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Acknowledgements

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EXECUTIVE SUMMARY

The City of Encinitas Clean Water Program has compiled this report to summarize the activities and accomplishments of the program for the reporting period of Fiscal Year 2006-07 (July 1, 2006 through June 30, 2007). This report is in response to requirements set forth by the California Regional Water Quality Control Board, San Diego Region, in Order No. 2001-01, NPDES No. CAS0108758, which describes individual tasks that must be implemented and reports that, must be submitted. This report provides a comprehensive summary of the City of Encinitas' efforts during the reporting period in accordance with Section I of Order 2001-01.

ES.1 Background

In 1987, Section 402 of the Federal Clean Water Act was amended by the United States Congress to require the Federal Environmental Protection Agency (EPA) to include regulations for non-point stormwater discharges. The regulations control pollutant discharges into State waters from municipal stormwater systems by the issuance of the National Pollutant Discharge Elimination System (NPDES) Permit. The California State Water Resources Control Board has been delegated the authority by the EPA to administer the NPDES permit for the State of California. In turn, the Regional Water Quality Control Board (RWQCB), San Diego Region, administers the permit at the local level.

On February 21, 2001, the RWQCB San Diego Region adopted Order No. 2001-01 NPDES No. CAS 0108758, *Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, and the San Diego Unified Port District.* The provisions of the Order require the development and implementation of comprehensive Jurisdictional Urban Runoff Management Programs (JURMP). The Order names the County of San Diego as the "principal Copermittee" and lists the City of Encinitas as one of the 21 Copermittees.

ES.2 Overview of the City of Encinitas

The City of Encinitas is a small residential coastal community in northern San Diego County. The current population is approximately 60,000 and is generally built out. Encinitas is bordered by the Pacific Ocean to the west, Batiquitos Lagoon to the north, and the San Elijo Lagoon to the south. These three receiving waters receive all stormwater and urban runoff from the City.

ES.3 Summary of FY 2006-07 Annual Report

The following sections summarize the activities conducted on a jurisdictional basis during this reporting period. The City also actively participates in regulatory programs on a watershed and regional basis. The jurisdictional programs are presented below and are organized to follow the outline of Order 2001-01. Watershed programs are reported in the Carlsbad Watershed Urban Runoff Management 2006-07 Annual Report and regional programs are presented in the San Diego Region 2006-07 Unified Annual Report, both submitted under separate cover.

ES.3.1 Land-Use Planning for New Development and Redevelopment

In 2003, the City of Encinitas' local Standard Urban Stormwater Mitigation Plan (SUSMP) was established in the City's Storm Water Best Management Practices Manual, Part II. The SUSMP

program aims to reduce the impact from development on receiving water quality. Since then the City has successfully integrated the SUSMP into their overall review and approval process for ministerial and discretionary projects. There has been a heavy focus on implementing the SUSMP program; requiring SUSMP best management practices (BMPs) on each project that goes through the City system, introducing the requirements at the earliest opportunity, and encouraging developers to use natural BMPs rather than concrete structural BMPs. In FY 2006-07, nearly 180 projects were conditioned with SUSMP BMPs. Of these 45 were priority projects requiring treatment BMPs.

ES.3.2 Construction Component

The City of Encinitas construction component is defined by a well developed inspection program and enforcement mechanisms. The City's Engineering Services Department employs six full time engineering inspectors. All inspectors have been trained regarding proper stormwater BMPs applications. They inspect construction sites for compliance with the City's Stormwater and Grading Ordinance, and program-required BMPs. During this reporting period, the construction inventory included a total of 134 project sites, of which 22 were considered high priority and were inspected on a weekly basis over the rainy season.

ES.3.3 Existing Development

Municipal Component
The City owns and operates approximately 51 municipal facilities, three of which are deemed high priority. These three facilities are subject to annual stormwater inspections and were all inspected in the FY 2006-07. All recommended BMPs were implemented by staff at these facilities. Publicly–owned catch basins and detention basins throughout the MS4 were cleaned, and debris and trash was removed from creeks and beaches, including several encampments. An integrated pest management program (IPM) was implemented by Community Services Department who is responsible for the maintenance of City parks and properties. Another major accomplishment is the City's continued efforts towards pollution prevention, including the use of recycling trash bins throughout the City's parks and bus stops, multiple BMPs implemented at the new Cottonwood Creek Park, including pervious pavement, open-channel drainage facilities, drought tolerant landscaping and the "daylighting" of Cottonwood Creek as it drains through the park, and the use of hybrid vehicles for City use. During this reporting period, the City completed numerous capital improvement projects to reduce future sewage spills by improving the wastewater collection system. The Moonlight Beach Pump Station Rehabilitation project serves to increase pump station reliability, 4 hour emergency storage capabilities if a complete power failure should occur and has the ability to pump creek water directly to the pump stations 188,000 gallon capacity wet well in case of a sewage spill occurring at Cottonwood Creek.

Industrial Component
There are three facilities considered to be industrial and therefore high priority in the City of Encinitas. Each of the three was inspected in FY 2006-07 (two by the City and one by the County of San Diego) for stormwater BMPs.

Commercial Component
The Clean Water Program focused efforts on three categories of facilities that are deemed to have the highest potential to generate stormwater pollution. In the current reporting period, there were 494 commercial facilities deemed high priority by the Municipal Permit, of which 239 were inspected and enforcement actions were taken at 95. In 2003 a full-time stormwater inspector was hired which has improved the program's focus on the inspection process.

Continued improvements in the stormwater GIS and data management system have improved the tracking and follow-up process. Staff now have the stormwater GIS available on their desktop computers to view facility and compliance information. The grease program continues to be implemented and during the FY 2006-07 three grease traps/interceptors were added at new and/or remodeled restaurants. This effort has reduced the amount of grease-related private lateral sewer overflows. Throughout the City there has been a notable increase in the number of BMPs implemented by restaurants and nurseries. During this reporting period, the City configured their enterprise GIS system to create and handle commercial stormwater inspections in a GIS based program called Cityworks. Cityworks is a useful tool for tracking all routine inspections, follow-ups, enforcement and education efforts.

Residential Component
The City's residential program strives to minimize the impact of discharges from residential areas through pollution prevention and BMP implementation. The City provided household hazardous waste collection, trash and recycling services, oil recycling, a compost bin sale, and implemented other structural and non-structural BMPs to achieve the goal of reducing pollutants from residential areas. The education and outreach activities for residential component included the distribution of a series of previously developed stormwater brochures at public events and to residents during inspections. The brochures (written in English and Spanish) focus on residential activities and BMPs that will reduce stormwater pollution.

ES.3.4 Illicit Discharge/Illegal Connection Component

The City's IC/ID program consisted of the dry weather monitoring program, a stormwater hotline, routine inspections, and visual inspections of the MS4. Staff monitored 52 dry weather sites in the 2007 dry season and received 156 documented complaints from the public and city staff over the course of the reporting period. The City has successfully evaluated water quality on a sub-basin level, correlating number of complaints with water quality exceedances to better understand where efforts are needed. Bacteria and nitrates have been identified as high priority constituents of concern. The areas of highest water quality exceedances and complaints in the City are the more heavily developed areas including the Old Encinitas and Leucadia sub-basins. Spill response procedures and coordination between internal departments were improved during the reporting period. During this reporting period, the City configured their enterprise GIS system to create and handle complaint driven stormwater inspections in a GIS based program called Cityworks. Cityworks is a useful tool for tracking all complaints, follow-ups, enforcement and education efforts.

ES.3.5 Education Component

The City has developed an education component that has reached a wide variety of target audiences through a broad range of educational tools. The City targeted specific audiences: employees (Public Works and San Dieguito Water District), commercial/industrial, construction, and school children. General audiences are also educated using media coverage and newsletter articles in residentially-oriented publications. The City partnered with nonprofit groups, the watershed, and regional programs to maximize educational resources.

ES.3.6 Public Participation

The City continued to provide public participation opportunities during this reporting period through conducting events and through being involved in stakeholder groups such as the

Carlsbad Watershed Network and the Escondido Creek Watershed Alliance. This year 29 public participation opportunities were provided.

ES.3.7 Assessment of JURMP Effectiveness

The City of Encinitas has complied with all the requirements of Order 2001-01 through a wide range of programs that are overseen by the Clean Water Program. Through these efforts many aspects of the City's operations have been improved as well as the actions of the community. The knowledge level of staff has continued to increase and staff has noticed an increased level of knowledge in developers and in the commercial establishment. More and more BMPs are being implemented and constructed throughout the City. The City is able to show that there is a downward trend in the percentage of exceedances of water quality action levels in the storm drain system from 2002 through 2007.

ES.3.8 Fiscal Analysis

The City of Encinitas implemented a Clean Water Fee in FY 2003-04 to offset reliance on the general fund. The fee was set at $5.00 per month per active water meter in the City. The fee was collected through the waste disposal (EDCO) bills since the spring of 2004. However, the Howard Jarvis Taxpayers Association challenged the Clean Water Fee based on Proposition 218 requirements. In FY 2004-05, the City stopped collecting the fee as part of the challenge and has been working towards putting the Clean Water Fee to a public vote. In 2005-06, the Clean Water Fee was put to vote but did not pass by a significant margin, even though pre-surveys about the vote indicated strong support. As such, 2006-2007 is marked by significant spending from the City's general fund to ensure compliance with Order 2001-01.

ES.3.9 Special Investigations

Several special investigations were performed by the Clean Water Program including: continued operation and monitoring of the Moonlight Beach Urban Runoff Treatment Facility, the San Elijo Lagoon Restoration Project, and the Regional Channel Maintenance Workgroup. Additionally, the Clean Water Program participated in several watershed and regional projects and groups including: the Escondido Creek Watershed Alliance, the Beach Water Quality Workgroup, the Regional Channel Maintenance Workgroup, the Southern California Coastal Water Research Project, and the Stakeholder Advisory Groups for TMDL development for Bacteria I (beaches and creeks) and Bacteria II (lagoons), and the Reference Beach Workgroup.

ES.4 Conclusions and Recommendations

The City of Encinitas has successfully implemented Order No. 2001-01 in FY 2006-07. This year completes the sixth year of program implementation. Overall, a great deal of effort has been expended to reduce pollutants from entering the City's waterways and the Pacific Ocean as recounted within this report. Through refined actions, functions, and direction, the City of Encinitas has begun to identify areas of programmatic success and perceptible improvements in water quality through ongoing sampling and analysis.

On January 24, 2007, the San Diego Regional Water Quality Control Board adopted Order No. 2007-0001, marking a significant transitional period for the San Diego region and the City of Encinitas Clean Water Program. Order No. 2007-0001 builds upon the provisions of Order No. 2001-001, adding considerable new requirements to be met through updated JURMP components. As such, beyond the reporting period of this report, the City of Encinitas has

endeavored upon holistic programmatic updates through as needed augmentation of existing elements and the development of new processes, procedures, and strategies to meet new permit obligations. It should be noted that while the Clean Water Program works to develop new permit compliance strategies toward compliance with Order No. 2007-0001, successful implementation of existing components has remained consistent with the activities described throughout this report.

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1.0 INTRODUCTION

The City of Encinitas is a Copermittee regulated under the San Diego County Municipal Stormwater NPDES Permit. This permit was reissued by the Regional Water Quality Control Board (RWQCB) on February 21, 2001 and is designated Order No. 2001-01, NPDES No. CAS0108758, herein referred to as the Municipal Permit. Order No. 2001-01 was issued to 18 cities, the County of San Diego, the Port of San Diego and the San Diego Airport Authority, collectively known as the Copermittees. Under this permit, the City is required to develop and implement a Jurisdictional Urban Runoff Management Program (JURMP), which establishes the activities the City will carry out to be in compliance with the Municipal Permit, but more importantly, to improve water quality in stormwater and urban runoff within its jurisdiction. Further, the City is required to prepare an Annual Report that recounts the activities performed during each year (Municipal Permit Section I). This report is the fifth annual report under the new program and covers the implementation period for Fiscal Year 2006-07 (FY 2006-07), which is July 1, 2006 through June 30, 2007.

The required Annual Report is reviewed by the RWQCB each year and comments are incorporated into a response letter or are incorporated into the subsequent JURMP Annual Report. Two comments on the City of Encinitas JURMP Annual Report for 2005-2006 were received on September 25, 2007 to be addressed in the following report for 2006-2007. The comments received from the 2005-2006 report have been addressed in the following sections of this report:

- Section 7.0 – Construction Component (Subsection 7.2.1 – 2005-06 Annual Report Comment Response)
- Appendix H-2 – 2007 Dry Weather Monitoring Report

1.1 JURMP Implementation

In the City of Encinitas, the JURMP is primarily implemented in the Engineering Department and the Public Works Department. Engineering provides program management, education, inspections and water quality assessments, and Public Works (NPDES Division) performs MS4 inspection and cleaning services. The Planning and Parks Departments also implement portions of the Clean Water Program through project conditioning and public land maintenance.

1.2 Overview of Encinitas

The City of Encinitas is a semi-arid coastal community located in the North County area of San Diego County, approximately 22 miles north of downtown San Diego. The City is fully within the Carlsbad Hydrologic Unit and is split between the San Marcos Watershed to the north and Escondido Creek Watershed to the south. The City encompasses an overall area of nearly 20 square miles and has six miles of coastline. The current population is approximately 58,000. Encinitas receives an average annual rainfall of approximately 10 inches.

The City is nearly surrounded by sensitive water bodies. Stormwater in the north drains to Batiquitos Lagoon, which is designated a Critical Coastal Area in the State of California 2002 Critical Coastal Areas Strategic Plan. To the south and east, stormwater drains to Escondido Creek (which drains to San Elijo Lagoon) or directly to San Elijo Lagoon. San Elijo Lagoon is a 303(d) impaired water body listed for sediment/siltation, bacteria indicators, and eutrophic conditions. In addition, it is also designated as a Critical Coastal Area. In the west, stormwater

drains to the Pacific Ocean (via Cottonwood Creek or directly). The Pacific Ocean is listed as a 303(d) impaired water body at Moonlight Beach for bacteria indicators due to urban runoff from Cottonwood Creek. In general the city drains to three blue-line creeks; Cottonwood Creek, Encinitas Creek and Escondido Creek. Cottonwood Creek drains the heart of Encinitas and discharges to the Pacific Ocean at Moonlight Beach. Encinitas Creek drains the north-central portion of the city, and drains into Batiquitos Lagoon. Escondido Creek drains the southern and northwest (Olivenhain) portion of the city and drains into the San Elijo Lagoon.

1.3 Organization of Annual Report

This Annual Report is organized to be consistent with the format of the JURMP and the format established by the Regional Program. A description is provided of the activities performed for each of the following components:

- Land Use Planning for New and Redevelopment (Section 6),
- Construction (Section 7),
- Existing Development (Municipal – Section 2, Industrial – Section 3, Commercial – Section 4, and Residential – Section 5),
- Education (Section 9),
- Illicit Discharge Detection and Elimination (Section 8),
- Public Participation (Section 10),
- Assessment of the JURMP Effectiveness (Section11),
- Fiscal Analysis Including the Upcoming Year's Budget (Section 12),
- JURMP Revisions (discussed I each section),
- Special Monitoring Investigations (Section 12),
- Water Quality Improvements or Degradation (Section 8 and 11), and
- Identification of Ineffective Management Measures (Section 11).

2.0 MUNICIPAL (EXISTING DEVELOPMENT) COMPONENT

The municipal component of the City's Clean Water Program includes proper management of facilities owned and operated by the City of Encinitas to eliminate or reduce the amount of pollutants that enter the storm drain system. These facilities include the streets, the storm drain system, municipally owned facilities; city buildings, maintenance yards, fire stations, parks, and open space. The updated municipal facilities inventory is included as Appendix B -1.

The pollutants of concern associated with municipal activities include oils and grease from leaking engines, litter, herbicides used for vegetation control, pesticides used for animal control, paints and solvents, battery acids from leaks, heavy metals from brake linings, green waste from roadside maintenance, and sediment from construction and earth moving.

2.1 Description of Activities

The municipal component of the City's Clean Water Program includes proper management and maintenance of the MS4, the municipally owned facilities, parks, and open space areas. The primary goals of the program are staff education, BMP implementation, and facility inspections. The following municipal activities are covered under this component: street sweeping, storm drain maintenance, litter control, capital projects (roadway repair and maintenance), parks and recreation maintenance, and public lands maintenance.

2.1.1 Pollution Prevention

Pollution prevention activities are aimed at keeping pollutants from entering the storm drain system. The primary pollution prevention activities include:

- Street Sweeping,
- Litter Control,
- Encampment Cleanup,
- Capital Projects: Drainage and Sewer;
- Municipal Facilities;
- Landscape Management of Public Areas; and
- Placement of recycle receptacles in all City Parks, beaches, and bus stops.

Street Sweeping

Street sweeping is an effective method of reducing the amount of pollutants on street surfaces that will contribute to water quality impairment. The City uses two types of street sweepers depending on the type of debris to be removed, a broom sweeper and a vacuum sweeper. Arterial streets are swept weekly, collector streets are swept bi-weekly, and residential areas are swept on a monthly basis. A total of 7,120 linear curb miles of streets are swept per year by the street sweepers. The City measures the amount of debris collected during street sweeping activities by volume. 1,456 cubic yards of debris was collected by street sweepers in FY 06-07. The density of the debris collected can vary depending on a number of factors including, which streets are being swept, the time of year, and weather conditions. Debris collected in the City of Encinitas generally consists of sediment, organic debris and some trash. Based on the California Integrated Waste Management Board's conversion chart a removal rate of 1.15 tons per cubic yard was used to convert the total volume of debris measured into an approximate

tonnage. Therefore, a estimated 1,674 tons of debris was collected by City street sweeping trucks in FY 06-07.

The City of Encinitas Public Works Department maintains publicly owned storm drain channels, pipes, detention basins, inlet boxes, and associated infrastructure on a regular basis. Public Works crews operate one Vac-con truck, which is effective in cleaning pipes and storm drain boxes while eliminating discharges associated with cleaning activities. A second Vac-con is also available in the wastewater department to assist with recovery efforts when needed. All components of the MS4 are on a routine cleaning schedule by area and all catch basins are cleaned on an annual basis.

Litter Control

Public Works crews and County probation crews collect litter in any necessary areas based on visual observations and citizen complaints. Bus stops have been identified as significant sources of litter that has the potential of entering the MS4. After studying the bus stop locations and the increase of trash that was collected by City service trucks, the City partnered with NCTD to install trash receptacles and provide maintenance, thus reducing pollutants entering our MS4. In 2004 new trash receptacles were added at thirteen locations. Several of these were recycling trash receptacles. In addition, crews collect litter in areas of known debris accumulation on a routine basis citywide. During the FY 2006-07 reporting period, Public Works (using probation and Partners with Industry (PWI) Crews removed 9,285 bags of litter from bus stops, storm drain channels/basins, and right-of-ways. Appendix B-2 illustrates the breakdown of the work orders for the NPDES division.



Recycling trash cans at bus stops

Encampment Program – Homeless and migrants tend to gather in local waterways whereby feces, urine and trash are deposited directly into the waterways. When necessary, the City employs special crews to clean up the trash and debris left behind and encourages the homeless to find other places to stay.

Beach Clean Ups – The City conducted two beach clean ups during this reporting period. These clean ups were coordinated with the Solana Center for Environmental Innovation. A total of 461 pounds of trash and recycling were removed through these beach cleanups.

Capital Projects

The Engineering Department was instrumental in completing numerous capital improvement projects that will reduce sewage spills in the future by improving the wastewater collection system. Capital Improvement Projects incorporate sewer pump station upgrades, sewer main replacements and removal of pump stations. The sewer and emergency repair projects completed or initiated during FY 2006-07 are shown in Table 2-1.

Table 2-1 Wastewater CIP Projects

Project Title	Budget	Goal	Status
Moonlight Beach Pump Station Rehabilitation*	$3.7 M	Reduce sewage spills and increase capacity.	Completed
Regal Pump Station Removal	$300,000	Reduce sewage spills & remove pump station replacing it with a new gravity sewer.	Completed
Olivenhain Pump Station Upgrades	$5M	Improve pump station reliability emergency storage capabilities added, ability to capture first flush runoff and send to the pump station wet well	In preliminary design
Hwy 101 Sewer Forcemain, Phase III	$752,000	Replace 35 year old ductile iron pipe to reduce sewage spills and leaks.	Completed

* Partially funded by Clean Beaches Initiative Grant to reduce beach closures due to overflows from old pump station.

The Moonlight Beach Pump Station Rehabilitation project virtually eliminates sewage spills through several factors of safety (redundancy) which were built into the pump station, This project serves to increase pump station reliability, 4 hour emergency storage capabilities if a complete power failure occurs and has the ability to pump creek water directly to the pump stations 188,000 gallon capacity wet well in case of a sewage spill occurring in Cottonwood Creek.

The Engineering Department was also instrumental in completing numerous drainage capital improvement projects. These projects are outlined in Table 2-2.

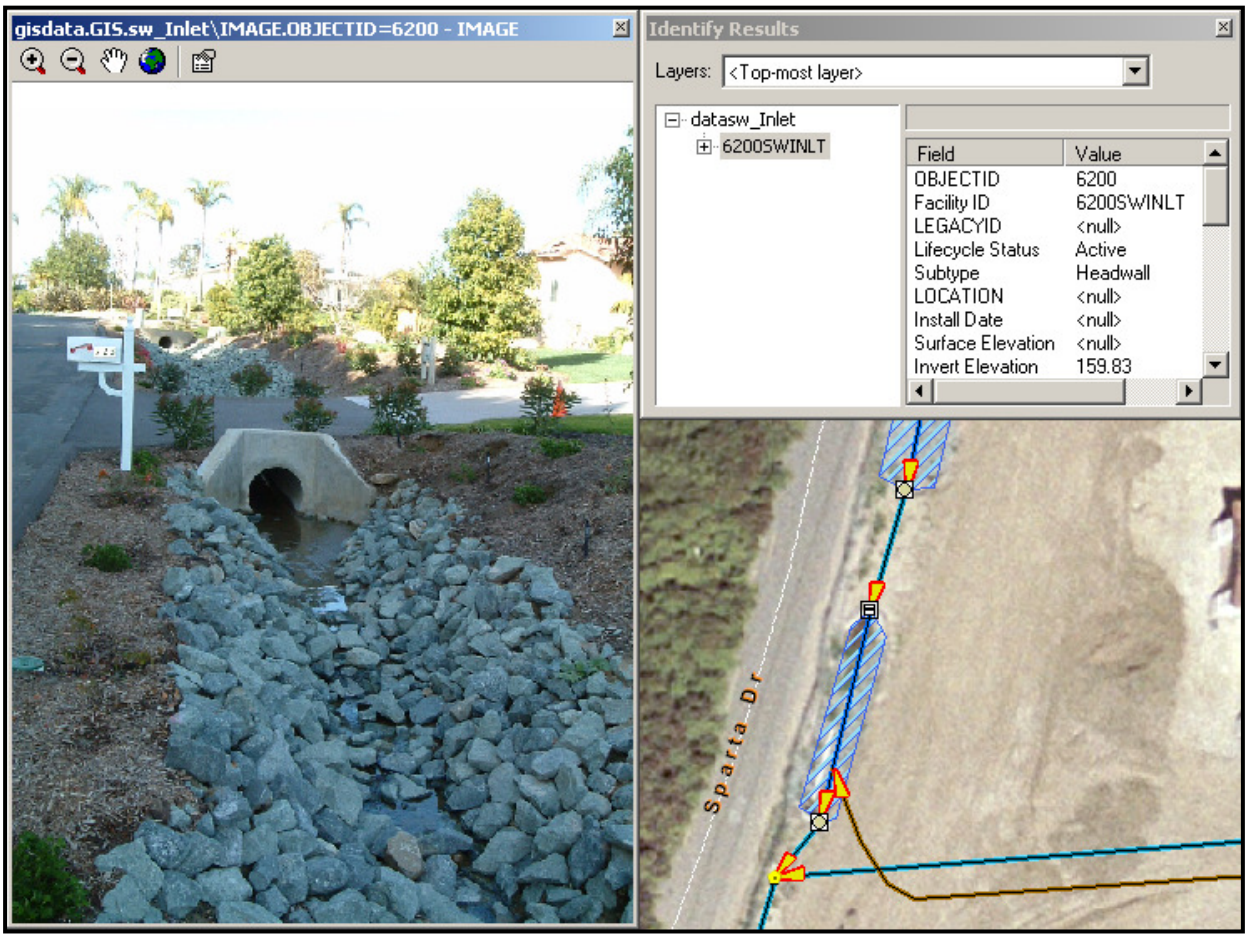
Table 2-2 Storm Drain CIP Projects

Project Title	Budget	Goal	Status
Lone Jack (Stratford Knoll) Channel Improvements	$550,000	Install new storm drain	In Design Phase
4th Street Storm Drain	$750,700	Eliminate flooding and erosion of beach area	Design Complete. Waiting for additional funding for construction.
Santa Fe Drive Storm Drain	$400,000	Eliminate flooding and erosion along Santa Fe Drive from Bonita Drive to Nardo Road.	Complete
Bonita Drive Storm Drain	$265,000	Eliminate flooding and erosion along with replacing broken spillways and concrete channel on Bonita Drive from Santa Fe Drive to Melba Road.	Complete
Windsor Rd. Storm Drain	$35,000	Slip lining of a collapsing CMP pipe on Windsor Rd.	Complete
Total Cost	**$2,000,000**		

Storm Drain System Map and Information Management

The City of Encinitas has a mature GIS program in which the entire City's storm water infrastructure has been mapped in detail. The City continually updates the system as part of routine maintenance. Updates include adding new storm water improvements constructed in the City and resolving quality control issues. Quality control issues include such things as locating missing plans, standardizing the list of BMPs, capturing photographs and associating them to the GIS features, and filling in missing attribute information obtained from found plans or field verification. When necessary the City will also go into the field to GPS any storm water infrastructure– the overall spatial accuracy of the system is roughly within a 5-foot tolerance.

With such a high degree of detail available in the GIS, City staff has many new automated tools at their disposal. In most cases the data is so detailed, storm water staff can get the information they need about an infrastructure feature right from their desktop with a click of the mouse – thus saving time from having to go into the field. Additionally, specific data can be queried and reports or maps can be generated using the detailed feature attribute information in the GIS. Finally, the entire storm water GIS system has been built as a "network", which allows for on-screen network tracing. The GIS is capable of identifying all inlet locations upstream of any outfall in the City's storm drain system. This helps the City efficiently and effectively locate potential pollution sources.



The City developed and implemented a program for inspections of storm water "commercial sites" using the City's Asset Management Software. This software is fully integrated into the City's GIS system and gives staff the ability to track routine inspections, record discharge complaints and auto generate upcoming sites that are due for an annual inspection. These inspections and complaints are all tracked in an automated system that is linked directly to the storm water GIS layers. This provides a very comprehensive means for reporting and summarizing issues and problems found.

The City of Encinitas storm water GIS is much more than "just a map". The system is a dynamic, up to date means of accessing information quickly and efficiently to solve clean water problems and facility tracking.

Municipal Facilities

The City employs a multitude of pollution prevention practices at City Hall. These practices have been expanded each year and include:

- the use of recycled paper (30%) for all copiers and printers,
- installation of an Automated Logic System (ALS) which controls the Heating, Ventilation and Air Conditioning (HVAC) system,
- implementing a 9-80 work week so that City Hall is closed every other Friday,
- installing lighting controls and timers that time lights in specific areas of the building based on specific needs and maximizes the time when lights are out,
- synchronizing traffic signals on four main arteries throughout the City to maintain traffic flow and reduce emissions due to braking and accelerating,
- implementing a battery collection and recycling program at City Hall,
- replacing large trash receptacles at individual desks with large recycling containers for mixed paper and cans/bottles and mini trash receptacles, thereby encouraging employees to minimize trash and maximize recycling,
- placing recycling centers in conference rooms that include mixed paper, cans/plastic, and trash compartments,
- the use of three hybrid cars for City vehicles (Honda Civic, Toyota Prius, and Ford Escape Hybrid);
- the use of special recycling trash receptacles at public parks and beaches to encourage recycling,
- construction of bus stop improvements including placement of trash receptacles to reduce litter, and
- subsidizing a compost bin sale to encourage diversion of food waste from landfills.

Landscape Management of Public Areas

During the reporting period public areas were maintained using methods to minimize over watering using a computer controlled irrigation system. The system was automatically shut-off if a system leak was detected. Sensors in landscaping areas were used to shut down irrigation when rain was detected. Fertilizers were applied carefully in order to reduce spillage outside of planted areas.

2.1.2 Source Identification and Prioritization

The City of Encinitas owns, operates, and maintains 51 municipal sites within the City. All locations are visually inspected on a routine basis and any illicit discharges or illegal connections are referred to the Clean Water Program. Of these sites, three have been classified as high priority according to Section F.3.a. (3) of the Municipal Permit. The high priority sites in Encinitas include:

- Fleet Maintenance Yard, 811 Orpheus;
- Requeza Street facility, 397 Requeza;
- San Elijo Public Works Wastewater Division Yard, 2695 Manchester Avenue; and
- Calle Magdalena Public Works Facility, 160 Calle Magdalena

Appendix B-1 provides an updated municipal inventory that lists the municipal facilities in Encinitas with addresses, land uses, priority, and watershed sub-basins. Figure 2.1 illustrates the land uses and activities at the municipal sites in Encinitas.

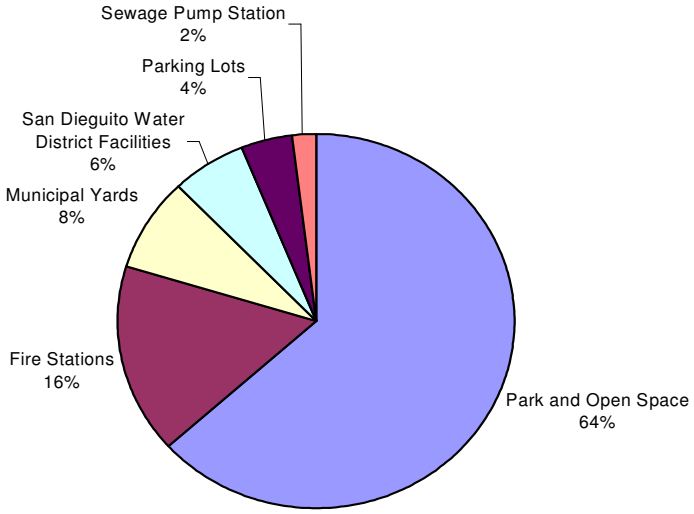


Figure 2.1 City of Encinitas Municipal Facilities Land Uses

All high, medium, and low priority municipal facilities must implement certain minimum best management practices. These include good housekeeping, litter control, employee training, waste disposal and recycling, and facility and grounds maintenance. The BMPs implemented at municipal facilities are discussed below.

2.1.3 BMP Implementation

Best management practices were identified in the JURMP for the following categories of Municipal Activities/Areas and are discussed below:

- Roads, Streets, Highways, and Parking Facilities,
- Flood Management Projects and Flood Control Devices, and
- High Priority Municipal Facilities.

During this reporting period, the City prepared a map of all the municipal BMPs; this map is included as Appendix B-3.

The City has implemented a range of BMPs for municipal facilities throughout the City including the Urban Runoff Treatment Facility located at Third and B Streets adjacent to Cottonwood Creek. This treatment facility was completed and went on-line in August 2002. The purpose of the facility is to treat bacteria in urban runoff using ultraviolet (UV) light, thereby reducing AB411 beach postings at Moonlight Beach. The treatment facility diverts 85% of Cottonwood Creek flows to a wet well and pumps it through a treatment process that consists of basket filters, multimedia filters, and two UV chambers. Bacteria in the runoff is reduced by 99% as it passes through the treatment facility and beach postings have been reduced. In FY 2005-06 reporting period, the City completed a three-year monitoring plan and prepared a Final Report to the State Water Resources Control Board. This report can be found on the City's web site at http://www.ci.encinitas.ca.us/NR/rdonlyres/5612D387-D6D9-48A7-AF7F-A9D039C78547/0/Moonlight_Beach_Urban_Runoff_030806.pdf.



"Daylighted" Cottonwood Creek

During the FY2003-04 reporting period, the City implemented additional noteworthy BMPs primarily focused around the new Cottonwood Creek Park. This park is a prime example of low impact development. The post-construction BMPs that were implemented at this site include:

- daylighting 90 feet of Cottonwood Creek (using a Wetland Recovery Grant)
- use of porous pavement for all parking and driveways, and pervious walkways
- using surface drainage through earthen-bottom open channels rather than underground pipe systems
- planting of drought tolerant plants in landscaping areas

During 2006-07 this facility was operated and maintained by the City.

Roads, Streets, Beaches, Highways, and Parking Facilities

- **Street Sweeping** - During the reporting period street sweeping occurred on residential streets monthly and arterial streets weekly.
- **Parking Surface Cleaning** - Public parking lots (City Hall Civic Center, parks and beaches) were swept on a regular basis (at a minimum of monthly).

- **Litter Control** - Public Works, Partners with Industry (PWI), and county probation crews collect litter in any necessary areas based on visual observations and citizen complaints. In addition, special crews are employed to remove encampments and litter in environmentally sensitive areas.
- **Beach Clean-ups** – The City sponsors two Beach Clean Up events per year whereby an additional 461 lbs. of trash and recycling are removed from the public beaches.
- **Employee Training** – The Streets Division of the Public Works Department discussed stormwater issues as regular staff meetings throughout the reporting period. The Clean Water Program also presented the Public Works Streets and Wastewater Divisions with stormwater management training on Feb 1, 2007 and again on June 13, 2007. The San Dieguito Water District received stormwater management training for dewatering mains on May 23, 2007.
- **Storm Drain Inserts** – The City has installed a total of 54 storm drain filter inserts in 35 inlets, throughout its jurisdiction to remove sediment, debris, oil and grease. These inserts have been installed over a period beginning in 1999 and are shown on 2-3 below. All storm drain inserts are inspected, cleaned and retrofitted on a quarterly basis. During FY 2006-07, approximately 3.473 tons of sediment and debris was removed using a vactor truck during semi-annual and quarterly maintenance performed by a specialty contractor.

Table 2-3 Storm Drain Inserts Inventory

Inlet No.	Size (Inches)	Size (Feet)	Location	Inlet Type
2	24" X 45"		In right driveway apron @ 1470 Neptune Ave.	Grate
4	24" X 40"		AC From 1638 Neptune in grass shoulder	Grate
5		9'	1786 1/2 Highway 101	Curb
6	24" X 41"		1650 Highway 101	Grate
7	23" X 40"		Alley West of Hwy 101, North of Jasper	Grate
8	24" X 41"		Alley West of 101, Behind 918 N. 101	Grate
10	24" X 41"		Leucadia Blvd. North of Park @ Hwy 101	Grate
11	23" X 40"		In Alley behind 828 Hwy 101	Grate
12	23" X 40"		Behind building. @828 Hwy 101	Grate
13	23" X 40"		Alley West of 101 @ Europa	Grate
14	23" X 40"		129 Cadmus	Grate
15	23" X 40"		149 Basil St.	Grate
16		10'	130 Basil St.	Curb
17	23" X 40"		130 Athena	Grate
18		9'	170 Athena	Curb
19	23" X 40"		577 N. Vulcan	Grate
20		4'	Across from208 Cereus	Curb
21	23" X 40"		208 Cereus	Grate
22	23" X 40"		321 Union	Grate
23	23" X 40"		Across from 321 Union	Grate
24		7'	1750 Hwy 101	Curb
25	24" X 40"		Alley West of 2nd St. @ G St.	Grate
26	36" X 64"		364 2nd St.	Grate

Inlet No.	Size (Inches)	Size (Feet)	Location	Inlet Type
27		10'	Encinitas Blvd. NE Corner @ Hwy 101	Curb
28		11'	102 Encinitas Blvd.	Curb
29		7'	Santa Fe South side, 120 yards. West of I-5	Curb
30		8'	Santa Fe, North side, 120 yards. West of I-5	Curb
31	24" X 40"		2560 Manchester	Grate
32	24" X 40"		2582 Manchester	Grate
ECR-1			Intersection of Via Molena & El Camino Real	Curb
ECR-2			Mountain Vista & El Camino Real	Grate
ECR-3			El Camino Real (in front of Circuit City Mall)	Curb
ECR-4			Garden View Rd./El Camino Real (East side)	Combo
ECR-5			El Camino Real/Garden View Rd., SE corner	Curb
ECR-6			El Camino Real/Garden View Rd. SW Corner	Curb
ECR-7			El Camino Real (across from Circuit City mall)	Grate
ECR-8			In front of 294 El Camino Real	Grate
ECR-9			El Camino Real in front of Block Buster Video	Curb

2.1.4 Flood Management Projects and Flood Control Devices



Routine Maintenance - BMPs implemented for Flood Management and Flood Control Devices included the cleaning of sixteen desilting basins: Fox Point, Saxony, Ocean Cove, Encinitas Boulevard (Cottonwood Creek Park), Encinitas Ranch (Lot 12), El Camino Real/Pine Branch (Lux Canyon), Cape Sebastian (Cardiff), Piraeus/Sparta, Piraeus/Olympus, Leucadia Oaks Park, Plaza II, Town Center, Leo Mullen, Garden View, Ponto Beach and La Costa Overflow Basin. Basins were cleaned during the dry season so that waste discharges generally do not occur. Gravel bags were utilized when necessary to retain sediment and minimize the release of sediment into the MS4. Specialty contractors were used to hand-clean environmentally sensitive areas. There are also numerous vegetated swale and channels throughout the City that are maintained by the public works program. Public Works NPDES crews removed 190.5 cubic yards of sediment from the detention basins, channels, and right-of-ways. Based on the 1.15 conversion factor adapted from the California Integrated Waste Management Board conversion chart for debris removal, this volume of material roughly equates to 219.8 tons of debris collected.



The City maintains the drainage channel along Highway 101 and La Costa Avenue

at Ponto State Beach. The project was completed in response to the Leucadia Drainage Plan and also serves to improve water quality along Highway 101 prior to discharge into Batiquitos Lagoon. The project has been deemed a success according to the wetlands specialist overseeing the project.

The City also maintains the newly constructed La Costa detention basin just north of La Costa Avenue and east of Saxony (see photo on previous page). This area was frequently inundated by sediment that discharged onto La Costa Avenue from the canyon to the south. The purpose of the detention basin is to control sediment before flooding the road and discharging into Batiquitos Lagoon.

Regional Channel Maintenance Workgroup – The City of Encinitas has been an active participant in the Regional Channel Maintenance Workgroup with staff from the Engineering and Public Works Departments providing information and collaboration. This workgroup was formed as a result of a Directive Regarding Channel Maintenance Activities letter from the Regional Water Quality Control Board in 2004. The RWQCB planned to determine if a region-wide, jurisdictional-specific, or project-specific permitting approach would be necessary and appropriate for maintenance activities. The Workgroup, comprised of San Diego County jurisdictions, continued to meet during this reporting period and discussed ways to collaborate on a region-wide permitting approach so cities may perform necessary channel maintenance and flood control work. The Workgroup supports a regional permit in accordance with all applicable agencies to allow channel maintenance, and would like to collaborate with the Regional Board on the proposed channel maintenance permit.

Municipal Facilities

High Priority Municipal Facilities – During the reporting period, BMPs were implemented at high priority municipal facilities in accordance with their SWPPPs. BMPs that were implemented included:

- good housekeeping practices were followed,
- proper operation and maintenance of equipment and vehicles occurred,
- hazardous waste and chemicals were properly stored (secondary containment for waste oil and fuel),
- MSDS inventories of hazardous and non-hazardous materials were updated,
- preventative maintenance was performed (fleet vehicles are inspected and maintained annually),
- spill prevention and response procedures were followed and updated, vehicle and equipment maintenance was performed indoors at the Fleet Maintenance Facility,
- vehicles were washed at an off-site carwash that recycles and treats (using a clarifier) their wash water and large equipment was washed at the San Elijo JPA facility where wash water is directed to the treatment plant headwaters,
- loading and unloading of materials was performed in designated areas with containment BMPs in place (berms or overhead coverage),
- facility and grounds maintenance was performed to clear litter and debris, public areas were dry swept and storm drain inlets, culverts and swales were kept clean and free from debris,
- landscape waste was collected and properly disposed of or temporarily stored in designated areas at the Requeza Maintenance Yard,
- native vegetation was used wherever possible (e.g. Leucadia Boulevard widening and beautification project),

- pesticide, herbicide, and fertilizer application and handling was performed in accordance with applicable federal, and state laws (Federal Pesticide, Fungicide, and Rodentcide Act and California Title 3, Division 6, Pesticide and Pest Control Operations) and all employees who handled pesticides received appropriate training, and
- employees received stormwater training as part of their "tailgate" safety meetings, staff meetings, and one-on-one education with supervisors and stormwater staff.

Medium and Low Priority Municipal Facilities – During the reporting period, BMPs were implemented at medium and low priority municipal facilities in accordance with their SWPPPs. BMPs that were implemented included:

- good housekeeping practices,
- recycling/trash receptacles were placed at beach parks and bus stops,
- employees received stormwater training as part of their "tailgate" safety meetings, staff meetings, and one-on-one education with supervisors and stormwater staff,
- hazardous waste and chemicals were properly stored (secondary containment for waste oil and fuel),
- facility and grounds maintenance was performed to clear litter and debris, public areas were dry swept and storm drain inlets, culverts and swales were kept clean and free from debris, and
- native vegetation was used wherever possible (e.g. Cottonwood Creek Park project).

2.1.5 Maintenance of MS4

MS4 maintenance activities in Encinitas are divided into above ground and below ground. Activities performed during the reporting period for these two categories are discussed below.

Above Ground Maintenance

Above ground maintenance includes the removal of sediment, litter, and debris from publicly owned creeks, rock lined channels, concrete channels, brow ditches, de-silting basins, and detention basins. Most of the maintenance is performed by the City's Public Works Department or outside crews that they supervise, such as probation crews and PWI.

Routine inspection and cleaning of concrete-lined facilities was performed in accordance to the schedule established in the JURMP. An automated NPDES Work Order Program was used to record and direct day-to-day efforts of the crews. The forms are digitally connected to a database for record keeping purposes.

Flood Management Projects and Flood Control Devices, 190.5 cubic yards of sediment, vegetation and debris were removed from the aboveground MS4 during this reporting period. In accordance with the JURMP, above ground, non-emergency maintenance (channels, creeks, brow ditches, desilting basins, and detention basins) was performed during the dry season when the facilities are dry and waste discharges generally do not occur. To reduce the potential for pollutants from reaching any receiving water body, crews utilized BMPs when there was a potential for discharge of waste or debris. For example, gravel bags may be used to retain sediment and debris, allowing settling prior to discharges reaching receiving waters. Sediment from the MS4 was transported to the Requeza Public Works Facility and stored prior to disposal by the local waste disposal contractor, EDCO.

Maintenance, such as sediment removal, in environmentally sensitive areas, such as those classified as wetlands, is generally avoided.

Environmentally Sensitive Areas

Litter and debris is removed by hand in environmentally sensitive areas of the MS4 by a specialty contractor. Often these cleanup efforts involve removal of illegal encampments and cleaning of the Cottonwood Creek pond.

Below Ground Maintenance

Between May 1 and September 30 of the reporting year, the City inspected and cleaned all known inlets and under curb drains in the MS4. Additional cleaning was performed between October 1 and April 30, if necessary. For inspection and maintenance purposes, the City is divided into ten areas. Maintenance crews routinely begin in the northernmost area and work their way south. The below ground maintenance program consisted primarily of inspecting all of the underground facilities and removing accumulated debris in inlets, catch basins, and under-curb drains. Cleaning was performed using a combination vactor (Vaccon) truck that utilizes a water recovery and vacuum unit so that disturbed sediment and debris is fully captured and can be disposed of properly according to its degree of contamination.

69.5 cubic yards of debris was removed from the underground portion of the MS4 this year. Based on the 1.15 conversion factor adapted from the California Integrated Waste Management Board conversion chart for debris removal, this volume of material roughly equates to 80 tons of debris collected. Debris removed was transported to the San Elijo Public Works Yard. The debris is disposed of regularly by the San Elijo Water Reclamation Facility along with their facility grit.

In addition, approximately 3.5 tons of debris and sediment was removed from the City's storm drain inserts by an outside contractor.

2.1.6 Management of Pesticides, Herbicides, and Fertilizers

Public Works Department

The Public Works Department is responsible for maintaining public streets and right-of-ways, including channels and detention basins. Several techniques were employed to minimize the use of pesticides, herbicides and fertilizers, including:

- mulching and mowing to control weeds rather than applying herbicides,
- restricting use of pesticides in channels,
- using less toxic aquatic herbicides, like Aquamaster, and
- requiring all employees using chemicals to be licensed applicators.

In addition, the State Department of Pesticide Regulation inspects all procedures and products used by the Public Works Department for maintenance of channels and rights-of-ways annually.

Parks and Recreation Department

The City of Encinitas Parks and Recreation Department has prepared and adopted a Policy and Procedures Manual for integrated pest management (see Appendix B-4). Implementation of the policy included:

- educating and training of staff and contractors on the policy,
- implementing a process of identifying pests and/or problems by site,
- monitoring and record keeping,
- establishing thresholds for pest problems,
- selecting a less toxic treatment, and
- evaluating the success of the treatment.

2.2 Summary of Inspections

Storm water staff performs annual inspections at all of the high priority municipal facilities in the City of Encinitas. Facility inspection locations and inspection dates are summarized in Table 2-4 below.

Table 2-4 Municipal Facility Inspections

Municipal Facility	Inspection Date
Orpheus Ave. Fleet Maintenance Facility	6/4/07
Pacific View Public Works Facility (Temporary)	6/4/07
Requeza Street Public Works Yard	6/4/07
San Elijo Wastewater Division Facility	6/4/07
"A" Tank Site Public Works Facility Yard	6/4/07
Calle Magdalena Public Works Facility	6/11/07

The recommended Best Management Practices are summarized in the inspection reports included in Appendix B-5 and have been implemented by the Public Works Department.

Fleet Maintenance Facility
No violations were noted however, the following corrective actions were required:

- Pick up litter around trash area
- Cover heavy equipment

Pacific View Public Works Facility (Temporary)
No violations were noted however, the following corrective actions were required:

- Store heavy equipment under cover

All Public Works, Streets Division staff and San Dieguito Water District staff were trained in storm water management on Feb. 1, 2007 & May 23, 2007.

Requeza Street Public Works Yard
No violations were noted however, the following corrective actions were required:

- Make spill kit more accessible

- Properly store paint cans in covered area

San Elijo Wastewater Division Facility
No violations were noted. All Public Works-Wastewater Division staff were trained in stormwater management on 6/13/07.

"A" Tank Site
No violations were noted however the following corrective actions were required:.

- Clean up trash from over turned container on East side of lot
- Obtain a spill kit
- Cover heavy equipment stored outdoors

Follow up was performed on 6/18/07 to verify that all corrective actions had been completed.

Calle Magdalena Public Works Facility
No violations were noted however, the following corrective actions were required:

- Clean trash and recycle areas
- Obtain spill kits and spill prevention plans
- Store heavy equipment and vehicles under cover
- Label outdoor storage containers
- Replace worn sandbags at storm drains

Follow up was performed on 6/25/07 to verify that all corrective actions had been completed.

2.3 Compliance and Enforcement Actions

Activities performed in the operation and maintenance of municipal areas complies with all federal, state and local regulations, specifically the City's Stormwater Management Ordinance. The City Manager is the appointing authority for all department heads and uses this authority to ensure that the City complies with all applicable laws.

2.4 Revisions to JURMP

The City of Encinitas has endeavored upon a comprehensive update of its Jurisdictional Urban Runoff Management Program per Water Quality Order No. 2007-0001 (Municipal Stormwater Permit), as adopted by the San Diego Regional Water Quality on January 24, 2007. Programmatic updates specific to this section will be described in an updated Jurisdictional Urban Runoff Management Plan (JURMP) document to be submitted to the RWQCB on March 24, 2008.

3.0 INDUSTRIAL (EXISTING DEVELOPMENT) COMPONENT

3.1 Description of Activities

3.1.1 Pollution Prevention

Industrial facilities within Encinitas were required to operate in accordance with their current SWPPPs and the appropriate local ordinance during the reporting period. The San Dieguito Union High School District (SDUHSD) Transportation Cooperative and the San Elijo Joint Powers Authority (JPA)–Water Reclamation Facility both operated under their SWPPPs and the Encinitas landfill operates under the County of San Diego Stormwater Ordinance 9518. All facilities operate under the City of Encinitas Stormwater Ordinance (EMC 20.08). The SWPPPs and ordinances require pollution prevention BMPs to be implemented. Pollution prevention BMP requirements were communicated to facilities on a one-on-one basis during site inspections as described in Section 3.2.

3.1.2 Source Identification and Priorities (Inventory)

Three industrial facilities are located in the City of Encinitas. All three facilities are covered under the State General Industrial Permit. The industrial inventory is included as Appendix C-1.

The San Elijo JPA Water Reclamation Facility is a wastewater treatment plant located at 2695 Manchester Avenue. The plant treats approximately 5.25 million gallons of raw sewage per day. The second industrial facility in the City of Encinitas is the SDUHSD-Transportation Cooperative. The facility is located at 1142 Bonita Drive and functions as the maintenance shop for the SDUHSD bus fleet as well as the parking area for the buses. The third industrial facility is the Encinitas Landfill, owned and operated by the County of San Diego. This facility is located at 2099 Encinitas Boulevard and is now closed. The JPA and SDUHSD are inspected by the City of Encinitas and the Encinitas Landfill is inspected by the County. Inspection forms for each industrial facility are located in Appendix C-2.

3.1.3 BMP Implementation

The two sites inspected by the City of Encinitas Clean Water Program implement BMPs as required by their individual SWPPPs. These BMPs were found to be appropriately implemented at each facility as noted in the individual inspection reports, located in Appendix C-2. BMPs have been implemented by the County of San Diego at the County Landfill in accordance with County Codes and the Encinitas Municipal Code.

3.1.4 Monitoring of Industrial Sites

In addition to the annual inspections performed by Clean Water Program staff, monitoring is performed on an on-going basis at each facility to comply with the State General Industrial Permit as well as the facilities SWPPPs. Each responsible person monitors their facilities throughout the year, performing inspections and required water quality monitoring of the sites to ensure compliance. City staff reviewed data collected for each facility during the annual inspections. The data suggested that runoff sampled at the San Elijo JPA Water Reclamation Facility and the Encinitas Landfill contained no significant pollutant loads over the past year. However, the runoff data from the SDUHSD Transportation Cooperative indicated that their runoff exceeded four USEPA benchmark values, as a result additional BMPs were necessary to prevent future storm water pollution. Clean Water Program staff has since met with the

SDUHSD to verify that additional BMPs have been implemented to effectively address their runoff.

3.2 Summary of Inspections

Clean Water Program staff for the City of Encinitas performed the annual inspection for the San Elijo JPA-Water Reclamation Facility on May 17, 2006. The Assistant General Manager was present for the inspection. Overall, the San Elijo JPA Water Reclamation Facility was clean and orderly. Clean Water Program staff recommended better management of outdoor materials storage of unused or unwanted spare parts and properly disposing of wooden palettes located in the waste containment area. San Elijo JPA staff is aware of current stormwater regulations and keeps a constant watch for storm water concerns at this facility. In addition to the inspection conducted by the City of Encinitas, San Elijo JPA staff conducts quarterly storm water inspections at the plant, as required under the facility's general industrial permit.

Inspection of the SDUHSD Transportation Cooperative was performed on June 8, 2007. The Director of the Cooperative accompanied City staff during the inspection. Clean Water Program staff recommended the following corrective actions: replace storm drain filter and store all equipment properly. The City also reviewed the facilities Industrial Annual Report which indicated that runoff samples collected at the facility exceeded four USEPA benchmark values. The City required the SDUHSD Transportation Cooperative to implement additional BMPs to eliminate and/or improve runoff quality. A follow-up inspection on November 9, 2007 revealed that the facilities main discharge points had been placed on a regular inspection and maintenance schedule to replace storm drain filters as necessary. SDUHSD Transportation Cooperative personnel also implemented weekly sweeping and vacuuming near these areas. Cement K-rails and straw wattles were placed along the perimeter of the parking lot and areas most susceptible to erosion. Regularly scheduled sweeping by a professional company was implemented quarterly. Earthen banks were hydro-seeded with native vegetation and all equipment and materials were placed in a Tuff Shed adjacent to the bus washing area. In addition to the inspection conducted by the City of Encinitas, SDUHSD Transportation Cooperative staff conducts quarterly storm water inspections at the plant, as required under the facility's general industrial permit.

The Encinitas Landfill, which is closed and owned and operated by the County of San Diego, was inspected by the County of San Diego Department of Environmental Health. The landfill BMP requirements, as outlined in the County's Stormwater Ordinance 9518, are compatible with the City of Encinitas BMP requirements in outlined in EMC 20.08 and Best Management Practices Manual, Part II, Commercial/Industrial BMP Requirements. The County's landfill inspection form has also been reviewed and found to be compatible with the City of Encinitas Facility Inspection Report. Therefore, the City believes that inspections performed by the County are adequate and extra resources expended by the City would be redundant and should be spent on other compliance issues. Table 3-1 summarizes the inspections performed for the industrial section of the program.

Table 3-1 Summary of Industrial Inspections FY 2006-07

Date	Facility	Address
7/01/07*	Encinitas Landfill	2099 Encinitas Boulevard
6/06/07	San Elijo Water Pollution Control Facility	2695 Manchester Avenue
6/08/07	San Dieguito Union High School District Transportation Cooperative	1142 Bonita Drive

*Inspections at the Encinitas Landfill are conducted quarterly throughout the year by the County of San Diego, the results of which were summarized in an annual report completed on 7/01/07.

3.3 Compliance and Enforcement Actions

No enforcement actions were necessary for either of the industrial facilities inspected by the City of Encinitas Clean Water Program. All individual facility inspection reports are located in Appendix C-2. Each facility was in compliance with their individual SWPPPs as well as all applicable regulations, including EMC 20.08.

3.4 Revisions to JURMP

The City of Encinitas has endeavored upon a comprehensive update of its Jurisdictional Urban Runoff Management Program per Water Quality Order No. 2007-0001 (Municipal Stormwater Permit), as adopted by the San Diego Regional Water Quality on January 24, 2007. Programmatic updates specific to this section will be described in an updated Jurisdictional Urban Runoff Management Plan (JURMP) document to be submitted to the RWQCB on March 24, 2008.

4.0 COMMERCIAL (EXISTING DEVELOPMENT) COMPONENT

The City of Encinitas commercial stormwater programs' goals are to educate and assist commercial establishments in eliminating non-stormwater discharges from their site and to reduce the amount of pollutants contained in stormwater runoff from their property. These goals are met through establishment of minimum BMPs, inspections, and enforcement.

4.1 Description of Activities

4.1.1 Pollution Prevention BMPs

Commercial facilities within Encinitas are required to implement pollution prevention BMPs outlined in the City's JURMP. The City focuses on educating businesses about pollution prevention, water quality issues, and their responsibilities under current regulations, including federal, state, and local. Pollution prevention principles that the City encourages among commercial businesses include:

- Eliminate wastewater flows
- Keep trash areas clean and dispose of wastes properly
- Maintain grease removal devices at restaurants
- Keep storage containers covered with Secondary Containment
- Change production processes to reduce waste
- Recycle wastes as part of the production process (most preferred), off site or on site (least preferred)
- Use smaller quantities of toxic materials or substitute less-toxic materials
- Obtain spill kits and develop a spill response plan and make them accessible to all employees
- Properly train all employees in stormwater management and maintain a training log

Pollution prevention BMP requirements are communicated to facilities on a one-on-one basis during site inspections and in literature presented to site representatives.

4.1.2 Source Identification and Prioritization (Inventory)

The commercial inventory is continually updated as facilities go out of business and new facilities are opened. Records are kept in an electronic database as well as hardcopy format. The total number of commercial high priority facilities during the FY 2006-07 reporting period is 494. A review/audit of all restaurant and automotive facilities in the commercial database inventory was performed during the reporting period. As a result of the review/audit, 221 restaurants and 70 automotive facilities were identified as high priority commercial facilities. The City has also identified 102 nurseries, 28 landscaping companies, 10 pool businesses, six (6) painting businesses, seven (7) animal facilities, three (3) mobile businesses, three (3) masonry businesses, three (3) building material businesses, one (1) golf course, and one (1) botanical garden in its commercial inventory. It should be noted that commercial facilities/businesses in the city are dynamic with changes happening often. This is particularly true of the nurseries. Nurseries frequently go out of business, many of them converting their properties into residential developments. A copy of the updated inventory is included in Appendix D-1.

4.1.3 BMP Implementation

Commercial facilities are required to implement BMPs as outlined in the JURMP. These consist of nonstructural and structural BMPs depending on the activities conducted at the facility. The BMPS are outlined in the City's Best Management Practices Manual and Stormwater Ordinance, Encinitas Municipal Code Section 20.08. The BMP Manual is available to the public on the City's website at http://cwp.ci.encinitas.ca.us The Engineering Services Department counter staff refers the public to this document regularly for guidance as to required minimum BMPs for commercial establishments, as well as for other activities regulated by the City's Stormwater Ordinance.

During each storm water quality inspection and complaint investigation, educational materials are provided. The City has continued to educate facility owners and employees during the inspection process and provide additional BMP information as needed.

4.2 Summary of Inspections

Inspections of commercial facilities were divided into the following two categories: complaint driven inspections and routine facility inspections. Complaint inspections are those in response to a call on the Clean Water Hotline or staff observation. When the City receives a complaint regarding a commercial facility, an initial site visit is conducted. If the complaint is legitimate, the inspector addresses the immediate complaint/discharge and recommends corrective action or executes enforcement action, and a complaint inspection is recorded for that visit. In some instances, follow-up inspections are required to verify that compliance has been met. In addition to a complaint inspection investigation, if it is determined that the facility has not been inspected recently (approximately two years), the inspector makes an appointment to conduct a full routine facility inspection and completes a Storm Water Quality Inspection Form during the inspection. Additional recommendations and enforcement action may result from these inspections that are not necessarily related to the initial complaint.

Routine facility inspections can be initiated as a result of a complaint inspection or as part of a regular schedule of inspections.

In FY 2006-07, a total of 316 Commercial inspections were performed during the reporting period. There were a total of 79 commercial complaints which yielded 72 complaint inspections. Of those 79 complaints, two (2) complaints were phone inquiries and required no further action, 5 were referred for full routine facility inspections, while another 4 complaints required secondary or follow-up complaint inspection to verify that compliance had been met. Additionally, there was a total of 239 routine facility inspections conducted in the reporting period which also required a follow-up inspection for about half of all facilities inspected, or 141 facilities. See Table 4.1 for a brief summary of all routine inspections and Appendix D-2 for a detailed summary of the regular storm water inspections which include all of the recommended corrective actions for each facility. For a summary of complaint inspections completed in FY 06-07, refer to Appendix H-5.

Table 4.1 Summary of Commercial Inspections FY 06-07

Type of Commercial Establishment	Complaint Inspections	Follow-up Complaint Inspections	Routine Inspections	Follow-Up Routine Inspections
Restaurants	21	2	200	116
Nursery/Grower	5	0	18	7
Auto Shops/Gas Stations	8	1	18	17
Golf Course	0	0	1	1
Other (mobile businesses, contractors, commercial properties, etc.)	38	0	2	0
TOTAL	**72**	**3**	**239**	**141***

**** Multiple facilities required more than one follow up***

4.2.1 Routine Inspections

The City conducted a total of 239 routine commercial facility inspections with 141 requiring follow-up inspections to verify that compliance had been met. Of the 239 inspections and 141 follow-up inspections, 21 restaurants received NOVs for failure to comply with the City's Storm Water Ordinances.

The City continued to utilize the Storm Water Quality Commercial Inspection Access Database for tracking annual routine, follow-up, and complaint investigations for commercial establishments that was established in the FY 2004-05 reporting period. The database contains several categories to describe each facility and contains all of the data that is collected from the two-page Storm Water Quality Inspection form (Appendix D-4). A hardcopy of completed inspection forms are kept in a binder as well as electronically in the database. A procedural manual was written and delineates procedure for viewing different queries, entering, deleting, or changing facility or inspection information. Please see Appendix D-3 for a copy of the City GIS Basic Training Manual.

During the FY 2005-06, reporting period, the City developed an important element for the commercial program: a centralized Geographic Information System (GIS) based work order management application for storm water complaints, investigations, and inspections using Azteca Cityworks software. The system is capable of displaying, on a map, storm water assets such as storm drains, inlets, and outlets, as well as creating and displaying open and closed service requests and work orders for tracking commercial inspections. In addition, the system is capable of being queried to find historical complaints or inspections at any location. Reports can be produced to document all storm water related complaints and inspections for any given time period. Although the software and an accompanying user manual were not deployed until the beginning of FY 2006-07, the GIS system was designed throughout FY 2005-06. A detailed description of this program is presented in the Municipal Component on page 2-4.

The Storm Water Quality Inspection forms were updated to be more facility-specific. The restaurant form focuses on grease management, cleaning, and materials and wastes, while the other inspection form also includes sections on nurseries, landscaping, and equipment and vehicles. Copies of the inspection forms used during the commercial inspections are contained in Appendix D-4.

The primary inspection categories and the findings of the inspections during 2006-07 are presented below.

SIC Codes
During each inspection the inspector requested the business license to verify each business had the appropriate SIC code.

Grease Traps
New construction and remodel of existing restaurants require grease interceptors or traps to be installed that meet current sizing requirements. As these facilities are brought up to code and the number of grease removal devices throughout the city increases, bacteria loads from SSOs to the MS4 should be reduced. The process is ongoing. In the reporting period it was noted that many restaurants are in compliance and keeping records for the cleaning of the grease interceptors. A cleaning log was distributed to these facilities to make their record keeping easier. The presentation of a log or the receipts from a pumping company helps determine compliance and is requested during inspections. In FY 2006-07, three new grease interceptors were installed at new or improved restaurants.

Stormwater Management Training
During site inspections, inspectors handed out educational stormwater management pamphlets and required businesses to train their employees annually and keep written records of when training occurs and who has received it. Follow-up compliance for the required training will be made on future inspections in FY 2007-08.

Restaurant Pollution Prevention Manual
A City of Encinitas Storm Water Pollution Prevention Manual was created this fiscal year and handed out during annual commercial inspections at approximately 180 restaurants throughout Encinitas. The binder consisted of eight sections: General Info, Site Map, BMPs/SOPs, Training Records, Inspection Records, Maintenance Records, Municipal Code, and Other Resources. Each restaurant was provided with a packet of BMP information, a blank training log and maintenance record, the Encinitas Storm Water Municipal Code, and information on becoming a Green Business. Also included were the general storm water poster, the "What's Cookin' Guide", and the City of Encinitas Restaurant Brochure in both English and Spanish. Each binder came with a City of Encinitas Storm Water Restaurant Training CD, which gives a ten minute presentation in both English and Spanish on proper BMPs for restaurants. The binder and CD are used by restaurant managers to continuously train employees and assure that they keep records of all paperwork necessary during future annual inspections. Follow up on the use of the binder and CD will be done during annual inspections in FY 07-08.

Secondary Containment
The City issues Notices of Violation (NOV) related to the storage and containment of oil recycling containers. Each business must provide over-head coverage and an overflow container at the base to protect from overflows and runoff. Inspections during the current period revealed that some used cooking oil service providers replaced 55-gallon drums during each pick up. This has resulted in much cleaner storage areas and reduces the potential for stormwater pollution. However, the City requires coverage and containment of all used cooking oil storage areas.

Nurseries
Routine stormwater inspections were performed at 18 nurseries in FY 2006-07. Education was provided to the facility operators and the results of their inspections were discussed on site.

Many nurseries have implemented BMPs because of the City's previous educational efforts with the University of California Cooperative Extension and in most cases, additional BMPs were implemented as a result of the routine inspections.

Inspection Summary

Of the 239 routine commercial inspections, there were 109 facilities which required corrective actions. The most frequent inspection comments included directives to implement the following BMPs:

- Properly train and educate all employees on storm water management and maintain a training log
- Obtain a spill kit and make it accessible to all employees

Other requirements included:

- Properly dispose of trash
- Keep trash areas clean
- Ensure that trash lids remain closed
- Sweep and clean up spills as they occur
- Properly maintain grease traps/interceptors
- Keep grease trap/interceptor maintenance records on site
- Properly store and/or dispose of hazardous materials and wastes
- Prohibit outdoor washing (including hosing off outside areas and cleaning floor mats)

When the City requires BMP implementation based on an inspection, a follow-up date is provided to the facility manager/owner. The City follows up with these facilities to ensure that the BMP has been properly implemented. These follow-up activities do not trigger a full facility inspection; however, they do require a site visit and meeting with the facility owner/manager to verify that compliance has been met. During the FY 2006-07 reporting period, 141 follow-up inspections were performed.

4.2.2 Complaint Driven Inspections

Clean Water Program staff maintains and answers the City's Clean Water Hotline. This hotline serves as a mechanism for the public to report suspected stormwater violations. Of the 156 total complaints received by the Clean Water Program in this reporting period, 79 complaints were in regards to alleged stormwater violations occurring in or at commercial facilities. Inspections were performed at 79 facilities. Table 4.2 below illustrates the distribution of complaints concerning commercial facilities in the City.

Table 4.2 Commercial Complaints Distribution FY 2006-07

Type of Commercial Establishment	Number of Complaints
Automotive	11
Eating Places	22
Nursery/Grower	6
Other (mobile businesses, contractors, commercial properties, etc.)	38
Phone Inquiries	2
Total	**79**

Clean Water staff investigated each of the complaints received. During the FY 2006-07, the City received 16 more commercial complaints than the previous fiscal year. The City's education and outreach efforts continue to be a contributing factor in increased awareness. The 24 hour complaint line is advertised on pencils and stormwater brochures that are distributed during

outreach events. In addition, the complaint line is listed in the telephone directories as "Storm Water Pollution Hotline" under the City listings, as well as the City's website. Follow-up actions and enforcement proceedings are addressed in Section 4.3.

4.3 Summary of Enforcement Actions

During FY 2006-07, the City received a total of 79 complaints regarding commercial facilities. However, it was determined that two (2) of those complaints were phone inquiries and required no further action due to the fact that: a) illegal discharges were not observed b) observed discharges were determined to be legal; or c) the caller only requested educational information. The remaining complaints triggered many enforcement actions, ranging from education to formal citations and cost recoveries. Table 4.3 summarizes the enforcement actions resulting from complaints received by the stormwater program.

Table 4.3 Commercial Enforcement Actions - FY 2006-07

Enforcement Category	Number of Actions
Education	42
Notice of Violation	25
Citation	15
Cost Recovery	3
Total	**85**

Table 4.4 summarizes the Notices of Violation/Citations and their causes. Most were issued as a result of an illegal discharge.

Table 4.4 Causes of Notices of Violations at Commercial Facilities - FY 2006-07

Violation	Number of Occurrences
Grease discharge/storage	19
Wash Water	1
Sediment in Storm Drain	1
Trash	2
Lack of spill kit	1

Table 4.5 Citations Issued FY 2006-07

Date	Code Violation	Violation Description	Fine	Cost Recovery
7/31/06	20.08.040B	Illegal discharge of auto oil	$100.00	$1,868.88
7/31/06	20.08.040B	Illegal discharge of auto fuel	$0.00	$433.38
08/03/06	20.08.040B	Illegal discharge of concrete waste	$100.00	$0.00
08/05/06	20.08.040B	Illegal discharge of food debris and wash water	$200.00	$0.00
10/09/06	20.08.040B, 20.08.140	Grease discharge	$200.00	$0.00
10/18/06	20.08.040B	Illegal discharge of wash water	$100.00	$0.00
11/16/06	20.08.040B	Illegal discharge of antifreeze	$100.00	$0.00
11/20/06	20.08.040B	Illegal discharge of wash water	$200.00	$0.00
01/02/07	20.08.040B	Illegal discharge of wash water, food and grease	$100.00	$0.00
01/15/07	20.08.040B	Illegal discharge of paint	$100.00	$665.00
01/31/07	20.08.040B	Illegal discharge of sediment	$100.00	$0.00

Date	Code Violation	Violation Description	Fine	Cost Recovery
02/13/07	20.08.040B	Illegal discharge of grease	$100.00	$0.00
02/28/07	20.08.040B	Illegal discharge of oil and wash water	$100.00	$0.00
06/07/07	20.08.040B	Illegal discharge of wash water	$100.00	$0.00
6/21/2007	20.02.140	Lack of proper grease storage	$100.00	$0.00
		TOTAL	**$1,700.00**	**$2,967.26**

4.4 Revisions to JURMP

The City of Encinitas has endeavored upon a comprehensive update of its Jurisdictional Urban Runoff Management Program per Water Quality Order No. 2007-0001 (Municipal Stormwater Permit), as adopted by the San Diego Regional Water Quality on January 24, 2007. Programmatic updates specific to this section will be described in an updated Jurisdictional Urban Runoff Management Plan (JURMP) document to be submitted to the RWQCB on March 24, 2008.

5.0 RESIDENTIAL (EXISTING DEVELOPMENT) COMPONENT

The overall goal of the existing residential areas element is to minimize the impact of discharges from residential areas on receiving waters in Encinitas and, where possible, to enhance the quality of these resources. The implementation of this element overlaps into almost all departments within the City. The primary responsibility for disseminating information and coordination is with the Clean Water Program Staff in the Engineering Services Department.

5.1 Pollution Prevention

The City's residential pollution prevention program consists of encouraging residents to minimize the amount of pollutants they generate and therefore need to dispose of. It also includes providing acceptable and alternative methods of disposal of typical wastes generated by residential activities. An important component of this effort is educating residents about the effect of poor pollution prevention habits on the environment and water quality. Residential public education and outreach is discussed in Section 9.2.3 (Education) of this report. Following is a description of the pollution prevention activities that are employed at the City of Encinitas for residents.

(a) **Household Hazardous Waste** – In accordance with the California Integrated Waste Management Act (AB939) in 1989, the City provides Household Hazardous Waste (HHW) collection programs to residents to limit the volume of household hazardous waste going into the waste stream, being dumped into the environment, and being deposited in landfills. Household hazardous waste includes, but is not limited to, household cleaners, used oil and fuel additives, paint and paint thinners, pesticides, pool chemicals, and electronic waste.

Several options are provided to residents for the proper disposal and recycling of household hazardous waste. These include door-to-door home collection, two permanent collection facilities located in the cities of Vista and Poway, and periodic temporary collection events. The City encourages residents to use these services through advertising on the City website, billing inserts, newsletters, and at public events. Table 5-1 shows the amount of household hazardous waste collected from residents in Encinitas during this reporting period.

Table 5-1 Household Hazardous Waste Volumes Collected (FY 2006-07)

No.	Material Type	Description	PHHWCF Weight (in pounds)		Door-to-Door Program Weight (in pounds)	
			Region	**Encinitas**	Region	**Encinitas**
1.	Flammable	Flammable solid/liquid	75,200	6,148	20,100	7,861
	& Poison	Bulked flammable liquids	53,100	4,341	0	0
		Oil-base paint	93,800	7,668	0	0
		Poison (excl. aerosols)	45,600	3,728	20,100	7,861
		Reactive and explosive	20	2	0	0
		Subtotal	**267,720**	**21,887**	**40,200**	**15,722**
2.	Acid	Inorganic & Organic acid	9,240	755	2,020	790
3.	Base	Inorganic & Organic base	7,200	589	2,020	790
4.	Oxidizer	Neutral oxidizers, Organic peroxides	3,450	282	0	0
		Subtotal	**19,890**	**1,626**	**4,040**	**1,580**
5.	PCB-containing	PCB-containing paint	0	0	0	0

No.	Material Type	Description	PHHWCF Weight (in pounds)		Door-to-Door Program Weight (in pounds)	
			Region	**Encinitas**	Region	**Encinitas**
		Other PCB waste	390	32	0	0
		Subtotal	**390**	**32**	**0**	**0**
6.	Reclaimable	Antifreeze	9,181	751	0	0
		Car batteries	0	0	0	0
		Latex paint	235,200	19,228	160,800	62,891
		Motor oil/oil products	46,497	3,801	0	0
		Oil filters	3,500	286	0	0
		Subtotal	**294,378**	**24,066**	**160,800**	**62,891**
7.	Asbestos		1,000	82	0	0
8.	Universal Waste (UW)	Mercury containing waste	80	7	*	*
		Thermostats/switches/thermometers	0	0		
		Lamps	13,800	1,128		
		Rechargeable batteries	150	12		
		Household batteries	9,900	809		
		Subtotal	**23,930**	**2,038**		
	Electronic Waste (UW)	SB20/50 video display devices	62,603	5,118	*	*
		Non SB20/50 video display devices	0	0		
		Consumer electronic devices	148,185	12,115		
		Subtotal	**210,788**	**17,233**		
	Aerosol Containers (UW)	Non-empty aerosol containers	10,200	1,292	10,050	3,931
		Other	0	0	0	0
		All UW subtotal	**250,518**	**20,563**	**10,050**	**3,931**
9.	Other HHW	Home-generated sharps	0	0	0	0
		Pharmaceutical waste	550	45	0	0
		Compressed gas cylinder	4,894	400	0	0
		Non-UW aerosol containers (corrosive, flammable, poison)	2,500	204	0	0
		Treated Wood	0	0	0	0
		Other	38,315	3,132	20,100	7,861
		Subtotal	**46,259**	**3,577**	**20,100**	**7,861**
10.		**Grand Total**	**880,155**	**71,751**	**235,190**	**91,985**

* Universal Waste collection services are provided, however, these materials are consolidated and shipped to the Vista facility and detailed data is not provided.

(b) **Trash and Recycling Services** - In the City of Encinitas, for public health purposes, the collection of solid waste is a mandatory service. All residents and businesses are liable for payment of fees for the mandatory service (reference 11.20.010, paragraph A of the Municipal Code). Residential service includes curbside green waste collection and recyclable materials collection. The City of Encinitas has an exclusive franchise agreement with EDCO Waste Recycling Services to provide solid waste collection services in Encinitas

for both residential and commercial customers. Table 5-2 provides a summary of waste diverted by the franchise hauler during the 2006 calendar year.

Table 5-2 Trash and Recycling Collected (Diverted) (2006).

TYPE	GREENWASTE (tons)	RECYCLING (tons)	TOTAL DIVERTED (tons)
Residential	11,236	18,751	29,987
Commercial	446	6,443	6,889
Roll Off	34	68	102
TOTAL			36,978

The City of Encinitas is dedicated to reducing the amount of waste that enters our landfills. The City goal is to divert 50% of the waste generated in the City. During the 2004-05 reporting period, the City completed implementation of a program to replace the residential small multiple curbside recycling bins with one large mixed recycling bin. The City of Encinitas diverted 54% of its debris from landfills in 2005.

Staff has been working with EDCO to improve the bulky item collection for Encinitas residents. In 2007 the City continued the "Self-Haul Coupon Program" consisting of the following:

- Once a year, EDCO mails a coupon to residential customers for the self-haul event. The coupon will be valid for a six-month period. This year's coupons were valid from March 3 through September 9.
- EDCO made arrangements with the Palomar Transfer Station (located at 5960 El Camino Real in Carlsbad) to allow Encinitas residents to bring one free load of trash/bulky items/yard waste (can be a carload or truckload) to the transfer station.
- Residents presented a photo I.D. and the coupon showing customer's name/address at the transfer station.
- The program is for residential customers only. Commercial loads will be charged a fee.

Benefits of the new program include:

- **Flexibility** – Residents will be able to dispose of their bulky items and other residential waste at their convenience. They can choose to go any weekend over a six-month period. The larger time window will be particularly convenient for residents who are moving during the year or are unable to make it to a single-day event.
- **Longer hours** – The transfer station is open from 7:30 to 4:00 on weekends, compared to single day event hours of 8:00 to 2:00.
- **Site locations** – The lack of a suitable site on City-owned property requires us to rely on outside agencies (Mira Costa College, school districts, etc.) for scheduling single-day collections. It is not certain that facilities will be available each year.
- **Logistics/Fiscal Impact** – The City will realize a savings in costs for event management, setup, traffic control, materials handling and cleanup.

Over the first six months of the program (March – September, 2007), 1,125 residents participated in the program. Based on the vehicle averages at the Community Clean-up day

(350 pounds per vehicle based on eight years of data), this program resulted in the disposal of 197 tons of residential waste.

(c) **Used Oil Recycling Program** - The City has a used oil recycling program that consists of a network of certified automotive waste recycling centers throughout the city, permanent Household Hazardous Waste collection facilities, and door-to-door collection. These facilities accept a range of used products including used oil, oil filters, auto batteries, and antifreeze. A big part of this program is the dissemination of educational information regarding the benefits of, and opportunities for, pollution prevention. This program is specifically for the residents of Encinitas and is funded through solid waste fees and grants from the California Integrated Waste Management Board (CIWMB). The location of the participating oil recycling sites is provided in all oil recycling printed material and on the City's website. Table 5-3 provides a summary of the City's used oil recycling program. A discussion of the door-to-door program follows.

Table 5-3 Certified Used Oil Collection Centers Data and Summary (FY 06-07)

Period	Quantity of Oil (Gallons)	Quantity of Filters (# of Filters)	Collection Type
July 2006 – June 2007	14,500.4	6,435	Certified Centers
July 2006 – June 2007	515	218	Permanent HHW Centers

Door-to-door HHW collection services offered to residents include used oil and oil filter collection. However, most residents are accustomed to taking their used oil and oil filters to the certified centers and the permanent HHW facilities and use the door to door service primarily for paints and other HHW.

(d) **Sanitary Sewer System Maintenance** – Sanitary sewer service is provided by two agencies. Generally, the northern portion of the City is serviced by the Leucadia Wastewater District and the southern and eastern portions are serviced by the City of Encinitas. These agencies provide operation and maintenance services involving cleaning sewer lines, clearing stoppages, repairing breaks on a routine basis, and responding to emergencies as needed. Sewage is delivered for treatment and disposal to either the Encina Wastewater Authority in Carlsbad or to the San Elijo Water Reclamation Facility in Cardiff. Special precaution is taken at facilities adjacent to sensitive areas to prevent sewer spills. These include pump and pipeline redundancy and emergency generators to ensure that service is uninterrupted during an emergency.

(e) **Storm Drain Stenciling** – The City's Public Works Department has implemented a program to stencil all municipal storm drain inlets. Two types of stencils are used: the first is an adhesive label which says "No Dumping, Drains to Ocean", and the second is a painted stencil with a diagram of a duck and says "No Dumping, I Live Downstream".

(f) **Pollution Prevention Materials** – The City has developed and distributed printed materials to encourage residents to reduce or eliminate the generation of pollutants. The activities that have been implemented during this reporting period include:

- Distributed brochures (developed in FY2002-03) for residents to learn pollution prevention methods (Appendix E-1):

  - Automotive - Simple Things to Keep Our Waterways Clean to reduce vehicle fluids spills through proper maintenance;
  - Yard & Garden Care - Keeping Your Yard & Garden Beautiful and our Waterways Clean;
  - Diazinon - How It Affects Your Health, Your Family and the Environment; and
  - Hiring a Handy Man - Easy Instructions for the Homeowner.
- A City of Encinitas Environmental Services Guide was created this fiscal year and mailed in March 2007, to approximately 22,000 single- and multi-family residences throughout the City. It was also handed out at all public events throughout the City. It is a compilation of information regarding trash and recycling, HHW, electronics disposal and recycling, storm water management, home composting, and general environmental contacts. The brochure is printed on 100% post-consumer recycled paper (Appendix E-11).

5.2 Best Management Practice (BMP) Implementation

BMPs targeted at the general population and residential areas are implemented on two levels; Jurisdictional BMPs and residential BMPs. Jurisdictional BMPs are structural BMPs that have been implemented by the City or have been required to be implemented by the City. These are typically installed as part of the SUSMP program during development of a property. Residential BMPs are non-structural BMPs targeted at reducing pollutant generating activities or minimizing the effects of these activities on urban runoff water quality. This section provides a description of these BMPs.

5.2.1 Jurisdictional BMPs

The City has a strong General Plan that works to protect water quality and open space, including riparian and wetland areas. Because of this, over the past ten years, several jurisdictional BMPs have been implemented by the City or required to be implemented throughout the City as part of new development and significant redevelopment. The goal of these projects is to improve the water quality of adjacent receiving waters. These jurisdictional BMPs generally include detention basins, storm drain inserts, daylighting of a section of Cottonwood Creek, low-flow channels, and the Moonlight UV Treatment Facility. These facilities are discussed in more detail in Section 2.1.3 and are shown in Table 5-4 and on the Encinitas BMP Map, Appendix B-3. They are broken into sub-watersheds beginning in the north and moving south.

5.2.2 Residential BMPs

Residential BMPs are nonstructural and are targeted at activities defined by the Municipal Permit as high priority. The City has revised its Storm Water Ordinance to be more direct and explicit about prohibitions on non-storm water and storm water discharges. BMPs are encouraged through the use of brochures, mailings, personal contact when applicable, workshops, City newsletter, and City website. These activities are discussed in Chapter 9 Education and Chapter 10 Public Participation.

Table 5-4 Summary of Jurisdictional BMPs

Sub-basin Served	Project Name/ Location	Purpose of BMP	Description of BMP
Leucadia	Leucadia Drainage Outfall Basin at Hwy 101 and La Costa Blvd. (Ponto Beach)	Sediment removal	Detention basin.
New Encinitas	Three basins along the El Camino Real channel at Garden View, Leo Mullen baseball field, and Town Center	Low-flow and first-flush pollutant Removal	Pollution basin designed to remove pollutants from low flows
New Encinitas	Encinitas Creek Riparian Area along Encinitas Creek from Garden View to Leucadia Blvd. (City Limits)	Water quality enhancement	Preservation of a 50 foot wide open space riparian buffer along the creek.
Leucadia	Saxony Detention Basin	Sediment removal	Detention basin.
Encinitas/ Cottonwood Creek	Moonlight Beach Urban Runoff Treatment Facility at Third and B Streets.	Bacteria Removal	Ultra-Violet treatment facility treats dry-season urban runoff. Facility was brought on-line in August, 2002, and operated since then during dry weather.
Encinitas/ Cottonwood Creek	Cottonwood Creek Park Sediment basin at Encinitas Blvd. and Vulcan Ave. (planned)	Sediment and nutrient removal	Inline wet pond designed to reduce peak storm discharge, remove sediment, and provide biological treatment of Cottonwood Creek.
Encinitas/ Cottonwood Creek	Quail Gardens Detention Facility at Quail Gardens Drive at Encinitas Ranch	Sediment removal	Detention basin designed to reduce peak storm discharge and remove sediment prior to release into Cottonwood Creek
Cardiff	Brandywine Wetland Development south of Santa Fe Drive	Nutrient removal	Wetland preservation and enhancement area.
Cardiff	Ocean Cove	Sediment removal	Detention basin.
Cardiff	Cape Sebastian	Sediment removal	Detention basin.
New Encinitas	El Camino Real Detention Basin (Pine Branch Lux Canyon)	Sediment removal	Detention basin.
Leucadia	Fox Point	Sediment removal	Detention basin.
New Encinitas	Plaza II	Sediment removal	Detention basin.
Leucadia	Piraeus/Sparta	Sediment removal	Detention basin.
Leucadia	Piraeus/Olympus	Sediment removal	Detention basin.
Leucadia	Leucadia Oaks Park	Sediment removal	Detention basin.
La Costa	La Costa Basin (new - 10/06)	Sediment removal	Detention basin.

The following is a description the BMPs that the City has been focusing on in the residential component.

(a) Automobile Repair and Maintenance (Residential)

Pollution Prevention (See Section 5.1)

(1) Encouraged residents to use routine preventative maintenance practices
(2) Encouraged and/or facilitated reductions in vehicle use:
- Changes in driving habits
- Carpooling
- Increased use of public transportation
- Biking or walking for short trips

(3) Encouraged residents to make timely vehicle repairs

Leaks and Spills

(1) Encouraged residents to prevent leaks and spills from entering the storm water conveyance system:
- Use drip pans, plastic sheeting, or other materials to contain spills
- Work indoors or under shelter
- If working outdoors, don't do it in the rain
- Require that leaks and spills be cleaned up when they occur
- Use absorbent materials to clean up spills
- Establish cleanup standards
- Require that tools and parts be cleaned only in contained areas

Materials and Waste Management

(1) Educated residents to properly manage and dispose of automotive wastes and materials through the automotive fact sheets by:
- Proper and lawful disposal of wastes and recycling of oil and antifreeze
- Storage of materials and wastes indoor or under cover
- Use of secure and watertight containers when storing materials and wastes outside

(b) Automobile Washing (residential)

Management / Reduction of Wash Water

(1) Educated residents to use dry cleaning methods to avoid the generation of wash and rinse water in the general storm water brochure.
(2) Encouraged residents to use commercial self-serve or full-serve car washes that properly recycle their wash water
(3) Educated residents to wash vehicles over porous surfaces (grass, dirt, etc.)
(4) Encouraged the establishment of neighborhood wash areas where wash water and contaminants can be properly managed

Materials and Waste Management

(1) Educated residents to properly dispose of soapy water or bucket rinse water (sanitary sewer or soak into lawn) in the general storm water brochure

***(c)* Automobile Parking (residential)**

(1) Design parking areas in residences; covered garages to be plumbed to the sewer system
(2) Educated residents to use routine preventative maintenance practices and to make timely vehicle repairs through storm water fact sheets.

***(d)* Home and Garden Care Activities and Product Use (residential)**

GARDEN AND YARD CARE

Pollution Prevention

(1) Encouraged residents to always read label instructions and follow the instructions for garden care products.
(2) Encouraged water conservation practices through our website, calendar, and water bill inserts.
(3) Encouraged the use of xeriscape gardening:
    - Encouraged the use of drip irrigation
    - Encouraged the use of soaker hoses
    - Encouraged the use of micro-spray systems
    - Encouraged the repair or adjustment of irrigation that allows excessive runoff
(4) Encouraged recycling of lawn clippings and green waste through local programs.
(5) Encouraged planting or mulching of hillsides and slopes to prevent erosion.

Leaks and Spills

(1) Educated residents to immediately cleanup spills of gardening chemicals, fertilizers, and soils.
(2) Educated residents to return spilled materials to the container for future use or proper disposal.

Materials and Waste Management

(1) Educated residents to store lawn care products in closed labeled containers and in covered areas through the storm water brochures.
(2) Discouraged the use of materials during windy or rainy days.
(3) Encouraged that stockpiles of soil, compost, or fertilizers be covered with plastic tarps to prevent dispersal by wind or rain.
(4) Required disposal of household chemicals to the household hazardous waste collection facility or at scheduled events.
(5) Encouraged dry sweeping techniques for clean up.

HOME CARE AND MAINTENANCE

Pollution Prevention

(1) Recommended product use only according to label instructions.
(2) Encouraged recycling of unused, unwanted products through storm water brochures.
(3) Encouraged the use of water based paints through the storm water brochures.

Leaks and Spills

(1) Required the cleanup of hazardous materials spills immediately.
(2) Educated residents on the use of techniques for spill cleanup and proper waste disposal.

Materials and Waste Management

(1) Educated residents about the proper storage of household hazardous materials in closed-labeled containers in a covered area.
(2) Informed residents about recycling of latex paint through community programs.
(3) Encouraged and educated the residents about the disposal of unwanted household hazardous waste through household hazardous waste collection facilities.

Restrictions

(1) Prohibited the disposal of wash waters (carpet cleaning, mop water, paint wash-up) to the street, gutter, or storm drain.

(e) **Disposal of Pet Waste**

Waste Management / Disposal

(1) Maintained pet waste disposal bags at each Dog Park.

5.3 Compliance and Enforcement Actions

The City received 59 complaints regarding residential areas or activities. Residential complaints which comprised of 40% of all complaints received, resulted in 37 educational actions, 17 Notices of Violation, and 6 Administrative Citations. Residential issues ranged from paint, stucco, or concrete in the gutter to private lateral overflows. A complete table with all IC/ID complaint investigation dates, discharges, investigations, follow-ups and enforcement activities is included in Appendix H-5.

5.4 Revisions to JURMP

The City of Encinitas has endeavored upon a comprehensive update of its Jurisdictional Urban Runoff Management Program per Water Quality Order No. 2007-0001 (Municipal Stormwater Permit), as adopted by the San Diego Regional Water Quality on January 24, 2007. Programmatic updates specific to this section will be described in an updated Jurisdictional Urban Runoff Management Plan (JURMP) document to be submitted to the RWQCB on March 24, 2008.

6.0 LAND-USE PLANNING FOR NEW DEVELOPMENT AND REDEVELOPMENT

Being a coastal community, environmental and water quality have been of utmost importance to the City of Encinitas since it was incorporated in 1986. This component describes the City's approach to minimizing the negative impacts of urbanization on storm water pollution control through the implementation of its General Plan and Land-Use policies. The Community Development and Engineering Services Departments within the City of Encinitas primarily administer the strong water quality protection policies reflected in the General Plan and the Land-Use element.

This component describes the City's actions during the reporting period FY 2006-07 regarding the development and redevelopment project review process, which ensures that City policies and regulations are followed. Of particular interest are the City's strides towards implementation of the Standard Urban Stormwater Mitigation Plan (SUSMP) requirements of the Municipal Permit. The environmental review process and the revisions implemented to comply with the Municipal Permit are also discussed in this section. Finally, the City's stormwater educational efforts are described.

6.1 General Plan

During the development of the JURMP, the City performed an assessment of its General Plan and Local Coastal Program Land Use Plan (GP/LCP) to determine the City's consistency with the watershed protection policies and principles found in the Municipal Permit. The analysis found that the City of Encinitas GP/LCP goals and policies are consistent with the Municipal Permit, and no amendments to the GP/LCP are required. The results of the analysis were presented in the JURMP.

The City of Encinitas General Plan and Local Coastal Program Land Use Plan (GP/LCP) currently addresses water quality and watershed protection. Included within the GP/LCP are proactive policies that pertain to water pollution and land-use decisions. Many of these policies directly specify preservation and acquisition of riparian corridors, wetlands, and buffer zones providing important water quality benefits. The policies also restrict developmental disturbance of natural bodies of water and drainage systems and even strive to avoid developments susceptible to erosion and sediment loss. In addition, GP/LCP policy discourages unnecessary use of impervious surfaces in new development areas, thereby minimizing the transport of urban runoff and pollutants.

Because the City of Encinitas is within the coastal zone, coastal development permits were issued to all applicable projects through the Local Coastal Program (LCP).

During the FY2002-03 reporting period, the City adopted a local Standard Urban Stormwater Mitigation Plan (SUSMP) program based on the regional Model SUSMP. The final Model SUSMP developed by the Regional Copermittees was approved by the RWQCB on June 12, 2002 (Resolution R9-2002-0097). In accordance with the Municipal Permit, the City of Encinitas modified the Model SUSMP and developed a local SUSMP. The City of Encinitas' local SUSMP was established in the City's Storm Water Best Management Practices Manual, Part II, Storm Water Manual for New Development and Redevelopment; A Manual for Construction and Permanent Post Construction Storm Water Best Management Practices Requirements (BMP Manual, Part II) and adopted on December 11, 2002 (Ordinance 2002-14). On February 5, 2003, the City received a Notice of Violation (No. R9-2003-0085) for three items requiring action. These items were addressed, and necessary modifications to the Local SUSMP (BMP

Manual Part II) were made and adopted on April 9, 2003 by City Council (Resolution 2003-22). Another modification made at this time was to change the number of the Storm Water Ordinance from Chapter 64.08 to Chapter 20.08 for more consistent municipal code numbering. Copies of the BMP Manual, Part II and the Storm Water Management Ordinance are provided in Appendix F-1 and F-2, respectively.

Although the City has adopted and actively implemented the SUSMP program as outlined in the BMP Manual Part II, the Coastal Commission has not yet approved the BMP Manual, Part II. During adoption of the BMP Manual Part II, the City made minor changes to the Grading Ordinance to maintain consistency. The Grading Ordinance is contained in the City's Local Coastal Program (LCP) and must receive Coastal Commission approval of any changes. The Coastal Commission reviewed the BMP Manual Part II and required, among other modifications, inclusion of various sections of the manual into the LCP prior to approval of the Grading Ordinance. During the reporting period, the City negotiated with the Coastal Commission the request for additional inclusions in the LCP. To date, the Coastal Commission has not approved the Grading Ordinance and BMP Manual Part II. Once it is approved, the City will then go through another public review period and give final approval of the Grading Ordinance and BMP Manual Part II.

6.2 Development Project Approval Processes

The project review process has been modified in an effort to reduce the stormwater impacts of urban development and redevelopment. The Engineering Department disperses information, enforces compliance, and checks for adequacy of the proposed facilities during predevelopment meetings with project applicants, during the Development Review process, and during the plan checks that precede project approval and permit issuance. This process is applied to discretionary and ministerial permits as discussed below.

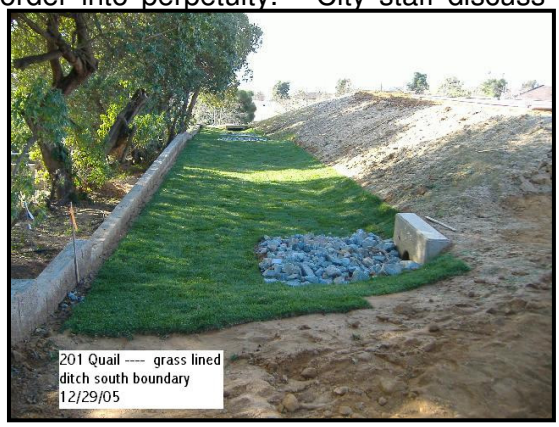
6.2.1 Discretionary Projects

Projects requiring a discretionary permit are subject to a three-tier review process that includes an initial predevelopment review prior to submittal to the City, a written self-certification of the BMP requirements for the project, and the application of project conditions of approval to meet storm water pollution control requirements. Those projects requiring a further ministerial permit are also subject to a plancheck review as described in the Ministerial Permit section.

The Predevelopment Process
The stormwater element of the Predevelopment Process is geared toward disseminating information on stormwater pollution control and the City of Encinitas SUSMP requirements during the preliminary design phase. During this phase, which is mandatory for larger projects and is available to any applicant requesting it, engineers and applicants are guided by City staff to provide adequate facilities in conceptual form and to document those facilities on the site plans upon the initial discretionary permit application submittal. This process results in better designed and integrated BMPs, since the facilities are included in the project design even in the earliest phases of the project.

During the predevelopment meeting, City representatives from all pertinent departments discuss project requirements with the applicants. For the Engineering Department, a primary focus of these meetings is stormwater pollution control; applicants are informed that all development projects generating a stormwater impact are required to provide standard Best Management Practice measures, regardless of the size or significance of the new development.

Priority Projects, targets for more stringent stormwater pollution control methods, are also first identified during these meetings. The categories of development falling under the Priority Project classification were identified by the Regional Water Quality Control Board and in the model SUSMP. The majority of Priority Projects processed by the City over the past year have been placed into that category because they proposed more than 5,000 square feet of new impervious area for driveways or roads. Priority Projects, which account for approximately 5% of the discretionary permit applications reviewed by the Engineering Department, learn that the BMP facilities they propose must meet numeric sizing requirements established by the City of Encinitas and the Regional Water Quality Control Board and must be maintained in working order into perpetuity. City staff discuss with the applicant and engineer of work options for meeting these numerically sized post-construction treatment requirements, including volume-based systems such as treatment ponds, wet ponds, and desilting basins, and flow-based systems such as grassy swales and stepped grass-lined channels. Because of vector control and maintenance issues, the City has begun to show a strong preference for flow-based systems. Mechanical treatment systems are discouraged and when accepted may account for a maximum of 50% of the treatment requirement, with the remainder of the treatment being provided by a natural system.



The photograph above shows a post-construction BMP, a grass-line swale along a project boundary.

Stormwater Pollution Control Checklist and Certification

During the 2004-05 reporting period, the City embarked upon a new project to assist in getting SUSMP requirements incorporated into projects at an earlier stage in project design. This project was instigated based on feedback from the Planning and Engineering staff. Applicants are now required to perform a written self-certification of the BMPs proposed with their project, and this certification is required to accompany the initial submittal of each discretionary permit application. The checklist briefly describes the clean water program and regulations. Applicants are required to:

a) Classify their projects as Priority, Standard, or Exempt
b) Present the BMPs that will be utilized on site to comply to the SUSMP requirements, and
c) Certify that they understand and will implement construction and post-construction BMPs on their site as appropriate for their project's priority.

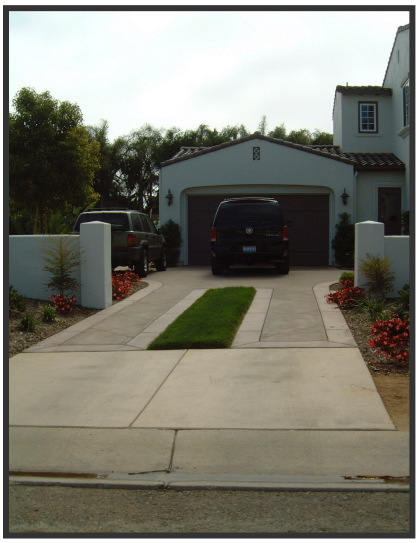
During the 2004-05 reporting period, this checklist was implemented for all ongoing CIP projects as a test case. It was expanded to all development projects at the end of the 2005-06 reporting period and has been used throughout FY 2006-07. A copy of the Checklist is provided in Appendix F-3.

The Development Review Process

The Engineering Department has established specific Conditions of Development Approval to assure compliance with the City's stormwater pollution control standards. These conditions, which are placed on the project during the Development Review process, include construction requirements as well as post-construction standards for effective stormwater pollution control facilities. Once the predevelopment meetings are conducted and the self-certification checklist

has been completed, the Engineering Department reviews the adequacy of the proposed facilities shown on the site plan and issues conditions of development to ensure implementation of satisfactory treatment measures. The Engineering Department reviews an average of 25 projects each month submitted for Development Review, approximately 5% of which are Priority Projects. Appendix F-4 provides the typical development conditions relating to stormwater pollution control.

The Engineering Department's Conditions of Approval for a project take into account the nature of the project site and the work proposed. All projects are conditioned to comply with construction stormwater requirements, and those projects creating new impervious surface areas or otherwise having a potential impact on stormwater pollution must provide standard or priority post-construction BMPs to the satisfaction of the City Engineer.



Applicants not showing adequate BMP measures on their initial development review submittals are asked to revise their plans and resubmit prior to approval. At a minimum, stormwater pollution control facilities for standard BMP projects may be considered adequate when they include no directly connected impervious areas (DCIA). Landscape areas must be designed to receive flows from hardsurface areas, and new impervious areas should be minimized in order to reduce adverse impacts on stormwater quality. When appropriate, project applicants are required to provide grassy swales or reinforced gravel swales along their property frontage to the street for stormwater pollution control purposes.

In the Development Review process, Priority Projects must show a feasible solution for numerically-sized treatment BMPs on their project plans, and those projects with treatment areas that appear to be inadequate are asked to provide substantiating calculations with their development review resubmittal. These numerical treatment requirements are enumerated in the BMP Manual, Part II, included here as Appendix F-2 and available to all applicants through the City website.

Priority Projects, such as those listed above, are not only required to show the proposed treatment BMPs on the development review site plan, but are also issued conditions of project approval requiring they meet all of the standard post-construction BMP requirements discussed above and follow additional guidelines calling for the construction of numerically sized stormwater treatment facilities. The conditions of approval are then recorded in a covenant against the property. After the discretionary phase, those projects that enter the ministerial phase are subject to further review of the project BMPs during the plancheck process as described below.

6.2.2 Ministerial Projects

Projects requiring a ministerial permit such as a grading, improvement, or building permit are required to provide post-construction stormwater pollution control facilities on the permit plans. These facilities must be considered adequate before the plans are approved by Engineering staff. Often the project has been scrutinized at the discretionary permit level and the project has been conditioned to provide specific treatment facilities. For those projects not requiring a

discretionary permit, the review of the storm water pollution control treatment facilities begins at the plancheck stage, which is described below.

During the FY 2005-06 reporting period, the City of Encinitas adopted new fees for NPDES plancheck and inspection of grading and improvement plans. The additional fees, assessed with every ministerial permit application, help to fund the increased workload brought about by more stringent storm water requirements.

The Plancheck Process

City plancheck engineers are trained in the design of stormwater pollution control facilities and serve as resources to the general public and to design engineers. During the plancheck process, every project is reviewed for stormwater BMPs. City plancheck engineers emphasize to applicants the variety of solutions that may be used in providing stormwater pollution control. Designs that propose directly connected impervious areas (DCIA) are not permitted, and projects that allow stormwater runoff to travel maximum practicable distances over landscape and turf areas are encouraged. Project engineers are asked to ensure that roof drains will discharge onto landscape areas rather than hard surfaces, and this stipulation is clearly indicated on the project plans. Whenever possible, hard surface areas must be replaced with permeable ones and concrete ditches be replaced with grassy swales and rip-rap ditches. Excessive use of area drains in landscaped regions is discouraged. Driveways that drain towards turf areas on one or both sides or towards a grassy swale in the middle are promoted. All landscape areas for use as BMPs must be clearly marked on the plans, and project engineers are asked to include the note, “Landscape area for Best Management Practice to be privately maintained and not to be modified without a permit from City”. Because the permitted drawing becomes public record, a clear record of the designated treatment areas is maintained. Engineers are also required to provide stormwater pollution control notes on the plans addressing employee stormwater education, materials storage, erosion control, and waste management (Appendix F-5). After a development drawing has been approved, Engineering Inspectors in the field ensure that the storm water pollution control treatment measures are installed per plan. During the current reporting period, approximately 180 standard grading or improvement projects were plan checked by the Engineering Department and required to implement SUSMP BMPs. A full list of these projects and the type of BMPs required is provided in Appendix F-6. Priority projects approved during this reporting period are discussed below.





Every plan in plancheck is also reviewed to determine if it meets the City’s definition of a Priority Project. Priority Projects are checked to make sure that, in addition to meeting standard BMP

requirements, numerically-sized treatment facilities are provided. Design requirements include providing treatment facilities to treat at least the volume of rainfall generated by an 85th percentile storm over the entire project acreage or ensuring a treatment time of between 5 and 9 minutes within a flow-based system; these requirements are discussed further in the BMP Manual, Part II, available to all applicants on the city website and included here as Appendix F-1. All Priority Projects must comply with the numeric sizing criteria in order to be approved by the City Engineer, and plancheck engineers review the hydrology calculations to determine the adequacy of treatment system proposed. The project applicant is required to assume the maintenance responsibility or to identify the maintenance mechanism for the treatment system prior to project approval, and a covenant ensuring adequate maintenance into perpetuity is recorded against the property. In the current reporting period, 45 Priority projects were approved for issuance of grading or improvement permits. A full list of the projects that went through the Engineering plancheck process and the type of BMPs required is provided in Appendix F-6.

Table 6-1 Priority Projects Reviewed by Development Engineers (FY 2006-07)

Project Number	Approval Date	Address	BMP Type	Maintenance Agreement?
0094	06/06/07	1020 Calle Anacapa	bioswales	no
0187	11/20/06	1060 Urania Ave	mechanical/detention pit	yes
0153	08/31/06	111-125 Chesterfield	mechanical	yes
9055	12/08/06	1308-1310 El Camino Real	detention basin and bioswale	yes
0255	08/24/06	1877 Olivenhain Rd	TBD, not approved yet	yes
9057	08/08/06	201 Quail Road	bioswales	yes
0177	07/21/06	329 Lake Drive	bioswales	yes
0181	08/21/06	3342 Wildflower Valley Dr	bioswales	no
0414	01/29/07	4455 Manchester Ave	mechanical bioswales	yes
9294	10/10/06	477 N El Camino Real	underground detention basin, bioswale	yes
0462	05/22/07	70 N Coast Hwy 101 thru 90 N Coast Hwy 101	mechanical/bioswales	yes
9262	02/20/07	840 Bracero	bioswales	yes
9303	01/18/07	887 Brittany	detention basin	yes
7828	10/12/06	Lake Dr	bioswales with underground pipes	yes
0307	11/02/06	Phoebe St and Hwy 101	detention chamber	yes (HOA)
0308	11/02/06	Phoebe St and Hwy 101	detention chamber	yes (HOA)
9481	07/18/06	Quail Gardens 12 lot sub	swales and mechanical	yes (HOA)
9318	07/18/06	Santa Fe at Evergreen	bioswales	yes
1469	10/13/06	Sheilds	bioswales	yes (HOA)
6442	09/28/06	Manchester Ave	detention basin	yes
0562	06/14/07	1302 Encinitas Blvd	detention basin, grass swales	yes
0388	05/26/07	1435 Lake Dr	grass swales	yes
0372	06/13/07	1657 N Vulcan	detention basin, grass swales	yes
0437	04/28/07	200-52 El Camino Real	mechanical filter	yes
9459	07/18/06	211 Saxony Rd	bioswales; detention basin	yes
0183	11/01/06	3234 Olivenhain Farms	grass swales	yes
0087	09/28/06	354 Santa Fe	detention basin, grass swales	yes
9301	05/09/07	Halcyon Rd	grass swales	yes
0325	04/30/07	Lone Jack Rd	grass swales	yes
0276	11/07/06	Phoebe St and Hwy 101	mechanical filter	yes
9580	07/25/06	Vacant lot on Dove Hollow Ln	infiltration basin, bioswales	yes
0369	12/08/06	1415 Rainbow Ridge	bioswale	yes
9215	10/05/06	155 Quail Gardens	swale	yes
0482	02/02/07	1864 Crest Dr	bio-basin	yes

Project Number	Approval Date	Address	BMP Type	Maintenance Agreement?
6169	04/17/07	2100 N Coast Hwy	bioswale/ landscape	yes
0353	11/22/06	224 Andrew	bioswale	yes
0060	09/26/06	3275 Poppy Hills Ln	bioswale/ landscape	yes
0386	01/24/07	3535 Manchester Ave	underground storage chambers, bioswales	yes
9294	01/24/07	477 N El Camino Real	bioswale/ structural unit train	yes
0169	10/18/06	510 El Camino Real	bioswale/ inlet filters	yes
0483	02/07/07	540 La Costa	bioswale/ inlet filters	yes
9367	07/12/06	781 Gardenview Ct	bioswale	yes
0061	03/28/07	801 Orpheus Ave	bioswale/ landscape	yes
6242	08/30/06	Fortuna Ranch & Rancho Summ	roadside bioswale	yes
9318	07/06/06	Santa Fe at Evergreen	bioswale/ landscape	yes

During the plancheck process, erosion control plans are also carefully reviewed to ensure compliance with construction BMP measures. Gravel bags, silt fences, stabilized construction entrances, and other methods must be provided where appropriate. Inlets to drainage facilities must be protected from sediment. Additionally, all exposed slopes need to be protected by a combination of hydroseed, permanent landscaping, and other erosion control measures. Even flat building pads not scheduled to be built upon immediately must be protected with erosion control methods until construction begins. Engineering inspectors visit the project sites frequently to ensure that erosion control measures are satisfactorily installed and are in good working order. Those projects with the potential for substantial erosion are often required to provide an additional plan for permanent landscaping and irrigation and to place bonds with the City to guarantee successful implementation of the measures shown thereon. Such bonds are retained until the landscaping has become well established.

Plans submitted for building plancheck are also reviewed by the Engineering Department for compliance with stormwater pollution control guidelines. No directly connected impervious areas (DCIA) are permitted, and landscape areas must be designed to receive runoff from hard surfaces. Stormwater pollution control BMP treatment areas are required to be clearly indicated on the plans and to be labeled as “Landscape areas for BMP to be privately maintained and not to be modified without a permit from the City.” The building plan approval process has been modified to include a requirement for standard plan notes addressing stormwater pollution control for all projects (Appendix F-4). Building plans not providing adequate BMP facilities are required to be modified and resubmitted.

Post Construction BMP Maintenance Agreements

The Engineering Department is concerned that adequate BMPs are not only constructed but are also maintained in good working order. All Priority Projects under review for ministerial permits must execute a stormwater maintenance agreement guaranteeing the maintenance and/or replacement of the project BMPs as necessary into perpetuity. The covenant includes an attachment depicting the specific project BMPs, so the required facilities and their location on the project site are easily identified. The maintenance agreement is then recorded against and runs with the property. In a few rare cases the maintenance requirements are outlined on the plans themselves and an agreement is not recorded. A sample Private Stormwater Treatment Maintenance Agreement is included in Appendix F-7.

6.2.3 Capital Improvement Projects

City Capital Improvement Projects (CIP) are subject to the same post-construction BMP requirements as private development. Because many projects are reconstruction, linear, or repair projects, often only construction BMPs are implemented. However, SUSMP qualifying projects must also install post-construction BMPs. During the 2006-07 reporting period, the only SUSMP project was the Leucadia Blvd Improvement and Roundabouts Project. Inlet filters were installed as a post-construction BMP.

6.3 Environmental Review Process

In compliance with the JURMP, the City has modified its Initial Study Checklist. A copy of this checklist can be found in Appendix F-8. The revised checklist was utilized for all CEQA Initial Study reviews performed during the reporting period.

6.4 Education Efforts Focused on New Development and Redevelopment

Education focused on new development and redevelopment during this reporting period consisted of ongoing one-on-one education during the development review process.

6.4.1 Ongoing One-on-one Education

Representatives of the Engineering Department work one-on-one with project applicants and engineers to educate them on stormwater regulations and how these requirements may be met through project design. In predevelopment meetings held for discretionary projects, engineering staff explain to project engineers the City's stormwater standards and direct them to online references, such as the Best Management Practice Manual Part II, that may provide further direction. Preliminary designs are reviewed and necessary modifications are discussed, ensuring that the best designs for meeting stormwater requirements are achieved. Project engineers receive continuing guidance through the remainder of the project to ensure an adequate design. Project engineers have further access to engineering staff throughout the plancheck process, and through the City's consistent emphasis on effective BMP methods, local engineers have provided innovative designs for stormwater pollution control.

During all phases of the development approval process, from predevelopment meetings through permit issuance, applicants and project engineers have access not only to the assistance of the Engineering Department staff in providing stormwater pollution control activities, but they are also encouraged to utilize written and online sources. The City of Encinitas has collected drawings and guidelines into a professional engineers' reference, the BMP Manual Part II. The manual helps engineers to design effective and adequate stormwater pollution control facilities and includes typical drawings for stormwater treatment basins, percolation basins, grassy swales, and stormwater discharge systems. The manual also includes guidelines for maximizing the flow of runoff over landscape, lawn, and other permeable areas.

6.4.2 Targeted Audience Education

The BMP Manual, Part II is available to the public on the City website and on CD at the Engineering and Planning counter for purchase.

6.5 Revisions to JURMP

The City of Encinitas has endeavored upon a comprehensive update of its Jurisdictional Urban Runoff Management Program per Water Quality Order No. 2007-0001 (Municipal Stormwater Permit), as adopted by the San Diego Regional Water Quality on January 24, 2007. Programmatic updates specific to this section will be described in an updated Jurisdictional Urban Runoff Management Plan (JURMP) document to be submitted to the RWQCB on March 24, 2008.

7.0 CONSTRUCTION COMPONENT

7.1 Description of Activities

The City of Encinitas has placed a strong emphasis on its construction component. This emphasis begins with construction site BMP requirements that must be shown on grading plans, an aggressive inspection program and strong enforcement policies. The activities performed during the FY 2006-07 reporting period are discussed in the following sections.

7.1.1 Pollution Prevention

During the reporting period, pollution prevention BMPs were required on construction sites in accordance with the Encinitas Municipal Code (EMC), Chapter 20.08, the City's Stormwater Best Management Practices Manual, Part I & II, and the project's SWPPP, if applicable. In addition, grading and building plans issued included special notes requiring stormwater pollution prevention BMP implementation. These pollution prevention BMP requirements were also reiterated in the City's annual Erosion Control letter issued in September 2006 to contractors/developers operating in the City. Pollution prevention BMPs include erosion control, sediment control, materials management, and employee training programs. These BMPs were implemented on all construction sites and implementation was verified during site inspections.

7.1.2 Construction and Grading Approval Process

The City's project grading approval process has been modified to look for ways to minimize impacts of construction projects. The Engineering Department disperses information, enforces compliance, and checks for adequacy of the proposed facilities during predevelopment meetings with project applicants, during the Development Review process, and during the plan checks that precede project approval. This process is applied to ministerial and discretionary permits.

The Engineering Department has established specific Conditions of Development Approval to ensure compliance with the City's stormwater pollution control standards. These conditions, which are placed on the project during the Development Review process, include active construction requirements as well as post-construction standards for effective stormwater pollution control facilities (discussed in Section 6). The Engineering Department's Conditions of Approval for a project take into account the nature of the project site and the work proposed. All projects must comply with construction stormwater requirements. Applicants not showing adequate BMP measures on development review submittals are asked to revise their plans and resubmit.

During the plan check process, erosion control plans are carefully reviewed to ensure compliance with construction BMP measures. Gravel bags, silt fences, stabilized construction entrances, and other methods must be provided where appropriate. Inlets to drainage facilities must be protected from sediment. Additionally, all exposed slopes need to be protected by a combination of hydroseed, permanent landscaping, and other erosion control measures. Even flat building pads not scheduled to be built upon immediately must be protected with erosion control methods until construction begins.

7.1.3 Source Identification

The construction inventory is included in Appendix G-1. Projects were prioritized as high or medium priority sites based on size, slope, soils, or proximity to receiving waters. A total 134 projects were included in the 2006-07 rainy season inventory; 22 of the projects were considered high priority. In addition to the inventory, the City's GIS Department created a map of the various construction projects which includes the parcel(s) under construction and receiving waters within the City. To assist with project prioritization, this map was overlaid with a map of environmentally sensitive areas (ESA) to assist in prioritizing sites. The map is included in Appendix G-2.

7.1.4 BMP Implementation

Construction BMP requirements are presented in the Encinitas Municipal Code (EMC), Chapter 20.08, the City's Stormwater Best Management Practices Manual, Part I & II, and the project's SWPPP, if applicable.

Clean Water Program staff spends a significant amount of time coordinating with the engineering inspectors with regards to stormwater management and BMP implementation on construction sites.

Clean Water Program staff constantly monitors weather patterns and storms in the Pacific through the National Weather Service. Weather reports and forecasts are posted on a bulletin board allowing inspectors to be constantly updated on the possibility of incoming rain. When the forecast exceeds 40% over the coming five-day period, inspectors inform contractors that additional BMP implementation may be necessary and, where necessary, they require developers to have additional BMPs in place at the end of each work-day.

The general notes for the building plans have been amended to include erosion control, sediment control, and materials management practices. The Clean Water Program also reviews SWPPPs for projects greater than five acres and sensitive projects between one and five acres. Staff reviewed and commented on Stormwater Pollution Prevention Plans for three projects between July 1, 2006 and June 30, 2007. See Table 7-1 below for a summary of SWPPP reviews. Other project reviews completed by Clean Water Program Staff as part of the permitting process were previously addressed in Section 6.0, Land-Use Planning for New Development.

Table 7-1 Storm Water Pollution Prevention Plan Reviews, 2006-07

Site Name	Address	Size (acres)	NOI?	Review Date
Rancho Summit	Fortuna Ranch Rd & Rancho Summit Dr	11.2	Yes	05/01/07
Belmont Cardiff	3535 Manchester Ave	4.4	Yes	5/16/07
Holland Residence	1415 Rainbow Ridge Ln	4.58	Yes	6/14/07

Through the review and plancheck process, staff may require additional or alternative BMPs to be implemented on individual projects. This allows the Clean Water Program to ensure that the proper sediment control, erosion control, and materials management BMPs are shown on the plans and are to be implemented on-site.

7.2 Summary of Inspections

The City of Encinitas Engineering Department employs six engineering inspectors to oversee construction activities in the City and verify that minimum BMPs are implemented. Four of the inspectors are under contract, while two inspectors are employed full time by the City of Encinitas. Stormwater inspections were performed regularly by engineering inspectors and occasionally by Clean Water Program staff. There were 22 sites designated as high priority during the 2006-07 wet season. High priority designations were given to sites based on proximity to receiving water, size of site, and/or existing or new slopes.

Engineering inspectors are responsible for inspections at all construction sites. Stormwater issues (compliance with the grading and stormwater ordinance) have become one of their main focuses, especially during the wet season. Engineering inspectors were onsite inspecting high priority locations on a daily basis and were constantly monitoring BMPs installed and in use by developers, so that all high priority sites were inspected on a weekly basis, at a minimum. The high priority inspections are documented weekly. Staff documented a total of 579 stormwater inspections (371 were at high priority sites and 208 were at medium and low priority sites) during the wet season, spanning October 1, 2006 to April 30, 2007.

In addition to the high priority sites, a total of 112 medium and low priority sites were identified for the rainy season. Both medium and low priority sites were inspected at least twice during the wet season for a total of 208 documented inspections at these locations. Inspectors are at all of these sites at a minimum of once a week inspecting stormwater BMPs, as well as other construction related issues.

A copy of the Construction Site Storm Water Checklist for FY 2006-07 is included in Appendix G-3.

7.2.1 2005-06 Annual Report Comment Response

RWQCB Comment: The Annual Report States that all sites were inspected at the required frequency during the rainy season. The report provides a detailed account of the number of sites (23 high and 95 medium/low priority), and number of documented inspections conducted during the rainy season (437 at high and 55 at medium/low priority sites). The report clearly explains that all required inspections were conducted but some, especially of medium/low priority sites, were not formally documented. Please be aware that the Regional Board expects the City to document completed inspections and keep the records on file. The new Municipal permit requires the Co-permittees to create written or electronic inspection reports to verify that sites are inspected at the minimum required frequencies (section D.2.d(6)(f), p. 31)

The City of Encinitas has endeavored upon a comprehensive update of its Jurisdictional Urban Runoff Management Program (JURMP) per Water Quality Order No. 2007-0001 (Municipal Stormwater Permit), as adopted by the San Diego Regional Water Quality on January 24, 2007. Programmatic updates specific to this section will be described in an updated Jurisdictional urban Runoff Management Plan (JURMP) document to be submitted to the RWQCB on March 24, 2008. As part of this update process, the Construction component shall be developed and implemented to meet the requirements of the Permit as referenced in the comment above. Specifically, mechanisms shall be put in place to facilitate effective and efficient documentation of construction inspection activities in order to verify required inspection frequencies.

7.3 Compliance and Enforcement Actions

7.3.1 General Enforcement

Enforcement actions fall into several categories as outlined in the Jurisdictional Urban Runoff Management Plan for the City of Encinitas.

The first level of enforcement is based on education. When Clean Water Program Staff or engineering inspectors noticed a deficiency with BMPs on a construction site, the inspector attempted to contact the superintendent onsite at the time of inspection. When this approach was feasible, education was given to the superintendent in the forms of verbal advice and/or written information regarding best management practices. If the superintendent was not available, a copy of the inspection report was given to the engineering inspector for the project and discussed in detail, thereby educating the inspector and allowing him to educate the superintendent in the field.

The second level of enforcement is the issuance of a written Notice of Violation (NOV). Typically, contractors cooperated with requirements without staff issuing Notices of Violation to stop or correct work. The written NOVs are sub-divided into two categories: a Notice to Correct Work, and a Notice to Stop Work. When a Stop Work is issued, all work on the construction site must cease, with the exception of necessary erosion control, sediment control, or materials management practices. Notices of Violation are issued with a date for compliance and are followed up during future inspections.

On occasion, citations are issued for the most flagrant violations. The administrative citation process is most often used for citations, providing staff the ability to issue fines on-site when necessary.

An additional enforcement mechanism is referral to the Regional Water Quality Control Board. This occurs when a violation involves non-filing under the State General Construction Permit or when a significant sediment discharge occurs.

7.3.2 Reporting and Non-compliance

During the rainy season 2006-07, six complaints were received through the City's hotline and fifty one complaints of non-compliance were reported by the City's engineering inspectors. As a result, 51 NOVs/Notices to Correct Work and one (1) Stop Work Notice was issued. No citations were issued during FY 2006-07. With immediate oversight from the City's engineering inspectors, contractors were quick to address all complaints and implement the appropriate BMPs to achieve compliance. See Table 7-2 for a summary of violations in FY 2006-07.

7.4 Construction Education

Education for construction sites performed during this reporting period are listed below and are also discussed in Section 9 of this Annual Report.

- In September 2006, the Senior Civil Engineer of Field Operations sent 111 Erosion Control letters to all grading permit holders in the City. This letter addresses BMP requirements that are the responsibility of the permit holder in regards to erosion and sediment control during the wet season. The letter reiterates sections of the City's

Grading Ordinance, Encinitas Municipal Code Section 23.24.370. A copy of this letter is included as Appendix G-4.

- Announcements at pre-construction meetings. All pre-construction meetings are attended by the Engineering Department. The BMP requirements for construction and the concepts of post-develop BMPs are introduced and SUSMP requirements are outlined.

- Coordination with construction inspectors. Staff from the Clean Water Program attended weekly inspector staff meetings to provide support and information to inspectors.

- Individual communication during inspections. Stormwater and construction inspectors provide BMP requirements and information to contractors and developers on a weekly basis in the field during inspections of stormwater protection measures.

- Printed materials were provided to contractors and developers in the form of the City's bilingual English/Spanish brochure, "Devlopers-Simple and Cost Effective Ways to Comply with Storm Water Regulations" (Appendix E-1). The City also widely distributed the North County Storm Water Program's brochure "A Pollution Prevention Guide for the Construction Industry" (Appendix E-9). During the FY 2006-07 approximately 238 brochures were distributed.

7.5 Revisions to JURMP

The City of Encinitas has endeavored upon a comprehensive update of its Jurisdictional Urban Runoff Management Program per Water Quality Order No. 2007-0001 (Municipal Stormwater Permit), as adopted by the San Diego Regional Water Quality on January 24, 2007. Programmatic updates specific to this section will be described in an updated Jurisdictional Urban Runoff Management Plan (JURMP) document to be submitted to the RWQCB on March 24, 2008.

Table 7-2 Construction Enforcement Action FY 2006-07

Date	Site Address	Violation	Correct Work	Stop Work	Citation-Warning	Citation-Fine	Citation Number	Cost Recovery	Routine	Complaint
10/04/06	Encinitas Blvd & Quail Gardens Dr.	Lack of BMPs		X						
10/05/06	236-238, 290 Andrews Ave.	Lack of BMPs	X							
10/05/06	1555 Bella Vista	Lack of BMPs	X							
10/05/06	Encinitas Blvd & Quail Gardens Dr.	Lack of BMPs	X							
10/05/06	201 Quail Road	Lack of BMPs	X							
10/05/06	Wildflower Valley Dr.	Lack of BMPs	X							
10/10/06	Mackinnon Ave @ Birmingham	Lack of BMPs	X							
10/10/06	201 Quail Road	Lack of BMPs	X							
10/11/06	1653 Burgundy Rd.	Lack of BMPs	X							
10/12/06	236-238, 290 Andrews Ave.	Lack of BMPs	X							
10/12/06	Wildflower Valley Dr.	Lack of BMPs	X							
10/13/06	3230 Bella Colina	Lack of BMPs	X							
10/13/06	1555 Bella Vista	Lack of BMPs	X							
10/13/06	Encinitas Blvd & Quail Gardens Dr.	Lack of BMPs	X							
10/18/06	200 block Seeman Drive	Lack of BMPs	X							
10/18/06	Wildflower Estates	Lack of BMPs	X							
10/19/06	1555 Bella Vista	Lack of BMPs	X							
10/19/06	Encinitas Blvd & Quail Gardens Dr.	Lack of BMPs	X							
10/23/06	Third and B St.	Maintenance of BMPs	X							
10/24/06	477 El Camino Real	Lack of BMPs	X							
10/25/06	3275 Poppy Hills Lane	Lack of BMPs	X							
10/26/06	Pireaus & Plato	Maintenance of BMPs	X							
11/03/06	406 La Costa	Lack of BMPs	X							
11/06/06	1521 Summit Ave	Lack of BMPs	X							
11/15/06	1555 Bella Vista	Lack of BMPs	X							
11/29/06	1555 Bella Vista	Lack of BMPs	X							
11/29/06	Wildflower Dr.	Lack of BMPs	X							
12/12/06	540 Cornish Dr,	Lack of BMPs	X							
12/14/06	1555 Bella Vista	BMP Maintenance	X							

Date	Site Address	Violation	Correct Work	Stop Work	Citation-Warning	Citation-Fine	Citation Number	Cost Recovery	Routine	Complaint
12/19/06	1555 Bella Vista	Lack of BMPs	X							
1/04/07	1555 Bella Vista	Lack of BMPs	X							
1/04/07	Wildflower Dr.	Lack of BMPs	X							
1/15/07	1270 Rubenstein Ave.	Lack of BMPs	X							
1/18/07	1555 Bella Vista	BMP Maintenance	X							
1/18/07	Wildflower Dr.	Lack of BMPs	X							
1/23/07	406 La Costa	BMP Maintenance	X							
1/23/07	Wildflower Dr.	BMP Maintenance	X							
1/24/07	1555 Bella Vista	BMP Maintenance	X							
2/01/07	1555 Bella Vista	BMP Maintenance	X							
2/01/07	Wildflower Dr.	Maintenance of BMPs	X							
2/06/07	3358 Wildflower Valley Dr.	Maintenance of BMPs	X							
2/07/07	736 Fourth St.	Maintenance of BMPs	X							
2/08/07	1555 Bella Vista	Lack of BMPs	X							
2/14/07	Wildflower Dr.	Lack of BMPs	X							
2/22/07	1555 Bella Vista	Lack of BMPs	X							
2/27/07	293 Hillcrest Dr.	Lack of BMPs	X							
2/27/07	406 La Costa	Maintenance of BMPs	X							
2/28/07	3342 Wildflower Valley Dr.	Lack of BMPs	X							
3/05/07	1270 Rubenstein Ave	Lack of BMPs	X							
3/12/07	1450 Paseo del las Flores	Lack of BMPs	X							
4/09/07	403 Sheffield	Lack of BMPs	X							
FY 2006-07	**TOTALS**		**50**	**1**						

8.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

The Municipal Permit requires the establishment of an illicit connection/illegal discharge (IC/ID) program to actively seek and eliminate illicit connections and illegal discharges. This component describes the activities of the IC/ID program including the dry weather monitoring program, sanitary sewer overflows in the Encinitas Sanitary District/Cardiff Sanitary District (ESD/CSD) and in Leucadia Wastewater District (LWD), and public reporting of illicit discharges.

This program actively involves the municipal Clean Water Program staff, the sanitary districts (ESD/CSD, LWD), San Diego County and municipal Hazardous Materials teams, Fire Departments, Public Works, and the citizens of Encinitas. When an illicit discharge is detected in the monitoring programs or reported to the City, Clean Water Program staff investigates, inspects, eliminates, and follows up on the discharge. The City has trained and organized the municipal staff to detect and report illicit discharges and has also established an active public hotline to facilitate public reporting of illicit discharges.

8.1 Illicit Discharge and Connections Identification

8.1.1 Illicit Discharge Source Identification

The City of Encinitas incorporates four methods into source identification for illicit discharges including: dry weather monitoring, the stormwater hotline, routine inspections, and visual inspection of the Municipal Separate Storm Sewer System (MS4). These methods are discussed below.

Dry Weather Monitoring
Staff performs dry weather monitoring as required by Permit Section F.5.b, Dry Weather Analytical Monitoring. The City uses this program to better understand the water quality of its waterways and to detect illicit discharges. This program is described further in Section 8.2 of this document.

Stormwater Hotline
The second method in place to identify and eliminate illicit discharges is through the City's stormwater hotline, which receives complaints and referrals 24 hours a day. The hotline is staffed during business hours and includes a telephone number for after-hours emergencies. Staff carries an NPDES specific pager in order to respond promptly to after hours emergencies.

Routine Inspection
The third method utilized by City staff is routine inspection of businesses in order to further source illicit discharges. Industrial sites are inspected annually and are described in detail in Section 3.0, the Industrial Component, of this report. Commercial facilities deemed high priority are inspected on a routine and as-needed basis. The commercial inspections program is described in Section 4.0, the Commercial Component of this document.

Visual Inspections of the MS4
The fourth method of source identification employed by the stormwater and public works staff is through visual inspection of the MS4. When illicit discharges are observed, stormwater staff is notified and necessary measures are taken, starting with education, enforcement, and/or cleanup. Section 2.0, the Municipal Component, of this document describes the routine visual inspections performed by City staff. In FY 2006-07, 53 of the 156 total complaints were

reported by City staff as a result of visual monitoring of the MS4. These represent 34% of the total complaints received this fiscal year.

8.2 Dry Weather Analytical Monitoring

8.2.1 MS4 Map

A map of the MS4 was developed as required per the Consent Decree with Baykeepers (1999). The information is maintained in a Geographical Information System (GIS). The City of Encinitas has continued to refine and populate its GIS-based MS4 map throughout the reporting period. On a sub-basin by sub-basin basis, staff has been reviewing improvement, utility, and construction plans to verify the existing GIS maps and add storm drain features. In addition, Global Positioning System (GPS) verification has been performed for storm drains and creeks that are not shown on project plans or for which project plans are not available. The current map of the City of Encinitas MS4 and Dry Weather Monitoring Stations is located in Appendix H-1.

8.2.2 Dry Weather Analytical Monitoring Stations

Dry weather monitoring locations were selected based on adequate coverage of the MS4, allowing for characterization of flows and a better understanding of the water quality in Encinitas. This allows for the identification and tracking of exceedances, indicating the possibility of illicit discharges to the MS4. Efforts were made to cover the entire jurisdiction and isolate particular areas of the storm drain system according to factors such as land use or previous water quality data. The Dry Weather Monitoring Program for 2007 included 52 locations distributed across eight sub-basins.

8.2.3 Dry Weather Analytical Monitoring Procedures

The City's Dry Weather Monitoring Program utilizes methods and procedures in collecting and analyzing data which are consistent with those developed by the Copermittee Dry Weather Monitoring Workgroup. The elements of the dry weather program include 52 sampling locations, sampling frequencies, field screening and sampling procedures (including monitoring parameters), recommended action levels and data interpretation, follow-up investigations, and reporting. Qualitative observations were made at all sample locations. Each location has a unique field data sheet noting observations such as color, clarity, odor, and biological characteristics which are featured in the appendices of the report. Each of these procedures is discussed further in the Dry Weather Monitoring Report for 2007, located in Appendix H-2.

Field tests were performed at 33 sites. Meters were used in determination of pH, conductivity, temperature, and turbidity. Ammonia, ortho-phosphate, and MBAS analysis were performed with CHEMetrics field kits. Nitrate-nitrogen was analyzed using a Hach Spectrophotometer. Where possible, flow was determined by filling a bottle of known volume using a timer and an estimation of the amount of flow captured. Flow was not able to be measured in certain locations, often due to lack of flow, but was noted as either flowing or ponded at all locations.

8.2.4 Dry Weather Data Analysis

Detailed analyses of the 2007 dry weather data are included in Appendix H-2, the Dry Weather Monitoring Assessment, May 1, 2007 – September 30, 2007.

8.3 Investigations/Inspections and Follow-up

Table 8-1 summarizes follow-up investigations performed as a result of dry weather monitoring in 2007.

Table 8-1 IC/ID Investigations in Response to Dry Weather Monitoring, 2007

Sample Location	Parameter(s) Exceeded	Suspected Cause(s)
LUC-4	Bacteria, Orthophosphate	Animal sources and over-irrigation

In addition to the investigation performed as a result of dry weather monitoring results, many source identification investigations were performed in response to complaints received via the stormwater hotline and from City staff. On February 5, 2007 Clean Water staff received a complaint regarding an illegal discharge of grease into the municipal stormwater conveyance system in the Cardiff sub-basin. The discharge impacted approximately 688 ft. of the City's main 60 inch storm drain line. Clean-up and containment efforts were initiated immediately. A $100.00 citation was issued to both responsible parties, the restaurant owner and the property management company. The property manager also contracted with Gold Coast Flood Restorations and Affordable Pipeline Services to clean the storm drain line with a final billing of $20,060.50. A follow-up sample for oil and grease and bacteria was collected downstream on February 13, 2007 and all results were below action levels. A complete table with all IC/ID complaint investigation dates, discharges, investigations, follow-ups and enforcement activities is included in Appendix H-5.

8.4 Elimination of Illicit Discharges and Connections

The City utilizes three primary methods for the identification of illicit discharges and connections. These include: complaint responses via the stormwater hotline, City staff complaints and City staff observations and detection and elimination through monitoring (primarily dry weather).

There were a total of 156 complaints filed with the Clean Water Program in FY 2006-07. All 156 complaints were investigated with sources being identified in the majority of the cases. Ten complaints were requests for information or referred to other agencies or jurisdictions. The remaining 146 complaints were investigated and resulted in a total of 159 enforcement actions which included education (82), Notice of Violations (45), Administrative Citations (29) and cost recoveries (3) for illegal discharges. Appendix H-5 identifies all 159 enforcement actions which include: complaint dates, details of substances discharged and the resulting action taken by City Staff to eliminate and prevent discharges in the future.

The most flagrant violations observed by City staff resulted in Administrative Citations and cost recoveries issued to the responsible party. Table 8.2 below summarizes the most serious of the violations and the resulting action.

Table 8-2 Citations Issued FY 2006-07

Date	Code Violation	Violation Description	Fine	Cost Recovery	Category
7/31/06	20.08.040B	Illegal discharge of auto oil	$100.00	$1868.88	Commercial
7/31/06	20.08.040B	Illegal discharge of auto fuel	$0	$433.38	Commercial
8/3/06	20.08.040B	Illegal discharge of concrete	$100.00	$0	Commercial

Date	Code Violation	Violation Description	Fine	Cost Recovery	Category
		waste			
8/5/06	20.08.040B	Illegal discharge of food debris and wash water	$200.00	$0	Commercial
10/13/06	20.08.040B	Illegal discharge of concrete waste	$100.00	$0	Residential
10/18/06	20.08.040B	Illegal discharge of wash water	$100.00	$0	Commercial
11/16/06	20.08.040B	Illegal discharge of antifreeze	$100.00	$0	Commercial
11/20/06	20.08.040B	Illegal discharge of wash water	$200.00	$0	Commercial
1/2/07	20.08.040B	Illegal discharge of wash water, food and grease	$100.00	$0	Commercial
1/15/07	20.08.040B	Illegal discharge of paint	$100.00	$665.00	Commercial
1/31/07	20.08.040B	Illegal discharge of sediment	$100.00	$0	Commercial
2/13/07	20.08.040B	Illegal discharge of grease	$100.00	$0	Commercial
2/28/07	20.08.040B	Illegal discharge of oil and wash water	$100.00	$0	Commercial
3/22/07	20.08.040B	Illegal discharge of motor oil	$100.00	$0	Residential
6/7/07	20.08.040B	Illegal discharge of wash water	$100.00	$0	Commercial
		TOTAL	**$7600.00**	**$7,360.80**	

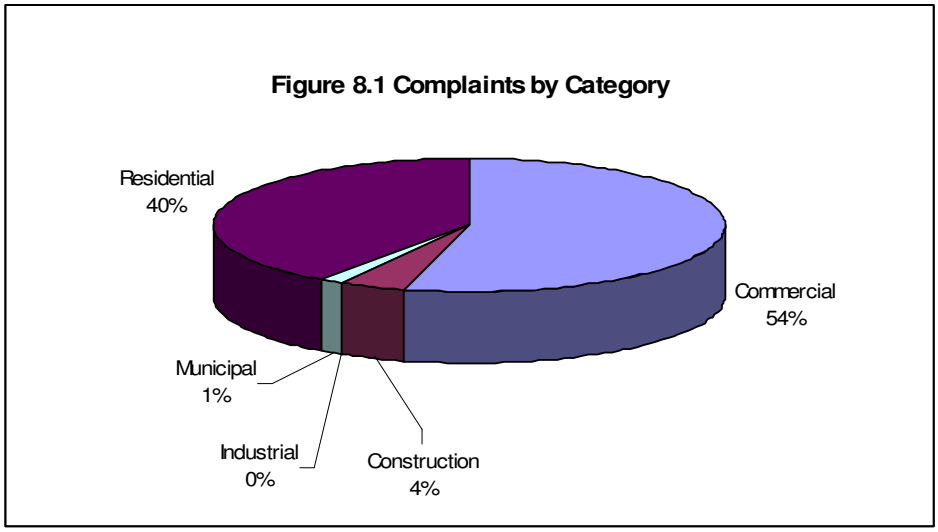
The major illicit discharges and connections eliminated this reporting period are summarized above in section 8.3 above.

In addition to routine elimination of illicit discharges and connections through monitoring and complaint response, the program continues to address sanitary sewer overflows caused by grease blockages. The City has instituted a requirement that new restaurants or significant tenant improvements (TI) to restaurants will install a grease interceptor. Each situation is evaluated on an individual basis and specific requirements are established. Currently, through the Encinitas Municipal Code Chapter 18.04 – General Sewer Regulations, the City has the authority to require new restaurants or remodels to install grease traps or interceptors. During the reporting period, all new restaurants and those submitting plans for TI were required to install grease interceptors.

8.5 Enforce Discharge Prohibitions Ordinance

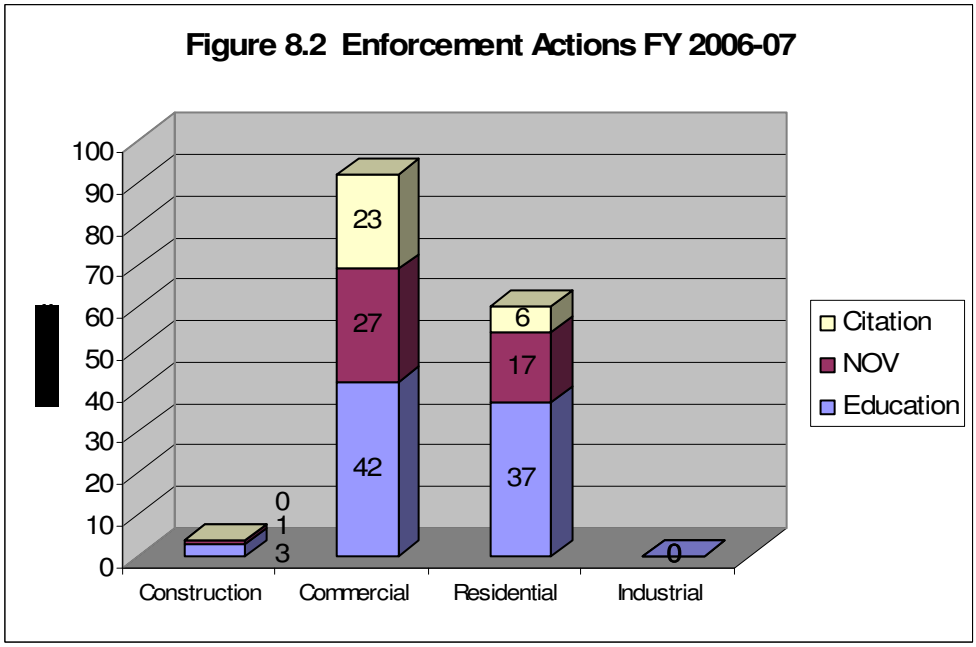
In FY 2006-07, Clean Water Program staff evaluated all reported illegal discharges and proceeded with appropriate enforcement actions as necessary. In total, City staff issued 29 Administrative Citations with 15 carrying fines of $100.00 or more and three additional notices for cost recovery. Additionally, a total of 45 Notices of Violation were issued. With appropriate education and enforcement, numerous illegal discharges and connections were eliminated. A copy of the City's Administrative Citation is included in Appendix H-4.

Figure 8.1 below illustrates the percentage of complaints related to residential, commercial, construction, and municipal activities.



Commercial complaints which comprised of 54% of all complaints received, resulted in 42 educational actions, 27 Notice of Violation, 23 citations and three cost recovery actions. Residential complaints which comprised of 40% of all complaints received, resulted in 37 educational actions, 17 Notices of Violation and six citations. Construction complaints, which comprised of 4% of all complaints received, resulted in three educational actions and one Notice of Violation. Municipal complaints which comprised 1% of all complaints received were referred to the City's Public Works Department for immediate maintenance. There were no industrial complaints this fiscal year.

Figure 8.2 depicts the breakdown of enforcement actions per complaint category.



8.6 Sanitary Sewer Overflows

Two separate agencies, Leucadia Wastewater District (LWD) and Encinitas Sanitary Division/Cardiff Sanitary Division (ESD/CSD), provide sewage collection and disposal for the City of Encinitas. LWD operates in the northern half of the City and ESD/CSD services the southern half of Encinitas. Wastewater from LWD and ESD flow north to the Encina Wastewater Treatment Facility and CSD flows south the San Elijo Water Reclamation Facility.

Table 8-3 contains a summary of all sanitary sewer overflows in Encinitas in the FY 2006-07.

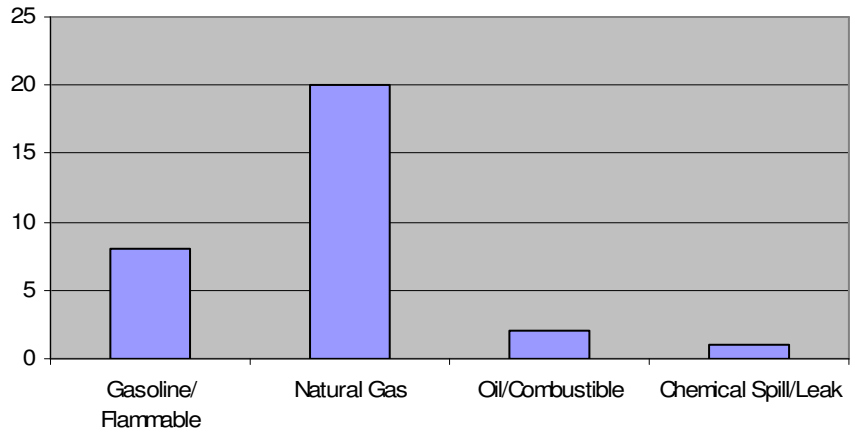
Table 8-3 Sanitary Sewer Overflows, FY 2006-07

Date	Agency	Location	Volume Spilled (gal)	Volume Recovered (gal)	Volume Released (gal)	Cause
8/14/06	ESD	Cottonwood Creek Park	200	0	200	Vandalism-Rocks thrown into manhole
9/5/2006	LWWD	1570 Burgundy Ln	30	0	30	Lateral blockage
12/13/06	LWWD	277 N. El Camino Real	300	150	150	Tree roots
1/2/07	LWWD	829 Hygeia Ave.	100	100	0	Lateral blockage
1/3/07	LWWD	1357 Ahlrich Ave.	20	20	0	Lateral blockage
5/21/07	LWWD	135 Avocado	30	30	30	Baby wipes

8.6.1 Other Spills

The City of Encinitas Fire Department responded to 31 Hazardous Materials Incidents in FY 2006-07. These incidents ranged from gasoline spills, gas leaks, oil spills and chemical spills. The Fire Department is equipped with containment booms, absorbent material, shovels, storm drain covers and disposal equipment. The Fire Department is typically the first responder to contain the site and will notify the Public Works Department and the Stormwater Division. The Public Works Department will respond with additional sandbags, absorbent materials a Vac-con truck and increased manpower. The Stormwater staff will provide maps and locate the extent of contamination and sites for potential recovery. Samples and pictures will be taken for potential court action and cost recovery. Figure 8.3 illustrates the distribution of HazMat incidents for FY 2006-07. The hazardous materials incident listings for the Encinitas Fire Department are included in Appendix H-6.

Figure 8.3 Hazardous Materials Incidents FY 2006-07
Encinitas Fire Department



The City of Encinitas also has a contract with the Hazardous Incident Response Team (HIRT) who will respond when the chemical is unknown or hazardous.

8.7 Public Reporting of Illicit Discharges and Connections – Public Hotline

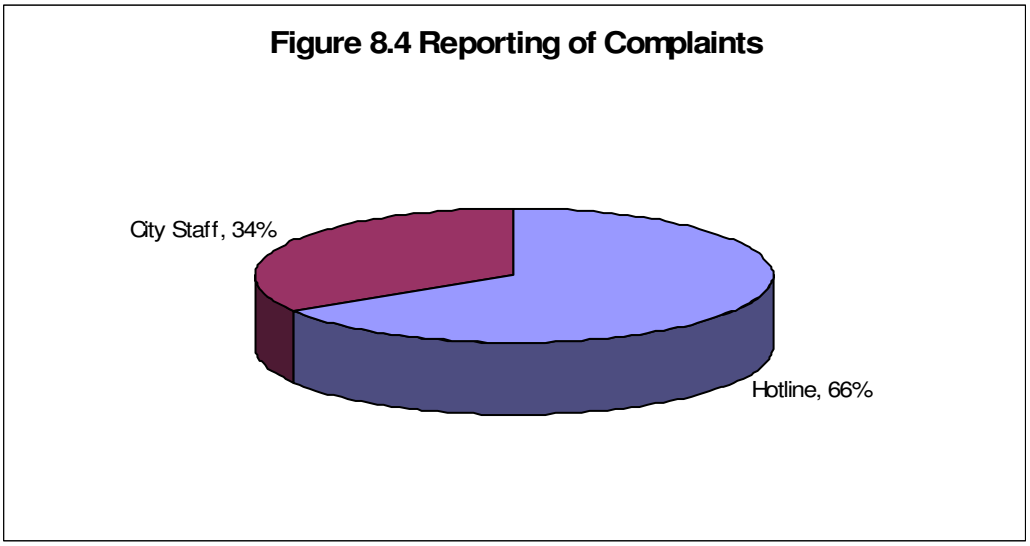
8.7.1 Methods of Reporting

Multiple opportunities are provided to facilitate public reporting of illicit discharges and connections to the City Clean Water Program Staff. Clean Water Program staff maintains a hotline available to the public for reporting stormwater discharges and public works maintains one for sewage related discharges. The public also often notifies City employees, all of whom are trained in stormwater issues and promptly notify Clean Water Program Staff.

The City of Encinitas has configured their enterprise GIS system to create and handle both commercial and complaint driven stormwater inspections in a program called Cityworks. A copy of the Cityworks training manual is included in Appendix D-3. The training manual establishes the procedures for creating service requests and work orders from complaints. The system supports the entry of service requests for citizen complaints, inspection results, ad-hoc and cyclical work orders, and report generation. All of the information stored in the system is accessible to any user through the City's standard desktop GIS application - CityGIS. The environmental inspector follows up on complaints and then determines whether an enforcement action is necessary. When a warning, citation, or Notice of Violation is issued then a case file is created in Cityworks. In the case of no violations, verbal instruction and educational materials are given. Cityworks is a useful tool for tracking all complaints, follow-ups, enforcement and education efforts.

The Clean Water Program staff received 156 complaints from two major sources this year, staff and public complaints. The complaints summary is included in Appendix H-6. Approximately 103 of the 156 complaints were reported via the stormwater hotline. City staff reported approximately 53 complaints.

Figure 8.4 shows the breakdown of the methods used to report complaints.



8.7.2 Categories of Complaints

This fiscal year the majority of complaints reported by the public via the stormwater hotline are primarily related to residential and commercial activities. Approximately 30% of the hotline complaints reported are residential, 30% are commercial complaints, 4% are construction complaints and the fewest hotline complaints, 1% is related to municipal activities.

Figure 8.5 illustrates the complaints distribution for the past six reporting periods.

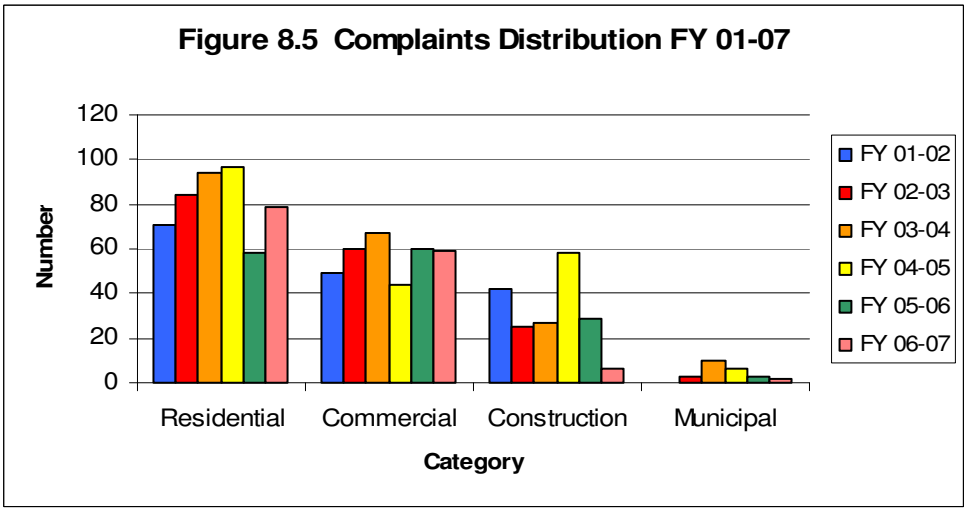
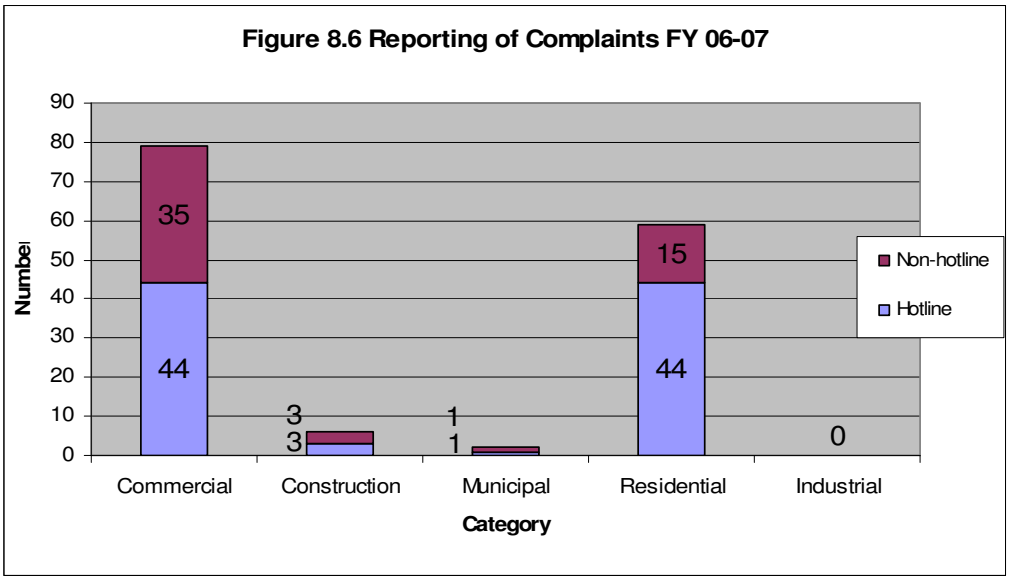


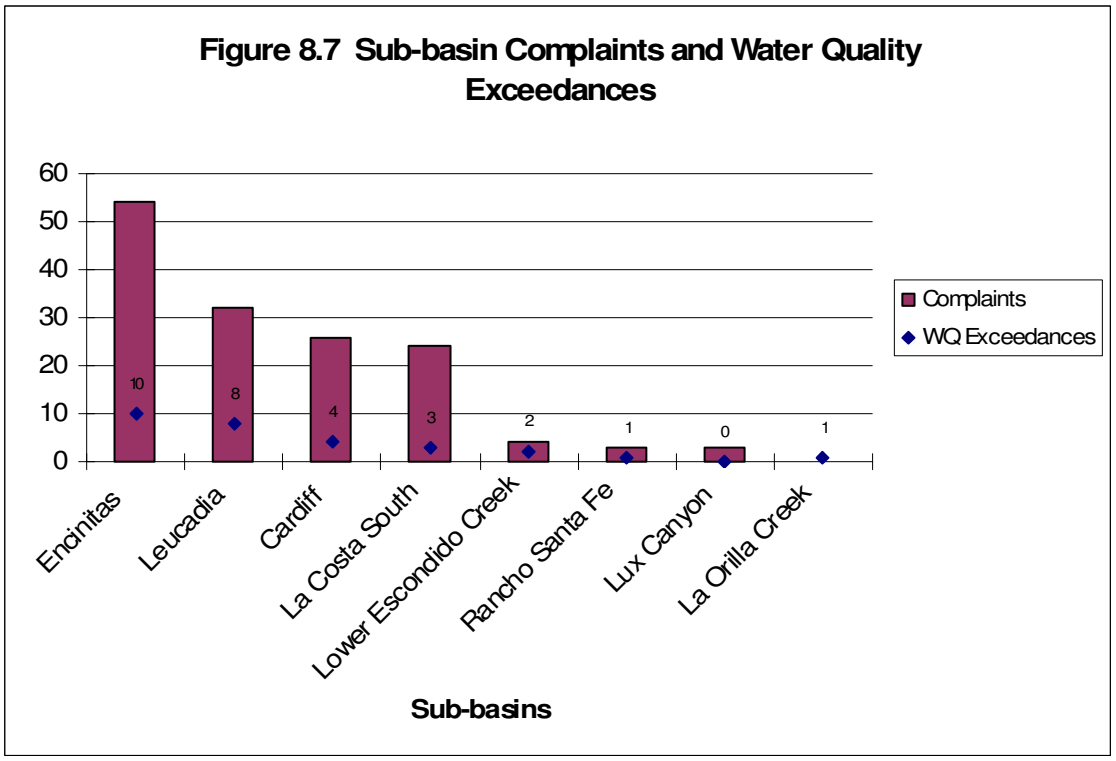
Figure 8.6 shows the percentage of complaints reported via the stormwater hotline by the category of complaint.



Enforcement in each category varied according to the complaint. Both commercial and residential complaints were primarily resolved with education. However, both the commercial establishments and residents received more enforcement actions than in past years. A breakdown of the enforcement actions performed per type of complaint is presented above in Figure 8.2.

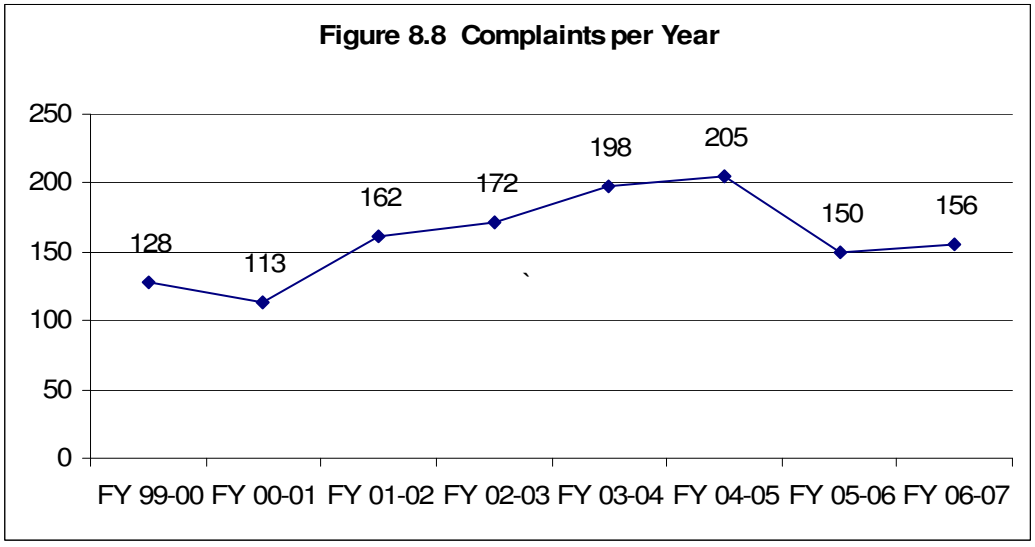
8.7.3 Distribution of Complaints

The City of Encinitas is broken up into eight distinct drainage sub-basins. These sub-basins are shown on the Dry Weather Analytical and Field Screening Monitoring Stations Map, included in Appendix H-1. Of these eight sub-basins, the Encinitas Sub-basin had the largest number of reported complaints. The Leucadia and Cardiff Sub-basins had many complaints reported as well. In Figure 8.7 the numbers of complaints are compared to water quality exceedances in the sub-basins. This correlation assists the City in prioritizing sub-basins.



8.7.4 Hotline Utilization

Through the efforts of the education component of the Clean Water Program, the general public in the City of Encinitas has become aware of the effects of illicit discharges on the environment. Methods to report stormwater issues were continually advertised during this reporting period. As illustrated in Figure 8.8, both City staff and the public continue to actively participate in the reporting of suspected illegal discharges and illegal connections.



8.8 Limiting Infiltration from Sanitary Sewer to MS4

The Municipal Permit requires that jurisdictions that operate both municipal sanitary sewer system and an MS4 must implement controls and measures to limit infiltration of seepage from these sewers to their MS4.

The City performed capital projects to repair the sewer system to reduce the potential for leakage of sewage into the MS4, to improve the integrity of the MS4 to prevent infiltration of sediments and pollutants, and to repair and maintain roadways to minimize erosion and pollutants from entering the MS4. During FY 2006-07, the following sewer (Table 8-4), and MS4 repair projects (Table 8-5) were completed or initiated:

Table 8-4 Wastewater Projects

Project Name	*Goal*	*Status*
Moonlight Beach Pump Station Rehabilitation*	Reduce sewage spills and increase capacity.	Completed
Regal Pump Station Removal	Reduce sewage spills & remove pump station replacing it with a new gravity sewer.	Completed
Olivenhain Pump Station Upgrades	Improve pump station reliability emergency storage capabilities added, ability to capture first flush runoff and send to the pump station wet well	In preliminary design
Hwy 101 Sewer Forcemain, Phase III	Replace 35 year old ductile iron pipe to reduce sewage spills and leaks.	Completed
Moonlight Beach Pump Station Rehabilitation*	Reduce sewage spills and increase capacity.	Completed

Table 8-5 Stormdrain Projects

Project Name	*Goal*	*Status*
Lone Jack (Stratford Knoll) Channel Improvements	Install new storm drain	In Design Phase
4th Street Storm Drain	Eliminate flooding and erosion of beach area	Design Complete. Waiting for additional funding for construction.
Santa Fe Drive Storm Drain	Eliminate flooding and erosion along Santa Fe Drive from Bonita Drive to Nardo Road.	Complete
Bonita Drive Storm Drain	Eliminate flooding and erosion along with replacing broken spillways and concrete channel on Bonita Drive from Santa Fe Drive to Melba Road.	Complete
Windsor Rd. Storm Drain	Slip lining of a collapsing CMP pipe on Windsor Rd.	Complete

The City requires a 10-foot clearance between any sewer and storm drain facility, reducing the possibility for sewage to inflow into the MS4.

The MS4 is cleaned annually and inspected thoroughly during this cleaning by Public Works staff. This process is detailed in Section 2.0.

The City's Wastewater Collections Division purchased a Closed Circuit Television (CCTV) camera and truck in August of 2002. This equipment allows the City to televise sections of the sanitary sewer system or the MS4 in order to assess integrity or to investigate problems. If problems such as cracked pipes or illegal connections are suspected, City staff televises lines to check the integrity of pipes or to survey for illegal connections to the MS4. During FY 2006-07, wastewater collections staff televised approximately 14.3 miles of the sanitary collections system, focusing primarily on the Encinitas and Cardiff sub-basins. Staff also investigated hotspots and televised areas for preventative maintenance purposes. The CCTV equipment was also utilized on an as needed basis to televise portions of the MS4. This televising was in response to complaints regarding illegal connections to the storm drain system or in response to water quality exceedances detected through routine monitoring.

8.9 Revisions to JURMP

The City of Encinitas has endeavored upon a comprehensive update of its Jurisdictional Urban Runoff Management Program per Water Quality Order No. 2007-0001 (Municipal Stormwater Permit), as adopted by the San Diego Regional Water Quality on January 24, 2007. Programmatic updates specific to this section will be described in an updated Jurisdictional Urban Runoff Management Plan (JURMP) document to be submitted to the RWQCB on March 24, 2008.

9.0 EDUCATION

The City's outreach program includes an education component and a public participation component. The education component is focused on disseminating educational information to increase public knowledge of storm water issues, while the public participation component, discussed in Section 10, provides opportunities for the public to become involved in the process of education and reducing pollutants of concern in storm water and urban runoff. The education component is primarily implemented by the Engineering Services Department (Clean Water Program).

The overall goal of the education element is to provide an education program that will:

(1) Measurably increase the knowledge of children and their parents in the community regarding storm drain pollution and ways they can help and improve their scientific understanding with real life situations.
(2) Measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment over the cycle of the Municipal Permit.

The City performed a wide variety of storm water education activities during the FY 2006-07 reporting period. Education and outreach was preformed on three levels---Jurisdictional, Watershed and Regional. The focus of this year's program was environmental education for schools and general storm water and watershed education for citizens. Section 9.2 summarizes the specific activities utilized as they relate to specific target audiences.

9.1 Outreach Tools / Approaches

Following is a list of the types of educational tools and approaches that are used in the City's educational program.

(a) Print Media. Newspaper advertisements or articles, newsletters, brochures, fact sheets and printed BMP information are used to inform and educate target audiences.

(b) Brochures/Printed Materials. Educational brochures are used to reach specific target audiences (e.g., home do-it-yourselfers, businesses, etc.) with water quality and BMP information. The City produced and disseminated several specific activity-based or trade-appropriate brochures (Appendix E-1). Printed materials were included, as much as feasible, on our City website. Contact information and referrals to other topical references were provided.

(c) Surveys. The North County Storm Water Program created a pet waste survey and a small watershed survey to be given out at public events throughout the Carlsbad watershed. The six question pet waste survey asks about the public's view on picking up pet waste and shows us how many people actually know what happens to waste that is not picked up. The two question watershed survey asks what a watershed is, and if residents think they live in a watershed or not. These surveys were given out on a trial basis at Encinitas Environment Day in June 2007. (Appendix E-10)

(d) News Media Releases. Articles and press releases are distributed for inclusion in City newsletters and local papers. Likewise, homeowners and trade and industry associations are encouraged to print articles in their newsletters. Media releases were used to announce special promotions, beach clean up days, and special events.

(e) Municipal Facilities / Public Lobbies. The City Hall Community Center public lobbies are

used for distributing posters, brochures, and other educational items. Permit counters located at City of Encinitas City Hall (construction, grading, hazardous materials, etc.) are also a primary tool for distributing trade-related materials to the business sector.

(f) Storm Drain Stenciling. It is the goal of the City to have all storm drain inlets stenciled with a storm water message. In FY 05-06, the City moved from painted stencils to a plaque-type stencil. The plaque is applied with glue and maintains its high quality for a longer period of time (Appendix E-3).

(g) Promotional Items. The City's Clean Water Program uses promotional items that are given out at community events and schools. These items are imprinted with a storm water message and the Clean Water Hotline.

(h) Other Advertising. The City participates in the Regional Outreach Program to explore the use of other, non-traditional advertising, including the use of slides in movie theatres, bookmarks, coupons for car washes, and messages printed on billing inserts.

(i) Workshops/Training. Workshops and training sessions are very effective tools for providing specific information to agency personnel and specific industries. The City uses this "hands on" approach primarily to educate internal City employees. Storm water training was given to the Public Works Streets and Waste Water Divisions, as well as to the San Dieguito Water District. The City will continue to use workshops and training opportunities for increasing awareness and knowledge, conveying complex or technical information, and instructing attendees on the use of specific best management practices and pollution prevention techniques.

(j) Hotlines. The City has a local hotline for storm water concerns and complaints. The hotline number is (760) 633-2787 and connects the caller directly to the staff in the Clean Water Program. An after-hours storm water hotline has been added to the daytime hotline number and is dispatched to field inspectors during evenings, weekends, and holidays. Last year the hotline was included in the Government Listings of the San Diego Directories 2006 Phone Book. There are also currently two regional storm water hotline numbers promoted within San Diego County, a toll-free Regional Storm water Hotline, 1-888-846-0800 and the Think Blue Hotline, 1-888-THINK BLUE (1-888-844-6525). Both of these hotlines are staffed by the County of San Diego Monday through Friday, 8:00 a.m. - 5:00 p.m. In addition to personal service at these hotlines, during regular business hours, the hotlines provide a voice mail message for 24-hour public access.

(k) Internet Websites. The City currently has a website that includes several pages of information regarding storm water. The storm water information is easily accessible through a pull-down window on the homepage, and through links in the Engineering Services Department and Public Works pages. By clicking on "Clean Water Program" several pages can be accessed (Appendix E-4).

(l) Community Events. Community events such as informational booths at community fairs and family festivals provide a conduit to distribute information and resources directly to target communities. On a regional and jurisdictional level, the City participated in the North County Storm Water Programs' educational booths at four different events.

(m) School Programs. Education of school children is essential for promoting storm water awareness and responsibility. The Solana Center, located in Encinitas, is active in school education and promotes pollution prevention, recycling, composting, water quality and general environmental education at Encinitas schools and throughout the county. The Clean Water Program, along with the Solana Center and other City departments, participated in

Public Works Week (May 22-24, 2007), giving presentations at Cardiff Elementary School and Ocean Knoll Elementary School. The Clean Water Program is working with the Regional Outreach Workgroup to develop a Regional program to educate elementary school students.

9.2 Jurisdictional Education Activities

The Municipal Permit establishes the following six target audiences which must be addressed by the education program:

- Municipal Departments and Personnel
- Construction Site Owners and Operators
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and Schoolchildren
- Quasi-Governmental Agencies / Districts

This section describes how the Outreach Tools/Approaches presented in Section 9.1 were applied to all target audiences and then to each individual target audience. It should be noted that there is crossover education that occurs during the education process of each target audience. The activities were performed on a jurisdictional level, unless noted.

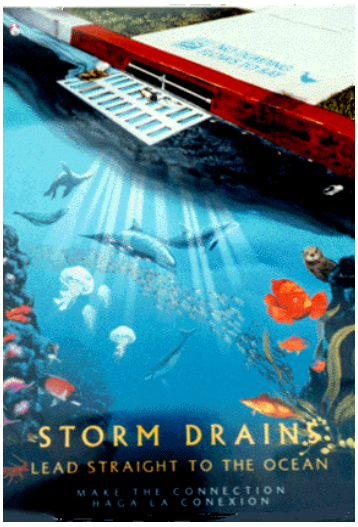
9.2.1 All Target Communities

- General storm water brochures were disseminated at the City Hall front desk, the Engineering Counter, employee education sessions, and public events. (Appendix E-2)
- Stencils have been placed at inlets, and as storm drain inspections note damage, they are replaced. New projects are required to install decals on projects before completion and acceptance. (Appendix E-3)
- The City of Encinitas updated the Clean Water Program website to add a shorter link to the City's website, http://cwp.ci.encinitas.ca.us, which takes one directly to the Clean Water Program section of the City's site. In addition, the website was updated to include more comprehensive information regarding the Clean Water Program (Appendix E-4), and includes:
    1. Clean Water Program summary page
    2. "Frequently Asked Questions" page
    3. JURMP summary page, with the JURMP Annual Report
    4. Clean Water Fee description page
    5. The Encinitas Storm Water Municipal codes
    6. The City of Encinitas Best Management Practices Manual for Commercial, Industrial and Municipal facilities. It also has Residential and Construction BMP requirements
- The local Clean Water Hotline number has been well advertised in all forms of education outreach (brochures, door hangers, presentations and training, newsletter articles, newspaper articles), and promotional items.
- For incidences of IC/ID and responses to complaint calls, door hangers were

disseminated by the Clean Water Program staff and Public Works personnel. (Appendix E-5)

- Thirty-six local newspaper articles and four articles in other media such as City of Encinitas Residential EDCO "Environmental Times" Newsletter, Down 2 EARTH News, and Solana Center's "The Composter" were published locally with information regarding the City's Clean Water Program and its accomplishments.
- In 2002-03, a suite of twelve brochures (six in English and six in Spanish) were developed (Appendix E-1). The City continues to use these brochures which are often disseminated at educational events and placed on the City website. The brochures consist of:

  1. Restaurants Can Help Keep Our Waterways Clean
  2. Automotive - Simple Things to Keep Our Waterways Clean
  3. Developers - Simple and Cost Effective Ways to Comply with Storm Water Regulations
  4. Diazinon - How It Affects Your Health, Your Family and the Environment
  5. Yard & Garden Care - Keeping Your Yard & Garden Beautiful and our Waterways Clean
  6. Hiring a Handy Man - Easy Instructions for the Homeowner



- General Storm water Posters (developed previously as a watershed activity) were disseminated at pubic events.
- A City of Encinitas Environmental Services Guide (Appendix E-11) was created this fiscal year and mailed to approximately 22,000 single- and multi-family residences. It is described in more detail in the Residential and General Public Section.

9.2.2 Municipal, Construction, Commercial, Industrial, and Quasi-Governmental Communities

(a) Municipal Departments and Personnel:

Clean Water Task Force. Managers from Engineering, Public Works, and the Clean Water Program met throughout FY06-07 to discuss the updated budget and new permit requirements and to assure permit compliance in all departments. The Clean Water Task Force will continue to meet on an as needed basis throughout the upcoming fiscal year.

Public Works, Streets Division. A presentation was given to the Streets Division on February 1, 2007, to discuss storm water BMPs and address how this department would be affected by the new Permit regulations. There were eleven attendees.

Public Works, Waste Water Division. On June 13, 2007, nine members of the Waste Water Division received storm water training from Clean Water Staff. A power point presentation was given to explain the importance of storm drain maintenance and show how the Waste Water Division is an important asset to the Clean Water Program.

San Dieguito Water District. Thirteen employees were given a power point presentation on May 23, 2007, to discuss proper implementation of BMPs while dewatering water mains and during unscheduled water discharge events.

(b) Construction and development:

- "A Pollution Prevention Guide for the Construction Industry" was received and distributed at public events, to engineering construction inspectors, the building department, and displayed at the City of Encinitas Engineering counter for the public. Two hundred and thirty-eight brochures (238) were disseminated during the 2006-07 fiscal year. This brochure was developed as part of the Carlsbad Watershed URMP (Appendix E-9).
- Announcements at pre-construction meetings. Pre-construction meetings are attended by the Engineering Department. Storm water topics discussed include the required construction site BMPs along with concepts of post-development BMPs and an outline of the SUSMP requirements.
- Construction inspector storm water coordination. Staff from the Clean Water Program attended weekly inspector staff meetings to provide support and information to the City's construction inspectors.
- Printed materials were provided to contractors and developers in the form of the City's brochure, "Developers - Simple and Cost Effective Ways to Comply with Storm Water Regulations". The brochure is in Spanish and English.
- Special mailings of information (i.e., wet season erosion control letter). In October 2006, approximately 111 letters were mailed to local developers and contractors regarding BMP requirements for the upcoming rainy season. Letters were also hand carried by some of the inspectors to the job sites (Appendix G-5). "A Pollution Prevention Guide for the Construction Industry" brochure was inserted into the annual Erosion Control letter that went to contractors, developers, and job superintendents.
- The City of Encinitas co-sponsored a three-session training seminar through the Building Industry Association of San Diego County on November 30, December 5, and December 14, 2006. Topics included Storm Water Regulation and SWPPP Preparation, Monitoring, and Sampling; BMP Selection and Implementation Including Treatment Techniques; SWPPP Implementation and Compliance Techniques.

(c) Commercial/Industrial Owners and Operators:

- Individual Communication. Commercial inspections were performed at 239 commercial facilities and three industrial facilities during the 2006-07 reporting period. During these inspections individual one-on-one education was presented to each facility manager/owner. Information presented included general storm water education and BMP requirements.

- Printed materials were provided to commercial facilities in the form of City brochures including:
  1. "Only Rain in the Storm Drain", general storm water brochures provided to all facilities.
  2. "Restaurants Can Help Keep Our Waterways Clean", provided to all restaurants.

The brochure is in Spanish and English.

3. "Automotive - Simple Things to Keep Our Waterways Clean", provided to all automotive facilities. The brochure is in Spanish and English.
4. "Yard and Garden Care - Keeping Your Yard and Garden Beautiful and Our Waterways Clean", provided to all nurseries and landscapers. The brochure is in Spanish and English.
5. A City of Encinitas Storm Water Pollution Prevention Manual was created this fiscal year and handed out during annual commercial inspections at approximately 180 restaurants throughout Encinitas. The binder consisted of eight tabs: General Info, Site Map, BMPs/SOPs, Training Records, Inspection Records, Maintenance Records, Municipal Code, and Other Resources. Each restaurant was provided with a packet of BMP information, a blank training log and maintenance record, the Encinitas Storm Water Municipal Code, and information on becoming a Green Business. Also included were the general storm water poster, the "What's Cookin' Guide", and the City of Encinitas Restaurant Brochure in both English and Spanish. Each binder came with a City of Encinitas Storm Water Restaurant Training CD, which gives a ten minute presentation in both English and Spanish on proper BMPs for restaurants. The binder and CD are used by restaurant managers to continuously train employees and assure that they keep records of all paperwork necessary during future annual inspections. Follow up on the use of the binder and CD will be done during annual inspections in FY 07-08.

- During inspections, automotive facilities and restaurants were provided with the regional "Green Wrench Guide", "What's Cookin' Guide", and the watershed-developed posters for automotive and restaurant BMPs, as well as local information regarding BMP requirements.

- Clean Water staff gave a pollution prevention training presentation to 39 employees of the Olivenhain Municipal Water District on September 6, 2006.

- Storm water management training was provided to 26 employees at El Callejon Restaurant on September 9, 2006. Topics included storm water and watershed education and the implementation of appropriate BMPs.

- A four week workshop for Spanish-speaking landscape professionals was hosted by the San Dieguito Water District. It occurred every Tuesday, from February 6-27, 2007, and there were approximately 25 attendees for each class. The workshop involved discussions on irrigation management and landscape maintenance, and how both can impact water quality.

(d) Quasi-Governmental Communities:

- None.

9.2.3 Residential, General Public, School Children Communities

(a) *Residential and General Public:*

- The City hosted the Household Hazardous Waste Information Exchange at the Del Mar Fairgrounds on November 29, 2006. The event included speakers from all areas of the County with topics such as 'Regional Collaboration' and 'Large Venue Recycling Programs'. Seventy-five people were in attendance.

- A free Water-Wise Landscaping Workshop was hosted by the San Dieguito Water District at the Encinitas Community Center on March 10, 2007. There were 35 people in attendance. A four week Home Landscaping Workshop was also hosted at the Rancho Santa Fe Garden Club each Wednesday from September 6 through September 27, 2006. Twenty-five people attended each session. The two workshops each covered four topics: landscape design basics; California friendly plants; landscape sprinkler systems; and soils, water, and fertilizers.

- The Solana Center hosted a free hands-on Composting and Manure Management Workshop in conjunction with the County of San Diego on June 23, 2007. The workshop was held at the Elfin Valley Nursery/Costanzo Farm and 18 people were in attendance.

- A City of Encinitas Environmental Services Guide was created this fiscal year and mailed in March 2007, to approximately 22,000 single- and multi-family residences throughout the City. It was also handed out at all public events throughout the City. It is a compilation of information regarding trash and recycling, HHW, electronics disposal and recycling, storm water management, home composting, and general environmental contacts. The brochure is printed on 100% post-consumer recycled paper.

- An Earth Day presentation on storm water management was given by Clean Water staff at San Dieguito United Methodist Church on April 22, 2007. Twenty-six people were in attendance.

- The Solana Center continued to sell compost bins and worm bins to residents of Encinitas throughout FY 06-07. All of the bins were subsidized by the City and sold to residents at discounted rates. Bins could be purchased at the Solana Center or at composting events and workshops throughout the City.

- Individual Communication. There were 59 Residential ICID complaint investigations in FY 06-07 and 37 of those resulted in education. During these inspections individual one-on-one education was presented to each homeowner/resident. Information presented included general storm water education, BMP requirements, pollution prevention education, as well as specific municipal code and clean water regulations.

- Media Coverage (newspaper articles, press releases, etc.): See Table 9-1 below.

Table 9-1 Summary of Media Coverage for FY 2006-07

Article Number	Article Title	Date	Source
1	E.A.R.T.H. News	Summer 2006	Solana Center
2	Environmental Times	Fall 2006	Newsletter by EDCO
3	City facing urban runoff fines	October 5, 2006	Union Tribune
4	Beacon's beach may get new look and feel	November 24, 2006	The Coast News
5	Agency explores quality-of-life tax	December 8, 2006	CA Coastal Coalition

Article Number	Article Title	Date	Source
6	City seeking grant for pollution study	December 28, 2006	Union Tribune
7	The Composter	Winter 2007	Solana Center
8	County's urban-runoff rules getting tougher	January 5, 2007	Union Tribune
9	Sick surfer sues over dirty water	January 10, 2007	Voiceofsandiego.org
10	Ailing surfer suing groups over Cardiff beach pollution	January 11, 2007	Union Tribune
11	Council to consider funding environmental team	January 15, 2007	North County Times
12	Building, restaurant officials want new storm water permit delayed	January 18, 2007	North County Times
13	Water Board toughens rules for rain runoff	January 25, 2007	Union Tribune
14	Coalition forming to oppose 'Crippling Costs' of new runoff rules	February 5, 2007	SD Business Journal
15	Del Mar council to consider water, sewer rate hikes	February 5, 2007	Union Tribune
16	Water fees should launch revolution	February 5, 2007	North County Times
17	Del Mar to place clean-water fee on ballot	February 10, 2007	North County Times
18	To pour sand, or not to pour sand- Who gets the bill for beach replenishment a key question for region	February 10, 2007	North County Times
19	Cities want help with anti-pollution cost	February 28, 2007	Union Tribune
20	Opponents, supporters contest storm water permit	March 3, 2007	North County Times
21	House OKs $1.7 billion clean-water bill	March 7, 2007	Yahoo! News
22	Oceanside official says new water rules will be costly	March 7, 2007	North County Times
23	Battle over beach replenishment leads to costly, overdue study	March 9, 2007	The Coast News
24	Support wavers for beach projects	March 18, 2007	North County Times
25	Feinstein goes to bat for beach project	March 24, 2007	North County Times
26	The Composter	Spring 2007	Solana Center
27	Encinitas group demands report on environmental progress	April 15, 2007	North County Times
28	Encinitas mulls $53.4M budget	April 24, 2007	North County Times

Article Number	Article Title	Date	Source
29	Not Cost Affected?	April 29, 2007	North County Times
30	On the edge of a solution	April 29, 2007	Union Tribune
31	Encinitas sewage station up and pumping	May 1, 2007	North County Times
32	Report challenges planned resort	May 9, 2007	North County Times
33	Rain in drain biggest pain for ocean	May 12, 2007	North County Times
34	Smoking debate resurfaces	May 12, 2007	Union Tribune
35	Most North County beaches score well in annual water-quality report; But Cardiff State Beach gets a 'D'	May 24, 2007	North County Times
36	Fighting for clean bays and clean beaches	Summer 2007	Environment California
37	Encinitas beaches shut down as fuel spill reaches shore	June 1, 2007	North County Times
38	Fuel spill off Encinitas is all but gone	June 2, 2007	Union Tribune
39	Encinitas beaches reopen after fuel spill off coast	June 5, 2007	North County Times
40	Officials confirm beach spill was diesel	June 28, 2007	North County Times

- **Residential Workshops/events:**

1. Master Composter Training – The City of Encinitas sponsored a training class for Encinitas Residents.
2. Coastal Clean-up Day – September 16, 2006
3. Home Landscaping Workshop @ RSF Garden Club – Wednesdays, September 6-27, 2006
4. Poinsettia Street Festival - November 19, 2006
5. HHW Information Exchange @ Del Mar Fairgrounds – November 29, 2006
6. Water-Wise Landscape Workshop @ Encinitas Community Center – January 27, 2007
7. Water-Wise Landscape Workshop @ Encinitas Community Center – March 10, 2007
8. Mission San Luis Rey Pepper Tree Day – April 15, 2007
9. Creek to Bay Beach Clean-up – April 28, 2007
10. San Elijo Lagoon Day – May 12, 2007
11. Encinitas Environment Day @ Cottonwood Creek Park – June 3, 2007
12. Composting & Manure Management Workshop @ Elfin Valley Nursery – June 23, 2007

(b) School Children Communities:

- The City of Encinitas Parks & Recreation Department has many summer camps for children in Encinitas. "Back to Nature Week" is one camp that takes place in July at Glen Park in Cardiff, with a watershed presentation by the Solana Center. On May 22,

and May 24, 2007, the City of Encinitas Public Works Department, San Dieguito Water District, and Encina Wastewater Treatment Facility, in conjunction with the Clean Water Program, presented to kindergarten through fifth grade classes at Ocean Knoll and Cardiff Elementary Schools. The presentations included a discussion of the importance of water quality and how activities upstream in a watershed affect downstream areas including the ocean. In addition to general storm water education, children were encouraged not to litter and to clean up after their pets. Over 400 children participated in the presentations.

- Clean Water staff gave a brief storm water presentation to the 11 members of the City's Youth Commission. The presentation was given to explain the duties of the Clean Water Program and educate on the concepts of watersheds and the difference between the sewer system versus storm drains.

Table 9-2 City of Encinitas School Based Activities in FY 2006-07

School/Group Name & Address/Location	Date of Presentation /Event	Total number reached
Public Works Week- Cardiff Elementary	5/22/07	350
Public Works Week- Ocean Knoll	5/24/07	60
	Total	**410**

The Solana Center for Environmental Innovation also participated in school based educational programs where storm water awareness was taught. See Table 9-3 below for details.

Table 9-3 Solana Center School Based Activities in FY 2006-07

School/Group Name & Address/Location	Date of Presentation /Event	Total number reached
Ocean Knoll Elementary	7/19/06	18
Park Dale Elementary	7/20/06	45
Park Dale Elementary	7/24/06	20
Seaside Summer Day Camp (Back to Nature Week)	7/25/06	66
Cardiff Elementary Environmental Club	2/26/07	35
Flora Vista Elementary	4/4/07	60
Cardiff Elementary Ocean Nights	4/4/07	60
TIP Academy	4/19/07	62
TIP Academy	4/20/07	60
YMCA	4/25/07	30
Park Dale Elementary	4/27/07	80
San Elijo Lagoon	5/12/07	200
Brain Highways	5/16/07	18
Public Works Week- Cardiff Elementary	5/22/07	350
Public Works Week- Ocean Knoll	5/24/07	60
Ocean Knoll Elementary	6/15/07	30
	Total	**1194**

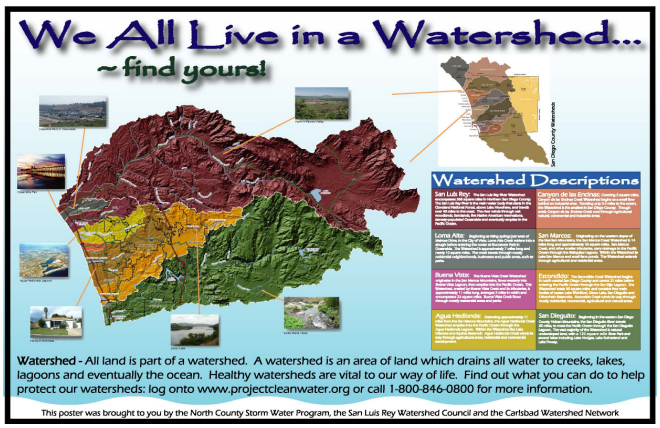
9.3 Watershed Educational Activities

Important parts of the City's education program are activities generated on a watershed basis through the North County Storm Water Program, the educational arm of the Carlsbad Watershed URMP. Materials and activities are developed on a watershed basis to address the

high priority water quality problems in the watershed. These materials and activities are then implemented or disseminated on a jurisdictional basis. Below is a description of the educational materials and activities that were performed on a watershed basis and implemented on a jurisdictional basis. A more detailed description of watershed activities is provided in the 2006-07 Carlsbad WURMP Annual Report.

Public Awareness Surveys. To assess the general public's level of watershed and water quality awareness, a two-question watershed survey and a one-page pet waste survey were redeveloped during this reporting period to be distributed at various public events. The new surveys incorporated watershed and behavior-related questions. The City of Encinitas collected surveys at Encinitas Environment Day.

Watershed Map. A 36"x24" "We all Live in a Watershed" poster was developed giving information about the San Luis Rey, Carlsbad, and San Dieguito Watersheds. This educational poster includes a map of the watershed with topographical relief, information on individual watersheds and sub-watersheds, photos of various land-uses, as well as general information about water quality. The City of Encinitas used the poster in presentations and public display.



Watershed Collaboration. The City of Encinitas collaborated with other outside organizations to enhance public educational efforts to understand watershed issues, including the Carlsbad Watershed Network, Solana Center, North County Stream Team, and Escondido Creek Watershed Alliance. The City of Encinitas participated in public outreach events throughout the watershed in an effort to provide watershed support and extend the watershed message beyond jurisdictional boundaries. In FY 2006-07, the City participated in the following watershed outreach events:

- Coastal Cleanup Day – 9/16/06
- Mission San Luis Rey Pepper Tree Day – 4/15/07
- Creek to Bay Beach Cleanup – 4/28/07

Watershed Educational Materials. The City continues to distribute materials developed by the North County Storm Water Program in previous reporting periods, including the restaurant posters, automotive posters, "Storm Drains Lead to the Ocean" posters, general storm water brochure, and the door hangers. A new pencil was designed in FY 05-06 that states, "It's Your Watershed. Protect It!" The pencil also has the Clean Water Program phone number on it. (Appendix E-6). One hundred and nineteen pencils were distributed at public events and at local schools.

9.4 Regional Activities

On a regional basis, educational outreach activities are coordinated through the Outreach Technical Workgroup and Project Clean Water. This group is made up of all the Copermittees throughout the entire San Diego County region. The workgroup meets on a monthly basis. These meetings are open to the public and stakeholders provide informational presentations regarding activities and opportunities for partnerships. The group is funded through the regional program and operates under the Copermittees Memorandum of Understanding.

Most of the activities are coordinated and conducted regionally; however, some of the products are distributed or implemented on a jurisdictional basis. Below is a description of those activities that were specifically implemented on a local basis. A full description of regional activities is described in the Jurisdictional Unified Annual Report.

BMP Booklets. A bilingual "Green Wrench Guide" for automotive facilities and the "What's Cookin' Guide" for restaurants continues to be distributed to facilities during inspections These guides are booklets that present information about general storm water issues and regulations and BMPs to reduce pollutants at each facility. The "What's Cookin' Guide" was translated into Spanish during FY 06-07 with the help of staff from the Clean Water Program. It will be handed out at future restaurant inspections.

Watershed Map. In FY 2005-06, the regional education group printed, mounted, and framed Watershed Maps for each Copermittee Agency. The City of Encinitas continues to make use of this poster for public display at all educational events.

9.5 Partnerships

The City also pursued "crossover education" or consolidation with existing programs, such as solid waste removal, composting, recycling, household hazardous waste, used oil recycling, and water conservation. At beach cleanups the City of Encinitas partnered with "I Love a Clean San Diego", San Diego Coastkeeper, and the Solana Center to promote pollution prevention and educate the public about the destructive nature of marine debris.

- The City collaborated with the Solana Center to provide educational storm water messages in materials prepared for the used oil, household hazardous waste, recycling, conservation, and composting programs. During this reporting period, the Solana Center made the following presentations where a storm water message was presented:
    - San Marcos Street Festival (8/27/06)
    - Coastal Cleanup Day (9/16/06)
    - Escondido Street Fair (10/22/06)
    - Encinitas Poinsettia Festival (11/19/06)
    - Used Oil Filter Exchange (2/17/07)
    - Mission San Luis Rey Pepper Tree Day (4/15/07)
    - Balboa Park Earth Day Fair (4/22/07)
    - Fallbrook Avocado Festival (4/22/07)
    - "Creek to Bay" Beach Cleanup (4/28/07)
    - Encinitas Street Fair (4/29/07)
    - San Elijo Lagoon Day (5/12/07)
    - Encinitas Environment Day (6/3/07)
    - Composting and Manure Management Workshop (6/23/07)

Other Partnerships:

- An important partnership in the City of Encinitas is with the Solana Center, including collaboration on educational material development and distribution and carrying the Clean Water Program message to the public through their numerous events (some of which are sponsored by the City)

- The Clean Water Program partnered with ongoing Public Works Week activities presented at schools by the Public Works Department on May 22, and May 24, 2007.

Educational Outreach Material Totals. In FY 2006-2007, 20 outreach events and workshops were attended and/or hosted. The total number of outreach materials distributed was 3,070. This included BMP brochures for Automotive Facilities (English and Spanish), Developers (English and Spanish), Diazinon (English and Spanish), "Hiring A Handyman" (English and Spanish), Restaurants (English and Spanish), and Yard & Garden (English and Spanish). The Program also distributed watershed pencils, construction brochures, posters, door hangers, eating establishment guides ("What's Cooking"), automotive guides ("Green Wrench"), and other informational guides. These guides related to Integrated Pest Management (UCSD Cooperative Extension), water conservation brochures from local water districts and the County Water Authority, invasive species brochures ("Don't Plant A Pest" and "NIMBY-No Invasives In My Back Yard"), "How to Hire A Landscaper"-UCSD Cooperative Extension/Scott Parker, County of San Diego Household Hazardous Waste Guides, miscellaneous storm water educational worksheets for children ("Word Finds"), and lastly, "10 Simple Ways You Can Help Protect the Ocean" from the Encina Wastewater Authority.

9.6 Revisions to JURMP

The City of Encinitas has endeavored upon a comprehensive update of its Jurisdictional Urban Runoff Management Program per Water Quality Order No. 2007-0001 (Municipal Stormwater Permit), as adopted by the San Diego Regional Water Quality on January 24, 2007. Programmatic updates specific to this section will be described in an updated Jurisdictional Urban Runoff Management Plan (JURMP) document to be submitted to the RWQCB on March 24, 2008.

10.0 PUBLIC PARTICIPATION

Public participation is one of several components of the City's overall outreach program. The goal of the education component, discussed in Section 9, is geared primarily towards disseminating educational material to increase public knowledge of storm water issues. The goal of the public participation component is to provide opportunities for the public to become involved in the process of education and reducing pollutants in storm water and urban runoff. This component is primarily implemented by the Engineering Services Department (Clean Water Program) and the Public Works Department.

Public participation activities provide opportunities for the public to interact and become involved with water pollution issues. When the public has the opportunity to become involved there are several positive outcomes. First, those involved become more knowledgeable about storm water issues. Second, they become educators and stewards for the Clean Water Program. Finally, they provide important feedback to the Clean Water Program regarding the concerns of the public and issues that may be overlooked. Ultimately, the public could help make the education process more effective.

The constituency of Encinitas has a generally high level of awareness of water pollution issues and is actively involved in protecting the water quality of our waterways. This is evident by the results in the FY 2005-06 Baseline Public Awareness Survey and the number of complaints reported to the storm water hotline (discussed in more detail in Section 10.2.4 below and also in Section 8.7). Following is a description of the City's public participation approach and the opportunities that were made available in Encinitas in the FY 2006-07 reporting period.

10.1 Public Participation Approach

The City's approach for the outreach program is to develop an understanding among its constituency of some fundamental storm water concepts. These include:

1. The difference between the sanitary sewer and the storm drain system (sanitary waste gets treated, but discharges in the storm drain system flow directly to our waterways and the beach, untreated).
2. Our beaches have high economic value and we must protect their quality.
3. An understanding of what is an illegal discharge, i.e. sidewalk and street wash down runoff, vehicle fluid (antifreeze and oil), landscape debris, soil, etc.
4. How to report a storm water violation (Storm Water Hotline).
5. The fact that we all live in a watershed and that the watershed is integral to wildlife, public health, and to the water quality of the rivers, streams, and beaches.
6. Reducing pollutants of concern: pesticides (due to improper use and over-irrigation), eutrofication (over-fertilization), sediment (improper erosion control in landscaping and construction sites), and bacteria (pet waste).
7. Responsibility of citizens to participate in the cleaning and maintaining of the community (i.e. beaches and parks) and not be part of the pollution problem (littering, illegal dumping of toxic chemicals etc.)

The tools that are used by the City to implement the public participation activities include:

- Workshops/Training Sessions
- Public Awareness Surveys
- Storm Water Hotline
- Community Events
- School Programs
- Printed Educational Materials
- The Enviroscape Watershed Model

The public participation program strives to include members of the following target audiences:

- Municipal Departments and Personnel
- Construction Site owners and Developers
- Commercial Owners and Operators
- Residential Community, General Public, and School Children
- Quasi Governmental Agencies/Districts

10.2 Public Participation Implementation

This section describes the specific public participation tools used during the FY 2006-07 reporting period.

10.2.1 Workshops/Training Sessions

Workshops and training sessions are effective tools for providing specific information to targeted audiences and obtaining direct feedback. These workshops/training sessions consisted of education and provided an opportunity for the Clean Water Program to explain the complex issues of each target audience related to compliance with the storm water regulations. Table 10-1 provides a summary of the workshops/training sessions conducted where public input was given to the Clean Water Program during this reporting period.

Table 10-1 Summary of Public Workshop/Training Sessions FY 2006-07

Workshop/Training Session	Target Audience	Date	Attendance
Home Landscaping Workshop	Homeowners	9/6/07-9/27/07	25/session
Olivenhain Municipal Water District	Industrial Staff	9/6/06	39
El Callejon Restaurant Training	Restaurant Staff	9/9/06	26
HHW Information Exchange	Public	11/29/06	75
Public Works- Streets Division	City Staff	2/1/07	11
Spanish-speaking Landscapers	Public	2/6/07-2/27/07	25/session
Water-wise Landscape Workshop	Public	3/10/07	35/session
San Dieguito Water District	City Staff	5/23/07	13
Public Works- Waste Water Division	City Staff	6/13/07	9
Total			**258**

10.2.2 Public Opinion Surveys

The North County Storm Water Program created a pet waste survey and a small watershed survey to be given out at public events throughout the Carlsbad watershed. The six question pet waste survey asks about the public's view on picking up pet waste and shows us how many people actually know what happens to waste that is not picked up. The two question watershed survey asks what a watershed is, and if residents think they live in a watershed or not. These surveys were given out on a trial basis at Encinitas Environment Day in June 2007.

10.2.3 Storm Water Hotline

The City has a local hotline that connects the caller directly to the staff in the Clean Water Program. The number is (760) 633-2787. An after-hours hotline is also available on the recorded message that is dispatched to storm water-trained City Staff. The after-hours hotline is (760) 633-2922. The hotline was placed in the Government Listings of the San Diego Directories 2006 phone book. There are also currently two regional storm water hotline numbers promoted within San Diego County, a toll-free Regional Storm water Hotline, 1-888-846-0800 and the Think Blue Hotline, 1-888-THINK BLUE (1-888-844-6525). Both of these hotlines are staffed by the County of San Diego Monday through Friday, 8:00 a.m. - 5:00 p.m. In addition to personal service at these hotlines during regular business hours, the hotlines provide a voice mail message for 24-hour public access.

The Storm Water hotline has been heavily advertised for some time. In FY 06-07 the Clean Water Hotline received 162 calls, which is consistent with the volume of calls received in past years. The hotline is advertised in newsletters and on the City's website, in brochures, on product giveaways, and at all Clean Water Program presentations. A summary of the types of calls, follow-up, and enforcement procedures related to the hotline are presented in the IC/ID section of this annual report. As an additional feature to the hotline, Clean Water Program personnel carry a 24-hour pager that is dispatched through the 24-hour emergency citywide security system. When emergency after-hours calls come in regarding a spill or major storm water violation, trained personnel are dispatched to the site.

10.2.4 Community Events

Community events such as informational booths at community fairs and family festivals provide a conduit to distribute information and resources directly to target communities. Following are the public events that the Clean Water Program organized or participated in: See Table 10-2 below.

Table 10-2 City of Encinitas Community Events in FY 06-07

Community Events	Target Audience	Date	Attendance
Back to Nature Week Camp	Students	7/25/2006	45
Coastal Cleanup Day	Public	9/16/2006	60
Mission San Luis Rey Pepper Tree Day	Public	4/15/07	75
Creek to Bay Beach Cleanup	Public	4/28/2007	100
Encinitas Environment Day	Public	6/3/07	150
Total			**430**

10.2.5 Other Public Participation Groups

Escondido Creek Cooperative Agreement – During the previous reporting periods, the Cities of Solana Beach, Encinitas, Escondido, the County of San Diego, San Elijo Lagoon Conservancy, Escondido Creek Conservancy, and Cottonwood Creek Conservancy signed an agreement to address the issue of future planning and development in the Escondido Creek Watershed, including the San Elijo Lagoon preservation area. The terms of the agreement are:

- Notification to participants in the agreement
- Participate in quarterly meeting
- Encourage preparation and submission of joint grant applications
- Consider appropriate mitigation strategies for the watershed

The group recognizes that activities on land impact the quality and quantity of land and water. With continuing growth in San Diego County and, in particular, North County, there is an increasing need to protect open space, habitat, and water quality, while permitting responsible land development. Poorly planned development can lead to many problems including unnecessary loss of open space, fragmentation, and ultimately the loss of irreplaceable habitat, increased fire hazards, and unhealthy pollution of the waterways, lagoons, and Pacific Ocean.

During this reporting period, representatives from the signatory agencies met quarterly to help better plan for and encourage a coordinated comprehensive conservation strategy in conjunction with responsible development in the watershed. The meetings are open to the public and were publicly noticed. The Clean Water Program staff participated in all meetings and plan to be a part of future meetings as well.

Carlsbad Watershed Network - The Carlsbad Watershed Network (CWN) is a group of nonprofit foundations and conservancies, as well as public agencies within the Carlsbad Hydrologic Unit. CWN promotes the well being of the Carlsbad Watershed by providing a forum for discussion, mutual support of member activities, educational programs, and a vehicle to influence actions of all parties in the watershed. CWN prepared the Carlsbad Watershed Management Plan, dated February of 2002. The Carlsbad Watershed Management Plan consists of a description of the watershed, an overview of the important issues, and planned objectives and actions to protect the watershed.

During the reporting period, the CWN members and stakeholders met monthly to discuss watershed issues. Representatives from the Carlsbad Watershed Copermittees attended most monthly meetings, presented an update on Watershed URMP activities, and solicited input from the CWN stakeholders.

Solana Center for Environmental Innovation - The Solana Center for Environmental Innovation is a non-profit recycling advocate group operating now for over 24 years. They pioneered the first comprehensive curbside recycling program in San Diego County and one of the first community-based recycling programs in the State of California. Eleven years ago they changed their focus to community outreach, public education, and creating new markets for recycled products. Employees and volunteers of the Solana Center participate in community outreach events and often share booths with the City of Encinitas. The Solana Center offers Master Composting workshops and compost bins at one-third of the retail cost. “Vermiculture,” the process of recycling food with worms, is promoted by the Solana Center, and free worm bins and vermiculture training are offered to Encinitas school children. Free 45 minute environmental presentations are also offered to San Diego communities with a variety of topics

such as Storm Water Awareness, Pollution Prevention, Healthy Marine Ecosystems, and Household Hazardous Waste awareness. The Solana Center also offers school recycling to qualified schools. "Recycling audits" were performed in Encinitas Schools in FY 06-07 to promote recycling education and awareness. Paper recycling was implemented in all of the Encinitas elementary schools including the District offices, and most schools are also recycling bottles and cans to a degree. At the June 13th Council meeting, the Mayor of Encinitas presented super recycler awards to a teacher at Paul Ecke, the custodian at Capri Elementary, and to Paul Ecke Central Elementary School. The two individuals were recognized for their outstanding recycling efforts at their respective schools, while Paul Ecke Central was recognized for its innovative recycling programs and willingness to try new approaches to recycling. The Mayor presented the individuals with a plaque. Recycling programs in the schools are a double benefit in that the school districts save money for waste disposal costs and instill conservation in the children who then take this message home. Secondly, the City benefits through increased public awareness to reduce waste and increase sustainability.

The City of Encinitas-sponsored education can be viewed on the Solana Center website at http://www.solanacenter.org/1encinitascompost.html. Free home composting and gardening workshops, subsidized compost and worm bins/truckload bins, "The Composter" newsletter, Master Composting training courses and volunteer program, free worm bins for Encinitas schools, and many other resources are offered through the City of Encinitas sponsorship. The following Table 10-3 shows the public participation events hosted by the Solana Center for Environmental Innovation. Some of these events were in collaboration with the City of Encinitas and some were done independently; however, storm water pollution prevention, recycling, water conservation, water quality, and invasive species messages were presented.

Table 10-3 Solana Center Public Participation Events for FY 06-07

School/Group Name & Address/Location	Date of Presentation /Event	Total number reached
Ocean Knoll Elementary	7/19/06	18
Park Dale Elementary	7/20/06	45
Park Dale Elementary	7/24/06	20
San Marcos Grand Summer Festival	8/27/06	400
Coastal Cleanup Day	9/16/06	60
Escondido Street Fair	10/22/06	10
Encinitas Poinsettia Festival	11/19/2006	500
Used Oil Filter Exchange	2/17/07	50
Cardiff Elementary Environmental Club	2/26/2007	35
Flora Vista Elementary	4/4/07	60
Cardiff Elementary Ocean Nights	4/4/07	60
Mission San Luis Rey Pepper Tree Day	4/15/07	75
TIP Academy	4/19/07	62
TIP Academy	4/20/07	60
Balboa Park Earth Day Fair	4/22/07	3,000
Fallbrook Avocado Festival	4/22/07	2,500
YMCA	4/25/07	30
Park Dale Elementary	4/27/07	80
Creek to Bay Clean up	4/28/07	100
Encinitas Street Fair	4/29/2007	500
San Elijo Lagoon Day	5/12/07	200
Brain Highways	5/16/07	18
Ocean Knoll Elementary	5/16/07	30
Public Works Week – Cardiff Elementary	5/22/07	350
Public Works Week – Ocean Knoll	5/24/07	60
Encinitas Environment Day	6/3/07	150
San Diego County Fair - Composting	6/8/07 -7/4/07	5,000
Enviro Fair, San Diego County Fair, Del Mar Fairgrounds Regional HHW	6/16/2007	300
Composting Workshops 2006-2007		
Solana Center	7/18/06	12
Solana Center	8/22/06	23
Solana Center	9/6/06	7
Master Composter Program	10/06	13
Solana Center	10/4/06	12
Solana Center	11/1/06	14

School/Group Name & Address/Location	Date of Presentation /Event	Total number reached
Quail Botanical Gardens	2/17/07	27
Quail Botanical Gardens	3/17/07	21
Solana Center	4/4/07	6
Solana Center	5/23/07	9
Solana Center	6/6/07	12
Total Participants		**13,929**

Southern California Coastal Water Research Project (SCCWRP) - The City of Encinitas is an active participant in the Beach Water Quality subcommittee of SCCWRP. This involvement includes attending meetings, making presentations sharing data and ideas regarding beach water quality. The Clean Water Program receives active program input from the subcommittee involvement.

Total Maximum Daily Load (TMDL) Stakeholder Advisory Group (SAG) – The City of Encinitas Clean Water Program was instrumental in the development of the work plan and Request for Proposal to implement the Lagoon Monitoring Order No. R9-2006-076. The City has taken the leadership role as the contact administrator for multiple cities in the Carlsbad Hydrologic Unit. The City of Encinitas has also participated in the SAG for the Bacteria TMDL and written numerous comments in response to the upcoming TMDL.

10.3 Revisions to JURMP

The City of Encinitas has endeavored upon a comprehensive update of its Jurisdictional Urban Runoff Management Program per Water Quality Order No. 2007-0001 (Municipal Stormwater Permit), as adopted by the San Diego Regional Water Quality on January 24, 2007. Programmatic updates specific to this section will be described in an updated Jurisdictional Urban Runoff Management Plan (JURMP) document to be submitted to the RWQCB on March 24, 2008.

11.0 ASSESSMENT OF JURISDICTIONAL URMP EFFECTIVENESS

11.1 Introduction

This component evaluates the progress of the City's program towards the overall goal of reducing pollutants associated with stormwater and urban runoff. The objectives of the assessment component are to assess the performance of the Clean Water Program, assess the effectiveness of improving receiving water quality, and identify changes that will increase the effectiveness of the program.

The San Diego Copermittees have been working to refine an appropriate and consistent effectiveness assessment strategy for urban runoff management programs. The Copermittees prepared a guidance document and submitted it to the RWQCB on October 16, 2003, titled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs". This guideline presents a comprehensive assessment strategy that initially focuses on programmatic assessments and moves toward water quality-based assessments to determine program effectiveness. More specifically, it addresses six levels of assessment:

1. Compliance with Activity-based Permit Requirements
2. Changes in Knowledge/Awareness
3. Behavioral Changes
4. Load Reductions
5. Changes in Discharge Quality
6. Changes in Receiving Water Quality

The City has begun adopting this assessment strategy and will be adopting it more fully as the regional program strategy becomes available. This year's assessment is a combination of the strategy presented in the JURMP with the addition of elements of the new strategy. The levels of assessment are combined into four rather than six this year because of the developmental stage of the program. The first level is Level 1: Compliance with Activity-based Permit Requirements, and includes the assessment tables from the JURMP. Level 2 and 3 are combined and discuss the program strengths (accomplishment and outcomes) for each component. Level 4: Load Reductions, is not addressed this year. Level 5 and 6 are combined to present a water quality assessment.

The strategy uses both quantitative and qualitative measure of program effectiveness. Assessment Forms presented in the JURMP were modified in the Level 1 assessment to more closely reflect the appropriate activities performed for each activity and the data from the forms is presented below. This approach provides a means to track the program performance and effectiveness.

It is important to consider that the effectiveness assessment process is ongoing and inherently iterative. Subsequent reporting years will represent a more fully developed approach to long term effectiveness assessment both on a jurisdictional and regional basis, driven by provisions in Order No. 2007-0001 adopted by the RWQCB on January 24, 2007 and supported by a regionally developed long term effectiveness assessment standardization process. Further, the assessments presented below mark the conclusion of Order No. 2001-001, and shall be used as a baseline for assessment conducted under the new permit.

11.2 Level 1: Compliance with Activity-based Permit Requirements

The following table summarizes the activities that are tracked by the program to demonstrate compliance with Order No. 2001-01.

Table 11.1 Level 1: Compliance with Activity-based Permit Requirements

Permit Section	Activity	Quantity	Comments
F.1 Land Use	Number of high priority projects subjected to SUSMP projects	45	43 with maintenance agreements
F.2 Construction	Number of high priority construction sites targeted for inspection	22	
	Number of medium and low priority construction sites targeted for inspection	112	
	Number of high priority construction sites inspected weekly during the rainy season (All inspections were documented by hand and electronically)	22	
	Number of medium priority construction sites inspected twice during the rainy season (All inspections were documented by hand and electronically)	112	
	Number of facilities referred to RWQCB for enforcement of State General Construction Permit	0	
	Total number of enforcement actions taken (50 Notices to Correct Work and 1 Stop Work Order)	51	
F.3.a Municipal	Number of high priority municipal facilities;	4	
	Number of high priority municipal facilities inspected;	4	
	Quantity of debris and material removed from the municipal separate storm sewer system (MS4) or not allowed into the MS4: • Storm drain pipes, inlets, and catch basins, filter inserts • Storm drain channels and detention basins • Street sweeping • Environmentally Sensitive Areas Total	 31.5ons 76.2 tons 582 tons 0.5 tons 690.2 tons	
F.3.b Industrial	Number of high priority facilities identified	3	
	Number of high priority facilities targeted for inspection	3	
	Number of high priority facilities inspected	3	
	Number of enforcement actions taken on facilities	0	
	Number of facilities referred to Regional Water Quality Control Board (RWQCB) for enforcement of State General Industrial Permit; and Number of enforcement actions taken.	0	
F.3.c Commercial	Number of high priority commercial facilities identified	494	
	Number of high priority commercial facilities inspected	239	In addition 141 follow-up inspections were performed.
	Number of enforcement actions taken (27 NOV's, 23 citations, 3 cost recoveries, and 42 education actions)	95	

Permit Section	Activity	Quantity	Comments
F.3.d Residential	Quantity of HHW materials collected-Household Hazardous Waste Facility	36 tons	
	Quantity of HHW materials collected-Door-to-Door Collection Program	46 tons	
F.4 Education	Number of stormwater education/instructional materials/brochures	3,070	(Materials included: General Storm water brochures (English and Spanish), IPM Posters, Key chains, Pet waste Containers, Click pens, Watershed pencils, Regional commercial guides, Construction brochures, and Door hangers.
	Number of stormwater advertisements (40 newspaper articles)	40	12 Workshops/events 16 school-based events (includes Solana center events)
	Number of employees attending training events regarding stormwater principles	72	
	Total number of stormwater-related education/workshops/outreach events conducted	28	
	Total number of children educated	1,194	
F.5 IC/ID	Number of dry weather sampling locations monitored	52	
	Number of stormwater complaints/referrals received	156	
	Enforcement actions related to complaints: • Notices of Violation • Citation • Cost Recoveries • Educational Actions	 45 29 3 82	
F.6 Public Participation	Number of opportunities provided for public participation	16	Approximately 700 members of the public participated in outreach events hosted by the City of Encinitas (in addition the Solana Center reached 13,929 residents

11.3 Level 2 & 3: Changes in Knowledge/Awareness and Behavioral Changes

This section is broken into each component of the JURMP and presents a summary of the changes in knowledge/awareness and behavior changes. Each section discusses the accomplishment for the component and discusses resulting outcomes. It should be noted that this section is mostly based on observations of City staff.

11.3.1 Land-Use Planning for New Development and Redevelopment

The City has focused on implementing the SUSMP program; requiring SUSMP BMPs on each project that goes through the City system, introducing the requirements at the earliest opportunity, and encouraging developers to use natural BMPs rather than concrete or other structural or mechanical BMPs. The City has successfully integrated the SUSMP process into the overall review and approval processes for ministerial and discretionary projects. At the end of this reporting year the Stormwater Certification was rolled out for all development projects applying for discretionary permits. Developers and applicants are using the Stormwater Certification process; however, the information provided on the certification is not always transferred to the project design so that comments issued during development review and then later during plan checking are still the primary means for ensuring that SUSMP BMPs are designed into projects.

During the current reporting period, the City engineering plan checkers continue to believe that there has been an increase in knowledge and change in behavior over the past year with regard to implementing the SUSMP program. They report much more effective and creative treatment solutions being submitted from the development community. Although these are only observations, they do indicate progress in the SUSMP implementation.

11.3.2 Construction

The City focuses heavily on the construction component, including working with RWQCB staff on complaints and errant sites. This focus continued during the current reporting period, however, it was evident that the level of BMP implementation has increased. This resulted in more BMPs being implemented on construction sites. The City spent less time educating contractors and developers and more time working on details of specific BMP implementation. Improvements made to the construction inspection form have eased the formal reporting burden for inspectors resulting in increased documented inspections. The number of Notices to Correct Work increased slightly from last year, indicating that construction inspectors have continued their proactive enforcement efforts.

11.3.3 Municipal

All high priority municipal facilities were inspected and were found to be in good order indicating a change in behavior. The MS4 was cleaned including catch basins, problem pipes, channels, and detention basins have become a regular part of the Public Works Department activities. An integrated pest management program (IPM) program was implemented by Community Services Department who is responsible for the maintenance of City parks and properties.

11.3.4 Industrial

All industrial facilities' personnel were knowledgeable about stormwater issues and BMPs. Facilities were in compliance or BMPs were implemented to come into compliance.

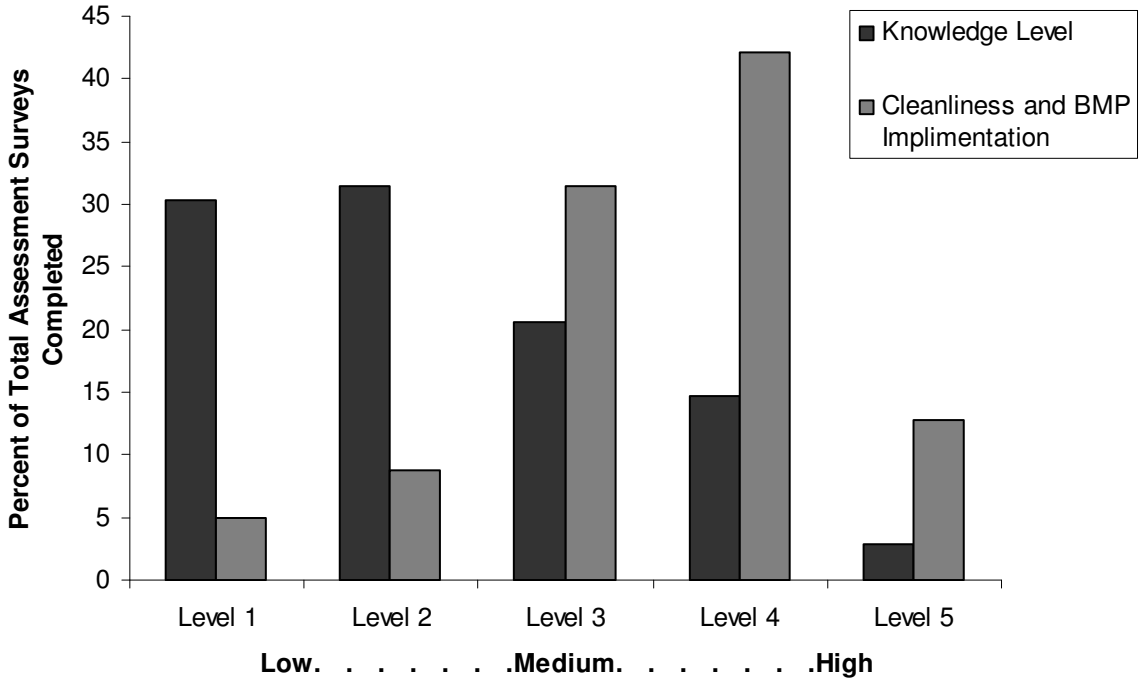
11.3.5 Commercial

The City's full-time inspector conducted a total of 248 commercial inspections and 134 follow-up inspections. The Administrative Citation program was successfully implemented and has improved the enforcement process. Continued improvements in the stormwater GIS and data

management system have streamlined the commercial inspection process. Staff now have the stormwater GIS available on their desktop computers to view facilities and property information. The grease program continues to be implemented and several new and remodeled restaurants installed grease traps or interceptors during the current reporting period. Further, through inspection actions, existing restaurant facilities are required to have over-head coverage and secondary containment for all grease bins stored outside. This effort has reduced the amount of grease-related private lateral sewer overflows.

An assessment survey was added to the commercial inspection forms during this fiscal year. The survey includes two questions which assess the knowledge level and the extent of cleanliness and BMP implementation at the site. The assessment survey was completed during 102 of the commercial inspections this fiscal year. Figure 11.1 summarizes the results of the survey. In general, most of the commercial sites were clean and had BMPs implemented, however the majority of the commercial site managers surveyed did not have a high level of understanding of storm water or water quality concepts. This exercise showed that knowledge of storm water and water quality concepts could be improved. In future years, the City will continue to use these survey questions to assess the knowledge level and BMP implementation at commercial sites. Over the long term this should provide valuable assessment information which can be used to improve the City's Clean Water Program.

Figure 11.1 Summary of Assessment Survey



11.3.6 Residential

The City of Encinitas provides a wide range of programs for its residents to allow for convenient pollution prevention. Residents seem to be more aware of stormwater issues as complaints in

residential areas continued to increase. This awareness did not, however, translate into a willingness to pay for the Clean Water Program as evidence by the Clean Water vote in 2005.

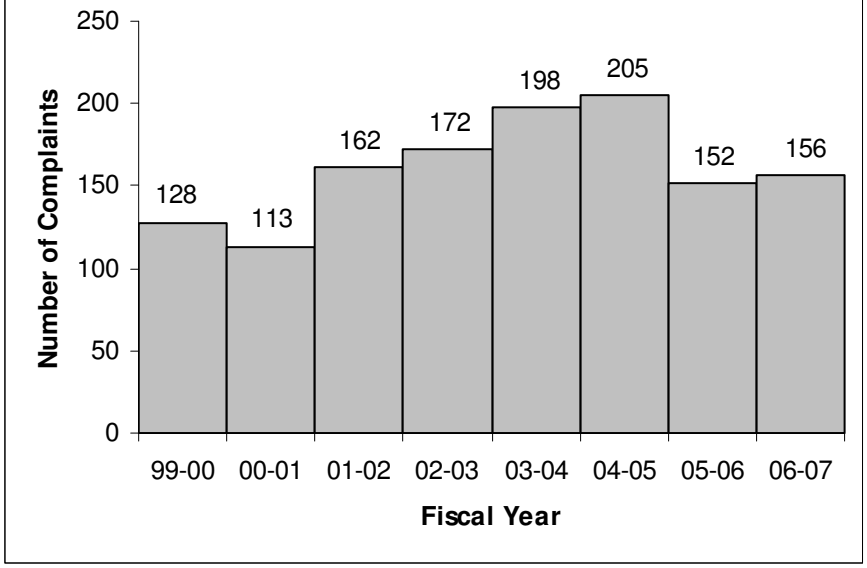
11.3.7 Education

Approximately 1,194 students received environmental education during fiscal year 2006-07.

11.3.8 Illicit Discharge Detection and Elimination

The stormwater program continued efforts to respond to complaints and referrals in the IC/ID component. As shown in Figure 11-2 the number of complaints appears to be slightly higher than the previous fiscal year.

Figure 11.2 Complaints per Year



The dry weather program was performed by a consulting firm which specializes in water quality sampling and included a significant amount of testing and data analysis. The City has successfully evaluated water quality on a sub-basin level, correlating number of complaints with water quality exceedances to better understand where efforts are needed.

The City continues to have good success implementing the Administrative Citations program that reduces the administrative time involved in issuing fines for water quality violations. One major accomplishment has been that all new and major tenant improvements for restaurants are now required to install grease removal equipment (trap or interceptor). Again this year, several new and remodeled restaurants were required to install grease traps of interceptors. This program should reduce the number of private lateral overflows due to grease blockages.

11.3.9 Public Participation

The City increased its public participation opportunities during this reporting period through conducting events and through being involved in stakeholder groups such as the Carlsbad Watershed Network and the Escondido Creek Watershed Cooperative group. In addition, the

Clean Water Program participated in the first annual Encinitas Environment Day held at Cottonwood Creek in Encinitas this fiscal year.

11.3.10 Fiscal

The City examined its fiscal expenditures from the standpoint of program efficiency. Each component and its respective expenditure was reviewed and qualitatively assessed as to how effective the expenditures were, see Table 11.2. This review is subjective, but serves to focus efforts in the most effective manner.

Table 11.2 Fiscal Review for Program

Effectiveness Category	Cost 03-04	Cost 04-05	Cost 05-06	Cost 06-07	Specifics	Assessment	Comments
Municipal	67%	64%	61%	55%	staff time, PP/recycling/HHW, trash removal, inspections, inserts, storm drain replacement, MS4 and channel maintenance, and street sweeping	Improves water quality but at higher cost	Maintenance cost will continue to rise as more permits are obtained and channels are maintained
Industrial	1%	1%	1%	1%	3 sites	Overlapping program with State	Not efficient use of money, little benefit to water quality
Commercial	9%	7%	6%	4%	126 inspections were performed of the 403 total sites	Productive	Follow up reduces the total number of inspections but improves compliance
Land Use Planning	1%	1%	1%	1%	All development plans	Excellent program	Removes pollutants
Construction	4%	15%	17%	27%	Weekly inspection reports	Strong program	Maintains disturbed soil on property
IC/ID	7%	6%	6%	6%	Dry weather, investigations, UV, Special studies, coastal & lagoon	Excellent program	Discovers new and potentially threatening water quality exceedances in a timely manner
Education	3%	4%	3%	1%	Educational materials, workshops, outreach events, training	Excellent program	Educate the children while they are developing their value system.
Special Investigations	1%	1%	1%	1%	Multiple projects	Excellent studies	Would like to offset special studies with grants
WURMP	2%	1%	1%	1%	Includes each cities cost in the Carlsbad Watershed	Excellent coordination	Strong watershed approach more helpful than regional
Reporting	4%	3%	3%	3%	Includes WURMP & JURMP	Overwhelming	Needs to be streamlined
Legal Fees	2%	0%	0%	0%	Internal & external		

Effectiveness Category	Cost 03-04	Cost 04-05	Cost 05-06	Cost 06-07	Specifics	Assessment	Comments
					attorneys		

11.4 Level 4: Load Reductions

The City computed a loads assessment for the high priority constituents of concern (COCs), bacteria and sediment, from a limited number of activities for this annual report. In 2005, the City used grant funding to monitor the UV facility installed along Cottonwood Creek upstream of Moonlight Beach. The data collected during this monitoring effort was used to calculate an annual bacteria load reduction as a result of the installation of the UV facility. In fiscal year 2005-06 the annual bacteria load reduction at the UV Treatment Facility was calculated to be 4.4 e^{13} (44,000,000,000,000) (CFU/year) for Total coliform, 3.9 e^{12} (CFU/year) for fecal coliform, and 2.1 e^{12} (CFU/year) for Enterococcus based on calculations from the influent to the outlet of the UV facility. Since it's installation, the UV facility has operated and been maintained on a regular basis. Therefore, it is expected that the bacteria load reduced in FY 2006-07 would be similar to that calculated in FY 2005-06 would be similar to those that. The sediment load was reduced by 690.2 tons per year (31.0 tons from storm drain pipes, inlets, and catch basins, 76.2 tons from channels and detention basins, 0.5 tons from the Environmentally Sensitive Areas, and 3.5 tons from inlet filter inserts).

11.5 Level 5 & 6: Changes in Discharge and Receiving Water Quality

A Level 5 & 6 long-term effectiveness assessment strategy was performed on a regional basis as part of the Waste Discharge Requirements as part of the NPDES Permit re-issuance and was submitted to the RWQCB in the fall of 2005. The assessment portion was developed and reported in a document titled the Long Term Effectiveness Assessment. This document is discussed in the Regional Unified Urban Runoff Management Program Annual Report.

The City has been looking at water quality as a means to better understand the priority problems in the City and to assess its jurisdictional program effectiveness. Data available for this type of analysis includes historical dry weather monitoring data and beach posting data. The following section provides an overview of the City's water quality assessment.

11.5.1 Dry Weather Data

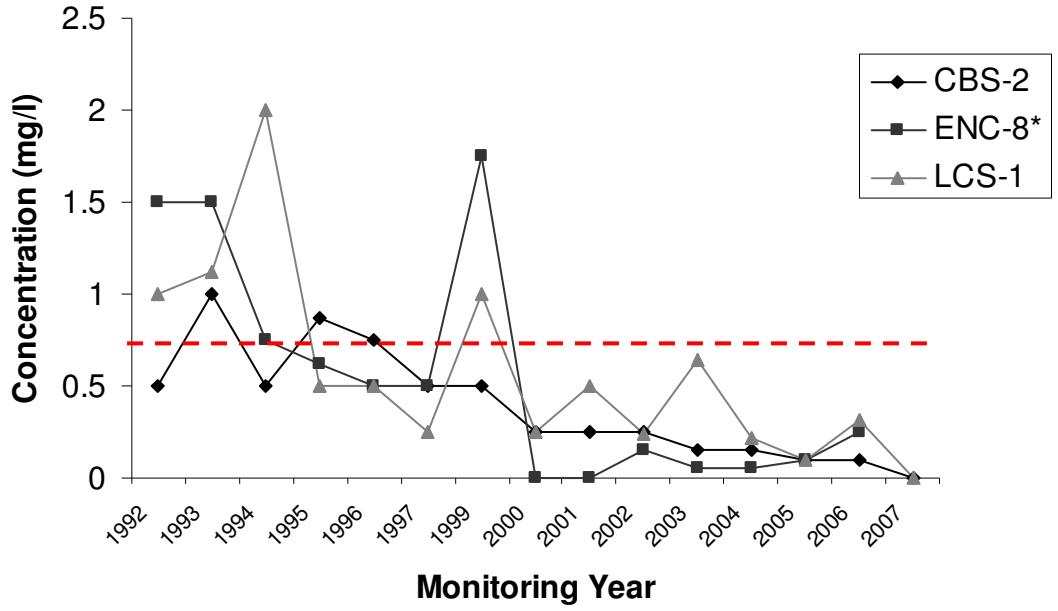
The City has collected dry weather data since 1992. In 2007, a total of 52 stations were monitored, including nine that have been monitored since 1992. The constituents monitored are limited in the historical data; however, the City has maintained these sites in the monitoring program so that 14 years of data have now been collected. The sites generally represent locations low in the sub-basin. The most pertinent available long-term data that can be used for assessment purposes includes MBAS and Ammonia. MBAS represents a measure of surfactants often found in soaps that may result from car washing or other general wash down operations. Ammonia is produced largely by the breakdown of organic nitrogen-containing compounds and urea (urine). The presence of high concentrations of ammonia may indicate a nitrogen source in the form of fertilizers, a wastewater source such as an illegal sewer connection, or a direct source of urine possibly from encampments or pet waste.

Figures 11.3 and 11.4 show historical data for MBAS and ammonia at three monitoring sites. CBS-2 is located on what was at one time Rossini Creek, but is now the 101 Channel, a storm

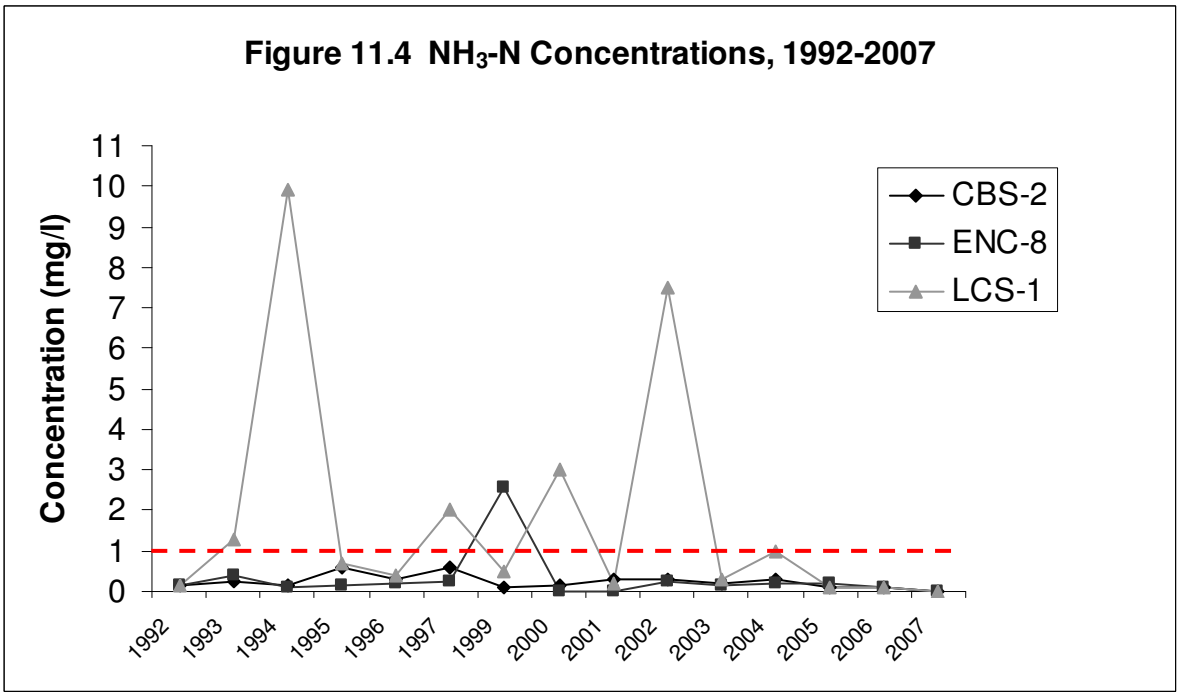
drain channel adjacent to Highway 101 near San Elijo Lagoon. CBS-2 captures flow from the residential and commercial areas of Cardiff in the southern part of Encinitas. LCS-1 is located on Encinitas Creek at Gardenview and El Camino Real. This site drains residential areas and the main commercial area of Encinitas along the El Camino Real corridor. The third site is ENC-8 located on Cottonwood Creek at Third and B Streets in the older part of Encinitas. The drainage to ENC-8 is the Cottonwood Creek sub-basin, encompassing residential and commercial land uses, and a new park.

These figures show long-term reductions of both MBAS and ammonia have occurred over the thirteen-year data period. Since these are anthropogenic pollutants, the reduction is attributable to increased public education and enforcement because of the City's active stormwater program. MBAS levels decreased from 2006 to 2007, and are well below the action levels and the overall trend is still downward.

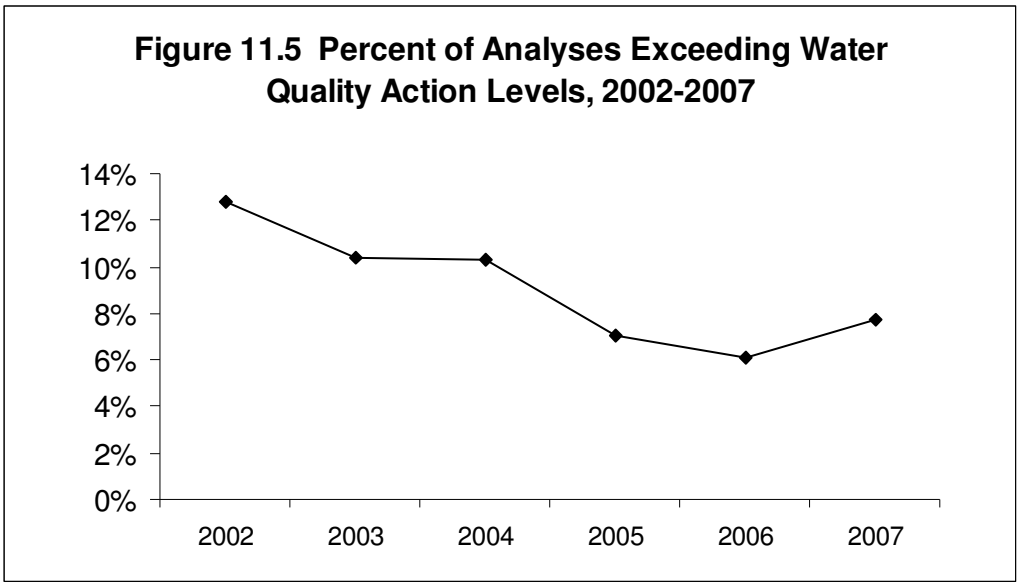
Figure 11.3 MBAS Concentrations, 1992-2007



*ENC-8 was not sampled in 2000, 2001 and 2007. Data from ENC-3 (upstream of ENC-8) was used for 2000 and 2001.



In addition this year, the City can show an overall decrease in the total percentage of exceedances in the dry weather testing as shown in Figure 11.5 for the period of compliance with Order 2001-01. Each point on the graph represents over 350 analyses.



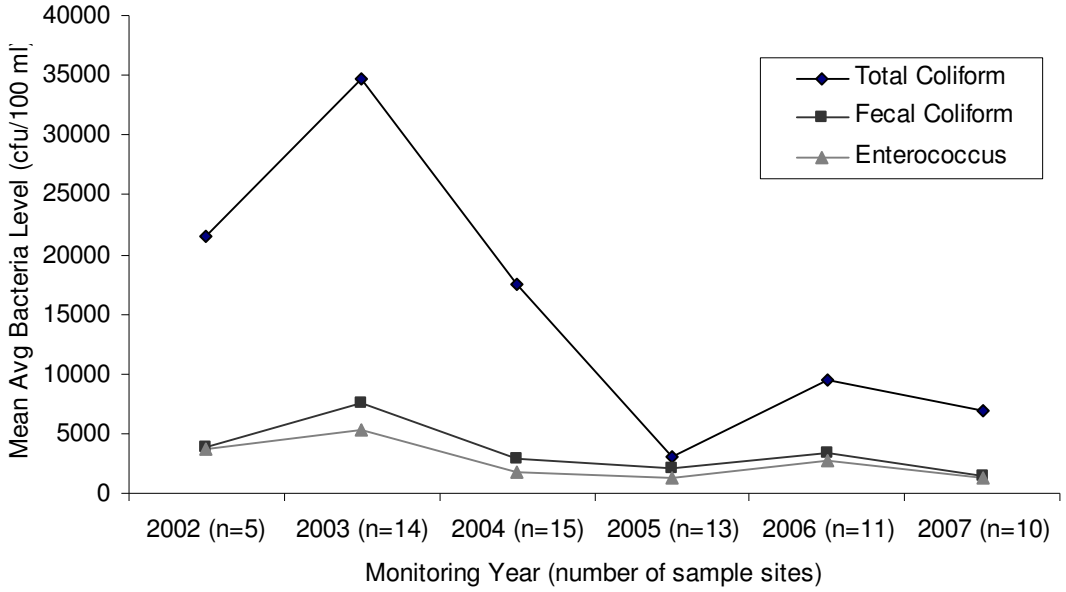
11.5.2 High Priority Constituents of Concern

Bacteria and nitrate-nitrogen remain high priority COCs in the area. Each contributes to water quality degradation in the receiving waters. This is validated by the fact that several receiving

waters in the area are 303(d) listed for bacteria and nutrients. Conductivity has increased in priority over the monitoring periods due to a rising trend in recent monitoring. COCs that have decreased in priority over the monitoring periods include ammonia-nitrogen and MBAS. Diazinon and dissolved copper were removed from the COC list because of lack of exceedances.

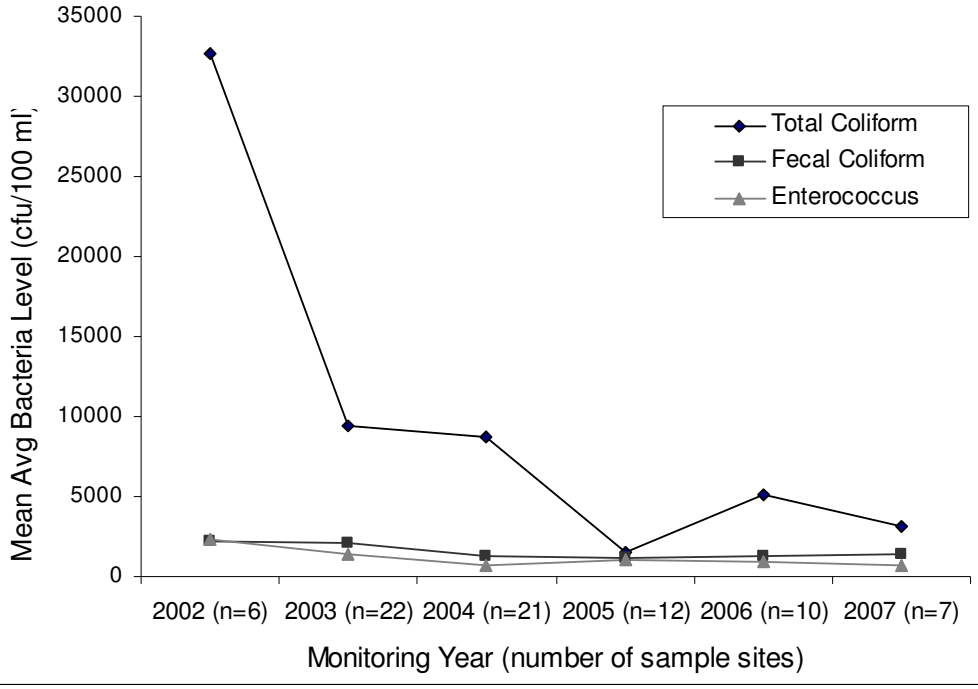
Based on this assessment, particular attention has been paid to bacteria and nitrates to identify and eliminate their sources. The City has focused efforts on inspection of commercial facilities and bacteria concentrations have been trending downward over the five years of data collection in the dry weather program. Although a slight increase in all indicator bacteria (total coliform, fecal coliform, and enterococcus) concentrations was measured in 2007, the six-year trend from 2002 to 2007 is showing decreasing bacteria trends in commercial areas, as shown in Figure 11.6.

Figure 11.6 Bacteria Trends in Commercial Areas, 2002-2007



Similar trends are observed in data from residential areas, as shown in Figure 11.7. Overall decreasing trends were evident across all three indicators from 2002 to 2007. This downward trend is likely the result of public education and ICID efforts by the City.

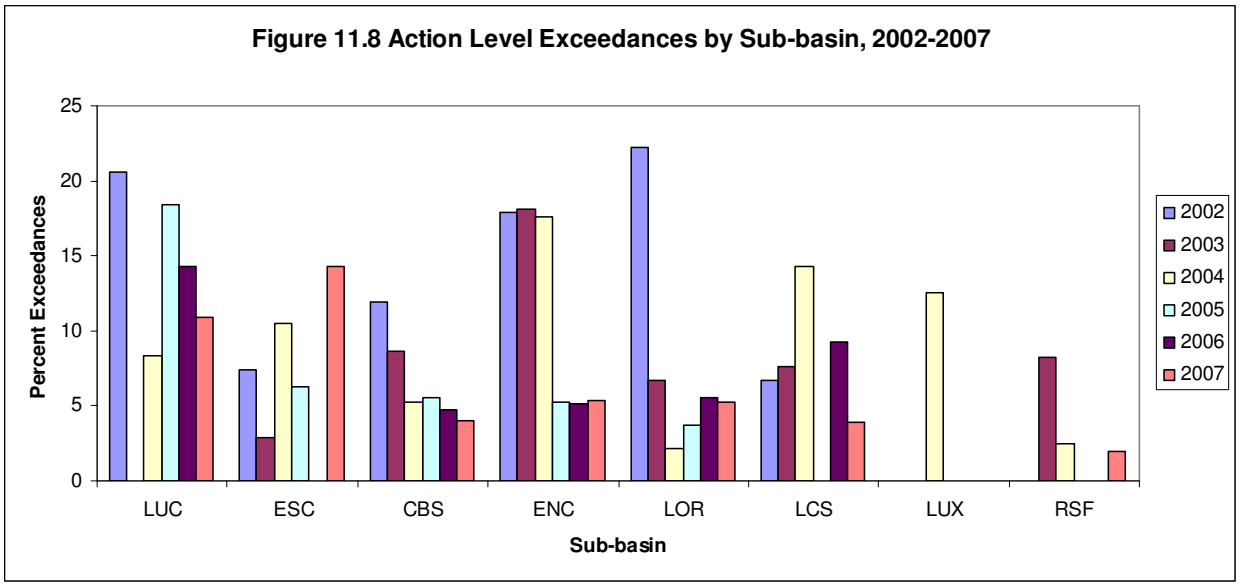
Figure 11.7 Bacteria Trends in Residential Areas, 2002-2007



11.5.3 Watershed Sub-basins Assessment

The City of Encinitas has eight watershed sub-basins. (See Appendix H-1) Each sub-basin flows to one of three coastal water bodies: San Elijo Lagoon, Batiquitos Lagoon or the Pacific Ocean at Moonlight State Beach. With six years of enhanced dry weather monitoring data, a preliminary assessment can be made of the water quality changes that have occurred within each sub-basin. By accumulating data in each sub-basin, the City is able to follow-up on trends, report on improvements and correct exceedances at the time of sampling.

Figure 11.8 is a summary of the exceedances that occurred in each sub-basin from 2002 to 2007. On average, about 10% of the dry weather sampling results exceede program action levels. In 2007, the exceedance rates were approximately 5% showing consistent water quality improvements in the sub-basin. Exceedance percentages improved from 2006 to 2007 for the Leucadia, Lower Escondido Creek, Cardiff, La Orilla Creek, and La Costa South sub-basins. Steady improvements in the Cardiff sub-basin are evident from 2002 through 2007.



11.5.4 Coastal Water Quality

The Pacific Ocean and lagoons (Batiquitos and San Elijo) are considered to be the ultimate receiving water for the City although there are other intermediate receiving waters, such as Escondido, Cottonwood, and Encinitas Creeks. However, at this point a distinction has not been made between the creeks and the MS4 during dry weather testing. To measure the quality of the final receiving waters and assess JURMP effectiveness, the City has monitored coastal storm drain outfalls. Another measure of water quality in the City is the number of beach postings due to elevated bacteria from storm drains.

Coastal and Lagoon Storm Drain Outfalls
In the sixth year of the Coastal Monitoring Program, the Clean Water Program continued to implement the adaptive monitoring approach as designed by the Copermittee Coastal Monitoring Workgroup. This program allows the City to focus resources to improve water quality and emphasizes non-problematic areas less. During the 2006-07 reporting period, monitoring continued at six storm drains which discharge into the San Elijo Lagoon. The storm drains monitored do not appear to have a detrimental effect on the receiving waters.

A total of twelve exceedances occurred during Coastal Monitoring in FY 06-07 (see Table 11.3)

Over half of these exceedances occurred at Moonlight Beach. Follow-up samples were collected at Moonlight Beach after each exceedance. All follow-up receiving water sample results were less than AB 411 standards, suggesting a transient source of bacteria. Frequency of bacteria sampling increased and was conducted nearly every weekday during the summer of 2006 and a sample location up-current of the creek mixing zone was added to the monitoring. An ultra-violet treatment facility has been in operation at the creek mouth for over three years and is removing all bacteria and pathogenic organisms entering the mixing zone from the watershed. It has been documented that bacterial regrowth is occurring downstream of the facility which causes the creek bacteria concentrations to rise. Upstream source investigations and inspections occur on a continual basis in the drainage basin.

Many sources of bacteria have been identified and studied at the Cottonwood Creek outlet at Moonlight Beach, including: birds, wrackline, sediment, and the creek discharge itself. On several of the sampling occasions where exceedances were recorded, more than 100 birds were present at the time of sample collection. With the summer often comes increased amounts of wrackline (i.e. kelp) on the beach and in the creek mouth and this has been shown to cause elevated bacteria concentrations in the mixing zone. The kelp, coupled with nutrient rich, warm freshwater from the creek, has been shown to act as a natural incubator for bacterial amplification. Sediments and sand at the creek mouth have also been shown to be a source of bacteria and bacterial amplification and may have contributed to exceedances in the mixing zone. The creek flows also may be contributing to bacterial exceedances in the surfzone. Although at all times the bacteria concentrations in the creek were well below 95th percentile concentrations, it is possible that the creek caused exceedances in the surf zone. However, on occasion the exceedance occurred in samples up-current from the creek mouth, suggesting sources other that the creek itself.

A total of three exceedances occurred on two separate occasions at CBS-2 in FY 06-07. The Fecal Coliform exceedance that occurred on 3/22/07 was likely due to the rain event that occurred on the same day. On 4/19/07, when the Enterococcus and Fecal Coliform exceedances occurred, the San Elijo Lagoon mouth was blocked by sand and tidal flushing of the lagoon did not occur. This was likely the cause of the exceedances.

Two Fecal Coliform exceedances occurred at SEL-1 in fiscal year 2006-07, one in the storm drain and one in the receiving water on separate dates. However, on both occasions there was no evidence that storm drain flows were affecting receiving water quality. When the exceedance occurred in the storm drain on 3/22/2007 there was no corresponding receiving water exceedance. When the receiving water exceedance occurred on 4/19/07 no flow was exiting the storm drain, thus no dry weather runoff was impacting the lagoon at this location on this day.

Table 11.3 Coastal Monitoring Exceedances

Station ID	Location	Station Type	Date	Analyte	Result	Units
EH-420	Moonlight Beach	CRW	7/11/2006	Enterococcus	**106**	CFU/100ml
EH-420	Moonlight Beach	CRW	7/20/2006	Enterococcus	**122**	CFU/100ml
EH-420 (75R)	Moonlight Beach	CRW	7/28/2006	Enterococcus	**298**	CFU/100ml
EH-420 (75L)	Moonlight Beach	CRW	7/28/2006	Enterococcus	**412**	CFU/100ml
EH-420 (75L)	Moonlight Beach	CRW	8/8/2006	Enterococcus	**338**	CFU/100ml
EH-420	Moonlight Beach	CRW	8/10/2006	Enterococcus	**207**	CFU/100ml
EH-420	Moonlight Beach	CRW	8/15/2006	Enterococcus	**118**	CFU/100ml
CBS-2	Cardiff Channel @ Hwy 101	LRW	1/4/2007	Fecal Coliform	**670**	CFU/100ml
SEL-1	2560 San Elijo Ave storm drain	LSDO	3/22/2007	Enterococcus	**43500**	CFU/100ml
CBS-2	Cardiff Channel @ Hwy 101	LRW	4/19/2007	Enterococcus	**890**	CFU/100ml
CBS-2	Cardiff Channel @ Hwy 101	LRW	4/19/2007	Fecal Coliform	**1420**	CFU/100ml
SEL-1	2560 San Elijo Ave storm drain	LRW	5/23/2007	Fecal Coliform	**1020**	CFU/100ml

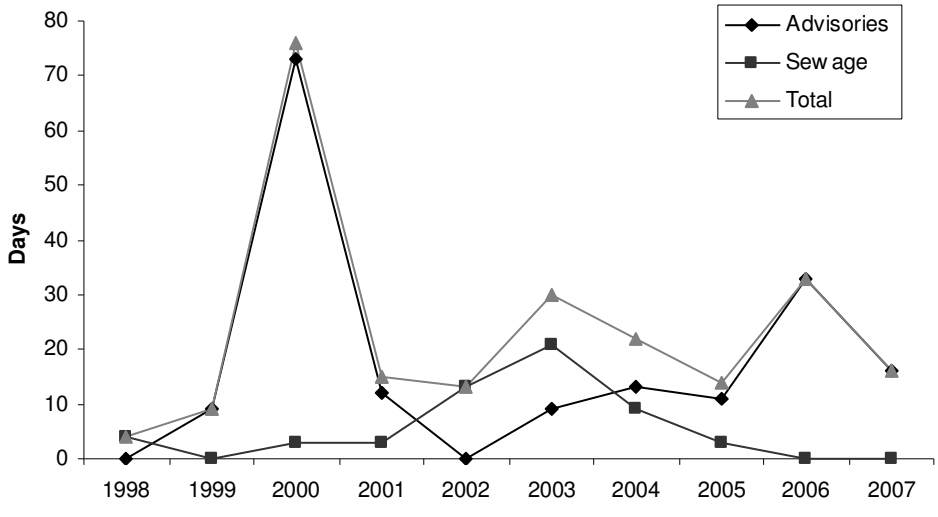
Beach Posting Data

The County Department of Environmental Health has monitored beach water quality for bacteria since the 1950s. This sampling is used to assess the health of the beaches. In 2000 there was a significant change in the protocol as a result of the passage of AB 411. AB 411 requires additional testing, testing of a third bacteria indicator (enterococcus), and requires the beach to

be posted when only one sample exceeds the standard. When bacteria levels exceed State standards, the County posts the beaches with advisory signs warning of contaminated water and advising the public to not go in the water. The beaches are also closed in the event of a sewage spill in the watershed that might contaminate the beach.

The City tracks the number of advisories (postings) and closures along its shoreline. Advisories (postings) and closures are generally located at Moonlight Beach at the mouth of Cottonwood Creek and at the San Elijo and Cardiff State Beach at the mouth of the San Elijo Lagoon. A graph of the postings and closures at Moonlight Beach is shown in Figure 11.9.

Figure 11.9 Beach Postings at Moonlight Beach, 1998-2007



A sharp increase in the number of postings was noted in 2000 when the receiving water standards were made more stringent with the introduction of AB 411. The number of postings was reduced significantly in 2001, which was a very dry year. In 2001, monitoring procedures were also changed and samples were collected 25 yards downcurrent from the outfall, as opposed to the previous monitoring location at the point of mixing between the outfall and the receiving water. This likely contributed to the downward trend in beach advisories. In 2002 there were no advisories after the installation of the Urban Runoff Treatment Facility (UV Treatment Facility) on Cottonwood Creek, just east of Moonlight Beach. Advisories increased slightly from 2003 through 2005 and more significantly in 2006. Some possible explanations for this increase are:

- Inconsistencies in testing methodologies between agencies
- Sediment in the water sampler containers
- Increased monitoring at Moonlight Beach
- Increase in ocean and creek water temperatures
- Increase in number of shorebirds
- Regrowth in creek channel
- Kelp and trash in the high tide line

In 2007, beach postings were reduced by 50 percent from 2006, showing marked improvement in the water quality conditions at Moonlight Beach. The City of Encinitas will continue to monitor beach postings and compare this data with monitoring and IC/ID data maintained by the Clean Water Program.

12.0 FISCAL ANALYSIS

The Clean Water Program in the City of Encinitas is split into two areas: Engineering Services and Public Works. Engineering Services administers, plans, monitors, implements, enforces, inspects, and provides education related to stormwater. Public Works performs the operations and maintenance of the municipal separate storm sewer system (MS4). This section outlines the budgets for these two areas.

12.1 Engineering Services Department

The City of Encinitas Clean Water Program FY 2006-2007 expenditure and FY 2007-2008 budget summaries are presented below in Table 12.1. In FY 2006-2007, the City's Clean Water Program fulfilled the Coastal Storm Drain Monitoring, Dry Weather Monitoring, IC/ID, Construction, Residential, and Commercial program requirements with a mix of internal staff and contract services.

The FY 2007-2008 budget has been prepared based upon existing and new requirements under Order No. 2007-0001 adopted by the San Diego Regional Water Quality Control Board on January 24, 2007, accounting for additional program costs. Notably, in FY 2007-2008 the Clean Water Program will include 5 full time staff, and require additional contract services for new programmatic areas of development and implementation.

Table 12.1 – Clean Water Budget Summary (Engineering Department) FY 2006-2007

CATEGORY	FY 06-07 EXPENDITURES	FY 07-08 BUDGET
Saff Costs		
Staff Salary	$ 210,618	$ 333,609
Permits & Shared Costs		
State Water Resources Discharge Permit Fee	$ 11,109	$ 11,109
San Diego Regional Stormwater Shared Costs	$ 25,327	$ 67,051
Contract Services		
IC/ID Program (MACTEC)	$ 35,713	$ 25,000
Watershed Urban Runoff Management (Ashford Engineering)*	$ 32,200	$ 9,600
Carlsbad WURMP GIS Application Development (Quartic)*	$ 1,260	$ 22,750
Post-Construction BMP Inspection (Geopacifica)**	$ -	$ 116,000
Stormwater Program Support (Ashford Engineering)	$ 37,125	*Staff Cost*
Commercial Inspection (PBS&J)	$ 19,622	*Staff Cost*
Filter Insert Maintenance (Downstream Services)	$ 11,630	*See Public Works*
Encinitas GIS Mapping & Data Management Systems (Quartic)**	$ -	$ 24,000
Lagoon TMDL Monitoring Order - QAPP & Implementation (MACTEC)**	$ -	$ 80,000
TMDL for Indicator Bacteria Project I - Beaches (Dynamic Solutions)	$ 8,000	$ 5,000
Grant Writing (PBS&J)	$ 1,083	$ -
Programmatic Costs		
Education (Jurisdictional)	$ 260	$ 5,000
Special Investigations	$ 710	$ 3,000
Legal Fees	$ -	$ 5,000
Construction Inspection	$ 150,000	$ 150,000
Coastal Monitoring Program (Equipment & Analysis Cost)	$ 14,689	
Ultraviolet (UV) Facility Maintenance	$ 550	*See Public Works*
TOTAL COSTS	**$ 559,896**	**$ 857,119**

* Carlsbad Watershed Shared Cost
** New Program Cost for 2007-2008

Table 12.2 Public Works - Operations and Maintenance

Public Works	Actual	Revenue Source	General Fund
Staff	$307,461		$289,139
Materials & Supplies	$12,272		$12,842
Contracts & Services	$215,422		$220,579
Fleet Maintenance	$12,730		$19,053
Capital Outlay	$10,000		$5,614
Lease Payments	$27,000		$27,000
Recycling/Solid Waste & Household Hazardous Waste Fund	$473,188	$473,188	0
Flood Control	$47,393		$48,898
Total Public Works	**$1,105,466**	$473,188	**$632,278**
Engineering Clean Water			**$559,896**
TOTAL COST			**$1,192,174**

Street Sweeping - The Gas Tax (TransNet) is collected by the state and allocated to local government for transportation-related work including maintenance of existing transportation systems (e.g. roadway sweeping, culvert cleaning) and construction of new transportation facilities. These funds may not be used for other purposes. The City offsets these expenditures from the Gas Tax by $121,878. The total budget in 2007-08 for Street Sweeping is $177,288.

Stormdrain/NPDES. This program includes four and a half full time staff personnel to clean catch basins, televise the storm drain system and respond to emergency operations. Complaints regarding ponding or nuisance water in the storm drain system are handled by this department. This fund also includes channel maintenance and detention basin cleaning. Equipment necessary to clean the storm drain system such as the VACCON plus staff vehicles are also included in this fund.

As more BMPs are constructed throughout the City or as part private development project, it is expected that the maintenance efforts will increase. Budgeted expenditures are based on the design of one regional treatment BMP per year, including planning, right-of-way, design, construction and maintenance cost.

Recycling/Solid Waste & Household Hazardous Waste Fund
The Household Hazardous Waste (HHW) and Recycling program includes costs associated with HHW disposal (home pickup and permanent facilities), electronic waste and recycling at public facilities. The program includes public education and City-subsidized compost bin sales. Funding for this program is derived from fees paid by the City's franchised trash hauler and grants awarded by the California Integrated Waste Management Board and the Department of Conservation

Flood Control – Concrete and miscellaneous repairs.

Public Works Total Budget

This is the actual total budget for the Public Works Department to accomplish the goals of the NPDES permit Order No. 2001-01. The Public Works Department receives grants, trash fees and gas tax revenue sources to help offset the costs to the general fund. By accounting for the offsets in revenue sources the actual cost to the general fund is **$632,278.**

12.2 Total Program Budget

The total expenditure for the Clean Water Program is **$1,192,174** for the Fiscal Year 2006-07. The total projected budget for the Clean Water Program is **$1,489,397** for the Fiscal Year 2007-08.

12.3 Program Funding

The City Council attempted to pass a Clean Water Fee in FY 2003-04, which charged $5.00 per month per water meter to the residents and businesses of Encinitas. The Howard Jarvis Taxpayers Association challenged the Clean Water Fee based on Proposition 218 requirements. The City was required to add this item to the ballot in March 2006 which was defeated. Unless a Regional approach to collecting fees is established the City of Encinitas must completely subsidize the Clean Water Program through the General Fund.

13.0 SPECIAL INVESTIGATIONS

The City of Encinitas strives to understand and improve water quality issues within its waterways. To this end, several special investigations and projects were undertaken during the reporting period.

13.1 Moonlight Beach Urban Runoff Treatment Facility

The City of Encinitas has been operating the Moonlight Beach Ultraviolet Treatment Facility since August 29th, 2002. The overall project has been a true success; the City has reduced the bacteria levels entering the Pacific Ocean at Moonlight State Beach and bacteria levels through the facility are consistently reduced by 99%. Beach postings have been reduced by an average of 90% per year for the five years that facility has been in operation.

The Moonlight Beach Urban Runoff Treatment Facility draws water from Cottonwood Creek inside an existing concrete double-box culvert. It is diverted to a wet well and pumped via two, alternating 7.5 HP, float-controlled submersible pumps to the UV treatment facility. After pre-screening at the wet well intake, a second stage of screening is provided by two basket strainers. Water is then filtered through two dual media (sand and anthracite) pressure filters. The disinfection unit consists of two UV disinfection chambers approximately 48 inches in length and 8 inches in diameter. Each chamber has four low-pressure, high intensity UV lamps.



The system is operated from a programmable logic controller (PLC). System controls are set to shut the entire system down on three operating conditions: high level in the wet well, high pump discharge pressure, and high effluent turbidity. Treated flow is returned to Cottonwood Creek inside a second portal of the concrete box culvert. The entire treatment facility is housed in a 24 feet long, 10 x 10 foot prefabricated steel enclosure.

In February 2006, the City of Encinitas completed the final report to the State Water Resource Control Board, Clean Beaches Initiative Grant. In order to monitor the effectiveness of the UV Facility two assessment methods were used: water quality monitoring and beach posting data. The City routinely monitored the concentrations of bacteria at three locations in Cottonwood Creek and in the mixing zone at the creek mouth. Samples were collected above and below the facility, and before and after project implementation. Monitoring locations include influent, effluent, the mouth of Cottonwood Creek, and the Moonlight Beach mixing zone. Approximately 160 routine sampling events occurred during the monitoring period.

Bacteria removal efficiencies through the UV Facility were calculated at >99% based on 153 pairs of influent and effluent samples. Through weekly bacteria monitoring and a special study, the City determine that additional sources of bacteria and regrowth contributed to the degradation of water quality downstream of the facility. However, the overall removal efficiency from the facility influent to the creek mouth was measured at approximately 50%. Monitoring also showed an improvement of water quality in the mixing zone as measured by changes in

exceedances of AB411 standards. AB411 exceedances were reduced from 9.4% prior to thte project to 4.8% after the project representing nearly a 50% reduction in exceedances in the mixing zone. A full copy of the report is included can be found on the Clean Water Program website at http://www.ci.encinitas.ca.us/NR/rdonlyres/5612D387-D6D9-48A7-AF7F-A9D039C78547/0/Moonlight_Beach_Urban_Runoff_030806.pdf.

In 2006-07, the City of Encinitas continued random sampling of influent and effluent from the UV facility to gauge the ongoing effectiveness and proper function of the system. A number of samples were taken at sporadic intervals and varying conditions to monitor the bacteria concentrations, affirming long term effectiveness and efficiency of the Moonlight Beach UV Treatment Facility.

13.2 San Elijo Lagoon Restoration Project

The City of Encinitas along with the City of Solana Beach and the Army Corps of Engineers have been analyzing possible enhancement opportunities for the San Elijo Lagoon. Artificial constrictions have hindered the natural ability of the estuary to open to the ocean. The Interstate 5 (1-5) North coast Freeway widening project will further impact the lagoon. A study was completed by the Army Corps of Engineers to investigate potential mitigation opportunities for the I-5 North Coast project.

The goal of the study is to optimize the openings at the three major transportation passageways across the San Elijo Lagoon. This study looked specifically into the effects of varying channel widths at each opening: inlet and PCH Bridge, the SDNR system, and the I-5 freeway. Results from each simulation would be judged on its ability to reduce muting, increase circulation, improve water quality in the lagoon, and ultimately on whether or not any improvements to the habitat distribution in the lagoon would be likely to occur. Work on this process continued throughout the defined reporting period of this report, most significantly with efforts conducting a data gap analysis to support necessary simulations and the evaluation of a variety of design options.

13.3 Regional Channel Maintenance

The City received a letter from the Regional Water Quality Control Board on September 29th, 2004 regarding a Directive Regarding Channel Maintenance Activities. In order to complete an assessment of the on-going and proposed maintenance activities within the waters of the State the Regional Board requested a Required Technical Report by January 2005. Based on the information the Board was going to determine if a region-wide, jurisdictional-specific, or project-specific permitting approach would be necessary and appropriate for maintenance activities**.** .A Regional Channel Maintenance Workgroup was formed to address the Regional Board letter and discuss ways to collaborate on a region-wide permitting approach so cities may perform necessary channel maintenance and flood control work. The Workgroup is supportive of a regional permit in accordance with all applicable agencies to allow channel maintenance, and would like to collaborate with the Regional Board on the proposed channel maintenance permit. The City of Encinitas has been an active participant in the Workgroup with staff from the Engineering and Public Works Departments providing information and collaboration.

The channel maintenance workgroup hired EDAW to streamline the permitting process with the resource agencies and coordinate with each city on their channel maintenance needs. This effort has continued throughout the defined reporting period of this report, and is anticipated to conclude in 2008.

14.0 CONCLUSIONS AND RECOMMENDATIONS

14.1 Introduction

This component summarizes the conclusions and recommendations for the Jurisdictional Urban Runoff Management Program (JURMP) for the reporting period of FY 2006-07. A summary of the proposed program focus for the next fiscal year is also included.

14.2 Conclusions

The City of Encinitas successfully implemented all sections of the Order No. 2001-01 in FY 2006-07. The program has progressed significantly from the time the JURMP was developed in 2002. Overall, a great deal of effort has been expended to understand and reduce pollutants from entering the City's waterways and the Pacific Ocean in the most effective manner.

The Clean Water Program continues to learn about water quality issues locally, which has allowed for a more specific approach to program implementation. Through the water quality monitoring program, the City has been able to isolate constituents and geographical areas of concern. The City has performed economic studies to determine the value of local beaches in order to more effectively educate existing development as to the importance of preserving and improving water quality. The City has a well developed inspection and enforcement program and protocols for all sectors including construction, residential, and commercial activities. The City progressively approaches land development through the application of required permanent BMPs in consideration of water quality concerns. The preceding report fully describes each of these efforts and the perceptible successes of each, as supported by the long term effectiveness analysis approach. As regionally developed effectiveness assessment strategies have become more refined, and targeted outcomes more clear, the Clean Water Program has evolved into a more effective and efficient set of program elements. The information gained each year has been applied to each of the programmatic elements described in this report resulting in informed actions, functions, and direction for the Clean Water Program.

14.3 Recommendations

On January 24, 2007, the San Diego Regional Water Quality Control Board adopted Order No. 2007-0001, marking a significant transitional period for the San Diego region and the City of Encinitas Clean Water Program. Order No. 2007-0001 builds upon the provisions of Order No. 2001-001, adding considerable new requirements to be met through updated JURMP development and implementation. As such, beyond the reporting period of this report, the City of Encinitas has endeavored upon holistic programmatic updates through as needed augmentation of existing elements and the development of new processes, procedures, and strategies to meet new permit obligations. Subsequent reporting years will be based upon newly developed and implemented program elements as required under Order No. 2007-0001.

Appendix A

A-1 RWQCB Review of JURMP Annual Report for City of Encinitas, September 25, 2007, CWU: File 10-5006.02:dwoodward

Linda S. Adams
Secretary for
Environmental Protection

California Regional Water Quality Control Board
San Diego Region

Over 50 Years Serving San Diego, Orange, and Riverside Counties
Recipient of the 2004 Environmental Award for Outstanding Achievement from U.S. EPA

Arnold Schwarzenegger
Governor

9174 Sky Park Court, Suite 100, San Diego, California 92123-4353
(619) 467-2952 • Fax (619) 571-6972
http://www.waterboards.ca.gov/sandiego

September 25, 2007

Certified Mail No. 7007 0220 000 4691 0480

Mr. Phil Cotton
City Manager
City of Encinitas
505 South Vulcan Avenue
Encinitas, CA 92024-3633

In reply refer to:
CWU: File 10-5006.02:dwoodward

SUBJECT: REVIEW OF 2005-2006 JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM ANNUAL REPORT FOR THE CITY OF ENCINITAS, ORDER R9-2001-01

Dear Mr. Cotton:

This is to acknowledge receipt and review of the City of Encinitas (City) Urban Runoff Management Plan Fiscal Year 2005-2006 Annual Report (Annual Report) dated January 2007. This year, the Regional Board's review focused on five components of the report: Municipal, Industrial, Commercial, Construction, and Illicit Discharges Detection and Elimination. Our comments include requests for additional information needed to fully assess program implementation and compliance during the reporting period. Some comments may also request information to help ensure program compliance for future reporting periods. For comments requesting a response, please submit your written response with next year's annual report.

The following comments reveal instances of incomplete and/or unclear reporting, in the Annual Report, of required actions and activities by your agency. If not addressed, then the identified deficiencies in your storm water program could become a basis for determining noncompliance with Order No. 2001-01. Such deficiencies may become the subject of future enforcement action by the Regional Board.

Annual Report Section 7.0 (Construction):

1. The Annual Report states that all sites were inspected at the required frequency during the rainy season. The report provides a detailed account of the number of sites (23 high and 95 medium/low priority), and number of documented inspections conducted during the rainy season (437 at high and 55 at medium/low priority sites). The report clearly explains that all required inspections were conducted but some, especially of medium/low priority sites,

were not formally documented. Please be aware that the Regional Board expects the City to document completed inspections and keep the records on file. The new Municipal Storm Water permit requires the Co-permittees to create written or electronic inspection reports to verify that sites are inspected at the minimum required frequencies (Section D.2.d(6)(f), p.31).

Annual Report Section 8.0 (Illicit Discharges Detection and Elimination):

2. The Annual Report states that the above-action level nitrate and conductivity measurements, obtained at several monitoring sites, are attributable to inflow of groundwater. In future Annual Reports, please provide data demonstrating that groundwater in the vicinity of the monitoring sites has elevated nitrate and conductivity levels. Also, indicate what the City would consider to be the 'above-groundwater' action level for these constituents, i.e., the levels that would warrant follow-up action in areas with elevated nitrate and conductivity.

The heading portion of this letter includes a Regional Board code number noted after "In reply refer to:" In order to assist us in the processing of your correspondence, please include this code number in the heading or subject line portion of all correspondence and reports to the Regional Board pertaining to this matter.

If you have any questions regarding this letter, please contact Deborah Woodward (858) 637-5586 or email: dwoodward@waterboards.ca.gov.

Respectfully,

JOHN R. ODERMATT, P.G.
Senior Engineering Geologist

cc: Ms. Kathy Weldon
City of Encinitas
505 South Vulcan Avenue
Encinitas, CA 92024-3633

Appendix B

B-1 Municipal Facilities Inventory FY 2006-07
B-2 FY 2006-07 NPDES Maintenance Work Orders Summary
B-3 Encinitas Municipal BMP Locations Map
B-4 Parks and Recreation Integrated Pest Management Program
B-5 Municipal Storm Water Quality Inspection Reports (5)

APPENDIX B-1 CITY OF ENCINITAS MUNICIPAL FACILITIES INVENTORY (2006-2007)

Facility Name	Address	Land Use/Activities	Priority	Sub-basin
CARDIFF SPORTS PARK	1623 LAKE	Sports Park/fields/landscaping	Low	Cardiff
CIVIC CENTER	505 S VULCAN AVE.	City Hall/parking lot	Low	Encinitas
COMMUNITY/SENIOR CENTER	1221 ENCINITAS	Community Center/parking lot	Low	La Costa South
D STREET VIEWPOINT PARK	450 D STREET	Park/landscaping	Low	Encinitas
E ST & 5TH ST (ATHERTON)	9999 E STREET	Vewipoint	Low	Encinitas
BEACON'S BEACH	700 NEPTUNE	Beach Access/parking lot	Low	Leucadia
COTTONWOOD CREEK PARK	95 N. VULCAN	Park/landscaping	Low	Encinitas
ENCINITAS VIEWPOINT	745 VAL SERENO DR	Park/landscaping	Low	Encinitas
LITTLE OAKS EQUESTRIAN PK	2879 LONE JACK	Park/horse corral/landscaping	Low	Lower Escondido Creek
GLEN PARK	2149 ORINDA	Park/landscaping	Low	Cardiff
GRANDVIEW BEACH	1700 NEPTUNE AVE.	Beach Access/parking lot	Low	Leucadia
H STREET VIEWPOINT PARK	498 H STREET	Park/landscaping	Low	Encinitas
HALL PROPERTY	1451 STARLIGHT DR	Future City Park	Low	Cardiff
HAWK VIEW PARK	1309 BLUE HERON DRIVE	Park/landscaping	Low	Leucadia
I STREET VIEWPOINT PARK	4981 I STREET	Park/landscaping	Low	Encinitas
INDIAN HEAD CANYON	0 QUAIL HOLLOW	Undeveloped park site	Low	Leucadia
J STREET VIEWPOINT PARK	398 J STREET	Park/landscaping	Low	Encinitas
LEO MULLEN SPORTS PARK	951 VIA CANTEBRIA	Park/landscaping	Low	La Costa South
LEUCADIA OAKS PARK	1511 N. VULCAN	Park/landscaping	Low	Leucadia
LEUCADIA ROADSIDE PARK	860 COAST HIGHWAY 101	Park/landscaping	Low	Leucadia
M.MACPHERSON PARK	1045 VULCAN	Park/landscaping	Low	Encinitas
MOONLIGHT BEACH	400 B STREET	Beach/park/parking	Low	Encinitas
OAKCREST PARK	555 BALOUR	Park/landscaping	Low	Encinitas
OLD STATION #4	120 SEEMAN	Fire Station/parking	Low	Encinitas
ORPHEUS PARK	482 ORPHEUS	Park/landscaping	Low	Leucadia
PAUL ECKE SPORTS PARK	278 SAXONY RD.	Park/landscaping	Low	Encinitas
PUMP STATION	2690 MANCHESTER	Pump station	Low	Cardiff
SAN ELIJO BLUFFS PARCELS	1400 COAST HIGHWAY 101	Undeveloped site	Low	Encinitas
SCOTTS VALLEY PARK	1602 WILLOWHAVEN	Park/landscaping	Low	La Costa South
STANDARD PACIFIC PARK SITE	OLYMPUS / PIRAEUS	Undeveloped site	Low	Leucadia
STONESTEPS BEACH	350 SOUTH EL PORTAL	Beach/stairs	Low	Leucadia
SUN VISTA	2011 AVNDA LA POSTA	Park/landscaping	Low	La Costa South
SWAMI'S BEACH	1298 COAST HIGHWAY 101	Beach/stairs/parking	Low	Encinitas
WIRO PARK	2232 EL CAM DEL NORTE	Park/landscaping	Low	Lower Escondido Creek/Ranch Santa Fe
CALLE MAGDALENA PUBLIC WORKS FACILITY	160 CALLE MAGDALENA	Municipal Yard/vehicle maint./material storage	High	Encinitas
CITY FLEET MAINTENANCE YARD	811 ORPHEUS	Municipal Yard/vehicle maint./material storage	High	Leucadia
FIRE STATION #1	415 2ND	Fire Station/parking	Low	Encinitas
FIRE STATION #2	1867 MACKINNON	Fire Station/parking	Low	Cardiff
FIRE STATION #3	801 ORPHEUS AVE	Fire Station/parking	Low	Leucadia
FIRE STATION #4	2011 VILLAGE PARK	Fire Station/parking	Low	La Costa South

APPENDIX B-1 CITY OF ENCINITAS MUNICIPAL FACILITIES INVENTORY (2006-2007)

FIRE STATION #5	540 BALOUR DR	Fire Station/parking	Low	Encinitas
FUTURE STATION #6	9999 LONE JACK	Fire Station/parking	Low	Lower Escondido Creek
ENCINITAS RANCH GOLF AUTHORITY	0 QUAIL GARDENS	Golf Course/landscaping	Low	La Costa South
PACIFIC VIEW PUBLIC WORKS FACILITY	608 THIRD STREET	Vehicle Parking/PW Offices	Medium	Encinitas
SAN DIEGUITO WATER DISTRICT	1190 OAKCREST PARK	Water Reservior/water storage	Low	La Costa South/Encinitas
REQUEZA STREET FACILITY	397 REQUEZA	Municipal Yard/sediment/materials s	High	Encinitas
"A" TANK SITE	355 SANTA FE	Tank Storage Site	Medium	Encinitas
SAN DIEGUITO WATER DISTRICT	601 SANTA FE	Pressure Regulating Station/no activ	Low	Encinitas
SAN DIEGUITO WATER DISTRICT	CAMBRIDGE RD	Pressure Regulating Station/no activ	Low	Cardiff
SAN ELIJO WASTEWATER DIVISION FACILITY	2695 MANCHESTER AVE	Public Works/Wastewater DivisionYa	High	Cardiff

Appendix B-2

FY 2006-07 NPDES Maintenance Work Orders

STREETS DIVISION

1,131	30 Gallon Bags of Litter removed from Bus Stops (removed by Partners With Industry)*
2,139	30 Gallon Bags of Litter removed directly from Storm Drain Channels/Basins
6,003	30 Gallon Bags of Litter and Trash removed from City Rights of Way
9,273	**Total amount of 30 gallon bags of Litter and Debris removed per N.P.D.E.S. regulations for Fiscal 2006-2007**
1,456	**Estimated Yards of Street Sweeping Debris removed per N.P.D.E.S. regulations for Fiscal 2006-2007**
107.00	Cubic Yards of Vegetation and Debris removed from Storm Drain Channels/Basins
82.50	Cubic Yards of Sediment removed from Channels and Basins by Streets/NPDES Crew
4.41	Inches of Rainfall

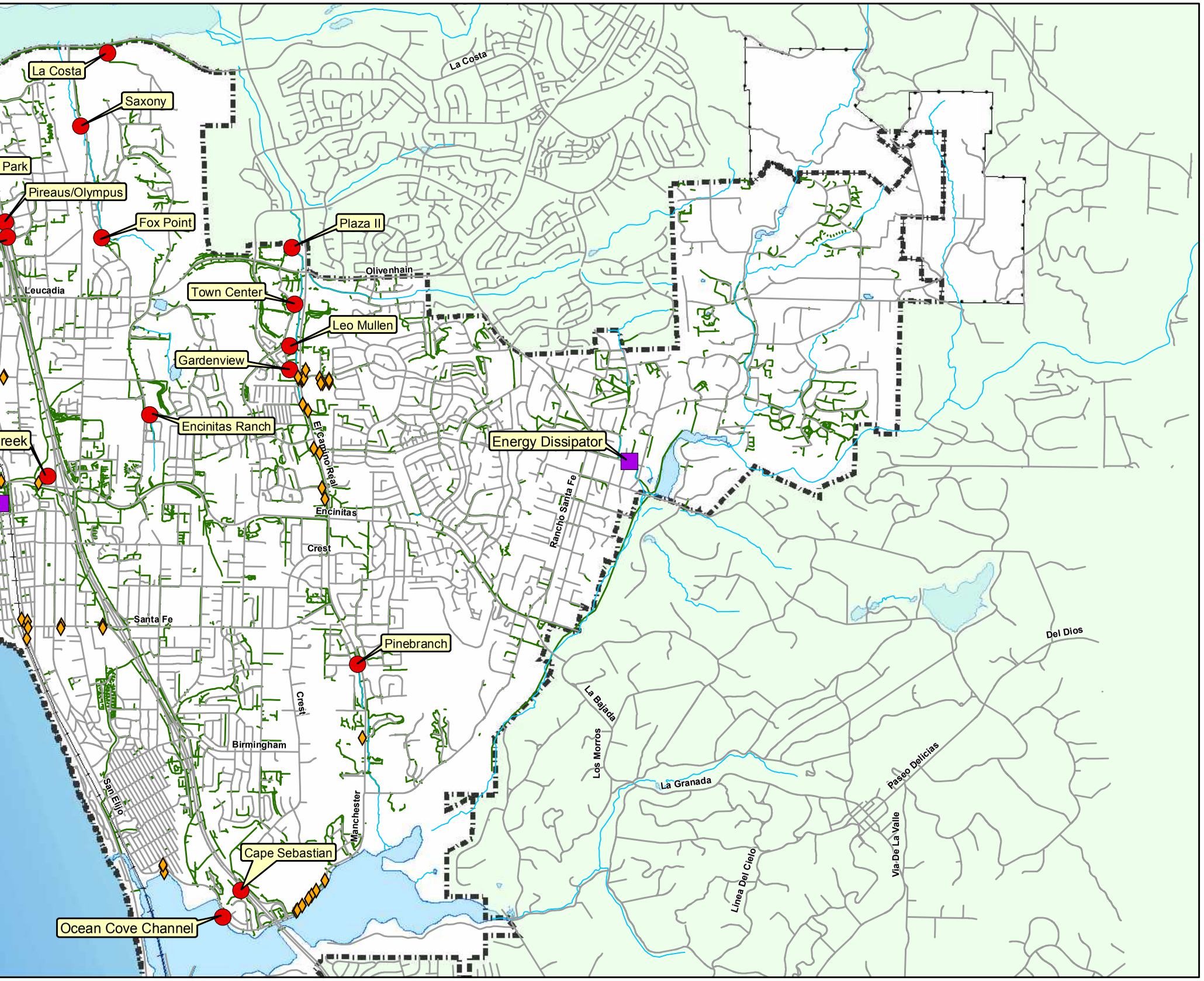
*Litter removed from various bus stops - without this service, trash & debris would filtrate our storm drain system

TOTAL Street Division Workorders From July 1 2006 to June 30 2007: 61

Breakdown of Events - National Pollution Discharge Elimination System

Spills	**26**
Storm Event Related-Cleanup	**0**
Standing Water Issues	**8**
Basins/Channels/Ditches	**19**
Curb & Gutter/Berm: Number Repaired/Replaced	**8**

*Last recorded date of included WOs: June 30, 2007



Encinitas Municipal BMP Locations

Storm Drains
Streams
Roads

This map was produced by the City of Encinitas GIS and is designed for internal use only. The map is based on the best data available at the time of production and is not guaranteed to survey accuracy. City of Encinitas, SanGIS, SANDAG and other data are represented.

Proprietary information: Access to and use of this information is restricted by a sublicense agreement. No sale, transfer license, or assignment of this information is permitted.

Coordinate System:
California State Plane Feet, Zone 6
Datum: NAD83

Date of Map Production: November, 2007

N

0 2,500 5,000
Feet

APPENDIX B-4

CITY OF ENCINITAS
PARK AND RECREATION DEPARTMENT

POLICY AND PROCEDURES MANUAL

Policy Title: *Integrated Pest Management Policy* Division: *Parks/Beaches Division*

Approved By: *Director of Parks and Recreation* Date: *September 30, 2003*

Originator: *Park and Beach Superintendent* Revised Date: _____

Policy Number: *PR P012*

I. POLICY STATEMENT

To protect public health and the environment, the Parks and Recreation Department desires to incorporate an Integrated Pest Management (IPM) program for all parks, beaches, streetscapes, recreational trails, and City landscaped facilities maintained by the Parks and Recreation Department with the most effective and least toxic management practices.

II. PURPOSE

Pests in the landscape can pose significant problems to people and the environment. Toxic pest control chemicals can also pose significant problems to people and the environment. Integrated Pest Management is the blending of all effective, economical, and environmentally sound pest control methods into a single but flexible approach to manage pest populations within acceptable limits. The first step of an IPM approach is to decide on the nature and the source of the pest problem, and then rely on a range of preventative and treatment strategies that can be cultural, physical, mechanical or biological. Only the least toxic chemical pesticides should be used as a last resort. IPM includes the use of pesticides, herbicides and fertilizers.

III. METHODOLGY

Parks and Recreation Integrated Pest Management Program will include the following components:

1. Education Educate staff, contractors, and the public about the Department's Integrated Pest Management policy / program.

2. Identification Identify the pests and/or the problem by site.

3. Monitoring & Recordkeeping Observe the plants, by site, for potential pest problems at regular intervals. Keep records of what is seen, decisions made, actions taken, and results.

4. Establish Thresholds Determine when the pest problem is likely to become serious enough to require some action.

5. Least Toxic Treatments In an IPM program, the object of treatment is to suppress pest populations below their injury level, but not to eradicate them. Select control strategies that are easy to carry out effectively, long-lasting, and least disruptive to the environment. The Pest Management flow chart at Exhibit 1 will be used by Department personnel as a guide to ensure Best Management Practices are selected for implementation.

6. Training Ensure that pesticide applicators are educated and trained in the use of current pesticides approved for use by the City of Encinitas, Parks and Recreation Department and that applicators follow label directions, precautions, and application regulations.

7. Evaluation Inspect after treatment action has been taken. Write down what has been learned. Has the treatment been effective? How can the whole process be improved to achieve the overall objectives of the program? The Observation Reporting Form at Exhibit 2 will be used for evaluations of sites and IPM applications.

√ FR 6/6/07

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

STORM WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Inspector Name Mike Emerson

Date 6/4/07 Time 1133 AM / PM Type of Inspection: ☒ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Business Name A TANK SITE - CITY OF ENCINITAS

Street Address 601 SANTA FE DRIVE ENCINITAS CA 92024

Mailing Address 505 S. VULCAN AVE ENCINITAS, CA 92024

Responsible Person(s) HOWARD WAITZOCK

Property Manager

Business Phone # (760) 633-2853 ext.

Property Manager's #

Business Fax # (760) 436-3592

APN Number

B. FACILITY/SITE INFORMATION

Principal activity: STORAGE LOT

SIC Code(s)

Does SIC Code best represent principal activity: ☐ Yes ☐ No

What is recommended SIC Code(s)?

New JURMP Classification?

Does facility have a current Encinitas business certificate? NA ☐ Yes ☐ No #_____ Exp._____

Is this facility currently listed in the City of Encinitas JURMP Inspection List? ☒ Yes ☐ No ☐ Unknown

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☒ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID #

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☒ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☐ Yes ☒ No

Has facility conducted previous storm water monitoring programs? ☐ Yes ☒ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: Rossini Creek to San Elijo Lagoon

Approximate distance to water bodies: ☐ < 200 ft. ☐ 200 – 1000 ft. ☒ > 1000 ft.

Sensitivity of receiving waters: ☒ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: SANTA FE DRIVE NORTHEAST CORNER OF LOT

Discharge observed: ☐ Yes ☒ No

If yes, describe:

Approximate area covered by industrial or commercial activities: square feet

Approximate % impervious surface of this area 0 %

Exposed areas of intensive outdoor activity: DIRT & LANDSCAPED

D. BMP Assessment

D.1 General

BMPs	N/A	Yes	No	Comments
1. Is the site free of litter and debris?		X		
2. Are discharge locations free of sediment and debris?		X		
3. Are parking lots, sidewalks and streets free of sediment and debris?		X		
4. Is pressure washing of parking lots or sidewalks conducted at the facility?			X	
a. If yes, is wash water captured?				
b. Please provide contact name and phone number info for pressure washing company.				
5. Are roof downspouts directed away from areas of potential pollutants?	X			
6. How many employees do you have? Are employees trained in storm water management? If so, provide a list of employees who have participated.		X		

D.2 Landscaping

1. Are adequate erosion prevention measures employed? (vegetation or physical stabilization)		X		
2. Are irrigation systems programmed to minimize over-watering and runoff?	X			
3. Is reclaimed water used for irrigation?	X			
4. Are stockpiles of soil or landscape waste equipped to prevent runoff transport?		X	X	LARGE amount of dirt in Middle of site W/out BMPs

D.3 Materials and Wastes

1. Are adequate trash containers provided?		X		
2. Are adequate recycling containers provided?	X			
3. Is the trash/recycling area enclosed and free of litter and debris?			X	appears that someone turned a trash container over
4. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?		X		on the EAST side of lot
5. Are outdoor material storage areas adequate (covered area with secondary containment)?			X	all out DOOR
6. Are outdoor storage containers properly labeled?	X			
7. Is there an accessible spill response kit?			X	YARD is SelDOM Used
8. Is there a spill response plan? If so, please provide to inspector.		X		
9. Are storage tanks equipped with secondary containment?	X			
10. Is secondary containment free of spills and rainwater?	X			
11. Are loading and unloading areas free of spills and debris?		X		

D.4 Equipment and Vehicles

1. Are exposed parking areas free of significant spills and leaks?		X		
2. Are heavy equipment and vehicles stored in garages or under canopies?			X	
3. Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?	X			
4. Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?	X			

BMPs	N/A	Yes	No	Comments
5. Is vehicle washing preformed in a contained area where runoff does not enter the MS4?	X			
D.5 Food Establishments				
1. Does facility have a grease trap or grease interceptor?				
2. Who maintains the grease trap? Company Name: Phone #				
3. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
4. Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
5. How many grease fryers are at the facility? _____				
6. About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually ☐ Other_____				
7. How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____ Company Name: Phone #				
8. Do oil-recycling/grease bins have overhead coverage?				
9. Do oil-recycling/grease bins have secondary containment?				
10. Are deep fryer oil-recycling drums stored properly?				
11. At what time is restaurant cleaning performed? _____				
12. Are biodegradable soaps used for cleaning activities?				
13. How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:				
14. Where is used cleaning water discharged?				
15. Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
16. Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
1. Is the site free of evidence of illicit connections and illegal discharges?		X		
2. Is the site free of evidence of unauthorized releases to storm drains?		X		
3. If not, have the appropriate authorities been notified?				
D.7 Commercial Nurseries N/A ☐				
1. Does nursery minimize water use and runoff during irrigation? What type of irrigation is used?				
2. Does nursery use controlled release fertilizers or other conservative fertilizing practices?				
3. Does nursery implement integrated pest management techniques to prevent pesticide pollution?				
D.8 Other				
1. Are there any other potential storm water pollution issues or concerns? If yes, explain below.			✓	
2. Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?	✓			
3. Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.	✓			

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION SUMMARY

FACILITY: _____ DATE: _____

E. VIOLATIONS

☐ No violations have been noted at this time

☒ No violations have been noted, but required corrective actions are described below.

☐ Violation of storm water ordinance or other applicable regulations were found.
(Attach Copy of NOV or Administrative Citation)

F. CORRECTIVE ACTIONS

Is corrective action needed? ☒ Yes ☐ No

As per Encinitas Municipal Code Section 20.08.110, the following corrective actions must be implemented. Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

1 TRASH PICK UP FROM OVER TURNED CONTAINER EAST
2 SIDE OF LOT
3 Need
4 A SPILL KIT
5 COVER HEAVY EQUIPMENT

Owner/operator has been notified of corrective actions both verbally and by: ☒ Photocopy ☐ Fax ☐ Mail

G. Describe informational, educational or BMP information distributed: ☐ City of Encinitas Restaurant Brochure English/Spanish, ☐ County of San Diego-What's Cooking Guide English/Spanish, ☐ City of Encinitas Automotive Brochure English/Spanish, ☐ County of San Diego-Green Wrench Guide English/Spanish. OTHER: _____

H. FOLLOW UP INSPECTION? YES or NO (CIRCLE ONE) **DATE:** 6/18/07

COMMENTS Heavy Equipment removed + trash was clean up

INSPECTOR NAME Mike Emerson **FACILITY CONTACT NAME (PRINT)** Howard G. WHITLock

INSPECTOR SIGNATURE Mike Emerson **FACILITY CONTACT SIGNATURE** Howard G. Whitlock

DATE 6/4/07 **DATE** June 4, 2007

I. RECOMMENDED CITY ACTIONS

_____

_____

FOR OFFICE USE ONLY

WO # 37944

F.U. WO # 38260

ASSESSMENT (circle appropriate level - "5" is a high level)

Level of knowledge regarding stormwater issues: **1. 2. 3. 4. 5.**

Level of cleanliness, BMP implementation, orderliness of site: **1. 2. 3. 4. 5.**

VAR 9/18/07

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

STORM WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Inspector Name MIKE EMERSON

Date 6/11/07 Time 3 AM / PM Type of Inspection: ☒ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Business Name CITY OF ENCINITAS - Calle Magdalena YARD

Street Address 160 CALLE MAGDALENA ENCINITAS CA 92024

Mailing Address 505 S. VULCAN AVE ENCINITAS CA 92024

Responsible Person(s) HOWARD WHITLOCK

Property Manager

Business Phone # (760) 633 - 2853 ext.

Property Manager's #

Business Fax # (760) 436 - 3592

APN Number

B. FACILITY/SITE INFORMATION

also Water operation

Principal activity: CORP YARD - STREET DEPT.

SIC Code(s)

Does SIC Code best represent principal activity: ☒ Yes ☐ No

What is recommended SIC Code(s)?

New JURMP Classification?

Does facility have a current Encinitas business certificate? NA ☐ Yes ☒ No #_____ Exp._____

Is this facility currently listed in the City of Encinitas JURMP Inspection List? ☒ Yes ☐ No ☐ Unknown

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☒ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID #

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☒ No

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☒ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☐ Yes ☒ No

Has facility conducted previous storm water monitoring programs? ☐ Yes ☒ No

7/9/07 I will contact Bryce said Wilson Bryce Wilson 633 2542 for Date of Submittal

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: Cottonwood Creek

Approximate distance to water bodies: ☐ < 200 ft. ☐ 200 – 1000 ft. ☒ > 1000 ft.

Sensitivity of receiving waters: ☒ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: NORTH WEST CORNER

Discharge observed: ☐ Yes ☒ No

If yes, describe:

Approximate area covered by industrial or commercial activities: ≈ 4+ ACRES square feet

Approximate % impervious surface of this area 90 %

Exposed areas of intensive outdoor activity: STORAGE of Heavy Equipment

D. BMP Assessment

D.1 General

BMPs	N/A	Yes	No	Comments
1. Is the site free of litter and debris?		X		
2. Are discharge locations free of sediment and debris?		X		
3. Are parking lots, sidewalks and streets free of sediment and debris?		X		
4. Is pressure washing of parking lots or sidewalks conducted at the facility?			X	
a. If yes, is wash water captured?	X			
b. Please provide contact name and phone number info for pressure washing company.	X			
5. Are roof downspouts directed away from areas of potential pollutants?		X		
6. How many employees do you have? 26 Are employees trained in storm water management?		X		
If so, provide a list of employees who have participated.		X		See Engineering or Admin for PW.

D.2 Landscaping

1. Are adequate erosion prevention measures employed? (vegetation or physical stabilization)		X		
2. Are irrigation systems programmed to minimize over-watering and runoff?		X		
3. Is reclaimed water used for irrigation?			X	
4. Are stockpiles of soil or landscape waste equipped to prevent runoff transport?		X		

D.3 Materials and Wastes

1. Are adequate trash containers provided?		X		
2. Are adequate recycling containers provided?		X		
3. Is the trash/recycling area enclosed and free of litter and debris?			X	TRASH IN DUMPSTER AREA
4. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?			X	≈ 12 BAGS of Recycle IN SE CORNER
5. Are outdoor material storage areas adequate (covered area with secondary containment)?		X		
6. Are outdoor storage containers properly labeled?			X	DON'T KNOW WHAT LARGE PLASTIC
7. Is there an accessible spill response kit?			X	CONTAINER are filled with
8. Is there a spill response plan? If so, please provide to inspector.			X	
9. Are storage tanks equipped with secondary containment?			X	
10. Is secondary containment free of spills and rainwater?		X		
11. Are loading and unloading areas free of spills and debris?		X		

D.4 Equipment and Vehicles

1. Are exposed parking areas free of significant spills and leaks?		X		
2. Are heavy equipment and vehicles stored in garages or under canopies?			X	Stored alongE West Perimeter
3. Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?		X		
4. Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?	X			

BMPs	N/A	Yes	No	Comments
5. Is vehicle washing preformed in a contained area where runoff does not enter the MS4?		X		
D.5 Food Establishments				
1. Does facility have a grease trap or grease interceptor?				
2. Who maintains the grease trap? Company Name: Phone #				
3. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
4. Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
5. How many grease fryers are at the facility? _____				
6. About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually ☐ Other_____				
7. How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____ Company Name: Phone #				
8. Do oil-recycling/grease bins have overhead coverage?				
9. Do oil-recycling/grease bins have secondary containment?				
10. Are deep fryer oil-recycling drums stored properly?				
11. At what time is restaurant cleaning performed? _____				
12. Are biodegradable soaps used for cleaning activities?				
13. How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:_____				
14. Where is used cleaning water discharged? _____				
15. Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
16. Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
1. Is the site free of evidence of illicit connections and illegal discharges?		X		
2. Is the site free of evidence of unauthorized releases to storm drains?		X		
3. If not, have the appropriate authorities been notified?	X			
D.7 Commercial Nurseries N/A ☐				
1. Does nursery minimize water use and runoff during irrigation? What type of irrigation is used?				
2. Does nursery use controlled release fertilizers or other conservative fertilizing practices?				
3. Does nursery implement integrated pest management techniques to prevent pesticide pollution?				
D.8 Other				
1. Are there any other potential storm water pollution issues or concerns? If yes, explain below.			X	
2. Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?		X		
3. Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.		X		

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION SUMMARY

FACILITY: _____ DATE: 6/11/07

E. VIOLATIONS

☐ No violations have been noted at this time

☒ No violations have been noted, but required corrective actions are described below.

☐ Violation of storm water ordinance or other applicable regulations were found. (Attach Copy of NOV or Administrative Citation)

F. CORRECTIVE ACTIONS

Is corrective action needed? ☒ Yes ☐ No

As per Encinitas Municipal Code Section 20.08.110, the following corrective actions must be implemented. Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

1 clean trash + Recycle areas
2 obtain spill Kit + PLAN
3 Store HEAVY EQUIPMENT + Vehicles IN GARAGE or UNDER Canapys
4 label outDoor Storage Containers
5 Replace torn SAND BAG especially around Storm Drains

Owner/operator has been notified of corrective actions both verbally and by: ☐ Photocopy ☐ Fax ☐ Mail

G. Describe informational, educational or BMP information distributed: ☐ City of Encinitas Restaurant Brochure English/Spanish, ☐ County of San Diego-What's Cooking Guide English/Spanish, ☐ City of Encinitas Automotive Brochure English/Spanish, ☐ County of San Diego-Green Wrench Guide English/Spanish. OTHER: _____

H. FOLLOW UP INSPECTION? YES or NO (CIRCLE ONE) **DATE:** 6/25/07

COMMENTS 7/26/07 clean trash + recycle areas + SAND BAGS Removed + Replace w/ New ones -

INSPECTOR NAME Mike Emerson **FACILITY CONTACT NAME (PRINT)** HOWARD G. WHITLOCK

INSPECTOR SIGNATURE Mike Emerson **FACILITY CONTACT SIGNATURE** Howard G. Whitlock

DATE 6/11/07 **DATE** June 12, 2007

I. RECOMMENDED CITY ACTIONS

me 1/2 hour truck 1/4 hour

FOR OFFICE USE ONLY

storm - WO# 38264

treats - FU WO # 39006

ASSESSMENT (circle appropriate level - "5" is a high level)

Level of knowledge regarding stormwater issues: 1. 2. 3. 4. 5.

Level of cleanliness, BMP implementation, orderliness of site: 1. 2. 3. 4. 5.

√ RR 6/6/07

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

STORM WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Inspector Name Mike Emerson

Date 6/4/07 Time 147 AM (PM) Type of Inspection: [X] Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Business Name CITY OF ENCINITAS — FLEET MAINTENANCE YARD

Street Address 801 ORPHEUS AVE ENCINITAS CA 92024

Mailing Address 505 S VULCAN AVE ENCINITAS, CA 92024

Responsible Person(s) Richard Barker Property Manager _____

Business Telephone # (760) 944 - 5019 ext. _____ Property Manager's # _____

Business Fax # (760) 943 - 7168 APN Number _____

B. FACILITY/SITE INFORMATION

Principal activity: FLEET MAINTENCE

SIC Code(s) _____

Does SIC Code best represent principal activity: ☐ Yes ☐ No

What is recommended SIC Code(s)? _____ New JURMP Classification? _____

Does facility have a current Encinitas business certificate? ☐ Yes ☐ No #_____ Exp._____

Is this facility currently listed in the City of Encinitas JURMP Inspection List? [X] Yes ☐ No ☐ Unknown

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes [X] No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID #_____

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? [X] Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? [X] Yes ☐ No

Has facility conducted previous storm water monitoring programs? [X] Yes ☐ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: ~~COTTONWOOD CREEK~~ Batiquitos

Approximate distance to water bodies: ☐ < 200 ft. ☐ 200 – 1000 ft. [X] > 1000 ft.

Sensitivity of receiving waters: [X] Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: ORPHEUS STREET
NO DRAINS ON SITE

Discharge observed: ☐ Yes [X] No

If yes, describe: _____

Approximate area covered by industrial or commercial activities: ≈ 4,500 square feet

Approximate % impervious surface of this area 50 %

Exposed areas of intensive outdoor activity: CONCRETE PAD IN FRONT OF YARD

D. BMP Assessment

D.1 General

BMPs	N/A	Yes	No	Comments
1. Is the site free of litter and debris?			X	Some litter around trash area
2. Are discharge locations free of sediment and debris?		X		
3. Are parking lots, sidewalks and streets free of sediment and debris?		X		
4. Is pressure washing of parking lots or sidewalks conducted at the facility?		X		
a. If yes, is wash water captured?		X		Wash water is discharged into landscaped area
b. Please provide contact name and phone number info for pressure washing company.				2 to 3 time a year by City employees
5. Are roof downspouts directed away from areas of potential pollutants?		X		
6. Are employees trained in storm water management? If so, provide a list of employees who have participated.		X		see attached

D.2 Landscaping

1. Are adequate erosion prevention measures employed? (vegetation or physical stabilization)		X		
2. Are irrigation systems programmed to minimize over-watering and runoff?	X			
3. Is reclaimed water used for irrigation?	X			
4. Are stockpiles of soil or landscape waste equipped to prevent runoff transport?	X			

D.3 Materials and Wastes

1. Are adequate trash containers provided?		X		
2. Are adequate recycling containers provided?		X		
3. Is the trash/recycling area enclosed and free of litter and debris?		X		
4. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?		X		
5. Are outdoor material storage areas adequate (covered area with secondary containment)?		X		
6. Are outdoor storage containers properly labeled?		X		
7. Is there an accessible spill response kit?		X		
8. Is there a spill response plan? If so, please provide to inspector.		X		
9. Are storage tanks equipped with secondary containment?		X		
10. Is secondary containment free of spills and rainwater?		X		
11. Are loading and unloading areas free of spills and debris?		X		

D.4 Equipment and Vehicles

1. Are exposed parking areas free of significant spills and leaks?		X		
2. Are heavy equipment and vehicles stored in garages or under canopies?			X	Traktor in SE corner
3. Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?		X		Some are conducted outside
4. Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?			X	No drains on site

BMPs	N/A	Yes	No	Comments
5. Is vehicle washing preformed in a contained area where runoff does not enter the MS4?	X			
6. Are biodegradable soaps used for cleaning activities?	X			
D.5 Food Establishments				
1. Does facility have a grease trap or grease interceptor?				
2. Who maintains the grease trap? Company Name: Phone #				
3. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
4. Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
5. How many grease fryers are at the facility? _____				
6. About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually ☐ Other_____				
7. How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____				
Company Name: Phone #				
8. Do oil-recycling/grease bins have overhead coverage?				
9. Do oil-recycling/grease bins have secondary containment?				
10. Are deep fryer oil-recycling drums stored properly?				
11. At what time is restaurant cleaning performed? _____				
12. What is the cleaning method?				
13. Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
14. How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:				
15. Where is used cleaning water discharged?				
16. Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
1. Is the site free of evidence of illicit connections and illegal discharges?		X		
2. Is the site free of evidence of unauthorized releases to storm drains?		X		
3. If not, have the appropriate authorities been notified?				
D.7 Commercial Nurseries				
1. Does nursery minimize water use and runoff during irrigation? What type of irrigation is used?				
2. Does nursery use controlled release fertilizers or other conservative fertilizing practices?				
3. Does nursery implement integrated pest management techniques to prevent pesticide pollution?				
D.8 Other				
1. Are there any other potential storm water pollution issues or concerns? If yes, explain below.			X	
2. Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?	X			
3. Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.	X			

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION SUMMARY

FACILITY: FLEET MAINTENANCE YARD DATE: 6/4/07

D.9 ADDITIONAL COMMENTS:

E. CORRECTIVE ACTIONS

Is corrective action needed? ☒ Yes ☐ No If yes, describe below.

1 PICK UP litter AROUND TRASH AREAS NEED TO CONTACT PACES Rec
2 COVER HEAVY EQUIPMENT
3
4
5

Owner/operator has been notified of recommended corrective actions both verbally and by: ☒ Photocopy ☐ Fax

F. Describe informational, educational or BMP information distributed:

G. VIOLATIONS

☐ No violations have been noted at this time
☒ No violations have been noted, but required corrective actions are described above.
☐ Violation of storm water ordinance or other applicable regulations were found.
(Attach Copy of NOV or Administrative Citation)

INSPECTOR NAME Mike Emerson FACILITY CONTACT NAME (PRINT) Richard Barker
INSPECTOR SIGNATURE [signature] FACILITY CONTACT SIGNATURE [signature]
DATE 6/4/07 DATE 6-4-2007

H. RECOMMENDED CITY ACTIONS

I. FOLLOW UP INSPECTION? YES or NO (CIRCLE ONE) DATE:

COMMENTS 6/14/07 Re inspection showed lot clean of trash all corrective actions complete

FOR OFFICE USE ONLY
WO #37948

ASSESSMENT (circle appropriate level - "5" is a high level)
Level of knowledge regarding stormwater issues: 1. 2. 3. 4. (5)
Level of cleanliness, BMP implementation, orderliness of site: 1. 2. 3. 4. (5)

√KR 6/7/07

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

STORM WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Inspector Name MIKE EMERSON

Date 6/4/07 Time 255 AM / (PM) Type of Inspection: ☒ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Business Name CITY OF ENCINITAS - PACIFIC VIEW YARD

Street Address 608 3rd STREET ENCINITAS, CA 92024

Mailing Address 505 S VULCAN Ave ENCINITAS, CA 92024

Responsible Person(s) HOWARD WHITLOCK Property Manager _____

Business Phone # (760) 633 - 2853 ext. _____ Property Manager's # _____

Business Fax # (760) 436 - 3592 APN Number _____

B. FACILITY/SITE INFORMATION

Principal activity: CORP YARD - STREET DEPT.

SIC Code(s) _____

Does SIC Code best represent principal activity: ☒ Yes ☐ No

What is recommended SIC Code(s)? _____ New JURMP Classification? _____

Does facility have a current Encinitas business certificate? ☐ Yes ☐ No # _____ Exp. _____

Is this facility currently listed in the City of Encinitas JURMP Inspection List? ☒ Yes ☐ No ☐ Unknown

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☒ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID # _____

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☒ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☒ Yes ☐ No

Has facility conducted previous storm water monitoring programs? ☒ Yes ☐ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: COTTON WOOD CREEK, PACIFIC OCEAN

Approximate distance to water bodies: ☐ < 200 ft. ☒ 200 – 1000 ft. ☐ > 1000 ft.

Sensitivity of receiving waters: ☒ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: F STREET

Discharge observed: ☐ Yes ☒ No

If yes, describe: _____

Approximate area covered by industrial or commercial activities: ≈ 2 ACRES square feet

Approximate % impervious surface of this area 50 %

Exposed areas of intensive outdoor activity: PARKING LOT

D. BMP Assessment

D.1 General

BMPs	N/A	Yes	No	Comments
1. Is the site free of litter and debris?		X		
2. Are discharge locations free of sediment and debris?		X		2 DRAINS IN YARD
3. Are parking lots, sidewalks and streets free of sediment and debris?		X		
4. Is pressure washing of parking lots or sidewalks conducted at the facility?			X	
a. If yes, is wash water captured?				
b. Please provide contact name and phone number info for pressure washing company.				25 Employees ON 5/22/07 ATTACHED
5. Are roof downspouts directed away from areas of potential pollutants?		X		
6. How many employees do you have? Are employees trained in storm water management? If so, provide a list of employees who have participated.		X		~~X~~ 11 EMPLOYEES ON 2/1/07 DONNA TROTTER has LOG COPY ATTACHED

D.2 Landscaping

1. Are adequate erosion prevention measures employed? (vegetation or physical stabilization)		X		
2. Are irrigation systems programmed to minimize over-watering and runoff?	X			
3. Is reclaimed water used for irrigation?	X			
4. Are stockpiles of soil or landscape waste equipped to prevent runoff transport?	X			

D.3 Materials and Wastes

1. Are adequate trash containers provided?		X		
2. Are adequate recycling containers provided?		X		
3. Is the trash/recycling area enclosed and free of litter and debris?		X		
4. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?		X		
5. Are outdoor material storage areas adequate (covered area with secondary containment)?		X		
6. Are outdoor storage containers properly labeled?	X			
7. Is there an accessible spill response kit?		X		DRY ABSORBENT SPILL LOG
8. Is there a spill response plan? If so, please provide to inspector.			X	KEPT IN WORK TRUCKS IN STORE
9. Are storage tanks equipped with secondary containment?	X			
10. Is secondary containment free of spills and rainwater?	X			
11. Are loading and unloading areas free of spills and debris?		X		

D.4 Equipment and Vehicles

1. Are exposed parking areas free of significant spills and leaks?		X		
2. Are heavy equipment and vehicles stored in garages or under canopies?			X	TRACTORS NOT COVERED
3. Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?		X		
4. Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?	X			

BMPs	N/A	Yes	No	Comments
5. Is vehicle washing preformed in a contained area where runoff does not enter the MS4?		X		
D.5 Food Establishments		NA		
1. Does facility have a grease trap or grease interceptor?				
2. Who maintains the grease trap? Company Name: Phone #				
3. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
4. Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
5. How many grease fryers are at the facility? _____				
6. About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually ☐ Other_____				
7. How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____ Company Name: Phone #				
8. Do oil-recycling/grease bins have overhead coverage?				
9. Do oil-recycling/grease bins have secondary containment?				
10. Are deep fryer oil-recycling drums stored properly?				
11. At what time is restaurant cleaning performed? _____				
12. Are biodegradable soaps used for cleaning activities?				
13. How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:_____				
14. Where is used cleaning water discharged?				
15. Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
16. Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
1. Is the site free of evidence of illicit connections and illegal discharges?		✓		
2. Is the site free of evidence of unauthorized releases to storm drains?		✓		
3. If not, have the appropriate authorities been notified?				
D.7 Commercial Nurseries N/A ☐				
1. Does nursery minimize water use and runoff during irrigation? What type of irrigation is used?				
2. Does nursery use controlled release fertilizers or other conservative fertilizing practices?				
3. Does nursery implement integrated pest management techniques to prevent pesticide pollution?				
D.8 Other				
1. Are there any other potential storm water pollution issues or concerns? If yes, explain below.			✓	
2. Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?	✓			
3. Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.	✓			

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION SUMMARY

FACILITY: CITY OF ENCINITAS – PACIFIC VIEW YARD DATE: 6/4/07

E. VIOLATIONS

☐ No violations have been noted at this time

☒ No violations have been noted, but required corrective actions are described below.

☐ Violation of storm water ordinance or other applicable regulations were found.
(Attach Copy of NOV or Administrative Citation)

F. CORRECTIVE ACTIONS

Is corrective action needed? ☐ Yes ☐ No

As per Encinitas Municipal Code Section 20.08.110, the following corrective actions must be implemented. Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

1 STORE HEAVY EQUIPMENT UNDER COVER
2 ON School property –
3
4
5

Owner/operator has been notified of corrective actions both verbally and by: ☒ Photocopy ☐ Fax ☐ Mail

G. Describe informational, educational or BMP information distributed: ☐ City of Encinitas Restaurant Brochure English/Spanish, ☐ County of San Diego-What's Cooking Guide English/Spanish, ☐ City of Encinitas Automotive Brochure English/Spanish, ☐ County of San Diego-Green Wrench Guide English/Spanish. OTHER: _____

H. FOLLOW UP INSPECTION? YES or NO (CIRCLE ONE) **DATE:** _____

COMMENTS checked with clean WATER Staff and found out that Pacific View PW Site is shared w/ ENC School District, all Heavy equipment is owned & Stored on School PART of lease

INSPECTOR NAME Mike Emerson FACILITY CONTACT NAME (PRINT) HOWARD G. WHITLOCK

INSPECTOR SIGNATURE Mike Emerson FACILITY CONTACT SIGNATURE Howard G. Whitlock

DATE 6/4/07 DATE June 9, 2007

I. RECOMMENDED CITY ACTIONS

_____

_____

FOR OFFICE USE ONLY

WO # 37954

ASSESSMENT (circle appropriate level - "5" is a high level)

Level of knowledge regarding stormwater issues: 1. 2. 3. 4. (5.)

Level of cleanliness, BMP implementation, orderliness of site: 1. 2. 3. 4. (5.)

✓ ZR 7/9/07

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

STORM WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Inspector Name Mike Emerson

Date 6/4/07 Time 1050 (AM) PM Type of Inspection: ☑ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Business Name City of Encinitas Requeza Yard

Street Address 397 Requeza Encinitas Mailing Address 505 S. Vulcan Ave Encinitas CA 92024

Responsible Person(s) Andy Billington Property Manager Howard Whitlock

Business Telephone # (760) 633-2873 ext. ____ Property Manager's # ____

Business Fax # (760) 436-3592 APN Number ____

B. FACILITY/SITE INFORMATION

Principal activity: Street Maintenance Yard

SIC Code(s) ____

Does SIC Code best represent principal activity: ☐ Yes ☐ No

What is recommended SIC Code(s)? ____ New JURMP Classification? ____

Does facility have a current Encinitas business certificate? ☒ Yes ☐ No #____ Exp.____

Is this facility currently listed in the City of Encinitas JURMP Inspection List? ☒ Yes ☐ No ☐ Unknown

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☒ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID #____

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☒ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☒ Yes ☐ No

Has facility conducted previous storm water monitoring programs? ☒ Yes ☐ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: Requeza drainage channel to Cottonwood Creek

Approximate distance to water bodies: ☐ < 200 ft. ☐ 200 – 1000 ft. ☒ > 1000 ft.

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☒ Non-sensitive

Discharge points along perimeter: Driveway drainage channel @ Northwest corner

Discharge observed: ☐ Yes ☒ No

If yes, describe: ____

Approximate area covered by industrial or commercial activities: ____ square feet

Approximate % impervious surface of this area 50 %

Exposed areas of intensive outdoor activity: Mostly Covered

D. BMP Assessment

D.1 General

BMPs	N/A	Yes	No	Comments
1. Is the site free of litter and debris?		✓		
2. Are discharge locations free of sediment and debris?		✓		
3. Are parking lots, sidewalks and streets free of sediment and debris?		✓		
4. Is pressure washing of parking lots or sidewalks conducted at the facility?	✓			
a. If yes, is wash water captured?				
b. Please provide contact name and phone number info for pressure washing company.				
5. Are roof downspouts directed away from areas of potential pollutants?	✓			
6. Are employees trained in storm water management? If so, provide a list of employees who have participated.		✓		

D.2 Landscaping

1. Are adequate erosion prevention measures employed? (vegetation or physical stabilization)		✓		
2. Are irrigation systems programmed to minimize over-watering and runoff?	✓			
3. Is reclaimed water used for irrigation?	✓			
4. Are stockpiles of soil or landscape waste equipped to prevent runoff transport?	✓			

D.3 Materials and Wastes

1. Are adequate trash containers provided?		✓		
2. Are adequate recycling containers provided?		✓		
3. Is the trash/recycling area enclosed and free of litter and debris?		✓		
4. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?		✓		
5. Are outdoor material storage areas adequate (covered area with secondary containment)?		✓		
6. Are outdoor storage containers properly labeled?	✓			
7. Is there an accessible spill response kit?			✓	6/18/07 yes absorbant INSIDE SOUTH SHED
8. Is there a spill response plan? If so, please provide to inspector.		✓		
9. Are storage tanks equipped with secondary containment?	✓			
10. Is secondary containment free of spills and rainwater?	✓			
11. Are loading and unloading areas free of spills and debris?		✓		

D.4 Equipment and Vehicles

1. Are exposed parking areas free of significant spills and leaks?		✓		
2. Are heavy equipment and vehicles stored in garages or under canopies?		✓		
3. Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?	✓			
4. Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?	✓			

BMPs	N/A	Yes	No	Comments
5. Is vehicle washing preformed in a contained area where runoff does not enter the MS4?	✓			
6. Are biodegradable soaps used for cleaning activities?	✓			
D.5 Food Establishments				
1. Does facility have a grease trap or grease interceptor?				
2. Who maintains the grease trap? Company Name: Phone #				
3. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
4. Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
5. How many grease fryers are at the facility? _____				
6. About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually ☐ Other_____				
7. How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____ Company Name: Phone #				
8. Do oil-recycling/grease bins have overhead coverage?				
9. Do oil-recycling/grease bins have secondary containment?				
10. Are deep fryer oil-recycling drums stored properly?				
11. At what time is restaurant cleaning performed? _____				
12. What is the cleaning method?				
13. Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
14. How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:				
15. Where is used cleaning water discharged?				
16. Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
1. Is the site free of evidence of illicit connections and illegal discharges?		✓		
2. Is the site free of evidence of unauthorized releases to storm drains?		✓		
3. If not, have the appropriate authorities been notified?				
D.7 Commercial Nurseries				
1. Does nursery minimize water use and runoff during irrigation? What type of irrigation is used?				
2. Does nursery use controlled release fertilizers or other conservative fertilizing practices?				
3. Does nursery implement integrated pest management techniques to prevent pesticide pollution?				
D.8 Other				
1. Are there any other potential storm water pollution issues or concerns? If yes, explain below.		✓		Location of Spill Kit
2. Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?	✓			
3. Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.	✓			

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION SUMMARY

FACILITY: Requeza YARD DATE: 6/4/07

D.9 ADDITIONAL COMMENTS:

E. CORRECTIVE ACTIONS

Is corrective action needed? ☐ Yes ☐ No If yes, describe below.

1 Make Spill kit More accessible ✓
2 Properly store PAINT CANS INTO covered area
3 THERE ARE 4 PAINT CONTAINERS STORED ON NORTH EAST
4 PART of YARD - see photo
5

Owner/operator has been notified of recommended corrective actions both verbally and by: ☒ Photocopy ☐ Fax

F. Describe informational, educational or BMP information distributed:

G. VIOLATIONS

☐ No violations have been noted at this time
☒ No violations have been noted, but required corrective actions are described above.
☐ Violation of storm water ordinance or other applicable regulations were found.
(Attach Copy of NOV or Administrative Citation)

INSPECTOR NAME Mike Emerson FACILITY CONTACT NAME (PRINT) HOWARD G. WHITLOCK

INSPECTOR SIGNATURE Mike Emerson FACILITY CONTACT SIGNATURE Howard G. Whitlock

DATE 6/4/07 DATE June 4, 2007

H. RECOMMENDED CITY ACTIONS

I. FOLLOW UP INSPECTION? YES or NO (CIRCLE ONE) **DATE:** 6/18/07

COMMENTS Found discarded Battery & TORN TARPS ON Equipment ON SE SIDE of Shelter
ON SW CORNER NEXT to Porta-Potty
6/28/07 YARD IN COMPLIANCE Mike Emerson

FOR OFFICE USE ONLY

WO # 38657
FM WO # 38658

ASSESSMENT (circle appropriate level - "5" is a high level)

Level of knowledge regarding stormwater issues: 1. 2. 3. (4.) 5.

Level of cleanliness, BMP implementation, orderliness of site: 1. 2. 3. 4. (5.)

√ TR 6/7/07

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

STORM WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Inspector Name MIKE EMERSON

Date 6/4/07 Time 3 AM (PM) Type of Inspection: ☒ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Business Name WASTE WATER COLLECTION FACILITY

Street Address 2695 MANCHESTER AVE CARDIFF CA 92007

Mailing Address

Responsible Person(s) UTILITIES SUPERINTENDANT SHAWN ATHERTON

Property Manager CITY OF ENCINITAS

Business Phone # (760) 753-5018 ext.

Property Manager's #

Business Fax # (760) 753-6928

APN Number

B. FACILITY/SITE INFORMATION

Principal activity: WASTE WATER – CORP YARD

SIC Code(s)

Does SIC Code best represent principal activity: ☐ Yes ☐ No

What is recommended SIC Code(s)?

New JURMP Classification?

Does facility have a current Encinitas business certificate? ☐ Yes ☐ No #_____ Exp._____

Is this facility currently listed in the City of Encinitas JURMP Inspection List? ☒ Yes ☐ No ☐ Unknown

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☒ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID #

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☒ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☐ Yes ☒ No

Has facility conducted previous storm water monitoring programs? ☐ Yes ☒ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: SAN ELIJO LAGOON

Approximate distance to water bodies: ☐ < 200 ft. ☒ 200 – 1000 ft. ☐ > 1000 ft.

Sensitivity of receiving waters: ☒ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: MANCHESTER STORM DRAIN TO THE WEST

Discharge observed: ☐ Yes ☒ No

If yes, describe:

Approximate area covered by industrial or commercial activities: ≈ 6,000 square feet

Approximate % impervious surface of this area 90 %

Exposed areas of intensive outdoor activity: PARKING LOTS + STORAGE

D. BMP Assessment

D.1 General

BMPs	N/A	Yes	No	Comments
1. Is the site free of litter and debris?		X		
2. Are discharge locations free of sediment and debris?		X		
3. Are parking lots, sidewalks and streets free of sediment and debris?		X		
4. Is pressure washing of parking lots or sidewalks conducted at the facility?			X	
a. If yes, is wash water captured?				
b. Please provide contact name and phone number info for pressure washing company.				
5. Are roof downspouts directed away from areas of potential pollutants?		X		
6. How many employees do you have? Are employees trained in storm water management? If so, provide a list of employees who have participated.		X		8 ARE TRAINED IN STORM Water MANAGEMENT ~~Will Email Log to me~~ Log is attached

D.2 Landscaping

1. Are adequate erosion prevention measures employed? (vegetation or physical stabilization)		X		
2. Are irrigation systems programmed to minimize over-watering and runoff?	X			
3. Is reclaimed water used for irrigation?	X			
4. Are stockpiles of soil or landscape waste equipped to prevent runoff transport?	X			

D.3 Materials and Wastes

1. Are adequate trash containers provided?		X		
2. Are adequate recycling containers provided?		X		
3. Is the trash/recycling area enclosed and free of litter and debris?		X		
4. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?		X		
5. Are outdoor material storage areas adequate (covered area with secondary containment)?		X		
6. Are outdoor storage containers properly labeled?	X			
7. Is there an accessible spill response kit?		X		SPILL KITS ON TRUCKS
8. Is there a spill response plan? If so, please provide to inspector.			X	UNKNOWN
9. Are storage tanks equipped with secondary containment?	✓			
10. Is secondary containment free of spills and rainwater?	✓			
11. Are loading and unloading areas free of spills and debris?		✓		

D.4 Equipment and Vehicles

1. Are exposed parking areas free of significant spills and leaks?		✓		
2. Are heavy equipment and vehicles stored in garages or under canopies?		✓		
3. Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?		✓		
4. Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?	✓			

BMPs	N/A	Yes	No	Comments
5. Is vehicle washing preformed in a contained area where runoff does not enter the MS4?		X		
D.5 Food Establishments				
1. Does facility have a grease trap or grease interceptor?				
2. Who maintains the grease trap? Company Name: Phone #				
3. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
4. Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
5. How many grease fryers are at the facility? _____				
6. About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually ☐ Other_____				
7. How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____ Company Name: Phone #				
8. Do oil-recycling/grease bins have overhead coverage?				
9. Do oil-recycling/grease bins have secondary containment?				
10. Are deep fryer oil-recycling drums stored properly?				
11. At what time is restaurant cleaning performed? _____				
12. Are biodegradable soaps used for cleaning activities?				
13. How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:_____				
14. Where is used cleaning water discharged? _____				
15. Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
16. Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
1. Is the site free of evidence of illicit connections and illegal discharges?		X		
2. Is the site free of evidence of unauthorized releases to storm drains?		X		
3. If not, have the appropriate authorities been notified?				
D.7 Commercial Nurseries N/A ☐				
1. Does nursery minimize water use and runoff during irrigation? What type of irrigation is used?				
2. Does nursery use controlled release fertilizers or other conservative fertilizing practices?				
3. Does nursery implement integrated pest management techniques to prevent pesticide pollution?				
D.8 Other				
1. Are there any other potential storm water pollution issues or concerns? If yes, explain below.			X	
2. Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?	X			
3. Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.			X	

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION SUMMARY

FACILITY: WASTE WATER COLLECTION FACILITY DATE: 6/4/07

E. VIOLATIONS

☒ No violations have been noted at this time

☐ No violations have been noted, but required corrective actions are described below.

☐ Violation of storm water ordinance or other applicable regulations were found.
(Attach Copy of NOV or Administrative Citation)

F. CORRECTIVE ACTIONS

Is corrective action needed? ☐ Yes ☒ No

As per Encinitas Municipal Code Section 20.08.110, the following corrective actions must be implemented. Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

1 _____

2 _____

3 _____

4 _____

5 _____

Owner/operator has been notified of corrective actions both verbally and by: ☒ Photocopy ☐ Fax ☐ Mail

G. Describe informational, educational or BMP information distributed: ☐ City of Encinitas Restaurant Brochure English/Spanish, ☐ County of San Diego-What's Cooking Guide English/Spanish, ☐ City of Encinitas Automotive Brochure English/Spanish, ☐ County of San Diego-Green Wrench Guide English/Spanish. OTHER: _____

H. FOLLOW UP INSPECTION? YES OR NO (CIRCLE ONE) **DATE:** _____

COMMENTS _____

INSPECTOR NAME Mike Emerson **FACILITY CONTACT NAME (PRINT)** Shaun Atherton

INSPECTOR SIGNATURE _____ **FACILITY CONTACT SIGNATURE** _____

DATE 6/4/07 **DATE** 6-4-07

I. RECOMMENDED CITY ACTIONS

_____

_____

FOR OFFICE USE ONLY

WO# 37956

ASSESSMENT (circle appropriate level - "5" is a high level)

Level of knowledge regarding stormwater issues: **1. 2. 3. 4.** (5.)

Level of cleanliness, BMP implementation, orderliness of site: **1. 2. 3. 4.** (5)

CITY OF ENCINITAS & SAN DIEGUITO WATER DISTRICT

MEETING REPORT

Date of Meeting: 6-13-07 Department: PUBLIC WORKS

Meeting Leader (Print Clearly) MAYELA padilla, City of Encinitas

Meeting Leader' s Signature: Environmental Specialist

Topics Discussed:

(Attach or identify all documents provided and discussed)

STORM water Employee

TRAINING WORKSHOP

Personnel in Attendance

Employee Attendee Names (Print Clearly)	Employees Signatures
1) Sean Sanks	
2) Edie Trantalis	
3) John E King	
4) David Soto	
5) Don Cowgill	
6) Edward Toy	
7) Ben Taylor	
8) Kristy Rygiel	
9) Mike Emerson	
10) Shawn Atherton	

Use a second FORM 102, if space is inadequate.

Supervisor to retain the Original, and send a copy to Risk Management

FORM 102

R2-7/03

Appendix C

C-1 Industrial Inventory
C-2 Industrial Storm Water Quality Inspection Reports (2)

Appendix C-1 City of Encinitas Industrial Inventory

WDID	Operator_Owner Name	Facility_SiteName	Facility_Site Location	SIC1	Principal Product/Activity	Priority	Sub-basin
9 37S000299	SAN DIEGUITO UNION HIGH SCHOOL	TRANSPORTATION COOPERATIVE	1142 BONITA ST	4151	Transportaion Facility/vehicle maintenance	High	ENCINITAS
9 37S001545	SAN ELIJO JOINT POWERS AUTHORITY	WATER RECLAMATION FACILITY	2695 MANCHESTER AVE	4952	Treatment works treating domestic sewage	High	CARDIFF
9 37S004562	SAN DIEGO COUNTY	ENCINITAS LANDFILL	2099 ENCINITAS BLVD.	4953	Closed Landfill	High	ENCINITAS

Industrial ✓ AS 9/07

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

STORM WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Inspector Name Mike Emerson + M. Padilla

Date 6/6/07 Time _____ AM / PM Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Business Name SAN ELIJO JPA (Water Reclamation Facility)

Street Address 2695 MANCHESTER AVE CARDIFF, CA 92007

Mailing Address P.O. BOX 1077 CARDIFF, CA 92007

Responsible Person(s) Patricia Berge / Holly TRYON - Associate Engineer

Property Manager John Clark

Business Phone # (760) 753 - 6203 ext. _____

Property Manager's # 760-753-6203 x 23

Business Fax # (760) 753 - 5935

APN Number _____

B. FACILITY/SITE INFORMATION

Principal activity: WASTE WATER TREATMENT

SIC Code(s) 4952

Does SIC Code best represent principal activity: ☒ Yes ☐ No

What is recommended SIC Code(s)? _____ New JURMP Classification? _____

Does facility have a current Encinitas business certificate? ☒ Yes ☐ No #_____ Exp._____

Is this facility currently listed in the City of Encinitas JURMP Inspection List? ☒ Yes ☐ No ☐ Unknown

Is facility subject to CA Statewide General Industrial Permit? ☒ Yes ☐ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☒ Yes ☐ No WDID # 937S001545

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☒ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☒ Yes ☐ No

Has facility conducted previous storm water monitoring programs? ☒ Yes ☐ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: SAN ELIJO LAGOON

Approximate distance to water bodies: ☒ < 200 ft. ☐ 200 – 1000 ft. ☐ > 1000 ft.

Sensitivity of receiving waters: ☒ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: STORM DRAIN CHANNEL - WEST

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area covered by industrial or commercial activities: ≈ 26 ACRES square feet

Approximate % impervious surface of this area ≈ 80 % NEW asphalt + PARKING AREA

Exposed areas of intensive outdoor activity: LOADING + UNLOADING AREAS

D. BMP Assessment

D.1 General

BMPs	N/A	Yes	No	Comments
1. Is the site free of litter and debris?		X		
2. Are discharge locations free of sediment and debris?		X		
3. Are parking lots, sidewalks and streets free of sediment and debris?		X		
4. Is pressure washing of parking lots or sidewalks conducted at the facility?		X		
a. If yes, is wash water captured?		X		
b. Please provide contact name and phone number info for pressure washing company.		DONE BY STAFF		
5. Are roof downspouts directed away from areas of potential pollutants?		X		
6. How many employees do you have? 22 Are employees trained in storm water management? yes If so, provide a list of employees who have participated.		X		

D.2 Landscaping

1. Are adequate erosion prevention measures employed? (vegetation or physical stabilization)		X		Will revegetate FORCE Main construction for Solana Beach
2. Are irrigation systems programmed to minimize over-watering and runoff?		X		
3. Is reclaimed water used for irrigation?		X		
4. Are stockpiles of soil or landscape waste equipped to prevent runoff transport?		X		

D.3 Materials and Wastes

1. Are adequate trash containers provided?		X		
2. Are adequate recycling containers provided?		X		
3. Is the trash/recycling area enclosed and free of litter and debris?		X		
4. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?		X		
5. Are outdoor material storage areas adequate (covered area with secondary containment)?			X	Will cover + contain w/in 3 days
6. Are outdoor storage containers properly labeled?				
7. Is there an accessible spill response kit?		X		
8. Is there a spill response plan? If so, please provide to inspector.		X		LAST UPDATED 1/2007
9. Are storage tanks equipped with secondary containment?				
10. Is secondary containment free of spills and rainwater?				
11. Are loading and unloading areas free of spills and debris?				

D.4 Equipment and Vehicles

1. Are exposed parking areas free of significant spills and leaks?				
2. Are heavy equipment and vehicles stored in garages or under canopies?				
3. Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?				
4. Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?				

BMPs	N/A	Yes	No	Comments
5. Is vehicle washing preformed in a contained area where runoff does not enter the MS4?		X		
D.5 Food Establishments				
1. Does facility have a grease trap or grease interceptor?				
2. Who maintains the grease trap? Company Name: Phone #				
3. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
4. Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
5. How many grease fryers are at the facility? _____				
6. About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually ☐ Other_____				
7. How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____ Company Name: Phone #				
8. Do oil-recycling/grease bins have overhead coverage?				
9. Do oil-recycling/grease bins have secondary containment?				
10. Are deep fryer oil-recycling drums stored properly?				
11. At what time is restaurant cleaning performed? _____				
12. Are biodegradable soaps used for cleaning activities?				
13. How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:_____				
14. Where is used cleaning water discharged? _____				
15. Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
16. Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
1. Is the site free of evidence of illicit connections and illegal discharges?		X		
2. Is the site free of evidence of unauthorized releases to storm drains?		X		
3. If not, have the appropriate authorities been notified?	X			
D.7 Commercial Nurseries N/A ☐				
1. Does nursery minimize water use and runoff during irrigation? What type of irrigation is used?				
2. Does nursery use controlled release fertilizers or other conservative fertilizing practices?				
3. Does nursery implement integrated pest management techniques to prevent pesticide pollution?				
D.8 Other				
1. Are there any other potential storm water pollution issues or concerns? If yes, explain below.			X	
2. Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?	X			
3. Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.		X		MISC SAND + GRAVEL BAG AS NEEDED

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION SUMMARY

FACILITY: SAN ELIJO JPA DATE: 6/6/07

E. VIOLATIONS

☐ No violations have been noted at this time

☒ No violations have been noted, but required corrective actions are described below.

☐ Violation of storm water ordinance or other applicable regulations were found.
(Attach Copy of NOV or Administrative Citation)

F. CORRECTIVE ACTIONS

Is corrective action needed? ☒ Yes ☐ No

As per Encinitas Municipal Code Section 20.08.110, the following corrective actions must be implemented. Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

1 Provide Better Management of outDoor
2 Materials STORAGE of UNUSED OR UNWANTED
3 PARTS LOCATED ON the SOUTHWEST PART of
4 PROPERTY (EAST of Building)
5

Owner/operator has been notified of corrective actions both verbally and by: ☒ Photocopy ☐ Fax ☐ Mail

G. Describe informational, educational or BMP information distributed: ☐ City of Encinitas Restaurant Brochure English/Spanish, ☐ County of San Diego-What's Cooking Guide English/Spanish, ☐ City of Encinitas Automotive Brochure English/Spanish, ☐ County of San Diego-Green Wrench Guide English/Spanish. OTHER: _____

H. FOLLOW UP INSPECTION? YES or NO (CIRCLE ONE) DATE: 6/20/07

COMMENTS 6/18/07 Received Email w/ Photo Showing that AREA is clear of parts + Machines. AS of 6/18/07 SAN ELIJO JPA appears to be in Compliance Mike Emerson INSPECTION DONE OK 6/18/07 By Mike Emerson

INSPECTOR NAME Mike Emerson FACILITY CONTACT NAME (PRINT) Holly Tryon

INSPECTOR SIGNATURE Mike Emerson FACILITY CONTACT SIGNATURE Holly Tryon

DATE 6/6/07 DATE 6/6/07

I. RECOMMENDED CITY ACTIONS

_____

_____

FOR OFFICE USE ONLY

WO # 37958
F.U.WO # 38262

ASSESSMENT (circle appropriate level - "5" is a high level)

Level of knowledge regarding stormwater issues: 1. 2. 3. 4. (5)

Level of cleanliness, BMP implementation, orderliness of site: 1. 2. 3. (4.) (5.)

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

STORM WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Inspector Name Mike Emerson / Mayela Padilla

Date 6/8/07 Time 2:35 AM / (PM) Type of Inspection: [X] Routine [ ] Follow-up [ ] Complaint Investigation

A. CONTACT INFORMATION

Business Name SAN DIEGUITO TRANSPORTATION

Street Address 1142 BONITA DRIVE ENCINITAS, CA 92024 Mailing Address 710 ENCINITAS BLVD. ENCINITAS CA 92024

Responsible Person(s) DANIEL J. LOVE / John REDMAN Property Manager

Business Phone # (760) 753 - 8298 ext. 5052 Property Manager's #

Business Fax # (760) 633 - 1645 APN Number

B. FACILITY/SITE INFORMATION

Principal activity: BUS STORAGE + REPAIR FACILITY

SIC Code(s) 4151

Does SIC Code best represent principal activity: [X] Yes [ ] No

What is recommended SIC Code(s)? New JURMP Classification?

Does facility have a current Encinitas business certificate? [ ] Yes [X] No #_____ Exp._____

Is this facility currently listed in the City of Encinitas JURMP Inspection List? [X] Yes [ ] No [ ] Unknown

Is facility subject to CA Statewide General Industrial Permit? [X] Yes [ ] No

If yes, has facility filed a Notice of Intent (NOI) to comply? [X] Yes [ ] No WDID # 937100029

If no, does facility have No Exposure Certification (NEC)? [ ] Yes [ ] No

Does facility maintain SWPPP or BMP Plan? [X] Yes [ ] No

Does facility have a map/sketch of the site with flow lines and storm drains? [ ] Yes [ ] No

Has facility conducted previous storm water monitoring programs? [X] Yes [ ] No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: COTTON WOOD CREEK

Approximate distance to water bodies: [ ] < 200 ft. [ ] 200 – 1000 ft. [X] > 1000 ft.

Sensitivity of receiving waters: [X] Sensitive (ESA, 303(d), or other) [ ] Non-sensitive

Discharge points along perimeter: 3 STORM DRAINS (2 ON LOWER LOT)

Discharge observed: [ ] Yes [ ] No

If yes, describe:

Approximate area covered by industrial or commercial activities: 2.5 ACRES square feet

Approximate % impervious surface of this area 85 %

Exposed areas of intensive outdoor activity: 15

D. BMP Assessment

D.1 General

BMPs	N/A	Yes	No	Comments
1. Is the site free of litter and debris?		X		
2. Are discharge locations free of sediment and debris?		X		
3. Are parking lots, sidewalks and streets free of sediment and debris?				
4. Is pressure washing of parking lots or sidewalks conducted at the facility?			X	SWEEPER TRUCK Every 6 MONTHS
a. If yes, is wash water captured?	X			
b. Please provide contact name and phone number info for pressure washing company.	X			
5. Are roof downspouts directed away from areas of potential pollutants?				
6. How many employees do you have? 70 Are employees trained in storm water management? If so, provide a list of employees who have participated.		X		@ MONTHLY MEETING yes, we reviewed it

D.2 Landscaping

1. Are adequate erosion prevention measures employed? (vegetation or physical stabilization)	X			Very Little LANDSCAPING
2. Are irrigation systems programmed to minimize over-watering and runoff?	X			
3. Is reclaimed water used for irrigation?	X			
4. Are stockpiles of soil or landscape waste equipped to prevent runoff transport?	X			

D.3 Materials and Wastes

1. Are adequate trash containers provided?		X		
2. Are adequate recycling containers provided?		X		
3. Is the trash/recycling area enclosed and free of litter and debris?		X		
4. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?		X		
5. Are outdoor material storage areas adequate (covered area with secondary containment)?		X		
6. Are outdoor storage containers properly labeled?		X		
7. Is there an accessible spill response kit?	X	X		
8. Is there a spill response plan? If so, please provide to inspector.		X		
9. Are storage tanks equipped with secondary containment?		X		
10. Is secondary containment free of spills and rainwater?		X		
11. Are loading and unloading areas free of spills and debris?		X		

D.4 Equipment and Vehicles

1. Are exposed parking areas free of significant spills and leaks?		X		
2. Are heavy equipment and vehicles stored in garages or under canopies?		X		When NOT IN OPERATION
3. Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?		X		
4. Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?		X		But NOT covered, DRAINAGE goes into Clarifier

BMPs	N/A	Yes	No	Comments
5. Is vehicle washing preformed in a contained area where runoff does not enter the MS4?		X		
D.5 Food Establishments				
1. Does facility have a grease trap or grease interceptor?				
2. Who maintains the grease trap? Company Name: Phone #				
3. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
4. Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
5. How many grease fryers are at the facility? _____				
6. About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually ☐ Other_____				
7. How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____ Company Name: Phone #				
8. Do oil-recycling/grease bins have overhead coverage?				
9. Do oil-recycling/grease bins have secondary containment?				
10. Are deep fryer oil-recycling drums stored properly?				
11. At what time is restaurant cleaning performed? _____				
12. Are biodegradable soaps used for cleaning activities?				
13. How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:_____				
14. Where is used cleaning water discharged?				
15. Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
16. Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
1. Is the site free of evidence of illicit connections and illegal discharges?		X		
2. Is the site free of evidence of unauthorized releases to storm drains?		X		
3. If not, have the appropriate authorities been notified?				
D.7 Commercial Nurseries N/A ☐				
1. Does nursery minimize water use and runoff during irrigation? What type of irrigation is used?				
2. Does nursery use controlled release fertilizers or other conservative fertilizing practices?				
3. Does nursery implement integrated pest management techniques to prevent pesticide pollution?				
D.8 Other				
1. Are there any other potential storm water pollution issues or concerns? If yes, explain below.		X		
2. Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?	X			
3. Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.	X			

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION SUMMARY

FACILITY: SAN DIEGUITO TRANSPORTATION DATE: 6/8/07

E. VIOLATIONS

☐ No violations have been noted at this time

☒ No violations have been noted, but required corrective actions are described below.

☐ Violation of storm water ordinance or other applicable regulations were found.
(Attach Copy of NOV or Administrative Citation)

F. CORRECTIVE ACTIONS

Is corrective action needed? ☒ Yes ☐ No

As per Encinitas Municipal Code Section 20.08.110, the following corrective actions must be implemented. Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

1 ① REPLACE STORM DRAIN FILTERS @ the BEGINNING and
2 at the END of the RAINY SEASON (Sep 1 - APRIL 30)
3 ② IMPLEMENT THE RECOMONDATIONS AS OUTLINED IN
4 THE 4/21/06 OEMC OWEN ENGINEERING REPORT
5 ③ CEMENT MIXER + AIR Compresser to be stored INSIDE or Removed

Owner/operator has been notified of corrective actions both verbally and by: ☒ Photocopy ☐ Fax ☐ Mail

G. Describe informational, educational or BMP information distributed: ☐ City of Encinitas Restaurant Brochure English/Spanish, ☐ County of San Diego-What's Cooking Guide English/Spanish, ☐ City of Encinitas Automotive Brochure English/Spanish, ☒ County of San Diego-Green Wrench Guide English/Spanish. OTHER: _____

H. FOLLOW UP INSPECTION? YES or NO (CIRCLE ONE) **DATE:** 11/9/07 See Section I below

COMMENTS ① CLARIFIER WAS Services By Safety KLEEN ON 7/25/06 ② SAMPLE ANALYSES Show an EXCEEDANCE FOR CONDUCTIVITY, TSS, Cadmium, Copper, and ZINC.

INSPECTOR NAME Mike Emerson **FACILITY CONTACT NAME (PRINT)** Daniel Love

INSPECTOR SIGNATURE Mike Emerson **FACILITY CONTACT SIGNATURE** Daniel Love

DATE 6/8/07 **DATE** _____

I. RECOMMENDED CITY ACTIONS

1) DOWNSTREAM INC INSPECTED and replaced filters as required 2) INSTALLED K rails + Straw waddles a perimeter of the Parking Lot 2) Implemented sweep in Contract 3) Hydro-seeded EARTH BANK ④ PLACE all MOP buckets IN shed. 5) Removed AIR compresser + cement mixer from property

FOR OFFICE USE ONLY

WO # 38030

ASSESSMENT (circle appropriate level - "5" is a high level)

Level of knowledge regarding stormwater issues: 1. 2. 3. 4. (5)

Level of cleanliness, BMP implementation, orderliness of site: 1. 2. 3. (4) 5.

Appendix D

D-1 Commercial Inventory FY 2006-07
D-2 Routine Commercial Inspections Summary FY 2006-07
D-3 CityGIS Basic Training Manual
D-4 Commercial Storm Water Quality Inspection Forms (2)

Appendix D-1

BUSINESS NAME	ADDRESS	BUSINESS
100% NATURAL	918 N. COAST HWY 101	EATING PLACES
101 DINER	552 S COAST HWY 101	EATING PLACES
10-C'S LANDSCAPE ENHANCEMENTS	1301 TRABERT RANCH RD	LANDSCAPING
A FEW GOOD CREPES	1666 COTTAGE GLEN CT	EATING PLACES
A LITTLE MOORE CAFÉ	1030 N COAST HWY 101	EATING PLACES
A+ SMOG TEST ONLY CENTER	449 SECOND ST	AUTO
ABELS FLOWERS & PLANTS	710 CLARK AVE	NURSERY
ABSOLUTE PERFECTION FOUNTAIN	730 THRID ST	HANDYMAN
ADD STYLE DESIGNS	607 N. VULCAN AVENUE	CONTRACTOR
ADES & GISH NURSERIES- Growers	1492 HYMETTUS AVE	NURSERY
ADES & GISH NURSERIES- Growers	1150 MELBA ROAD	NURSERY
ADES & GISH NURSERIES- Growers	875 BALOUR	NURSERY
ALBERTSON'S #6724	134 N. EL CAMINO REAL	EATING PLACES
ALBERTSON'S #6754	479 ENCINITAS BLVD	EATING PLACES
ALL CITIES CONSTRUCTION SERVICES	729 REQUEZA ST	LANDSCAPING
ALL CITIES HAULING	937 WOODLAKE DR	HANDYMAN
AMERICAN BIODIESEL	336 ENCINITAS BLVD #130	AUTO/OTHER
AMERICAN LANDSCAPING-Landscapers	556 UNION ST	LANDSCAPING
AMICI'S	564 COAST HWY 101	EATING PLACES
AN LUXURY IMPORTS OF SAN DIEGO	1302 ENCINTIAS BLVD	AUTO
ANDY'S ORCHIDS	734 OCEAN VIEW	NURSERY
ANGELO'S BURGERS	608 S COAST HWY 101	EATING PLACES
ANTONIO MARTINEZ LANDSCAPING	341 FITZPATRICK RD	LANDSCAPING
AQUA TECH POOL CARE	233 DELPHINIUM ST	HANDYMAN
ARCO SERVICE STATION	310 ENCINITAS BLVD	AUTO
ARCO/AMPM (Gas Station/Carwash)	1580 LEUCADIA BLVD	AUTO
ARMSTRONG GARDEN CENTERS	701 N EL CAMINO REAL	NURSERY
ARNULFO MEDINA LANDSCAPING	1408 HERMES AVE. A	LANDSCAPING
AUTO ZONE	120 LEUCADIA BLVD	AUTO
B G J RESTAURANTS	345 S. COAST HWY 101 #C-2	EATING PLACES
BAJA FRESH MEXICAN GRILL	194 N EL CAMINO REAL	EATING PLACES
BAR LEUCADIAN	1542 N COAST HWY 101	EATING PLACES
BARBARA J WEBER, TRUSTEE- Growers	237 SEEMAN DR	NURSERY
BARRELS & BRANCHES	1452 SANTA FE DRIVE	NURSERY
BART FORRY	404 ENCINITAS BLD #203	HANDYMAN
BARTLETT & GISH FLOWERS- Growers	1492 HYMETTUS AVE	NURSERY
BASIL TOPS	1425 RUBENSTEIN AVE	NURSERY
BASKIN ROBBINS	441 ENCINITAS BOULEVARD	EATING PLACES
BATLEY ENTERPRISES- Growers	1415 RAINBOW RIDGE LN	NURSERY
BEACH CITY BURRITO	102 ABERDEEN DR	EATING PLACES
BEACH HOUSE RESTAURANT	2530 COAST HIGHWAY 101	EATING PLACES
BEACH TEA HOUSE 101	1076 N COAST HWY 101	EATING PLACES
BEEMER COATINGS	152 COOP CT	PAINTING
BELLA ROSA RESTAURANT	806 S COAST HWY 101	EATING PLACES
BELMAN HANDYMAN	738 SNAPDRAGON	HANDYMAN
BENNY'S GARDENING	1055 EVERGREEN DR	LANDSCAPING
BESTA WAN PIZZA HOUSE	148 ABERDEEN DR	EATING PLACES
BETY'S TACO RESTAURANT	1464 ENCINITAS BLVD	EATING PLACES
BIG JIM'S OLD SOUTH BAR BQ	190 N COAST HWY 101	EATING PLACES
BIRD HOUSE GRILL	250 N COAST HWY 101 #A	EATING PLACES
BIRD ROCK TROPICALS	221 PRINCEHOUSE LN	NURSERY
BLAKE DUFOUR HANDYMAN SERVICE	905 WOODLAKE DR	HANDYMAN
BLUE WATER OF LA JOLLA POOL SERVICE	2008 WANDERING RD	POOL

BOB'S CARPET CARE	336 SANFORD STREET	MOBILE
BORELLI'S RESTAURANT	285 N EL CAMINO REAL #106	EATING PLACES
BRADLEY ALLEN AUTO BODY	204 N COAST HWY 101	AUTO
BRADLEY LANDSCAPE DEVELOPMENT	607 N. VULCAN AVENUE	LANDSCAPING
BRAD'S FOREIGN AND DOMESTIC	565 WESTLAKE ST. #200C	AUTO
BRIAN BUILDING CORPORATION	1009 HURSTDALE AVE	CONTRACTOR
BROWNS PLANTS INC- Growers	1515 LAKE DR	NURSERY
BURGER KING	242 N EL CAMINO REAL	EATING PLACES
BURTECH PIPELINE INC.	102 SECOND ST	BUILDING MATERIAL
BYER, RICHARD- Growers	1731 CREST DR	NURSERY
C M A GROWERS	1254 URANIA AVENUE	NURSERY
C P A GROUP, INC. DBA ENCINITAS	901 SECOND ST	AUTO
CACTUS KING NURSERY	1534 CREST DRIVE	NURSERY
CAL PACIFIC PLANT FARM	1122 ORPHEUS AVE	NURSERY
CALIFORNIA PAINT & AUTO BODY	320 N EL CAMINO REAL #E,F	AUTO
CALIFORNIA ROVER	386 ENCINITAS BLVD	AUTO
CALYPSO CAFÉ	576 N COAST HWY 101	EATING PLACES
CAPTAIN KENOS	158 N. COAST HWY 101	EATING PLACES
CARDIFF CHEVRON	805 BIRMINGHAM DR	AUTO
CARDIFF CLASSICS INC	1049 S COAST HWY 101	AUTO
CARDIFF GREENHOUSES aka California Greenhouses	1753 LAKE DRIVE	NURSERY
CARDIFF PALM TREE 2	333 LISZT AVENUE	NURSERY
CARDIFF VALERO	820 BIRMINGHAM DR	AUTO
CARLS CLASSICS RESTORATION INC	107 DIANA ST	BAR
CARL'S JR	1137 REGAL RD	EATING PLACES
CHAMPAGNE FRENCH BAKERY AND CAFÉ	162 S RANCHO SANTA FE RD #E10	EATING PLACES
CHARLIE'S BY THE SEA	2526 S COAST HWY 101	EATING PLACES
CHARLIE'S FOREIGN CAR SVC	751 SECOND ST	AUTO
CHART HOUSE	2588 S COAST HWY 101	EATING PLACES
CHICKS NATURAL	191 N EL CAMINO REAL #107	EATING PLACES
CHILI'S GRILL & BAR	1004 N EL CAMINO REAL	EATING PLACES
CHINA TOWN	118 LEUCADIA BLVD	EATING PLACES
CHINO GREENHOUSES INC	1253 URANIA AVE	NURSERY
CHINO GREENHOUSES INC- Growers	1168 URANIA AVE	NURSERY
CHIN'S SZECHWAN RESTAURANT	625 ENCINITAS BLVD	EATING PLACES
CHIPOTLE MEXICAN GRILL	268 N EL CAMINO REAL	EATING PLACES
CHRISTIAN BROTHERS LANDSCAPING	636 LUECADIA BLVD	LANDSCAPING
CICCIOTTIS TRATTORIA ITALIANA	1933 SAN ELIJO AVE	EATING PLACES
CLAUDIA NELSON'S HOUSEKEEPING	1338 MACKINNON AVE	JANITORIAL
CLEAN SENSE CARPET CLEANERS	328 1/2 LA MESA	MOBILE
CLEAR CHOICE WINDOW CLEANING	138 DIANA ST	HANDYMAN
COAST BRAKE & WHEEL SVC	444 S COAST HWY 101	AUTO
COASTAL FOREIGN AUTO SVC	320 N EL CAMINO REAL #ABC	AUTO
COCO'S FAMILY RESTAURANT #881	407 ENCINITAS BLVD	EATING PLACES
COLT CONSTRUCTION & DEVELOPMENT	709 CATHY LN	CONTRACTOR
COOKIES IN BLOOM	1277 ENCINITAS BLVD	EATING PLACES
CORDOVA GARDENS	902 ENCINITAS BLVD #A	NURSERY
CORDOVA, JOE- Growers	720 BALOUR DR	NURSERY
COSGROVE CYMBIDIUM CO- Growers	1200 SAXONY RD	NURSERY
CROWN POOL AND LANDSCAPE	2126 VIA TIEMPO AVE	HANDYMAN
D STREET BAR AND GRILL	485 S COAST HWY	EATING PLACES
D. ADES INVESTMENT CORPORATION	875 BALOUR DR	NURSERY
D. BELL CONSTRUCTION, INC	1539 CAUDOR ST	CONTRACTOR
DAIRY QUEEN	1465 ENCINITAS BLVD #B	EATING PLACES

DALEY DOUBLE COCKTAIL LOUNGE	546 S COAST HWY 101	EATING PLACES
DANIEL MOJONNIER ENTERPRISES- Growers	912 URANIA	NURSERY
DANIELS CONSTRUCTION	2105 MONTGOMERY AVE	CONTRACTOR
DAN'S PRECISION ALIGNMENT	565 WESTLAKE ST #200F	AUTO
DAPHNES GREEK CAFÉ	130 N. EL CAMINO REAL #C	EATING PLACES
DAVINA'S CABO GRILL	1950 COAST HWY 101	EATING PLACES
DAVIS, ERIC- Growers	752 BRACERO RD	NURSERY
DAWGS	379 TRAILVIEW RD	ANIMAL
DE PASCALE CONSTRUCTION, INC	555 SECOND ST. #4	CONTRACTOR
DEFINITIVE MOBILE AUDIO (DMA)	126 A ST.	AUTO
DEL MAR LANDSCAPING	2016 BULRUSH LANE, CARDIFF	LANDSCAPING
DEL RANCHO POOL & SPA SUPPLY	1315 ENCINITAS BLVD	POOL
DEL TACO	130 CALLE MAGDALENA	EATING PLACES
DENNY'S RESTAURANT NO. 6828	135 ENCINITAS BLVD	EATING PLACES
DISCOUNT AUTO SERVICES	710 S COAST HWY 101	AUTO
DIVINE ORCHIDS	1015 URANIA	NURSERY
DOMINO'S PIZZA	1458 ENCINITAS BLVD	EATING PLACES
DON'S FLOWERS	924 BRACERO RD	NURSERY
DOVE HOLLOW FARM	1084 DOUBLE LL RANCH RD	ANIMAL
DR. JOE	293 N. EL CAMINO REAL	EATING PLACES
DRAMM & ECHTER INC.	1150 QUAIL GARDENS DRIVE	NURSERY
E STREET CAFÉ	128 WEST E STREET	EATING PLACES
EAST COAST PIZZA	2015 SAN ELIJO AVENUE	EATING PLACES
ECKE RANCH- Growers	441 SAXONY RD	NURSERY
EINSTEIN BROS. BAGELS	1006 N EL CAMINO REAL #B	EATING PLACES
EL CABALLO LOCO, LLC.	1951 SAN ELIJO AVE	EATING PLACES
EL CALLEJON	345 S COAST HWY 101 #C2	EATING PLACES
EL CAMINO TIRE & BRAKE	330 N EL CAMINO REAL	AUTO
EL CORTEZ MEXICAN FOOD	445 ENCINITAS BLVD.	EATING PLACES
EL NOPALITO	560 SANTA FE DR	EATING PLACES
EL POLLO LOCO	1002 N EL CAMINO REAL	EATING PLACES
El TORITO	1068 N. EL CAMINO REAL	EATING PLACES
EL TORITO MEAT MARKET	948 No. COAST HWY 101	EATING PLACES
EMERALD M. GROWERS- Growers	834 LEUCADIA BLVD	NURSERY
ENCINITAS AUTOMOTIVE REPAIR	322 N EL CAMINO REAL #A,B	AUTO
ENCINITAS CAFÉ	531 S COAST HWY 101	EATING PLACES
ENCINITAS CAR WASH	293 N. EL CAMINO REAL	AUTO
ENCINITAS CHEVRON	350 ENCINITAS BLVD	AUTO
ENCINITAS DONUTS	580 SANTA FE	EATING PLACES
ENCINITAS ENTERPRISES, LLC/DBA	1616 LAKE DRIVE	NURSERY
ENCINITAS EXXON	325 ENCINITAS BLVD	AUTO
ENCINITAS FORD	1424 ENCINITAS BLVD	AUTO
ENCINITAS FOREIGN & DOMESTIC	901 SECOND ST	AUTO
ENCINITAS GREEN HOUSES	351 UNION ST	NURSERY
ENCINITAS JAPANESE SPECIALIST	328 N. EL CAMINO REAL # A	AUTO
ENCINITAS RANCH CAFÉ & GOLF SCHOOL	1275 QUAIL GARDENS DRIVE	EATING PLACES
ENCINITAS RANCH GOLF COURSE	1275 QUAIL GARDENS DRIVE	GOLF COURSE
ENCINITAS SMOG TEST ONLY CTR	682 S COAST HWY 101	AUTO
ENCINITAS YOGURT AND ICE CREAM	1070 N EL CAMINO REAL #C	EATING PLACES
ERWIN MOJONNIER ENTERPRISES- Growers	679 CAMINO ELDORADO	NURSERY
ETS TRANSMISSION SYSTEMS	318 N. EL CAMINO REAL #B	AUTO
EXPO DESIGN CENTER	1550 LEUCADIA BLVD	BUILDING MATERIAL
F & V Painting, Inc. DBA CERTAPRO	1340 RAVEAN CT	HANDYMAN
FELIX SANCHEZ GARDENING SERVICE	880 DEL RIO AVE	LANDSCAPING

FENDER MENDER	326 N EL CAMINO REAL	AUTO
FERNANDO J. C.	1168 ARCADIA RD	HANDYMAN
FIC SMOG	322 N EL CAMINO REAL #C	AUTO
FIESTA FLOWERS	335 SANTA FE DRIVE	NURSERY
FILIBERTO'S MEXICAN RESTAURANT	476 S COAST HWY 101	EATING PLACES
FILIPPI'S PIZZA GROTTO	1486 ENCINITAS BLVD	EATING PLACES
FINISHING TOUCH MOLDING, INC	921 HYMETUS AVE	CONTRACTOR
FIREFLY GRILL AND WINE BAR	251 N EL CAMINO REAL #B	EATING PLACES
FIRENZE TRATTORIA	162 S RANCHO SANTA FE RD #G10	EATING PLACES
FIRST MISSION AUTO BODY REPAIR	339 N EL CAMINO REAL #B	AUTO
FIRST STREET BAR	656 S. COAST HWY 101	EATING PLACES
FLOWERS OF LA COSTA	1911 SAXONY ROAD	NURSERY
FOX POINT FARMS	1657 N VULCAN AVE	NURSERY
FRANCO'S FLOWERS INC- Growers	842 LEUCADIA BLVD	NURSERY
FRAZEE PAINT AND WALL COVERING	270 N EL CAMINO REAL	PAINTING
FULANOS	145 LEUCADIA BLVD	EATING PLACES
G & J PLANTS	712 CLARK AVENUE	NURSERY
G B ENTERPRISES	1106 SECOND ST	HANDYMAN
G.K. LANDSCAPE	244 SECOND ST. #E	LANDSCAPING
GALAPACIFICA LANDSCAPE	253 MANGANO CIR	LANDSCAPING
GARDEN STATE BAGELS	191 N EL CAMINO REAL #106	EATING PLACES
GIANNI'S OF LEUCADIA	1468 N COAST HWY 101	EATING PLACES
GILL, PADAM- Growers	754 BONITA DR	NURSERY
GIOVANNI'S SANDWICH SHOP	764 S COAST HWY 101	EATING PLACES
GISH FOLIAGE	1245 LAKE DRIVE	NURSERY
GLOVER, A T- Growers	571 UNION ST	NURSERY
GOLDEN BAKED HAMS	114 N. EL CAMINO REAL	EATING PLACES
GOLDEN BOWL RESTAURANT	1337 ENCINITAS BLVD	EATING PLACES
GRANITE HOMES REQUEZA LLC- Growers	843 REQUEZA ST	NURSERY
GREEK AMERICAN FAMILY RSTRNT	392 N EL CAMINO REAL	EATING PLACES
GREENSTEIN MICHAEL CO. INC	132 N. El CAMINO REAL #P132	PAINTING
GROOT, DANA- Growers	603 UNION ST	NURSERY
GUILLERMINA'S HOUSEKEEPING	1253 ORKNEY LN	JANITORIAL
GUSTO TRATTORIA	429 ENCINITAS BLVD	EATING PLACES
H.S. SOLUTIONS	731 SNAPDRAGON ST.	HANDYMAN
HAPPY AUTO SALES	148 N COAST HWY 101	AUTO
HARRIS RADIATOR WORKS	274 COAST HWY 101	AUTO
HARVEST RANCH MARKET	162 S RANCHO SANTA FE RD	EATING PLACES
HENRY'S MARKETPLACE	1327 ENCINITAS BLVD	EATING PLACES
HOLIDAY PET HOTEL	551 UNION ST	ANIMAL
HOME DEPOT	1001 EL CAMINO REAL	BUILDING MATERIAL
HOME MAINTENANCE SERVICES	842 BONITA DR. #A	HANDYMAN
HONEY BAKED HAM	459 ENCINITAS BLVD	EATING PLACES
HONEY'S BISTRO & BAKERY	632 S COAST HWY 101	EATING PLACES
HOPULUVGARLIC	252-5 N EL CAMINO REAL	EATING PLACES
HORACE ANDERSON GREENHOUSES	375 LA COSTA AVENUE	NURSERY
HORSES AND MOORE PET CARE	1060 CALIFORNIA ST	ANIMAL
HUGOS AUTO EUROPEAN CAR SVC	110 N COAST HWY 101	AUTO
HYDRO SCAPE	750 S COAST HIGHWAY 101	NURSERY
ISLAND BROTHERS TERIYAKI	274 N EL CAMINO REAL #A	EATING PLACES
ISLANDS	1588 LEUCADIA BLVD	EATING PLACES
ISLAS JOSE L- Growers	235 LA COSTA AVE	NURSERY
ITO KIYOKO- Growers	936 EOLUS AVE	NURSERY
J & S GREENHOUSES	748 REQUEZA	NURSERY

J A LANDSCAPE	2068 BULRUSH LN	LANDSCAPING
JACK IN THE BOX #42	1967 SAN ELIJO AVE	EATING PLACES
JACK IN THE BOX #97	1439 ENCINITAS BLVD	EATING PLACES
JAM ROC	101 N COAST HWY 101	EATING PLACES
JAMBA JUICE	272 N EL CAMINO REAL #A	EATING PLACES
JAMIE'S POOL SERVICE	1265 RUBENSTEIN AVE	HANDYMAN
JAMMER'S JAVA	218 N EL CAMINO REAL #A	EATING PLACES
JAVA EXPRESS	325 ENCINITAS BLVD	EATING PLACES
JAY'S GOURMET RESTAURANT	218 N EL CAMINO REAL #B	EATING PLACES
JIFFY LUBE #1764	221 N EL CAMINO REAL	AUTO
JORGE MENDOZA	953 NARDO RD.	LANDSCAPING
JORGE'S MEXICATESSAN	267 N EL CAMINO REAL #E	EATING PLACES
JORGE'S MEXICATESSAN	417 SANTA FE #B	EATING PLACES
JOSE LOUIS ISLAS-Grower	514 LA COSTA AVE	NURSERY
JUANITAS TACO SHOP	290 N COAST HWY 101	EATING PLACES
JUICE N JAVA	168 N. EL CAMINO REAL #B	EATING PLACES
JUICY JUICE	201 S. EL CAMINO REAL #A	EATING PLACES
KAITO RESTAURANT	1476 ENCINITAS BLVD	EATING PLACES
KARINAS TACO SHOP	916 N. COAST HWY 101	EATING PLACES
KC'S TANDOOR	1070 N EL CAMINO REAL #A	EATING PLACES
KEALANI'S	137 W. D ST	EATING PLACES
KEITH'S AUTOMOTIVE & ELECTRIC	215 W. G ST	AUTO
KENTUCKY FRIED CHICKEN	266 N EL CAMINO REAL	EATING PLACES
KERCHER'S PAINT REPAIR	170 PHOEBE ST. #10	AUTO
KESSING PAINTING	261 CALIBAN CT	PAINTING
KG GROWERS	940 ORPHEUS AVE	NURSERY
KIM'S VIETNAMESE & CHINESE RESTAURANT	745 S COAST HWY 101 #103	EATING PLACES
KIS JUICE BAR AND RESTAURANT	2591 S COAST HWY 101	EATING PLACES
KOHLER POOL SERVICE & SUPPLY	368 N EL CAMINO REAL	POOL
KONA KOFFEE HUT	230 QUAIL GARDENS DR	EATING PLACES
KOTIJA JR TACO SHOP	852 N COAST HWY 101	EATING PLACES
KRAGEN AUTO PARTS	180 N EL CAMINO REAL	AUTO
KRAKEN BAR & GRILL	2531 S COAST HIGHWAY 101	EATING PLACES
L & E GREENHOUSES	712 CLARK AVENUE	NURSERY
L.B. DESIGNS	837 STRATFORD DR	LANDSCAPING
LA BONNE BOUFFE	471 ENCINITAS BLVD	EATING PLACES
LA CANTINELLA	2633 S COAST HWY 101	EATING PLACES
LA COSTA FARMS-retail fruits &vegetables	1911 SAXONY ROAD	NURSERY
LA ESPECIAL NORTE	664 N COAST HWY 101	EATING PLACES
LA SALSA RESTAURANT	219 N EL CAMINO REAL	EATING PLACES
LANDSCAPE MAINTENANCE/DAVE STEINBIS	699 N. VULCAN AVENUE #127	LANDSCAPING
LAS OLAS MEXICAN RESTAURANT	2655 S COAST HWY 101	EATING PLACES
LE PETIT CALYPSO/LE PAPAGAYO	1002 N. COAST HWY 101	EATING PLACES
LESLIE'S SWIMMING POOL SUPPLIES	270 EL CAMINIO REAL	POOL
LEUCADIA DONUTS	1604 N COAST HWY 101	EATING PLACES
LEUCADIA NURSERY/KOCHER FLOWERS	950 BRITTANY AVE	NURSERY
LEUCADIA ORCHIDS	1660 BURGUNDY ROAD	NURSERY
LEUCADIA PIZZERIA	315 S COAST HWY 101 #V	EATING PLACES
LEUCADIA SUSHI HOUSE	996 N COAST HWY 101	EATING PLACES
LIVING ART WATER GARDENS	759 MUNEVAR RD	LANDSCAPING
LOIS FLOWERS	1195 CARDIFF DRIVE	NURSERY
LOPEZ FLOWERS	440 SAXONY ROAD	NURSERY
LUI DELGADO LANDSCAPING SERVICE	1545 LAKE DRIVE	LANDSCAPING
LUIS MALDONADO	1041 SAN ANDRADE #A	LANDSCAPING

M.G. HANDY MAN WORK	2057 VILLAGE PARKWAY #204	HANDYMAN
MAC DESIGN & DEVELOPMENT	471 CHESTERFIELD	LANDSCAPING
MAISTER LANDSCAPE CONSTRUCTION	PO BOX 715, CARDIFF	LANDSCAPING
MALDONADO FLOWERS- Growers	1412 MACKINNON AVE	NURSERY
MAMA HOULI & SISTER T	423 LA MESA AVE	EATING PLACES
MAMA LULU'S PIZZA AND PASTA	191 N EL CAMINO REAL #110	EATING PLACES
MANDARIN CITY	815 BIRMINGHAM	EATING PLACES
MANHATTAN'S PIZZA GIANT	143 W. D STREET	EATING PLACES
MARIE CALLENDER'S	162 S RANCHO SANTA FE RD #B30	EATING PLACES
MARK LANGER MASONRY & LANDSCAPING	1310 SUMMIT AVENUE, CARDIFF	MASONRY
MAURICE'S HANDYMAN SERVICES	1190 ENCINITAS BLVD P167	HANDYMAN
MAY GREENHOUSES, INC	241 ANDREW AVE	NURSERY
MAY GREENHOUSES, INC- Growers	2021 SHERIDAN RD	NURSERY
MAYER POOL SERVICE	1553 PLUMTREE DR	POOL
MC DONALD'S	1271 ENCINITAS BLVD	EATING PLACES
MC DONALD'S #14229	1064 N EL CAMINO REAL	EATING PLACES
MERCEDES WEST AUTO WHOLESALE	2026 OXFORD AVE	AUTO
MERITAGE RESTAURANT & BAR	897 S COAST HWY 101 #F104	EATING PLACES
MEXICO VIEJO	1465 ENCINITAS BLVD #E	EATING PLACES
MIDAS MUFFLER SHOPS	328 N EL CAMINO REAL #C	AUTO
MIGUEL'S LANDSCAPING	1105 REGAL RD	LANDSCAPING
MILLER TIRE	759 MUNEVAR RD	AUTO
MIQUEL ESTEVEZ FLOWERS	708 DEL RIO AVENUE	NURSERY
MIRAMONTES MASONRY	3726 SAGE CANYON DR	MASONRY
MISTER SUSHI	111 N EL CAMINO REAL #B	EATING PLACES
MIYABI JAPANESE STEAK HOUSE & SUSHI	211 S EL CAMINO REAL #C	EATING PLACES
MO JOE'S COFFEE COMPANY	590 ENCINITAS BLVD	EATING PLACES
MOBILE SHINE DETAILERS	3320 CALLE SAND BLAST	MOBILE
MOJONNIER ENTERPRISES - Grower	2009 SHERIDAN RD	NURSERY
MONTANO'S HOUSECLEANING	704 REGAL RD. #C-12	HANDYMAN
MOONLIGHT GRILLE	190 N. COAST HWY 101	EATING PLACES
MOONLIGHT MOTORS	215 MELROSE AVE	AUTO
MORALES ROMERO NURSERY	805 BRACERO RD	NURSERY
MOSSY CHEVROLET - ENCINITAS	160 CALLE MAGDALENA	AUTO
MOZY CAFÉ	698 N. COAST HWY 101	EATING PLACES
MR. PAINT	404 ENCINITAS BLVD #228	PAINTING
MUHLETHALER W.F.	350 SEEMAN DRIVE	NURSERY
NATIVE SONS NURSERY	631 ORPHEUS AVENUE	NURSERY
NELSON AND SON'S POOL	PO BOX 235164, ENCINITAS	POOL
NEW LUCKY SZECHWAN	445 SANTA FE DR	EATING PLACES
NFAROOQI ENTERPRISES, LLC	1967 SAN ELIJO AVE	EATING PLACES
NIKKO ENTERPRISE CORPORATION	1327 ENCINITAS BLVD	EATING PLACES
NOODLES & COMPANY	260 N. EL CAMINO REAL #C	EATING PLACES
NORTH COAST EQUESTRIAN PARK	1877 OLIVENHAIN RD	ANIMAL
NORTH COUNTY HAULING SERVICE	1117 WOODLAKE DR	HANDYMAN
NORTH COUNTY MOTORSPORTS	111 C ST	AUTO
NRGIZE LIFESTYLE CAFÉ	201 S. EL CAMINO REAL #A	EATING PLACES
O & J GROWERS	1313 LAKE DR	NURSERY
OGATA JAPANESE CUISINE	615 S COAST HWY 101	EATING PLACES
OGGI'S PIZZA & BREW	305 ENCINITAS BLVD	EATING PLACES
ONE SWEET WORLD, LLC	148 ABERDEEN DR	EATING PLACES
ORCHID BARRON	804 CATHY LANE	NURSERY
ORCHID PLACE	829 BRACERO	NURSERY
OWENS CO.	18525 ALISO CANYON RD	HANDYMAN

OWENS, MARK N- Growers	1073 CREST DR	NURSERY
PACIFIC COAST POOL SERVICE	1439 LINDA SUE LANE	POOL
PACIFIC ROOF CLEANING	1571 AVENIDA DE LAS LILAS	HANDYMAN
PACIFIC VERDE NURSERY	556 UNION ST	NURSERY
PACIFICA FLOWERS	510 LA COSTA AVE	NURSERY
PANDA EXPRESS	262 N EL CAMINO REAL	EATING PLACES
PANDA EXPRESS	1084 N EL CAMINO REAL #E	EATING PLACES
PANNIKIN	510 N COAST HWY 101 #A	EATING PLACES
PAPA JOHN'S PIZZA #1596	337 N EL CAMINO REAL #B	EATING PLACES
PAPA TONI'S PIZZA	554 SANTA FE DR	EATING PLACES
PASSAGE TO INDIA RESTAURANT	257 N EL CAMINO REAL #K	EATING PLACES
PASTA BRAVO	1042 N EL CAMINO REAL #J05	EATING PLACES
PATRA CRUZ	351 COUNTRYWOOD LN	HANDYMAN
PATRICE ALEXANDER	2437 OXFORD AVE	HANDYMAN
PATRICK W. QUINLAN HANDYMAN	454 REQUEZA ST. #320a	HANDYMAN
PAUL'S AUTO ELECTRIC	325 MELROSE AVE	AUTO
PAYNE, PARRY- Growers	1231 BIRMINGHAM DR	NURSERY
PEI WEI ASIAN DINER	1560 LEUCADIA BLVD #A	EATING PLACES
PEP BOYS	256 N EL CAMINO REAL	AUTO
PEZ DEL INC DBA IT'S A GRIND	204 N. EL CAMINO REAL STE H	EATING PLACES
PICK UP STIX RESTAURANT	127 N EL CAMINO REAL #H	EATING PLACES
PINO'S CUCINA ITALIANA	967 S COAST HWY 101 #101	EATING PLACES
PIPES CAFÉ	121 LIVERPOOL DR	EATING PLACES
PIZZA HUT	127 N EL CAMINO REAL #G	EATING PLACES
PIZZICATO GOURMET PIZZA	252 N EL CAMINO REAL #5	EATING PLACES
PLANTRI, THE	921 URANIA AVENUE	NURSERY
POOLMASTER	PO BOX 232265, LEUCADIA	POOL
POTATO SHACK CAFÉ	120 W I STREET	EATING PLACES
PRECISION TUNE	318 N EL CAMINO REAL #A	AUTO
PRO EARTH LANDSCAPE	2210 ENCINITAS BLVD	LANDSCAPING
Q C SZECHUAN RESTAURANT	288 N EL CAMINO REAL #C	EATING PLACES
QUAIL BOTANICAL GARDENS	230 QUAIL GARDENS DR	BOTANICAL GARDEN
QUEZADA, TERESA A- Growers	1190 ISLAND VIEW LN	NURSERY
QUIZNO'S CLASSIC SUBS	337 N EL CAMINO REAL #A	EATING PLACES
R & L SKY BLUE INC.	598 PARK LANE	NURSERY
R. K. ENTERPRISES	658 SANTA FE DR	HANDYMAN
RALPHS GROCERY CO	125 N EL CAMINO REAL	EATING PLACES
RANCH AND SEA POOL CARE	1686 FALCON HILL CT, CARDIFF	POOL
RANCHO AUTO BODY	591 WESTLAKE ST #A,B,C	AUTO
RANCHO LOS AMIGOS EQUESTRIAN CENTER	3049 CAMINO DEL RANCHO	ANIMAL
RANCHO URIBE	1616 LAKE DRIVE	NURSERY
RAUL'S SHACK	490 S COAST HWY 101 #A	EATING PLACES
RCP BRICK AND BLOCK	577 N VULCAN AVE	MASONRY
RED POINT HOMES, INC	609 S. VULCAN AVE #302	CONTRACTOR
RED ROBIN BURGER & SPIRITS	294 N EL CAMINO REAL	EATING PLACES
REED MOTORS	1326 RAINBOW RIDGE LANE	AUTO
RICO'S TACO SHOP	165 S EL CAMINO REAL #L	EATING PLACES
ROADONE	1205 S COAST HWY 101	AUTO
ROBBIE'S ROADHOUSE	530 N COAST HWY 101	EATING PLACES
ROBERT TESSIERI CONSTRUCTION	1743 LE GAYE DR.	CONTRACTOR
ROBERTO'S MEXICAN FOOD	1900 N COAST HWY 101 #D	EATING PLACES
ROBERTO'S TACO SHOP	274 N EL CAMINO REAL #B	EATING PLACES
ROBERTS ENTERPRISES, LLC	215 S. EL CAMINO REAL H	EATING PLACES
ROUND TABLE PIZZA	1321 ENCINITAS BLVD	EATING PLACES

ROXY RESTAURANT	517 S COAST HWY 101	EATING PLACES
RUBIO'S FRESH MEXICAN GRILL	252 N EL CAMINO REAL #4	EATING PLACES
RUSSO'S PASTA SHOP	270 N EL CAMINO REAL #I	EATING PLACES
S & BROTHERS INC. AUTO UPHOLSTERY	322 N EL CAMINO REAL #F	AUTO
S.S. POOL SERVICE	1125 WOODLAKE DR	HANDYMAN
SAGE GRILL	1506 ENCINITAS BLVD	EATING PLACES
SAKURA-BANA SUSHI BAR	1031 S. COAST HWY 101 #101	EATING PLACES
SAN DIEGO STONE CARE	731 SNAPDRAGON ST.	HANDYMAN
SANDWICH STATION	218 N EL CAMINO REAL #A	EATING PLACES
SANTA FE BARBEQUE CO	1505 ENCINITAS BLVD	EATING PLACES
SANTA FE CAFÉ	445 SANTA FE DR	EATING PLACES
SANTA FE TRADING	417 SANTA FE #B	EATING PLACES
SANTINO'S TRATTORIA	257 N EL CAMINO REAL #D	EATING PLACES
SAVORY	267 N EL CAMINO REAL #A-B	EATING PLACES
SCOT ENTERPRISES	454 REQUEZA ST. #130C	HANDYMAN
SECRET GARDEN LANDSCAPING	1236 URANIA	LANDSCAPING
SEEDLING EXPRESS	1698 CREST DR	NURSERY
SEEDLING EXPRESS	440 SAXONY ROAD	NURSERY
SELF-REALIZATION FELLOWSHIP- Growers	1177 CORNISH DR	NURSERY
SEVEN ELEVEN	102 LEUCADIA BLVD	AUTO
SEVEN ELEVEN	2211 SAN ELIJO AVE	AUTO
SEVEN ELEVEN	1988 VILLAGE PARK WAY	AUTO
SEVEN ELEVEN	105 WEST D	EATING PLACES
SEVEN ELEVEN	592 SANTE FE DR	EATING PLACES
SEVEN ELEVEN	1446 ENCINITAS BLVD	EATING PLACES
SEVEN ELEVEN	2240 ENCINITAS BLVD #A	EATING PLACES
SHELL (ENCINITAS GAS & AUTO REPAIR)	1355 ENCINITAS BLVD	AUTO
SHELL (GAS/CAR WASH)	1060 N EL CAMINO REAL	AUTO
SHELL (LEUCADIA SHELL)	865 ORPHEUS	AUTO
SHELL QUICK SHINE CAR WASH	160 ENCINITAS BLVD	AUTO
SIAMESE BASIL RESTAURANT	527 S COAST HWY	EATING PLACES
SINCLAIR GROUNDS MAINTENANCE	454 REQUEZA ST.	LANDSCAPING
SKOPEC, FRANK- Growers	1381 SUMMIT AVE	NURSERY
SMART & FINAL	150 ENCINITAS BLVD	EATING PLACES
SMOOTH JAVA, INC DBA MAUI WOWI	165 S. EL CAMINO REAL STE A	EATING PLACES
SOFSPRA CARWASH	790 COAST HWY 101	AUTO
SOLANA SELECT PALMS/JIM RILEY	887 BRITTANY	NURSERY
SPECIMEN HOUSE	782 LEUCADIA BLVD	NURSERY
SPEEDY TUNE & BRAKE	225 N EL CAMINO REAL	AUTO
SPEERT, ELLEN- Growers	1905 CREST DR	NURSERY
SPRING LANDSCAPING	1578 N. COAST HWY 101 1	LANDSCAPING
ST GERMAINS CAFÉ	1010 S COAST HWY #12	EATING PLACES
ST TROPEZ BAKERY AND BISTRO	947 S COAST HWY 101 #D103	EATING PLACES
STATER BROTHERS	1048 N EL CAMINO REAL	EATING PLACES
STAVER, DAN- Growers	1586 CREST DR	NURSERY
SUBMAN	113 N. EL CAMINO REAL STE E	EATING PLACES
SUBMANIA	1514 ENCINITAS BLVD	EATING PLACES
SUBMANS	113 N EL CAMINO REAL #E	EATING PLACES
SUBWAY	2105 SAN ELIJO AVE	EATING PLACES
SUBWAY #27567	1560 LEUCADIA BLVD #C	EATING PLACES
SUBWAY #4442	272 N EL CAMINO REAL #C	EATING PLACES
SUN COAST POOL SYSTEMS	PO BOX 430, CARDIFF	POOL
SUNSHINE GARDENS	155 QUAIL GARDENS DR	NURSERY
SUPER DONUT #1	465 ENCINITAS BLVD	EATING PLACES

SUPER DONUT #2	252 N EL CAMINO REAL #2	EATING PLACES
SURFDOGS JAVA HUT	1126 S COAST HWY	EATING PLACES
SURFSIDE CREAMERY	2031 SAN ELIJO AVE	EATING PLACES
SUSHI BAR BLUE FIN	257 N. EL CAMINO REAL #D & E	EATING PLACES
SUSHI HOUSE	214 N EL CAMINO REAL #A-B	EATING PLACES
SUSPENSION PLUS	322 N EL CAMINO REAL #D,E	AUTO
SWAMI'S AUTOMOTIVE REPAIR	320 N. EL CAMINO REAL #D	AUTO
SWAMI'S CAFÉ	1163 S COAST HWY 101	EATING PLACES
TACO AUCTIONERS	1949 SAN ELIJO AVE	EATING PLACES
TACO BELL INC	1502 ENCINITAS BLVD	EATING PLACES
TARGET	1010 N EL CAMINO REAL	EATING PLACES
TASTES GROUP, LLC	641 S COAST HWY 101	EATING PLACES
TAYAMA GREENHOUSES INC- Growers	710 REQUEZA ST	NURSERY
TERIYAKI 101 LEUCADIA	250 N COAST HWY 101 #B	EATING PLACES
THAI PAN EXPRESS	138 N EL CAMINO REAL	EATING PLACES
THE BULLPEN	149 S. EL CAMINO REAL	EATING PLACES
THE DRAKE CENTER FOR ANIMAL HEALTH	195 N. EL CAMINO REAL	ANIMAL
THE GREENERY RAW FOOD CAFÉ	133 DAPHNE AVE	EATING PLACES
THE ORIGINAL PANCAKE HOUSE	160 S RANCHO SANTA FE RD D10	EATING PLACES
THE PALM SOURCE- Growers	1329 LAKE DR	NURSERY
THE QUICK FIX	144 ENCINITAS BLVD	EATING PLACES
THE QUICK FIX	552 SANTA FE	EATING PLACES
THRIFTY OIL CO #160	633 BIRMINGHAM DR	AUTO
TIERRA VERDE	1545 LAKE DRIVE	LANDSCAPING
TINNEY, BROOKE- Growers	1674 CREST DR	NURSERY
TODAYS PIZZA & SALAD	481 SANTA FE DRIVE	EATING PLACES
TOM, GIM- Growers	3107 MANCHESTER AVE	NURSERY
TOMIKO'S RESTAURANT	87 ENCINITAS BLVD	EATING PLACES
TRADER JOE'S	115 N EL CAMINO REAL	EATING PLACES
TRANS MASTERS	184 N COAST HWY 101	AUTO
TRANSWEST ENTERPRISES, INC	184 N. COAST HWY 101	AUTO
TRATTORIA I. TRULLI	830 S COAST HWY 101 #A	EATING PLACES
TRATTORIA POSITANO	2171 SAN ELIJO AVE	EATING PLACES
TRISH'S SECRET GARDEN	1236 URANIA AVENUE	NURSERY
TUSCAN SUN ITALIAN DELI	1070 N EL CAMINO REAL #B	EATING PLACES
TVERDOCH, R- Growers	898 HYMETTUS AVE	NURSERY
UNDERWATER ENVIRONMENTS	442 RANCHO SANTA FE	NURSERY
UNION 76 ROSANO'S	236 N EL CAMINO REAL	AUTO
V.G. DONUTS AND BAKERY	106 ABERDEEN DR	EATING PLACES
VAN SLYKE LANDSCAPE DESIGN & CONSTRUCTION	RANCHO SANTA FE ROAD, OLIVENH	LANDSCAPING
VERMA'S TOASTY, INC	337 N. EL CAMINO REAL #A	EATING PLACES
VIA ITALIA	565 SO. COAST HWY 101	EATING PLACES
VIGLUCCI'S TRATTORIA ITALIANA	505 S COAST HWY	EATING PLACES
VISTA PAINT WINDOW & WLCVRNGS	133 N EL CAMINO REAL	PAINTING
VONS #2144	262 NORTH EL CAMINO REAL	EATING PLACES
VONS #2351	453 SANTA FE DR	EATING PLACES
WAHOO'S FISH TACOS	1006 N EL CAMINO REAL #C	EATING PLACES
WALT HOEHN	1752 EOLUS AVENUE	NURSERY
WEIDNER'S GARDENS	695 NORMANDY RD	NURSERY
WEIDNER'S GARDENS	860 EOLUS	NURSERY
WEIDNER'S GARDENS- Growers	850 NORMANDY RD	NURSERY
WENDY'S RESTAURANT	102 ENCINITAS BLVD	EATING PLACES
WEST COAST WRECK CHECK	1227 VILLAGE VIEW RD	AUTO
WHALEN PERFORMANCE	1726 AVENUE MELODIA	AUTO

WHEN IN ROME	1108 S COAST HWY	EATING PLACES
WILKENS PALM TREE NURSERY	1450 MACKINNON AVENUE	NURSERY
WILLIAMSON'S PRODUCE	3111 MANCHESTER AVENUE	NURSERY
WILLOW LANE GROWERS-Growers	753 REQUEZA	NURSERY
WILMA ROMERO	870 DEVONSHIRE DRIVE	NURSERY
YOGI'S SPORTS BAR & RESTAURANT	2005 SAN ELIJO AVE	EATING PLACES
YOUNT, DAVID- Growers	1280 SANTA FE DR	NURSERY
YUMEYA	1246 COAST HWY 101	EATING PLACES
ZIBIBBO'S ITALIAN BISTRO	1560 LEUCADIA BLVD #E	EATING PLACES

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
33776	07/21/2006	SHELL OIL COMPANY	From: Request ID: 32152, 8/24/2006 2:01:20 PM DIS-OTHER WASH Discharge of other wash water Problem Details: Shell Car Wash of Encinitas (Mgr. Sonya) @ 1060 N. El Camino Real, Encinitas, CA (760) 943-9797, is power washing w/o containment. Complaint triggered routine commercial inspection on 7/21/06.	1) Contact city to make an appt for re-inspection of power washing activities. 2) Properly cover and contain haz materials stored outdoors. 3) Obtain spill kit and make accessible to employees.	Completed by MP on 8/5/06. Properly protect all storm drains prior to power washing and contain all wash water.		Gas Station
34140	09/14/2006	Moonlight Snack Shack	From: Request ID: 32308, 9/19/2006 12:56:38 PM DIS-OTHER Other discharge Problem Details: Location: Moonlight Snack Shack at Moonlight Beach Owner: Ken Davis Phone: 760-815-0608 or 760-720-7800. Trash Dumpster behind snack shack is overflowing. Complaint triggered routine commercial inspection on 9/14/06.	1) Obtain City Business License w/in 2 wks & display on-site 2) Obtain spill kit/make it accessible to employees 3) Provide sw management training to all employees/maintain a log 4) Maintain trash enclosure	Follow up call on 10/18/06. Obtained business license.		Eating/Drinking Establishment
34635	10/09/2006	RED ROBIN RESTAURANT	From: Request ID: 32863, 10/19/2006 10:33:46 AM DIS-OTHER Other discharge Problem Details: Grease investigation lead inspectors to Red Robin site. Routine commercial inspection took place on 10/9/06.	1) train employees on SW mgmt, maintain a log. 2) fax latest copy of grease interceptor maint. invoice to City. 3) Provide proper cover and containment for grease rendering bin.	Admin Citation issued on 10/9/06 for discharge of grease to storm drain. Clean up initiated on 10/10/06 in brow ditch. Work accomplished by Downstream Services.	10/9/06	Eating/Drinking Establishment
34824	10/31/2006	ENCINITAS FOREIGN AUTO	From: Request ID: 32307, 10/31/2006 11:41:03 AM DIS-ANTIFREEZE Discharge of antifreeze Problem Details: Odor reported in alley behind Encinitas Foreign & Domestic at 901 2nd St. (760)632-0830. Drains located outside rollup doors and a large basin appears to have oil & antifreeze in it.	A drive-by inspection was conducted prior to full commercial inspection on 10/31/06 to verify complaint. Train employees in SW mgmt and maintain training log.			Auto Repair/ Maintenance

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
35855	01/23/2007	Weidner's	From: Request ID: 33538, 1/23/2007 9:15:24 AM DIS-OTHER WASH Discharge of other wash water Problem Details: Caller states that the nursery next door is discharging runoff into the brow ditch adjacent to their property. They are also concerned that	Corrective Actions: Run-off collection system needs to be fully operational no later than 2/27/07. Follow-up inspection scheduled for 2/27/07.			Landscaping
36195	07/17/2006	Besta-wan Pizza		copy of inspection and Solana Center contact info mailed to property manager on 7/18/06 No violations noted, but required corrective actions are: 1. Train all employees in SW mgmt and maintain training log. 2. Make spill kit accessible to all employees			Eating/Drinking Establishment
36202	09/15/2006	Bety's Tacos		No violations, but corrective actions needed: 1. obtain spill kill, make accessible to employees. 2. properly train/educate employees in SW mgmt and maintain training log.	Faxed Solana Center and green business info to owner on 9/19/06.		Eating/Drinking Establishment
36206	07/18/2006	The Bullpen		No violations, but corrective action needed: 1. train/educate employees in SW mgmt and maintain log. 2. obtain spill kill, make accessible to employees. 3. provide proper cover/containment for outdoor grease bin (30 Days). 4. provide copy of grease trap maint. Invoice	Follow up completed on 9/1/06. Asphalt berm and lean to created to meet compliance requirements		Eating/Drinking Establishment
36208	08/16/2006	El Callejon		No violations, but corrective action: 1. obtain proper cover/containment for oil storage. 2. obtain spill kit/make accessible to employees. 3. maintain trash are litter free/sweep all food debris. 4. train/educate employees in SW mgmt & maintain log.	Storm water training provided to 26 restaurant employees on 9/9/06. Spill kit and oil storage BMPs implemented.		Eating/Drinking Establishment
36210	10/09/2006	Greek American Family Restaurant		No violations, but corrective actions: 1. train employees in SW mgmt/maintain training log. 2. install containment (drip pan) for grease bin stored outdoors.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
36212	10/11/2006	Island Brothers Teriyaki		No violations, but corrective actions: 1. obtain spill kit/make accessible to employees. 2. properly train employees in SW mgmt/maintain log. 3. copy of grease interceptor maintenance invoice to be faxed to city by 10/18/06.	Follow up by Clay Hill. All corrective actions completed.		Eating/Drinking Establishment
36216	07/13/2006	Jamba Juice		No violations, but corrective actions: 1. properly train and educate all employees in storm water management and maintain a training log.			Eating/Drinking Establishment
36218	10/26/2006	Jiffy Lube		No violations, but corrective actions: 1. provide proper containment/cover for 55 gallon drums stored outside by 11/30/06. 2. Clean up spills as they occur w/dry absorbents/mop. 3. call for extra trash pick up when trash is overflowing. 4. properly train employees in SW mgmt, and maintain a log.	Parent Work Order: 36218 follow up by Mike Emerson completed on 6/5/07. They installed cover and secondary containment for oil filter drums. performs monthly training, and will keep log.		Auto Repair/ Maintenance
36222	10/11/2006	Kentucky Fried Chicken		no violations, but corrective action: 1. properly train employees in SW mgmt/maintain log. 2. send most recent invoice of grease interceptor and bin maintenance by 10/18/06 via fax or US mail to City. 3. obtain business cert from City/post onsite			Eating/Drinking Establishment
36224	07/05/2006	The Kitchen Elves		No violations, but corrective actions: 1. obtain spill kit/make accessible to employees. 2. train/educate employees in SW mgmt and maintain training log. follow up w/ property mgmt re: waste enclosure. waste area maintained by maintenance crew for property mgmt			Eating/Drinking Establishment
36230	10/19/2006	La Salsa #94	By RYGIEL, KRISTINE: 7/19/2007 4:10:07 PM Still need training binder as of 7/19/07. Follow up completed by Mike Emerson on 7/18/07. restaurant installed overhead coverage and 2nd containment.	No violations, but corrective actions: 1. obtain current City business cert and post on-site; notify city inspector. 2. obtain proper cover/containment for 55 gal grease bin by 11/20/06. 3. spill kit/make accessible to employees. 4. properly train/educate employees in SW mgmt, maintain a log.	admin citation warning given on 6/5/07 by Clay Hill for lack of 2nd containment and overhead cover for grease bin. $100 citation issued by Clay Hill on 6/21/07 for same violation. Citation pd 7/16/07. Follow up by Mike Emerson on 7/18/07. All corrective actions complete.	6/5/07 and 6/21/07	Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
36232	08/16/2006	Leucadia Pizzeria		No violations, but corrective actions: 1. train employees in SW mgmt, maintain log. 2. maintenance in sump pump drain- remove food debris, oil, grease, sediment weekly. 3. call for extra trash pickup when trash container is overflowing, maintain lids closed			Eating/Drinking Establishment
36234	10/11/2006	Noodles and Company		No violations, but corrective actions: 1. obtain spill kit, make accessible to employees. 2. provide most recent invoice to City regarding grease trap maintenance w/in 1 week(10/18/06). 3. train/educate employees in SW mgmt, maintain log.			Eating/Drinking Establishment
36237	10/13/2006	Pep Boys	By PADILLA, MAYELA: 9/14/2007 2:33:24 PM Follow Up Commercial Inspection Work Order#45752	no violations, but corrective actions: 1. maintain trash lids closed. 2. keep used auto parts/scrap metal stored outdoors covered. 3. maintain floor grate in garage driveway on regular basis/clean up regularly-squeegee driveway. 4. train employees in SW mgmt, keep a log	10/16/06 BMPs have been implemented.		Auto Other
36239	10/13/2006	Q.C. II Szechwan Restaurant	By PADILLA, MAYELA: 9/14/2007 2:15:03 PM Follow-Up Commercial Inspection Work Order# 45745	No violations, but corrective actions: 1. provide most recent maintenance invoice for grease bin to City by 10/16/06. 2. obtain proper cover/containment for grease rendering bin by 11/16/06. 3. train employees in SW mgmt/maintain a training log.	Spoke to Mike Hazelton at North County Grease on 10/16/06. He confirmed last pick up was on 10/4/06. He will contact Pablo to discuss containment options for outdoor grease bin.		Eating/Drinking Establishment
36241	10/17/2006	Roberto's		No violations, but corrective action: 1. fax most current invoice of grease trap maintenance to City by 10/18/06. 2. obtain cover/containment for grease bin located outdoors by 11/17/06. 3. obtain spill kit/make accessible to employees. 4. properly			Eating/Drinking Establishment
36243	10/12/2006	Roberto's		No violation, but corrective action: obtain secondary containment for grease rendering bin located outdoors w/in 2 weeks. 2. obtain spill kit/make accessible to employees. 3. train/educate employees in SW mgmt/maintain a log.	Follow up by Clay Hill. All corrective actions completed.		Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
36248	10/10/2006	Roxy		No violation, but corrective action: 1. maintain SW mgmt training log. 2. maintain trash lids closed, call for extra pickup when needed.			Eating/Drinking Establishment
36250	10/05/2006	Russo's Pasta		No violation, but corrective action: 1. properly train/educate employees in SW mgmt and maintain log. 2. Obtain spill kit and make accessible to employees.			Eating/Drinking Establishment
36253	10/25/2006	Sage Grill	By RYGIEL, KRISTINE: 6/21/2007 10:04:56 AM follow up completed 6/20/07 by Mike Emerson.	No violations, but corrective action: 1. obtain cover/containment for outdoor grease bin by 11/30/06. 2. properly train/educate employees in SW mgmt, maintain training log. Follow up inspection scheduled for 11/30/06.	Mike Emerson observed grease BMPs in place (overhead coverage and containment) on 6/20/07.		Eating/Drinking Establishment
36255	09/15/2006	Savory	By PADILLA, MAYELA: 9/14/2007 4:13:30 PM	No violations, but corrective actions: 1. provide cover/containment for grease bin located outdoors. 2. obtain spill kit, make accessible to employees. 3. properly train/educate employees in SW mgmt and maintain log.	Follow up completed on 11/2/06. All corrective actions complete. WO#45754		Eating/Drinking Establishment
36258	10/26/2006	Speedy Tune & Brakes		No violation, but corrective action: 1. call for extra trash pickup when trash is overflowing. 2. properly train employees in SW mgmt, maintain log.			Auto Repair/ Maintenance
36261	10/25/2006	Submania		No violation, but corrective action: 1. obtain spill kit, make accessible to employees. 2. properly train employees in SW mgmt, maintain training log.			Eating/Drinking Establishment
36268	07/12/2006	Subway		No violations, but corrective actions: train/educate employees in SW mgmt, maintain log. 2. obtain spill kit, make available to employees. Gave them What's Cooking Guide and City of Encinitas BMP Brochure.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
36270	08/15/2006	Tayama Greenhouse		No violation, but corrective action: 1. maintain silt fence and channel in front to prevent runoff. 2. maintain trash area litter free, lids closed, call for extra pick up when overflowing. 3. maintain drainage swale litter free. 4. maintain stockpile materials covered when not in use. 5.train employees and keep log.	Spoke to greenhouse president on 8/17/06- advised him of SEL Conservancy and directed him to contact Doug Gibson RE: debris on slope.		Nursery
36272	12/11/2006	Trattoria i Trulli		No violation, but corrective action: 1. sewer lateral needs to be maintained w/in 2 weeks (jetting the lateral). 2. SW inspector to be notified when plumber is on the job. 3. receipts for all work completed to be provided to City w/in 2 weeks. 4. sewer lateral to be maintained quarterly w/ invoice sent to city. 5.obtain spill kit. 6.train employees in SW mgmt, keep a log.	6/19/07 Mike Emerson followed up. issued NOV for lack of overhead cover and secondary containment to comply by 7/3/07. 8/2/07 all corrective actions complete per Mike Emerson	6/19/07	Eating/Drinking Establishment
36274	10/24/2006	Cardiff Valero		Citation given 10/16. Inspection on 10/24. Corrective actions needed: 1. provide proper containment for 55 gal drums of haz waste stored outdoors no later than 11/30/06. 2. properly train/educate all employees in SW mgmt, maintain log. 3. no water or wash water runoff leaving site at any time.	Parent Work Order: 36274 Inspector Mike Emerson completed follow up on 6/5/07. Owner Jack showed Mike how he follows BMPS, no discharges. He will discontinue use of auto shop in 2008.		Gas Station
36276	10/11/2006	Vons #2144		No violation, but corrective action: 1. fax copy of invoice for grease trap maintenance to City no later than 10/18/06. 2. maintain SW mgmt training log. 3. maintain dock area clean and swept of all litter, debris, sediment.. 4. maintain compactor area clean and properly dispose of recycled bags located outdoors.	Follow up by Clay Hill. Corrective actions not complete on 6/5/07. All corrective actions completed on 6/6/07.		Eating/Drinking Establishment
36282	11/14/2006	Vons #2351- 453 Santa Fe Drive		No violations, but corrective action: 1. Properly train/educate employees on SW mgmt, maintain log. Maintain loading/unloading area litter free especially near storm drain.			Eating/Drinking Establishment
36305	02/16/2007	Weidner's- 850 Normandy Ave.		No violations or corrective actions			Nursery

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
36307	01/31/2007	Weidners- 695 Normandy	By PADILLA, MAYELA: 9/14/2007 4:44:49 PM Follow Up Commercial Inspection Work Order# 45755	No violations, but corrective action: 1. properly train employees in SW mgmt, maintain training log by 1/31/08. 2. soil trailers to be covered during rainy season & replace straw wattle in area. 3. saw dust stockpile cover to be secured with sandbags	2/16/07 All corrective actions complete.		Nursery
36504	03/15/2007	Cicciotti's	By RYGIEL, KRISTINE: 5/8/2007 1:13:43 PM Follow up on 5/2/07 by Kathy Weldon. All corrective actions completed.	No violations, but corrective actions: 1. properly train employees in SW mgmt, maintain log. 2.obtain spill kit, make it accessible to employees. 3. provide copy of current business cert no later than 4/1/07. 4. sweep up trash enclosure area and maintain area clean. 5.provide spill palette, cover for great bin no later than 4/15/07.	5/2/07 All corrective actions complete.		Eating/Drinking Establishment
36527	02/01/2007	Quail Botanical Gardens	By RYGIEL, KRISTINE: 3/16/2007 11:01:49 AM Nursery uses different types of irrigation, including weather based controllers, recycled water. Uses controlled release fertilizers and mulch. No IPM techniques to prevent pesticide pollution.	No violations, but corrective action: 1. maintain trash area free of litter and debris. 2. properly train, educate all employees in SW mgmt and maintain training log. Botanical Gardens owned by county of SD. previously inspected by county, Dave Mart			Botanical Garden
36976	03/29/2007	Las Olas	By RYGIEL, KRISTINE: 4/16/2007 3:06:53 PM Inspection by PBS&J.	No violations or corrective actions.			Eating/Drinking Establishment
36978	03/22/2007	Super Donuts No.1	By RYGIEL, KRISTINE: 4/16/2007 3:56:47 PM Inspection by PBS&J	No violations or corrective actions			Eating/Drinking Establishment
36980	03/22/2007	Del Taco	By RYGIEL, KRISTINE: 4/16/2007 4:23:21 PM Inspection by PBS&J	No violations, but corrective actions: 1. Secondary containment for oil/grease bin located outdoors. 2.overhead coverage for oil/grease bin located outdoors. 3.old equipment should be disposed of properly off-site.	Follow up completed by Mike Emerson 7/2/07. He asked manager to obtain a larger overhead cover so that it is larger than containment.		Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37193	03/22/2007	Baskin Robbins	By RYGIEL, KRISTINE: 4/30/2007 9:41:03 AM Inspection by PBS&J By RYGIEL, KRISTINE: 4/30/2007 9:41:29 AM Owner is Jeff Nix, all correspondence should be directed to him.	No violations, no corrective actions, no follow up.			Eating/Drinking Establishment
37203	03/22/2007	Honey Baked Ham	By RYGIEL, KRISTINE: 4/30/2007 10:01:18 AM Inspection by PBS&J	No violations, no corrective action, no follow up.			Eating/Drinking Establishment
37220	03/22/2007	Albertsons #6754	By RYGIEL, KRISTINE: 4/30/2007 10:27:29 AM Inspection by PBS&J	No violations, no corrective actions, no follow up.			Eating/Drinking Establishment
37225	03/22/2007	Coco's Restaurant #881	By RYGIEL, KRISTINE: 4/30/2007 10:41:51 AM Inspection by PBS&J	No violations, no corrective actions, no follow up.			Eating/Drinking Establishment
37236	03/29/2007	KI's Juice Bar and Restaurant	By RYGIEL, KRISTINE: 4/30/2007 3:40:12 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/11/2007 4:00:35 PM Follow up completed on 7/11/07 by Mike Emerson. Trash area clean. Two dumpsters have lids.	No violations, but corrective action: 1. replace trash bins with broken lids. 2. proper trash receptacle enclosure-evaluate if another location is possible. Follow up inspection needed. Follow up inspection required	Follow up completed by Mike Emerson on 7/11/07. trash area clean. Two dumpsters have lids.		Eating/Drinking Establishment
37243	04/17/2007	Ralph's Supermarket	By RYGIEL, KRISTINE: 4/30/2007 4:18:43 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/9/2007 10:26:29 AM Follow up completed 7/5/07 by Mike Emerson.	No violations, but corrective actions: 1. truck loading docks & trash/outdoor storage must be cleaned. 2. Conduct annual employee storm water BMP training & keep log. Follow up inspection required	Follow up completed 7/5/07 by Mike Emerson.		Eating/Drinking Establishment
37245	04/17/2007	Burger King #3528	By RYGIEL, KRISTINE: 4/30/2007 4:44:26 PM Inspection by PBS&J	No violations, but corrective actions: 1. perform annual employee storm water BMP training, keep log. 2. obtain spill kit, make accessible to employees.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37259	04/17/2007	Gusto Trattoria	By RYGIEL, KRISTINE: 5/1/2007 11:13:07 AM Inspection by PBS&J By RYGIEL, KRISTINE: 5/9/2007 3:26:37 PM Training CD mailed on 5/9/07.	No violations, but corrective actions: 1. train employees in SW mgmt and keep log. 2. wash floor mats inside. 3. don't discharge cleaning water outside. use mop sink or floor drains. 4. obtain spill kit, make accessible to employees.			Eating/Drinking Establishment
37261	04/17/2007	Good morning Coffee/Quick Fix	By RYGIEL, KRISTINE: 5/1/2007 11:29:29 AM Inspection by PBS&J By RYGIEL, KRISTINE: 6/18/2007 2:22:24 PM Good Morning Coffee/Quick fix mailing address is 140 Encinitas Blvd. #307	No violations, but corrective action: 1. train employees in SW mgmt, keep log. Recommended City actions: inquire about encinitas business cert. contact prop. mgmt company about trash storage area maintenance and pick up schedule			Eating/Drinking Establishment
37266	04/17/2007	Pick-up-Stix	By RYGIEL, KRISTINE: 5/1/2007 1:21:44 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/25/2007 1:13:55 PM 7/24/07: Business cleaned and resealed grease oven and obtained overhead coverage and secondary containment, per Mike Emerson.	No violations but corrective action: 1. clean up grease/oil storage area 2. train employees in SW mgmt, keep log. 3 obtain secondary containment tray and overhead coverage for grease bin. Follow up inspection required.	Follow up by Mike Emerson on 7/24/07. Business cleaned and resealed grease area and obtained overhead coverage and secondary containment.		Eating/Drinking Establishment
37269	04/17/2007	Chin's Szechwan	By RYGIEL, KRISTINE: 5/1/2007 1:37:39 PM Inspection by PBS&J By RYGIEL, KRISTINE: 8/3/2007 11:52:12 AM 7/30/07 Mike Emerson followed up. no overhead cover. appears irrigation is spraying over grease to trash area. very dirty container left open	No violations, but corrective actions: 1. train employees on SW mgmt, keep log. 2. don't use water to clean outside, use broom. 3. more frequent trash pickup, or additional trash bin. 4. second grease bin needs secondary containment.	Mike Emerson issued citation to comply by 8/3/07. 11am called landlord to do work.		Eating/Drinking Establishment
37272	04/17/2007	Daphne's Greek Cafe	By RYGIEL, KRISTINE: 5/1/2007 2:09:25 PM Inspection by PBS&J By RYGIEL, KRISTINE: 8/1/2007 10:21:57 AM Follow up by Mike Emerson on 7/31/07. Issued admin warning for lack of overhead cover and secondary containment for grease.	No Violations, but corrective actions: 1. outdoor grease bin needs secondary containment and lid closed. 2. contact grease/oil rendering service for grease removal and container cleaning. Follow up inspection required	Warning citation issued 7/31/07 by Mike Emerson. Follow up by Mike Emerson on 8/20/07. business obtained overhead cover and 2nd containment for grease.	7/31/07	Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37274	04/17/2007	Rubio's	By RYGIEL, KRISTINE: 5/1/2007 2:28:36 PM Inspection by PBS&J	No violations, but corrective actions: 1. purchase spill response kit. 2. display spill response plan for employees. 3. have Baker clean the outside of grease bin.	Sent restaurant CD and copy of inspection form on 5/2/07. Faxed inspection form to Jeanne Wilson, property manager on 5/8/07.		Eating/Drinking Establishment
37276	04/17/2007	Juice 'n Java	By RYGIEL, KRISTINE: 5/1/2007 2:57:57 PM Inspection by PBS&J By RYGIEL, KRISTINE: 5/11/2007 3:11:59 PM Training CD sent on 5/9/07	No violations. Keep trash bin lids closed.			Eating/Drinking Establishment
37278	04/17/2007	Golden Baked Hams	By RYGIEL, KRISTINE: 5/1/2007 3:43:02 PM Inspection by PBS&J By RYGIEL, KRISTINE: 5/11/2007 3:09:31 PM Training CD sent on 5/9/07	No violations, but corrective actions: 1. keep trash bin lids closed. 2. purchase spill response kit.			Eating/Drinking Establishment
37280	04/17/2007	Albertsons #6724	By RYGIEL, KRISTINE: 5/1/2007 4:02:13 PM Inspection by PBS&J By RYGIEL, KRISTINE: 5/11/2007 3:13:41 PM Training CD sent on 5/9/07	No violations. Keep trash bin lids closed.			Eating/Drinking Establishment
37283	03/29/2007	Charlie's by the Sea	By RYGIEL, KRISTINE: 5/1/2007 4:17:51 PM Inspection by PBS&J By RYGIEL, KRISTINE: 8/6/2007 4:38:15 PM Follow up by Mike Emerson on 8/6/07. Lids closed, mats cleaned inside. wash water goes to sewer.	No violations, but corrective actions: 1. contact Chris Avalas to confirm that floor mats are washed inside. No wash water allowed to parking lot. 2. Keep trash bin lids closed. Follow up inspection required.	Follow up by Mike Emerson on 8/6/07. Lids closed, mats cleaned inside. wash water goes to sewer.		Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37285	03/22/2007	Oggi's Pizza	By RYGIEL, KRISTINE: 5/1/2007 4:46:02 PM Inspection by PBS&J By RYGIEL, KRISTINE: 5/1/2007 4:57:16 PM Follow up required. By RYGIEL, KRISTINE: 8/27/2007 4:35:40 PM 6/18/07: Mike Emerson issued NOV for 2nd containment of grease bin and for cigarettes and trash on site	No violations, but corrective action: 1. grease removal pick up required for full grease drum. 2. clean spilled grease around grease bin. do not wash down. 3. secondary containment tray needed for grease storage. 4. do not wash floor mats outside.	6/18/07: Mike Emerson issued NOV for 2nd containment of grease bin and for litter of cigarette butts around site and grease area. 8/23/07: restaurant has 2nd containment for grease per Mike Emerson.	6/18/07	Eating/Drinking Establishment
37315	05/02/2007	BMW Encinitas (Harloff)	By RYGIEL, KRISTINE: 5/3/2007 1:18:59 PM Kathy completed inspection	No violations, no follow up required. Corrective actions: 1. Provide asphalt berm around service bays. 2. provide containment berm around used oil. 3. provide SW training to all employees, keep training log. 4. provide invoices for clarifiers cleaning	Follow up by Mike Emerson on 10/12/07. All corrective actions complete. Two NOVs issued on 9/10/07 and 9/28/07. Signed off on 10/12/07 by Mike Emerson.	9/10/07 and 9/28/07	Auto Other
37318	04/04/2007	Jungle Music Palms & Cycads	By RYGIEL, KRISTINE: 5/3/2007 1:42:00 PM Kathy completed inspection.	No violation, no follow up, no corrective actions.			Nursery
37320	03/29/2007	Encinitas Greenhouses	By RYGIEL, KRISTINE: 5/3/2007 1:58:50 PM kathy completed inspection. By RYGIEL, KRISTINE: 6/8/2007 12:06:22 PM Follow up completed on 6/8/07 by Mike Emerson	No violations, but corrective actions: 1. Remove or recycle oil from property. 2. cover and contain paint on property. 3. provide containment for soil mixing areas.	Follow up completed on 6/8/07 by Mike Emerson. Property appears to be in compliance.		Nursery
37323	04/23/2007	Ades and Gish Nurseries	By RYGIEL, KRISTINE: 5/3/2007 3:08:26 PM Complaint came in on 4/18/07, Kathy did complaint investigation inspection on 4/23. By RYGIEL, KRISTINE: 5/3/2007 3:08:38 PM Business will most likely be moving in the next couple months	No violations, but corrective actions: 1. Secondary containment of oil storage facility. 2. Remove oil from truck on NE corner. 3. provide containment of horse manure- sand bags, etc. 4. provide soil stabilization at entrance of property. 5. maintain the sump in SW corner of property	Follow up completed by Mike Emerson on 6/7/08. Site in compliance.		Nursery

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37399	05/04/2007	Cookies in Bloom	By RYGIEL, KRISTINE: 5/9/2007 10:49:34 AM Inspection by PBS&J	No violations, but corrective actions: 1. Train employees on SW mgmt and maintain a log.			Eating/Drinking Establishment
37401	05/04/2007	Dairy Queen	By RYGIEL, KRISTINE: 5/9/2007 11:13:28 AM Inspection by PBS&J By RYGIEL, KRISTINE: 5/16/2007 12:58:04 PM received faxed grease trap service receipt 5/15/07	No violations, but corrective actions: 1. keep log of employees trained in SW mgmt. 2. fax a copy of grease trap maintenance invoice to Mayela Padilla.			Eating/Drinking Establishment
37405	05/04/2007	Harvest Ranch #175	By RYGIEL, KRISTINE: 5/9/2007 3:41:23 PM Inspection by PBS&J	No violations, but corrective action: 1. don't wash floor mats outside. wash inside, dispose of water in mop sink or floor drains. 2. train employees on SW mgmt, keep log. 3. obtain spill kit, make accessible to employees. 4. fax grease invoice to MP			Eating/Drinking Establishment
37408	05/02/2007	Jack in the Box #97	By RYGIEL, KRISTINE: 5/9/2007 4:10:34 PM Inspection by PBS&J	No violations, but corrective actions: 1. Train employees annually and keep a log. 2. Clean trash and soiled area in trash bin area, contain any water. 3. Obtain spill kit, make accessible to employees.			Eating/Drinking Establishment
37443	05/04/2007	Marie Callenders	By RYGIEL, KRISTINE: 5/11/2007 8:37:47 AM Inspection by PBS&J By RYGIEL, KRISTINE: 5/11/2007 8:51:06 AM waiting for grease interceptor invoice fax By RYGIEL, KRISTINE: 5/16/2007 8:04:00 AM faxed copy of inspection on 5/15/07	No violations, but corrective actions: 1. Train all employees on SW mgmt, keep a log. 2. Fax grease interceptor invoice to Mayela Padilla.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37446	05/02/2007	Karina's Taco Shop	By RYGIEL, KRISTINE: 5/11/2007 8:58:54 AM Inspection by PBS&J By RYGIEL, KRISTINE: 5/11/2007 9:22:17 AM recommended City actions: consider investigating inlets in patio/back area to verify connection to sewer or storm drain.	No violations, but corrective actions: 1. Fax receipt, proof of oil disposal by May 16, 07. 2. Obtain spill kit, make accessible to employees. 3. Keep training log on file. Consider investigating inlets in patio/back area to verify connection to sewer			Eating/Drinking Establishment
37457	05/02/2007	McDonalds #3404	By RYGIEL, KRISTINE: 5/11/2007 11:48:42 AM Inspection by PBS&J By RYGIEL, KRISTINE: 5/11/2007 11:53:58 AM Consider writing violation or follow up on cleaning of trash area w/ mop and bucket and evidence of possible discharge.	No violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2. Don't hose off outside areas. If mopping outside, contain all water. 3. secondary containment of grease bin needs to be in place.	Follow ups on 6/12/07, 6/22/07, and 6/27/07. All corrective actions complete on 6/27/07 per Mike Emerson.		Eating/Drinking Establishment
37466	05/02/2007	Mexico Viejo	By RYGIEL, KRISTINE: 5/11/2007 1:36:02 PM Inspection by PBS&J	No violations, but corrective actions: 1. train employees on SW mgmt, keep log. 2. obtain spill kit, make accessible to employees. 3. clean soiled area and litter in trash area.			Eating/Drinking Establishment
37470	05/02/2007	Pasta Bravo	By RYGIEL, KRISTINE: 5/11/2007 2:06:55 PM Inspection by PBS&J	No violations, but corrective actions: 1. conduct annual SW training, keep log. 2. obtain a spill kit			Eating/Drinking Establishment
37472	04/23/2007	Quiznos	By RYGIEL, KRISTINE: 5/11/2007 3:20:21 PM Inspection by PBS&J By RYGIEL, KRISTINE: 5/14/2007 10:51:04 AM training CD sent on 5/14/07	No violations, but corrective actions: 1. conduct annual SW employee training, keep log. 2. obtain spill kit, make accessible to employees.			Eating/Drinking Establishment
37474	05/02/2007	Seven-Eleven #17475	By RYGIEL, KRISTINE: 5/11/2007 3:55:50 PM Inspection by PBS&J	No violations, but corrective actions: 1. train employees on SW mgmt, keep log.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37486	04/25/2007	Subway	By RYGIEL, KRISTINE: 5/14/2007 8:39:45 AM Inspection by PBS&J	No violations, but corrective actions: 1. conduct annual SW employee training, keep a log. 2. cooperate with cleanup of alley (litter). City may want to follow up on possible power washing w/o BMPs (not witnessed but employee stated that she has seen it.			Eating/Drinking Establishment
37498	05/04/2007	Super Donut #2	By RYGIEL, KRISTINE: 5/14/2007 2:03:56 PM Inspection by PBS&J By RYGIEL, KRISTINE: 5/14/2007 2:15:28 PM Consider giving a citation for illegal discharge of fish tank water per Crystal Najera of PBS&J	Violation of SW ordinance was found. Corrective actions: 1. Don't empty fish tank water into parking lot. 2. Clean soiled area, pick up litter in trash bin area. 3. keep trash bin lids closed. 4. train employees in SW mgmt, keep log. 5. get spill kit			Eating/Drinking Establishment
37503	04/25/2007	VG Donut & Bakery	By RYGIEL, KRISTINE: 5/14/2007 2:38:00 PM Inspection by PBS&J	No violations or corrective actions.			Eating/Drinking Establishment
37506	04/23/2007	Baja Fresh	By RYGIEL, KRISTINE: 5/14/2007 2:57:13 PM Inspection by PBS&J By RYGIEL, KRISTINE: 5/23/2007 3:51:26 PM Received license #14203 from Cynthia Miller on 5/15/07. Expires 11/30/07.	No violations, but corrective actions: 1. perform annual SW training for employees (within 1st month of hire), keep a log. Check back on Encinitas business certificate			Eating/Drinking Establishment
37508	04/25/2007	Chart House	By RYGIEL, KRISTINE: 5/14/2007 3:08:34 PM Inspection by PBS&J	No violations, but corrective actions: 1. conduct annual employee SW training, keep log.			Eating/Drinking Establishment
37576	04/23/2007	Firefly Grill & Wine	By RYGIEL, KRISTINE: 5/16/2007 4:07:17 PM Inspection by PBS&J By RYGIEL, KRISTINE: 5/16/2007 4:14:10 PM Follow up on lack of grease trap interceptor. By RYGIEL, KRISTINE: 7/9/2007 11:50:02 AM Follow up completed by Clay Hill on 6/21/07	No violations, but corrective actions: Conduct employee SW training for all employees, not just kitchen staff. 2. Obtain a spill kit and make it accessible to employees	Follow up and corrective actions completed 6/21/07 per Clay Hill.		Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37578	04/23/2007	Passage to India	By RYGIEL, KRISTINE: 5/16/2007 4:23:26 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/31/2007 8:44:34 AM 7/26/07 follow up by Mike Emerson. Obtained spill kit.	No violations, but corrective actions: 1. conduct annual employee SW training. 2. clean the grease storage area of loose debris. 3. obtain spill kit, make accessible to employees.	7/26/07 follow up by Mike Emerson. Restaurant obtained spill kit.		Eating/Drinking Establishment
37580	04/23/2007	Chipotle	By RYGIEL, KRISTINE: 5/16/2007 4:44:24 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/9/2007 12:48:50 PM Follow up completed 7/2/07 by Mike Emerson.	No violations, but corrective actions: 1. clean trash and oil/grease storage area. 2. provide overhead coverage and secondary containment for oil and grease bin. 3. provide annual SW BMP training, keep a log.	Follow up and corrective actions complete 7/2/07 per Mike Emerson.		Eating/Drinking Establishment
37585	04/23/2007	Papa John's #1596	By RYGIEL, KRISTINE: 5/17/2007 9:56:08 AM Inspection by PBS&J By RYGIEL, KRISTINE: 5/23/2007 4:02:39 PM Manager on duty refused to sign inspection form due to corporate rules.	No violations, but corrective actions: 1. conduct SW BMP training, keep a log. 2. obtain spill kit, make accessible to employees. Manager refused to sign inspection form due to corporate rules			Eating/Drinking Establishment
37587	04/25/2007	Jack in the Box	By RYGIEL, KRISTINE: 5/17/2007 10:18:30 AM Inspection by PBS&J By RYGIEL, KRISTINE: 5/17/2007 10:25:35 AM Follow up w/corrective actions and verify parking lot cleaning procedure.	No violations, but corrective actions: 1. clean trash storage area, clean up oil spills. 2. obtain spill kit. 3. conduct annual SW employee training, including development of spill response plan.	All corrective actions completed per Clay Hill.		Eating/Drinking Establishment
37589	04/25/2007	Kim's Vietnamese & Chinese Restaurant	By RYGIEL, KRISTINE: 5/17/2007 10:31:11 AM Inspection by PBS&J By RYGIEL, KRISTINE: 7/31/2007 9:05:30 AM Follow up 7/25/07 by Mike Emerson. Grease BMPs in place.	No violations, but corrective actions: 1. grease and oil storage bin should have secondary containment and overhead coverage. 2. wash water dumping should be directed to sanitary sewer- should be confirmed.	Follow up 7/25/07 by Mike Emerson. Grease BMPs in place.		Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37592	04/25/2007	Giovanni's Sandwich Shop	By RYGIEL, KRISTINE: 5/17/2007 11:04:09 AM Inspection by PBS&J By RYGIEL, KRISTINE: 7/25/2007 12:58:56 PM Follow up 7/25/07 by Mike Emerson. area clean and in compliance.	No violations, but corrective actions: 1. back side of bldg should be cleaned and trash bins closed. 2. arrange for proper storage of oil and waste, haul-off of waste. Follow up to verify that an oil/grease waste service is picking up the waste (man	follow up by Mike Emerson on 7/25/07. area clean and in compliance.		Eating/Drinking Establishment
37595	05/02/2007	Chili's Grill	By RYGIEL, KRISTINE: 5/17/2007 11:49:25 AM Inspection by PBS&J	No violations, but corrective actions: 1. conduct annual SW employee training, keep a log. 2. clean out secondary containment for grease bin. Investigate inlets in trash sump area, near grease bin for potential illegal connection. Investigate if power washing is conducted	All corrective actions completed per Clay Hill.		Eating/Drinking Establishment
37610	05/02/2007	Einstein Bros. Bagels	By RYGIEL, KRISTINE: 5/21/2007 8:45:08 AM Inspection by PBS&J By RYGIEL, KRISTINE: 9/5/2007 4:04:29 PM Mike Emerson followed up on 9/5/07. They needed a replacement copy of the restaurant binder. They obtained spill kit.	No violations, but corrective actions: 1. backside of bldg/delivery area should be swept/cleared. 2. conduct SW employee training. 3. Obtain spill response kit. Follow up on power washing procedures	9/5/07 Follow up by Mike Emerson. Restaurant obtained spill kit. Gave replacement training binder.		Eating/Drinking Establishment
37612	05/02/2007	Wahoo's Fish Tacos	By RYGIEL, KRISTINE: 5/21/2007 9:03:13 AM Inspection by PBS&J By RYGIEL, KRISTINE: 8/27/2007 2:43:47 PM Clay Hill issued NOV correct work on 5/31/07 to obtain grease bins for storing use grease, obtaining secondary containment and overhead coverage	No violations, but corrective actions: 1. clean/sweep backside of bldg, remove oil containers. 2. conduct annual employees SW training, keep a log. 3. obtain spill response kit. Follow up on pressure washing procedures.	Clay Hill issued NOV correct work on 5/31/07 to obtain grease bins for storing use grease, obtaining secondary containment and overhead cover, removing oil from back of store. 8/20/07 follow up by Mike Emerson. Restaurant has spill kit and grease is stored inside.	5/31/07	Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37614	05/02/2007	Panda Express	By RYGIEL, KRISTINE: 5/21/2007 9:15:42 AM Inspection by PBS&J By RYGIEL, KRISTINE: 7/25/2007 2:27:12 PM 7/12/07: Has 2nd containment for grease, needs overhead cover by 7/27/07. per Mike Emerson.	No violations, but corrective actions: 1. conduct annual SW training, keep a log. 2. provide overhead coverage for trash storage area and secondary containment for oil. 3. Obtain spill kit. 4. Clean up delivery area, trash storage area. 5. Cease outdoor mat washing	7/12/07: has 2nd containment for grease, needs overhead cover by 7/27/07 per Mike Emerson. follow up on 7/24/07 by Mike Emerson, grease has overhead cover and secondary containment		Eating/Drinking Establishment
37616	05/02/2007	Round table Pizza	By RYGIEL, KRISTINE: 5/21/2007 9:27:21 AM Inspection by PBS&J	No violations, but corrective actions: Train employees on water quality mgmt, keep a log. 2. obtain spill response kit, keep accessible to employees. 3. consider installing grease trap or interceptor during kitchen remodel.			Eating/Drinking Establishment
37618	05/02/2007	Domino's #7755	By RYGIEL, KRISTINE: 5/21/2007 9:51:52 AM Inspection by PBS&J By RYGIEL, KRISTINE: 6/5/2007 1:18:13 PM Clay Hill followed up on 6/4/07. wrote letter and issued admin citation #SW06-04-07 to Summit Realty, property manager, regarding the trash	No violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2. Thoroughly clean trash bin area, contain water and dispose of properly.	All corrective actions complete per Clay Hill.	6/4/07	Eating/Drinking Establishment
37620	05/02/2007	Taco Bell	By RYGIEL, KRISTINE: 5/21/2007 10:06:42 AM Inspection by PBS&J By RYGIEL, KRISTINE: 5/21/2007 10:15:38 AM Violation was found: pipe dripping water at NE corner of restaurant. Unknown source. 5/30/07 Kathy Weldon issued Admin Citation Warning for lack of grease bin coverage and containment..	No violations, but corrective actions: 1. remove pipe or contain water discharging at NE corner of restaurant. 2. obtain secondary containment and overhead coverage for grease bin. 3. Do SW training, maintain log. 4. Obtain spill kit, make accessible to employees	Follow up and corrective actions completed 7/10/07 per Mike Emerson. Grease BMPs in place- overhead cover and 2nd containment. water discharge is from A/C and is ok. Corp is ordering spill kits for all restaurants	5/30/07	Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37622	05/02/2007	Pei Wei Asian Diner	By RYGIEL, KRISTINE: 5/21/2007 10:19:07 AM Inspection by PBS&J	No violations, but corrective actions: 1. possible illegal discharge of grease due to clean out of traps-cease immediately. 2. obtain spill kit. 3. conduct annual employee training. 4. prop mgr should have trash storage area cleaned. (shared area)	Follow up and all corrective actions completed on 6/20/07 per Clayton Hill.		Eating/Drinking Establishment
37624	05/02/2007	Zibibbo's	By RYGIEL, KRISTINE: 5/21/2007 10:32:14 AM Inspection by PBS&J By RYGIEL, KRISTINE: 9/13/2007 9:46:29 AM Follow up by Mike Emerson 8/20/07. issued NOV Correct work to obtain spill kit. Follow up 9/11/07, spill kit was obtained.	No violations, but corrective actions: 1. clean backside of bldg, landscaping litter/potential litter entering storm drain. 2. cover outdoor storage rack. 3. obtain spill kit 4. conduct annual SW training. 5. provide city with most recent grease trap	Follow up and all corrective actions completed on 9/11/07 per Mike Emerson.	8/20/07	Eating/Drinking Establishment
37626	05/02/2007	Islands Hamburgers	By RYGIEL, KRISTINE: 5/21/2007 10:50:28 AM Inspection by PBS&J	No violations, but corrective actions: 1. clean up/sweep trash storage area. 2. cover outdoor storage rack. 3. conduct annual SW training, keep a log.	All corrective actions completed per Clay Hill.		Eating/Drinking Establishment
37628	05/04/2007	Davina's Cabo Grill	By RYGIEL, KRISTINE: 5/21/2007 11:08:19 AM Inspection by PBS&J By RYGIEL, KRISTINE: 7/9/2007 11:16:17 AM Follow up completed by Mike Emerson on 7/3/07. Grease BMPs in place.	No violations, but corrective actions: 1. provide cover, secondary containment for grease drums. 2. clean oil drum area, do not discharge wash water. 3. clean grease trap area, discharge water to grease trap. 4. fax grease trap maintenance info to City.	Follow up completed by Mike Emerson 7/3/07. Grease BMPs in place.		Eating/Drinking Establishment
37630	05/04/2007	Sushi House	By RYGIEL, KRISTINE: 5/21/2007 11:23:24 AM Inspection by PBS&J By RYGIEL, KRISTINE: 8/23/2007 9:00:09 AM 8/6/07: Business has 2nd containment but no overhead cover. business owner did not understand the overhead requirement. will comply by 8/16/07	No violation, but corrective actions: 1. clean soiled area, litter behind restaurant. 2. Obtain secondary containment and overhead coverage for grease bin. 3. train employees on SW mgmt, keep a log. 4. get spill response kit.	8/6/07: Business has 2nd containment but no overhead cover. business owner did not understand the overhead requirement. will comply by 8/16/07 per Mike Emerson. 8/20/07 Follow up showed overhead coverage		Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37633	05/04/2007	Henry's #123	By RYGIEL, KRISTINE: 5/21/2007 11:49:13 AM Inspection by PBS&J	Violation and corrective actions: 1. use only dry cleaning methods, no washing off trash area or contain all wash water. 2. obtain secondary containment for grease bin, clean soiled area below bin. 3. conduct SW training, keep log. 4. send fax to MP.			Eating/Drinking Establishment
37650	05/09/2007	El Torito Market	By RYGIEL, KRISTINE: 5/21/2007 3:06:50 PM Inspection by PBS&J	No violation, but corrective action: 1. coverage for outdoor storage. 2. conduct SW employee training, keep a log. 3. move oil waste to appropriate container, provide secondary containment. 4. fax grease maintenance log and current business cert to MP.			Eating/Drinking Establishment
37652	05/09/2007	Robbie's Roadhouse	By RYGIEL, KRISTINE: 5/21/2007 3:32:17 PM Inspection by PBS&J	No violations, but corrective actions: 1. obtain spill response kit. 2. conduct annual SW employee training. 3. clean up trash storage area and delivery entrance.			Eating/Drinking Establishment
37654	05/08/2007	Denny's	By RYGIEL, KRISTINE: 5/21/2007 3:59:18 PM Inspection by PBS&J	No violations, but corrective actions: train employees on SW mgmt, keep a log. 2. fax copy of grease maintenance to MP. 3. Keep spill kit accessible to employees.			Eating/Drinking Establishment
37692	05/09/2007	Fulano's Mexican Restaurant	By RYGIEL, KRISTINE: 5/22/2007 5:07:03 PM Inspection by PBS&J	No violations, but corrective actions: 1. conduct SW employee training. 2. clean/sweep trash enclosure, keep lids closed. 3. fax/mail copy of business cert to MP.			Eating/Drinking Establishment
37704	05/09/2007	La Especial Norte	By RYGIEL, KRISTINE: 5/23/2007 2:33:56 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/10/2007 4:51:39 PM Grease BMPs in place on 7/3/07 per Mike Emerson.	No violations, but corrective actions: 1. conduct SW training, keep a log. 2. Dry Clean out trash storage area (grease on floor). 3. provide secondary containment for grease bin.	Admin citation warning issued 6/13/07 for lack of overhead coverage and secondary containment for grease bin. Follow up on 7/3/07 showed all corrective actions complete per Mike Emerson.	6/13/07	Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37722	05/09/2007	Kotija Jr Taco Shop	By RYGIEL, KRISTINE: 5/24/2007 1:35:37 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/30/2007 8:31:05 AM 6/13/07 Mike Emerson followed up. Provide secondary containment and overhead coverage for oil and obtain spill response kit by 6/27/07.	No violations, but corrective actions: 1. conduct annual employee SW training. 2. obtain spill response kit. 3. provide secondary and overhead containment for oil.	6/13/07 Mike Emerson followed up. Provide secondary containment and overhead coverage for oil and obtain spill response kit by 6/27/07. Issued Admin Warning 6/13/07 7/26/07: grease stored properly per Mike Emerson.	6/13/07	Eating/Drinking Establishment
37724	05/08/2007	Mandarin City	By RYGIEL, KRISTINE: 5/24/2007 2:11:26 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/31/2007 8:57:43 AM Follow up calls by Mike Emerson made on 7/19/07 and 7/30/07 to north county grease, 760-749-6655, asking to remove bin located at Mandarin	No violations, but corrective actions: 1.train employees in SW mgmt, keep log. 2.remove empty oil drum, clean soiled grease near drum. 3.repair overhead coverage, keep oil containers under it. 4.keep trash bin lids closed. 5.obtain spill kit.	Follow up calls by Mike Emerson made on 7/19/07 and 7/30/07 to north county grease, 760-749-6655, asking to remove bin located at Mandarin City. They say the restaurant is not using their bin.		Eating/Drinking Establishment
37729	05/07/2007	Papa Toni's Pizza	By RYGIEL, KRISTINE: 5/24/2007 2:31:27 PM Inspection by PBS&J	No violations, but corrective actions: 1. train employees on SW mgmt, keep log. 2.obtain spill response kit. 3.fax copy of bus cert to MP, or obtain current bus cert within two weeks of inspection.			Eating/Drinking Establishment
37731	05/08/2007	Yogi's Sports Bar and Restaurant	By RYGIEL, KRISTINE: 5/24/2007 2:41:41 PM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep log. 2. obtain spill kit, make accessible. 3.keep trash bin lids close. 4. keep a record of grease trap maintenance.			Eating/Drinking Establishment
37733	05/10/2007	Meritage	By RYGIEL, KRISTINE: 5/24/2007 2:58:11 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/30/2007 8:17:57 AM 7/3/07 Issued NOV for grease BMP (overhead coverage). By RYGIEL, KRISTINE: 7/30/2007 8:18:21 AM 7/25/07 BMPs in place per Mike Emerson.	No violations, but corrective actions: 1.train employees in SW mgmt, keep log. 2.obtain overhead cover for grease bin. 3.keep trash bin lids closed. 4.obtain cover for laundry container or store indoors. 5.obtain spill kit, make accessible.	6/12/07 Still need to cover grease and laundry container by 6/26/07. also, fix leak at back of building. 7/3/07 Mike Emerson issued NOV for lack of overhead coverage 7/25/07 follow up by Mike Emerson. All corrective actions complete.	7/3/07	Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37735	05/08/2007	East Coast Pizza	By RYGIEL, KRISTINE: 5/24/2007 3:28:02 PM Inspection by PBS&J	No violations, but corrective actions: 1. train employees in SW mgmt, keep log. 2. fax most recent grease maintenance invoice to MP. 3. Keep trash bin lids closed.			Eating/Drinking Establishment
37737	05/10/2007	Angelo's Burgers	By RYGIEL, KRISTINE: 5/24/2007 3:41:42 PM Inspection by PBS&J By RYGIEL, KRISTINE: 6/18/2007 4:45:13 PM Copy of inspection faxed 6/18/07. Waiting for grease maintenance info. By RYGIEL, KRISTINE: 6/28/2007 10:41:39 AM Received grease maintenance info	No violations, but corrective actions: 1. train employees on SW mgmt, keep log. 2. fax most recent grease maintenance record to MP w/in two weeks.			Eating/Drinking Establishment
37739	05/07/2007	Encinitas Donuts	By RYGIEL, KRISTINE: 5/24/2007 4:18:37 PM Inspection by PBS&J	No violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2. obtain spill kit, make accessible.			Eating/Drinking Establishment
37741	05/07/2007	Carl's Jr #181	By RYGIEL, KRISTINE: 5/24/2007 4:39:38 PM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.obtain spill kit, make accessible. 3.keep grease bin lid closed.			Eating/Drinking Establishment
37755	05/09/2007	The Kraken	By RYGIEL, KRISTINE: 5/25/2007 9:16:50 AM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.don't wash floor mats outside; wash inside or take to a "do it yourself" carwash.			Eating/Drinking Establishment
37757	05/09/2007	Le Papagayo	By RYGIEL, KRISTINE: 5/25/2007 9:37:32 AM Inspection by PBS&J	No violations, but corrective actions: 1.dry clean or wash (contain water) the oil stains in front of oil waste bin. 2.conduct annual SW training, keep log. 3. obtain spill kit.			Eating/Drinking Establishment
37759	05/08/2007	Pipes Cafe	By RYGIEL, KRISTINE: 5/25/2007 10:05:01 AM Inspection by PBS&J By RYGIEL, KRISTINE: 7/9/2007 11:03:31 AM Grease BMPs in place per Mike Emerson 7/3/07	No violations, but corrective actions: 1.keep log of trained employees. 2. fix broken overhead containment for grease bin.	Follow up completed by Mike Emerson 7/3/07.		Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37761	05/07/2007	Seven-Eleven #13620	By RYGIEL, KRISTINE: 5/25/2007 10:50:37 AM Inspection by PBS&J By RYGIEL, KRISTINE: 6/18/2007 4:40:01 PM Copy of inspection faxed 6/18/07	No violations, but corrective actions: 1.keep trash bin lids closed, pick up litter in trash area and behind store. 2.train employees on SW mgmt, keep a log. 3.obtain spill response kit.			Eating/Drinking Establishment
37765	05/07/2007	El Nopalito	By RYGIEL, KRISTINE: 5/25/2007 3:27:39 PM Inspection by PBS&J By RYGIEL, KRISTINE: 9/13/2007 9:21:41 AM Clayton Hill issued NOV Correct Work on 5/31/07 for lack off 2nd containment. Follow up by Mike Emerson on 8/21/07. Issued NOV correct work	No violations, but corrective actions: 1.clean soiled grease stains in back, contain all wash water. 2.obtain secondary containment and overhead cover for grease bin. 3. train employees on SW mgmt, keep a log. 4.obtain spill kit.	Clayton Hill issued NOV Correct Work on 5/31/07 for lack off 2nd containment. Follow up by Mike Emerson on 8/21/07. Issued NOV correct work for lack of overhead cover. 9/12/07 Grease BMPs in place per Mike Emerson	5/31/07 and 8/21/07	Eating/Drinking Establishment
37767	05/08/2007	Santa Fe Cafe	By RYGIEL, KRISTINE: 5/25/2007 3:35:09 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/9/2007 11:27:37 AM Follow up and corrective actions complete 7/2/07 per Mike Emerson.	No violations, but corrective actions: 1.obtain overhead and secondary containment for grease bin. 2.train employees in SW mgmt, keep a log. 3.keep log of grease trap maintenance 4.obtain spill kit.	Follow up completed 7/2/07 by Mike Emerson. He asked that a more permanent BMP be constructed for grease storage.		Eating/Drinking Establishment
37769	05/10/2007	Sakura-Bana Sushi	By RYGIEL, KRISTINE: 5/25/2007 3:52:37 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/9/2007 10:14:13 AM 7/3/07 Follow up and corrective actions completed per Mike Emerson.	No violations, but corrective actions: 1.train employees on SW mgmt, keep log. 2.consider reconnecting and maintaining grease trap. 3.clean trash area, contain all wash water. 4.replace or repair grease bin. 5. obtain spill kit.	7/3/07 Grease storage and spill kit BMPs in compliance per Mike Emerson.		Eating/Drinking Establishment
37771	05/18/2007	Kaito's Sushi Restaurant	By RYGIEL, KRISTINE: 5/25/2007 4:05:20 PM Inspection by PBS&J	No violations, but corrective action: 1.train employees on SW mgmt, keep log. 2.obtain spill kit. 3. pick up trash in bin area, keep lids closed.	Follow ups by Mike Emerson on 7/12/07, delivered copy of inspection form to comply by 7/27/07. 8/1/07 11 am ME went to restaurant, no one was there, called phone number and left message to call him back re: spill kit.		Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37773	05/16/2007	El Torito	By RYGIEL, KRISTINE: 5/25/2007 4:21:00 PM Inspection by PBS&J By RYGIEL, KRISTINE: 6/4/2007 9:49:50 AM Follow up/All corrective actions completed on 6/4/07 per Clayton Hill.	No violations, but corrective actions: 1.conduct annual SW training, keep log. 2. obtain spill kit. 3.provide overhead coverage for any material/equipment stored outside.	Inspection by Clayton Hill All corrective actions completed 6/4/07		Eating/Drinking Establishment
37775	05/16/2007	El Pollo Loco/Foster's Freeze	By RYGIEL, KRISTINE: 5/25/2007 4:29:50 PM Inspection by PBS&J By RYGIEL, KRISTINE: 9/5/2007 4:12:01 PM Follow up inspection by Mike Emerson on 9/5/07. obtained grease BMPs and spill kit.	No violations, but corrective actions: 1.obtain spill kit. 2.dry sweep trash enclosure, provide overhead coverage for grease bin. 3. provide SW training for employees. 4.cease hosing off premises unless wash water is captured.	Follow up by Mike Emerson on 9/5/07. obtained grease BMPs and spill kit.		Eating/Drinking Establishment
37863	05/22/2007	Tomiko	By RYGIEL, KRISTINE: 6/4/2007 11:34:11 AM Inspection by PBS&J By RYGIEL, KRISTINE: 8/2/2007 9:34:08 AM 7/30/07 FU by Mike Emerson. No overhead coverage for grease. overstuffed trash bins. took photos.	Corrective actions: Train employees on SW mgmt. Fax grease log and business cert to MP. Don't discharge cleaning water to parking lot. Keep trash bin lids closed, clean soiled grease area. Get overhead coverage for grease bin. get spill kit.	7/30/07 FU by Mike Emerson. No overhead coverage for grease. overstuffed trash bins. took photos. 7/31/07 Mike Emerson spoke with owner. has overhead coverage. confirmed and took photos.		Eating/Drinking Establishment
37867	05/09/2007	Leucadian Bar	By RYGIEL, KRISTINE: 6/4/2007 12:05:58 PM Inspection by PBS&J	no violations, but corrective actions: 1. obtain spill response kit. 2. conduct SW training.			Eating/Drinking Establishment
37871	05/07/2007	Today's Piza and Salad	By RYGIEL, KRISTINE: 6/4/2007 2:32:12 PM Inspection by PBS&J By RYGIEL, KRISTINE: 8/2/2007 5:06:55 PM Business cert #16997 Exp.8/31/07 per MP.	No violations, but corrective actions: 1. train employees on SW mgmt, keep log. 2. obtain spill kit. 3. fax copy of bus cert to MP or obtain current bus. cert.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37873	05/10/2007	St. Germain's	By RYGIEL, KRISTINE: 6/4/2007 2:43:10 PM Inspection by PBS&J By RYGIEL, KRISTINE: 6/18/2007 4:41:25 PM Copy of inspection faxed 6/18/07.	No violations, but corrective actions: 1. obtain overhead and secondary cover for grease bin. 2. keep trash bin lids closed, pick up litter in trash bin area. 3. obtain spill response kit.	Follow up 7/18/07: Mike Emerson contacted manager regarding overhead cover for grease storage by 8/18/07. 8/21/07: follow up by Mike Emerson. they obtained overhead coverage.		Eating/Drinking Establishment
37875	05/10/2007	Beach City Cafe	By RYGIEL, KRISTINE: 6/4/2007 2:55:36 PM Inspection by PBS&J By RYGIEL, KRISTINE: 6/18/2007 4:47:34 PM Copy of inspection faxed 6/18/07.	no violations, but corrective actions: 1.purchase more absorbent material for spills.			Eating/Drinking Establishment
37877	05/15/2007	Filiberto's	By RYGIEL, KRISTINE: 6/4/2007 3:07:21 PM Inspection by PBS&J By RYGIEL, KRISTINE: 6/18/2007 4:43:07 PM Copy of inspection faxed on 6/18/07. Waiting for grease pick up info. By RYGIEL, KRISTINE: 8/1/2007 10:25:06 AM Mike Emerson issued NOV in FY 06-07	No violations, but corrective actions: 1.train employees on SW mgmt. 2. fax grease maintenance record to MP	Mayela spoke to Nidia 8/15/07. they use North County Grease. KR mailed them grease maintenance log 8/16/07.		Eating/Drinking Establishment
37879	05/16/2007	Firenze Trattoria	By RYGIEL, KRISTINE: 6/4/2007 3:19:13 PM Inspection by PBS&J By RYGIEL, KRISTINE: 6/18/2007 4:35:15 PM Copy of inspection faxed 6/18.	No violations, but corrective actions: 1.train employees on SW mgmt, keep log. 2. obtain spill kit. 3. keep records of grease interceptor maintenance.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37881	05/16/2007	KC's Tandoor	By RYGIEL, KRISTINE: 6/4/2007 3:27:47 PM Inspection by PBS&J By RYGIEL, KRISTINE: 8/6/2007 4:30:13 PM Follow up by Mike Emerson 8/6/07. mesquite in storage locker. all other materials stored elsewhere.	No violations, but corrective actions: 1.conduct annual SW employee training. 2.obtain spill kit. 3.provide overhead coverage for mesquite coals, other materials stored outdoors. 3. fax grease trap maintenance log to MP.	Follow up and BMPs completed 7/3/07 per Mike Emerson.		Eating/Drinking Establishment
37890	05/16/2007	Via Italia Trattoria	By RYGIEL, KRISTINE: 6/4/2007 3:38:05 PM Inspection by PBS&J By RYGIEL, KRISTINE: 6/18/2007 4:46:21 PM Copy of inspection faxed 6/18/07. Waiting for grease maintenance records. By RYGIEL, KRISTINE: 8/21/2007 4:53:19 PM Follow up completed	No violations, but corrective actions: 1.keep log of trained employees. 2.obtain secondary containment and overhead coverage for grease bin. 3. fax copy of grease maintenance log to MP.	follow up completed by Mike Emerson on 8/21/07. restaurant obtained Biotane container w/ overhead cover and 2nd containment.		Eating/Drinking Establishment
37897	05/18/2007	Chick's Natural	By RYGIEL, KRISTINE: 6/4/2007 4:07:07 PM Inspection by PBS&J	No violations, but corrective actions: train employees on SW mgmt, keep a log.	All corrective actions completed per Clay Hill		Eating/Drinking Establishment
37910	04/23/2007	Garden State bagels	By RYGIEL, KRISTINE: 6/5/2007 1:02:26 PM inspection by PBS&J	No violations, but corrective actions: 1.perform employee SW training, keep log. 2. keep trash enclosure clean and free of loose trash and debris. 3.obtain spill kit, make accessible to employees.	All corrective actions completed per Clay Hill		Eating/Drinking Establishment
37942	06/05/2007	Cactus King Nursery	By RYGIEL, KRISTINE: 6/6/2007 2:49:52 PM Inspection by Mike Emerson.	No violations, no corrective actions			Nursery
37944	06/04/2007	A Tank Site - City of Encinitas	By RYGIEL, KRISTINE: 6/6/2007 3:17:24 PM Inspection by Mike Emerson. By RYGIEL, KRISTINE: 6/18/2007 4:22:19 PM Follow up completed 6/18/07 by Mike Emerson	No violations, but corrective actions: 1.trash pick up from overturned container east side of lot. 2. obtain spill kit. 3. cover heavy equipment.	Follow up complete 6/18/07. All corrective actions complete.		Municipal

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37948	06/04/2007	City of encinitas- fleet maintenance yard	By RYGIEL, KRISTINE: 6/6/2007 4:07:24 PM Inspection by Mike Emerson	no violations, but corrective actions: 1.pick up litter around trash area- need to contact parks and rec. 2. cover heavy equipment.	Follow up 6/14/07 by Mike Emerson showed all corrective actions complete		Municipal
37954	06/04/2007	City of Encinitas Pacific View Yard	By RYGIEL, KRISTINE: 6/7/2007 10:04:12 AM Inspection by Mike Emerson	No violation, but corrective actions: 1. Store heavy equipment under cover on school property.	Pac View is shared w/ Enc School Dist. Heavy equip is stored on school part of lot.		Municipal
37956	06/04/2007	Waste water collection facility	By RYGIEL, KRISTINE: 6/7/2007 11:03:47 AM Inspection by Mike Emerson	No violations, no corrective actions.			Municipal
37958	06/06/2007	San Elijo Joint Powers Authority	By RYGIEL, KRISTINE: 6/7/2007 11:26:32 AM Inspection by Mike Emerson By RYGIEL, KRISTINE: 6/18/2007 4:26:47 PM Follow up completed by Mike Emerson on 6/18/07.	No violations, but corrective actions: 1.provide better management of outdoor materials storage of unused or unwanted parts located on the SW part of property (east of building).	Follow up completed by Mike Emerson on 6/18/07. all corrective actions complete.		Industrial
37960	05/21/2007	Howard Johnson	By RYGIEL, KRISTINE: 6/7/2007 11:49:31 AM Inspection by Kathy Weldon By RYGIEL, KRISTINE: 6/7/2007 11:59:44 AM Refer pipe from washing machine to Leucadia Water Dist	no violations or corrective actions.			Other
37962	05/31/2007	Barrels & Branches	By RYGIEL, KRISTINE: 6/7/2007 12:30:39 PM Inspection by Kathy Weldon	No violations or corrective actions.			Nursery
37967	06/06/2007	Expo Plant Service Inc	By RYGIEL, KRISTINE: 6/7/2007 3:42:29 PM Inspection by Mike Emerson	No violations, but corrective actions: 1.close trash container. 2.cover tools 3. discontinue wash water into storm drain- use a bucket to collect wash water. Empty into landscape area or connect to sewer.	follow up on 7/3/07 by ME. Letter from Steven Jeromes said that they installed a 250 gallon catch tank for the sink to drain. will be emptied into port a potty.		Nursery

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
37969	06/06/2007	Ables Flowers and Plants	By RYGIEL, KRISTINE: 6/18/2007 4:14:11 PM Inspection by Mike Emerson	no violations or corrective actions.			Nursery
37971	06/05/2007	Andy's Orchids	By RYGIEL, KRISTINE: 6/7/2007 4:41:58 PM Inspection by Mike Emerson	no violations or corrective actions.			Nursery
37973	06/05/2007	Cordova Gardens	By RYGIEL, KRISTINE: 6/7/2007 4:53:10 PM Inspection by Mike Emerson. By RYGIEL, KRISTINE: 6/20/2007 4:53:04 PM Follow up completed by Mike Emerson on 6/20/07	No violations, but corrective actions: 1. move paint and other hazardous material into covered areas. 2.fix hose leak @ SW corner	6/20/07: all paint and hazardous materials are stored under cover (in shed) and with secondary containment. hoses appear to be repaired. Per Mike Emerson.		Nursery
37975	05/31/2007	Leucadia Nursery	By RYGIEL, KRISTINE: 6/7/2007 5:09:04 PM Inspection by Kathy Weldon	No violations, but corrective actions: 1. replace O rings or back flush valve for injector.			Nursery
38014	05/30/2007	Borrelli's Pizza Inc.	By RYGIEL, KRISTINE: 6/11/2007 12:25:37 PM Inspection by PBS&J By RYGIEL, KRISTINE: 6/11/2007 12:43:00 PM follow up required. By RYGIEL, KRISTINE: 7/17/2007 5:19:22 PM Follow up completed by Mike Emerson on 6/18/07, issued NOV for bin tray	no violations, but corrective actions: 1 train employee on SW mgmt, keep a log. 2.obtain secondary containment and overhead coverage for grease bin. 3. keep trash bin lids closed. 4.obtain spill kit.	Follow up completed by Mike Emerson on 6/18/07, issued NOV for bin tray and cover to comply by 6/27/07. Issued Admin citation #CW070207 on 7/2/07. Voided citation on 7/17/07- restaurant had already ordered containment before citation date.	6/18/07	Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38016	05/29/2007	Surf Brother's Teriyaki	By RYGIEL, KRISTINE: 6/11/2007 2:08:31 PM Inspection by PBS&J By RYGIEL, KRISTINE: 6/11/2007 2:17:01 PM follow up required By RYGIEL, KRISTINE: 7/10/2007 4:43:36 PM follow ups on 6/18 and 7/5/07. Trash area looks clean on 7/5/07 per Mike Emerson	No violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2.keep bin lids closed. 3.contact property manager regarding litter in trash enclosure. follow up required.	Follow ups completed on 6/18 and 7/5/07. Trash area clean per Mike Emerson on 7/5/07.		Eating/Drinking Establishment
38018	05/18/2007	Mama Lulu's Pizza and Pasta	By RYGIEL, KRISTINE: 6/11/2007 2:32:49 PM Inspection by PBS&J	No violations, but corrective action: 1. keep a record of employee training.			Eating/Drinking Establishment
38020	05/18/2007	St. Tropez Bakery	By RYGIEL, KRISTINE: 6/11/2007 2:48:46 PM Inspection by PBS&J	no violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2.obtain current copy of business cert, fax copy to MP. 3. fax most recent grease trap maintenance log to MP. 4. Obtain spill kit, make accessible to employees.	Follow up completed by Mike Emerson 7/12/07. received emailed grease maintenance info 7/16/07.		Eating/Drinking Establishment
38022	05/31/2007	Kocher Flower Growers	By RYGIEL, KRISTINE: 6/11/2007 2:58:27 PM Inspection by PBS&J	No violations, but corrective actions: Replace O rings on back flush valve for injector.			Nursery
38024	06/07/2007	Bradley Allen Auto Body Painting	By RYGIEL, KRISTINE: 6/11/2007 3:46:12 PM Inspection by Mike Emerson By RYGIEL, KRISTINE: 6/13/2007 4:15:56 PM Follow up completed on 6/13/07.	No violations, but corrective actions: 1.diesel barrels secondary containment x3. 2. properly store oil drain pans under cover or indoors.	Follow up inspection completed by Mike Emerson. They performed all corrective actions listed on inspection form from 6/7/07. Provided storm water training log and assigned oil pans to each employee.		Auto Body Repair/Painting
38026	06/06/2007	A+ Smog Test	By RYGIEL, KRISTINE: 6/11/2007 4:01:01 PM Inspection by Mike Emerson.	No violations or corrective actions.			Auto Other
38028	06/07/2007	O'Brien Station aka Arco	By RYGIEL, KRISTINE: 6/11/2007 4:19:00 PM inspection by Mike Emerson	No violations, but corrective actions: 1.hazardous waste containers need secondary containment and cover.			Gas Station

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38030	06/08/2007	San Dieguito Transportation (San Dieguito Union HS District)	By RYGIEL, KRISTINE: 6/11/2007 4:34:04 PM inspection by Mike Emerson	No violations, but corrective actions: 1.replace storm drain filters at the beginning and end of rainy seasons. 2.implement recommendations as outlined in the 4/21/06 OEMC owen engineering report. 3. cement mixer & air compressor to be stored indoors			Industrial
38032	06/08/2007	City of Encinitas City hall	By RYGIEL, KRISTINE: 6/11/2007 4:45:25 PM inspection by Mike Emerson	No violations or corrective actions.			Municipal
38034	06/11/2007	Java Express (new business); Pat O'shey (old business)	By RYGIEL, KRISTINE: 6/11/2007 4:54:53 PM inspection by Mike Emerson	no violations or corrective actions.	Follow up on 9/28/07. Issued NOV for trash clean up, consider power washing. Follow up on 10/15/07 trash area clean. request power washing.	9/28/07	Eating/Drinking Establishment
38036	06/11/2007	Bird Rock Tropicals	By RYGIEL, KRISTINE: 6/11/2007 5:05:51 PM Inspection by Mike Emerson	no violations or corrective actions.			Nursery
38131	05/09/2007	Surfdog's Java Hut	By RYGIEL, KRISTINE: 6/13/2007 12:50:50 PM Inspection by PBS&J	No violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2.keep dirty rags/laundry stored indoors. 3. obtain spill response kit, keep accessible to employees.			Eating/Drinking Establishment
38133	05/08/2007	Swami's Cafe	By RYGIEL, KRISTINE: 6/13/2007 1:06:10 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/25/2007 1:09:32 PM Grease maintenance: Affordable Grease Pumping 858-456-1102. Last maintained on 4/14/07.	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.fax copy of current business cert and grease trap maintenance to MP. 3.obtain spill response kit, keep accessible to employees. 4. keep trash bin lids closed.			Eating/Drinking Establishment
38142	05/10/2007	Trattoria Positano	By RYGIEL, KRISTINE: 6/13/2007 2:16:42 PM Inspection by PBS&J	No violations, but corrective action: 1.fax most recent grease maintenance invoice to MP. 2.train employees on SW mgmt, keep a log. 3.keep trash bin lids closed, pick up trash around bin. 4. obtain spill kit, make accessible to employees.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38146	05/10/2007	Surfside Creamery	By RYGIEL, KRISTINE: 6/13/2007 2:50:20 PM inspection by PBS&J	No violations, but corrective action: 1.keep a log of trained employees.			Eating/Drinking Establishment
38165	05/15/2007	Daley Double Cocktail Lounge (The Saloon)	By RYGIEL, KRISTINE: 6/13/2007 3:51:07 PM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.obtain spill response kit, keep accessible to employees.			Eating/Drinking Establishment
38189	05/15/2007	Amici/Qero	By RYGIEL, KRISTINE: 6/13/2007 4:32:41 PM Inspection by PBS&J By RYGIEL, KRISTINE: 8/27/2007 3:17:47 PM 6/14/07 Admin citation warning issued by Mike Emerson for lack of overhead coverage and 2nd containment of grease.	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.obtain spill response kit, keep it accessible to employees. 3.wor with 101 diner to obtain secondary containment and overhead cover for grease bin. 4.fax bus cert.	6/14/07 Admin citation warning issued by Mike Emerson for lack of overhead coverage and 2nd containment of grease. 8/22/07: they have proper storage of grease	6/14/07	Eating/Drinking Establishment
38203	05/15/2007	101 Diner	By RYGIEL, KRISTINE: 6/14/2007 9:47:05 AM Inspection by PBS&J By RYGIEL, KRISTINE: 8/27/2007 3:49:09 PM Mike Emerson issued Admin citation warning on 6/14/07 for lack of 2nd containment and overhead coverage on grease bin.	no violations, but corrective actions: 1.train employees in SW mgmt, keep a log. 2.obtain secondary containment and overhead coverage for grease bin. 3.obtain spill response kit, keep accessible to employees. 4. fax bus cert to MP. 5.store all trash	Mike Emerson issued Admin citation warning on 6/14/07 for lack of 2nd containment and overhead coverage on grease bin. 8/23/07: they have proper storage of grease per Mike Emerson.	6/14/07	Eating/Drinking Establishment
38205	05/15/2007	Manhattan Pizza	By RYGIEL, KRISTINE: 6/14/2007 10:59:51 AM Inspection by PBS&J	No violations, but corrective actions: 1.train employees in SW mgmt, keep a log. 2.obtain spill kit, keep accessible to employees. 3. clean floor mats and patio furniture indoors or contain all wash water outdoors.			Eating/Drinking Establishment
38207	05/14/2007	Ogata Japanese Cuisine	By RYGIEL, KRISTINE: 6/14/2007 11:27:05 AM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.keep outdoor area clean and store grease buckets indoors. 3.obtain spill response kit, keep accessible for employees. 4.get Tastes to obtain secondary containment.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38209	05/15/2007	Raul's	By RYGIEL, KRISTINE: 6/14/2007 2:09:47 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/17/2007 1:28:45 PM no current business cert. as of 6/19/07 per Cynthia Miller. KR	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.store grease containers and other materials inside or under covered area. 3.mail/fax business cert to MP. 4.obtain spill response kit, keep accessible to employees.	Mike delivered business cert application 8/2/07.		Eating/Drinking Establishment
38211	05/21/2007	Trader Joe's	By RYGIEL, KRISTINE: 6/14/2007 2:55:06 PM Inspection by PBS&J	No violations, but corrective actions: 1. train employees on SW mgmt and keep a log. 2. keep trash area clean and bin lids closed.			Eating/Drinking Establishment
38213	05/04/2007	A little Moore Cafe	By RYGIEL, KRISTINE: 6/14/2007 3:25:54 PM Inspection by PBS&J	No violations, but corrective actions: 1. fax or mail most recent grease maintenance invoice to MP. 2. train employees on SW mgmt, keep a log.			Eating/Drinking Establishment
38223	05/20/2007	Leucadia Sushi Bar	By RYGIEL, KRISTINE: 6/18/2007 10:09:02 AM Inspection by PBS&J By RYGIEL, KRISTINE: 7/31/2007 8:38:30 AM 7/30/07 Follow up by Mike Emerson. Overhead and secondary containment of grease storage in place. No spill kit though.	No violations, but corrective actions: 1.Train employees on SW mgmt. 2.Get overhead cover and secondary containment for grease bin. 3. fax copy of grease maintenance to MP. 4. Obtain spill kit. 5.clean grease spill in trash area.	7/30/07 Follow up by Mike Emerson. Overhead and secondary containment of grease storage in place. No spill kit though.		Eating/Drinking Establishment
38226	05/16/2007	McDonald's #14229	By RYGIEL, KRISTINE: 6/18/2007 10:41:57 AM Inspection by PBS&J By RYGIEL, KRISTINE: 7/9/2007 10:42:45 AM Follow up and grease BMPs completed 7/3/07 per Mike Emerson	No violations, but corrective actions: 1. conduct annual SW training and maintain a log. 2. provide overhead coverage for the grease bin.	Follow up and BMPs completed 7/3/07 per Mike Emerson.		Eating/Drinking Establishment
38228	06/04/2007	Calypso Cafe	By RYGIEL, KRISTINE: 6/18/2007 11:03:22 AM Inspection by PBS&J By RYGIEL, KRISTINE: 7/12/2007 1:32:30 PM Follow up and corrective actions completed 7/11/07 per Mike Emerson.	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.properly dispose of grease being stored in planter area, mail copy of pick up invoice to MP. 3. obtain lids for trash cans. 4. don't store open grease outside.	Business appears in compliance per Mike Emerson 7/11/07. Jonam will fax letter regarding grease disposal by 7/13/07.		Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38230	06/06/2007	Mandarin Oriental	By RYGIEL, KRISTINE: 6/18/2007 11:19:48 AM Inspection by PBS&J By RYGIEL, KRISTINE: 9/13/2007 9:12:15 AM Follow up by Mike Emerson on 7/30/07. no 2nd containment. issued warning citation to comply by 8/7/07.	No violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2. obtain secondary containment and overhead coverage for grease bin. 3. store brooms indoors.	Follow up by Mike Emerson on 7/30/07. no 2nd containment. issued warning citation to comply by 8/7/07. On 9/10/07 follow up by Mike Emerson showed grease BMPs in place.	7/30/07	Eating/Drinking Establishment
38234	06/07/2007	Tastes Group, LLC	By RYGIEL, KRISTINE: 6/18/2007 11:36:59 AM Inspection by PBS&J By RYGIEL, KRISTINE: 8/2/2007 9:01:27 AM 7/30/07 FU inspection by Mike Emerson showed no 2nd containment for grease bin, no spill kit. appears they are washing mats into storm drain	No violation, but corrective actions: 1.train employees on SW mgmt, keep log. 2.do not clean floor mats outdoors. 3.if hosing outside areas, contain wash water. 4. obtain secondary containment and overhead coverage for grease bins. 5. spill kit	7/30/07 FU inspection by Mike Emerson showed no 2nd containment for grease bin, no spill kit. appears they are washing mats into storm drain. took photos. 7/31/07: owner uses biodiesel systems and keeps oil in original container inside for employee.		Eating/Drinking Establishment
38236	06/04/2007	Moonlight Grille	By RYGIEL, KRISTINE: 6/18/2007 11:51:51 AM Inspection by PBS&J By RYGIEL, KRISTINE: 10/26/2007 3:19:26 PM Follow up done 9/24/07 by Ben Taylor and Mike Emerson. Owner needs to construct proper grease storage and fix discharges to sewer connection	No violations, but corrective actions: 1.train employees on SW mgmt, keep log. 2.obtain secondary containment and overhead coverage for grease bin. 3.contain all wash water when cleaning picnic tables.	10/30/07 Dana (GM) called and will complete work by 11/2/07. 11/05/07 Grease BMPs in place per Mike Emerson.		Eating/Drinking Establishment
38264	06/11/2007	City of Encinitas Calle Magdalena Yard	By RYGIEL, KRISTINE: 6/18/2007 5:04:05 PM Inspection by Mike Emerson By RYGIEL, KRISTINE: 7/30/2007 10:51:34 AM Follow up inspection done 7/26/07. Clean trash and recycle areas and sand bags removed and replace w/new ones. per Mike Emerson.	No violations, but corrective actions: 1.clean trash and recycle areas. 2.obtain spill kit and plan. 3.store heavy equipment and vehicles in garage or under canopy. 4.label outdoor storage containers. 5. replace torn sand bag especially near drain.	Initial inspection done by Mike Emerson on 6/11/07. Entered in Storm Water Cityworks WO#38264. 7/26/07 follow up. clean trash and recycle areas. Remove sand bags and replace with new ones.		Municipal

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38266	06/13/2007	Basil Tops	By RYGIEL, KRISTINE: 6/18/2007 5:14:47 PM Inspection by Mike Emerson.	No violations or corrective actions.			Nursery
38288	05/18/2007	Seven-Eleven #18087	By RYGIEL, KRISTINE: 6/19/2007 9:59:54 AM inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.keep trash bin lids closed and pick up litter in trash bin area.			Eating/Drinking Establishment
38291	05/09/2007	Cap'n Keno's	By RYGIEL, KRISTINE: 6/19/2007 11:14:56 AM Inspection by PBS&J	No violations, but corrective actions: 1. clean up outdoor storage area-move under cover or remove storage materials. 2. conduct annual employee SW training. 3.obtain spill kit.			Eating/Drinking Establishment
38294	05/09/2007	Juanita's Tacos	By RYGIEL, KRISTINE: 6/19/2007 11:58:08 AM Inspection by PBS&J	No violations, but corrective actions: 1.conduct annual SW employee training. 2.obtain spill kit. 3. clean/dry sweep trash area, keep lids closed. 4.fax/mail copy of grease trap main invoice to MP.	Follow up completed 7/19/07 by Mike Emerson. Ricardo Gonzales showed him the grease trap invoice. Diamond 760-744-7191. Acct #385675. Emptied 6/12/07.		Eating/Drinking Establishment
38296	05/10/2007	The Potato Shack	By RYGIEL, KRISTINE: 6/19/2007 12:13:32 PM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.fax most current grease trap to MP. 3. keep trash bin lids closed. 4. have Darling or kitchen staff clean grease bin.			Eating/Drinking Establishment
38311	05/21/2007	Subman	By RYGIEL, KRISTINE: 6/19/2007 4:25:16 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/9/2007 4:27:42 PM Business license # 21227, expires 5/31/08 per Mike Emerson.	No violations, but corrective actions: 1.obtain current business certificate, fax copy to MP. 2.train employees on SW mgmt, keep a log.			Eating/Drinking Establishment
38313	05/21/2007	Subway #1442	By RYGIEL, KRISTINE: 6/19/2007 4:34:55 PM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.keep trash bin lids closed. 3.obtain spill kit.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38315	05/22/2007	Mozy Cafe	By RYGIEL, KRISTINE: 6/19/2007 4:51:15 PM Inspection by PBS&J	No violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2.obtain spill kit, keep accessible to employees.			Eating/Drinking Establishment
38338	05/16/2007	D Street Bar and Grill	By RYGIEL, KRISTINE: 6/20/2007 2:30:31 PM Inspection by PBS&J	No violations, but corrective actions: 1.keep trash bin lids closed, and pick up litter in trash bin area. 2.fax a copy of most recent grease trap cleaning invoice to MP. 3.obtain spill kit, keep accessible to employees.			Eating/Drinking Establishment
38368	05/22/2007	Bird House Grill	By RYGIEL, KRISTINE: 6/22/2007 11:31:40 AM Inspection by PBS&J	No violations, but corrective actions: 1. keep a record of employee training. 2.remind construction crew to contain any water used during construction and not to discharge into street or storm drains.			Eating/Drinking Establishment
38371	05/22/2007	Beach Tea House 101	By RYGIEL, KRISTINE: 6/22/2007 11:44:03 AM inspection by PBS&J	no violations, but corrective actions: 1.keep a log of trained employees.			Eating/Drinking Establishment
38376	05/23/2007	Jam Roc 101	By RYGIEL, KRISTINE: 6/22/2007 1:06:13 PM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2. keep outdoor storage area organized, picked up and clean.			Eating/Drinking Establishment
38390	05/23/2007	Leucadia Donut	By RYGIEL, KRISTINE: 6/22/2007 3:30:55 PM Inspection by PBS&J	No violations, but corrective action: 1.keep a record of trained employees			Eating/Drinking Establishment
38392	05/24/2007	Thai Pan Cuisine	By RYGIEL, KRISTINE: 6/22/2007 4:02:34 PM Inspection by PBS&J	No violations, but corrective actions:1.train employees on SW mgmt, keep log. 2.clean grease drips in front of grease bin. 3.Get spill kit. 4.keep trash bin lids closed. 5.store mops/cleaning supplies indoors. 6.send copy of bus. cert. to MP.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38441	06/11/2007	Mr. Peabody's	By RYGIEL, KRISTINE: 6/25/2007 4:48:43 PM Inspection by PBS&J	No violations, but corrective actions: 1.Store dirty laundry indoors or under cover. 2.keep trash bin lids closed and trash area free of litter/debris. 3.train employees on SW mgmt, keep a log. 4.obtain secondary tray and overhead cover for grease bin	7/31/07 follow up by Mike Emerson. manager was working on cover during inspection. issued NOV to comply by 8/8/07. Follow up 8/8 showed proper grease storage.	7/31/07	Eating/Drinking Establishment
38461	05/29/2007	Flippin' Pizza	By RYGIEL, KRISTINE: 6/26/2007 9:34:50 AM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2. keep trash bin lids closed.			Eating/Drinking Establishment
38462	05/29/2007	It's a Grind	By RYGIEL, KRISTINE: 6/26/2007 10:18:29 AM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.obtain spill kit. 3.keep trash bin area clean and free of litter.			Eating/Drinking Establishment
38463	05/29/2007	Rico's Taco Shop	By RYGIEL, KRISTINE: 6/26/2007 10:27:12 AM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log.			Eating/Drinking Establishment
38464	05/30/2007	Starbuck's	By RYGIEL, KRISTINE: 6/26/2007 2:11:48 PM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.Fax copy of business cert to MP. 3.Keep trash bin lids closed.			Eating/Drinking Establishment
38465	05/30/2007	Juice Stop	By RYGIEL, KRISTINE: 6/26/2007 2:59:56 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/10/2007 4:12:35 PM No business certificate as of 7/10/07 per Cynthia Miller. KR.	No violations, but corrective actions: 1. train employees on sw mgmt, keep a log. 2. fax current business cert to MP.			Eating/Drinking Establishment
38469	06/25/2007	Encinitas Ranch Golf Course	By TROTTER, DONNA L: 7/11/2007 9:04:52 AM Inspection of Golf Course -initial inspection By RYGIEL, KRISTINE X: 7/18/2007 9:08:26 AM follow up completed by Mike Emerson on 7/17/07. All corrective actions taken- in compliance.	No violations, but corrective actions: 1. move soda machine away from downspout approx 1 foot. 2.consider secondary containment for stockpiles. 3.need secondary containment for new oil. 4.remove/cover equip stored outdoors. 5. cover fueling area.	follow up completed by Mike Emerson on 7/17/07. All corrective actions taken- in compliance.		Golf Course

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38483	06/21/2007	Fender Mender		No violations, but corrective actions: 1. train employees on SW regulations, keep log.			Auto Body Repair/Painting
38484	06/26/2007	SoCal Inc		No violations, but corrective actions: 1.obtain spill kit, train employees on spill response plan. 2.perform SW mgmt training, keep log.	7/26/07 Owner showed Mike Emerson training log, spill kit w/plan, and 2nd containment.		Auto/Other
38486	06/26/2007	Coastal Foreign Auto Service	By RYGIEL, KRISTINE X: 7/30/2007 9:34:36 AM 7/26/07 Follow up by Mike Emerson. obtained 2nd containment for coolant and has two more on order for oils. will FU to confirm use by 8/9/07.	No violations, but corrective actions: 1.provide secondary containment of hazardous fluids. 2.train employees on storm water mgmt, keep a log. 3. spill response plan. 4.monitor trash area and report problems to prop manager.	7/26/07 Follow up by Mike Emerson. obtained 2nd containment for coolant and has two more on order for oils. will FU to confirm use by 8/9/07.		Auto Repair/ Maintenance
38503	06/26/2007	Encinitas Japanese Car Specialist, Inc	By RYGIEL, KRISTINE X: 7/30/2007 9:18:54 AM 7/26/07 Owner showed Mike Emerson training log, spill kit w/plan, and 2nd containment.	No violations, but corrective actions: 1. train employees, keep log. 2. create spill response plan, train staff. 3.provide secondary containment for all hazardous waste and storage. 4. close trash container located outside.	7/26/07 Owner showed Mike Emerson training log, spill kit w/plan, and 2nd containment.		Auto Repair/ Maintenance
38505	06/25/2007	Hazar Inc DBA Precision Tune Auto Care	By RYGIEL, KRISTINE X: 7/30/2007 10:08:04 AM Follow up completed 7/26/07 by Mike Emerson. secondary containment ok.	No violations, but corrective actions: 1.provide secondary containment for storage tanks for oils, hazardous waste, and other liquids.	Follow up completed 7/26/07 by Mike Emerson. secondary containment ok.		Auto Repair/ Maintenance
38506	06/25/2007	Camino Transmission	By RYGIEL, KRISTINE X: 6/28/2007 12:09:02 PM business is shutting down, but hell give storm water info to new tenant	No violations, but corrective actions: 1.provide secondary containment for hazardous materials/liquids. 2.cover and provide secondary containment of air compressor. 3. train employees on SW mgmt, keep log. 4. keep trash lids closed.	Follow up completed 7/26/07 by Mike Emerson. secondary containment ok.		Auto Repair/ Maintenance
38507	06/21/2007	Franco's Flowers	By RYGIEL, KRISTINE X: 7/9/2007 12:59:46 PM Follow up complete by Mike Emerson 7/5/07. he suggested more waste and recycle containers, keep area clean.	no violations, but corrective actions: 1.provide more containers for recycling & close lids. 2.properly store trash in containers. 3.provide roof for compressor north. 4. properly store fertilizers & plants under cover and secondary containment.	Follow up completed by Mike Emerson. Suggested more waste and recycling containers, and keep area clean.		Nursery

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38657	06/04/2007	City of Encinitas Requeza Yard	By RYGIEL, KRISTINE X: 7/9/2007 1:07:26 PM Follow up 6/18/07 found discarded battery and torn tarps on equipment on SW corner next to port-a-potty. Follow up on 6/28/07 yard in compliance per Mike Emerson.	No violations, but corrective actions: 1.make spill kit accessible. 2.properly store paint cans in covered area.- there are 4 paint containers stored on NE part of yard.	6/28/07 yard in compliance per Mike Emerson		Municipal
38727	06/21/2007	El Camino Tire and Brake	By RYGIEL, KRISTINE X: 7/11/2007 1:03:51 PM they received the EPA auto body and paint shops fact sheets book By RYGIEL, KRISTINE X: 7/11/2007 1:04:57 PM Follow up completed on 7/3/07. need to check and give written notice for secondary containment	No violations, but corrective actions: 1.compressor, oil, brake fluid need overhead cover and secondary containment. 2.close trash/recycle containers. 3.train employees on SW mgmt, keep log.	7/3/07 need to check and give written notice for 2nd containment of indoor storage per Mike Emerson. 7/26/07 obtained 2nd containment, but need overhead coverage	7/26/07	Auto Repair/ Maintenance
38741	06/21/2007	Twin Star Ventures DBA Midas	By RYGIEL, KRISTINE X: 7/11/2007 2:41:43 PM 7/3/07 Need to give written notice of required secondary containment of oils and other fluids stored indoors.	No violations, but corrective actions: 1.train employees on SW regulations and keep log. 2.develop a spill response plan.	7/26/07 Owner showed Mike Emerson training log, spill kit w/plan, and 2nd containment.		Auto Repair/ Maintenance
38746	05/30/2007	Quizno's Sub	By RYGIEL, KRISTINE: 7/11/2007 5:08:45 PM Inspection by PBS&J	No violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2. keep trash bin lids closed.			Eating/Drinking Establishment
38747	06/01/2007	Jorge's	By RYGIEL, KRISTINE: 7/11/2007 5:15:07 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/11/2007 5:25:45 PM Consider contacting property manager regarding drainage that flows thru grease bin area. flow should be diverted around grease bin.	No violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2.obtain spill kit, keep accessible to employees.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38766	06/01/2007	Starbuck's #6546	By RYGIEL, KRISTINE: 7/12/2007 2:50:00 PM Inspection by PBS&J By RYGIEL, KRISTINE: 7/16/2007 10:20:19 AM Business Cert # 15568 Exp. 5/31/08. KR	no violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2. obtain spill kit, keep accessible to employees.			Eating/Drinking Establishment
38767	06/01/2007	Subway#27567	By RYGIEL, KRISTINE: 7/12/2007 3:37:00 PM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.fax copy of grease interceptor cleaning invoice to MP.			Eating/Drinking Establishment
38768	06/04/2007	China Town	By RYGIEL, KRISTINE: 7/12/2007 3:52:34 PM Inspection by PBS&J	No violations, but corrective actions: 1. Train employees on SW mgmt, keep a log. 2.don't clean floor mats outside, clean inside. 3.obtain spill kit, keep accessible to employees.			Eating/Drinking Establishment
38769	06/04/2007	Encinitas Yogurt & Ice Cream	By RYGIEL, KRISTINE: 7/12/2007 4:26:27 PM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.properly dispose of old signs and fluorescent light bulb. 3. keep trash bin lids closed.			Eating/Drinking Establishment
38771	06/07/2007	Pannikin	By RYGIEL, KRISTINE: 7/12/2007 4:49:07 PM Inspection by PBS&J	no violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2. keep trash bin lids closed.			Eating/Drinking Establishment
38772	06/04/2007	Siamese Basil	By RYGIEL, KRISTINE: 7/12/2007 5:07:18 PM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2. obtain spill kit, keep accessible to employees.			Eating/Drinking Establishment
38779	06/07/2007	Starbuck's #5737	By RYGIEL, KRISTINE: 7/16/2007 9:47:59 AM Inspection by PBS&J	no violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2. make sure cleaning company does not wash floor mats outside.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38780	06/07/2007	When In Rome	By RYGIEL, KRISTINE: 7/16/2007 10:29:41 AM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.keep trash bin lids closed. 3.store all cleaning products indoors. 4.fax copy of most recent grease trap maintenance invoice to MP.			Eating/Drinking Establishment
38781	06/11/2007	Sub Palace	By RYGIEL, KRISTINE: 7/16/2007 11:04:35 AM Inspection by PBS&J	no violations, but corrective actions: 1. train employees on SW mgmt, keep a log.			Eating/Drinking Establishment
38782	06/04/2007	Starbuck's #5391	By RYGIEL, KRISTINE: 7/16/2007 11:22:25 AM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep a log.	Follow up completed by Mike Emerson 7/12/07. received emailed grease maintenance info 7/16/07.		Eating/Drinking Establishment
38784	06/11/2007	Filippi's Pizza Grotto	By RYGIEL, KRISTINE: 7/16/2007 1:00:45 PM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.dispose of kitchen equipment outside or store inside.			Eating/Drinking Establishment
38785	06/14/2007	Jorge's Mexican Food	By RYGIEL, KRISTINE: 7/16/2007 1:11:04 PM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2. obtain spill kit, keep accessible to employees.			Eating/Drinking Establishment
38786	06/14/2007	Sake House (Yumeya)	By RYGIEL, KRISTINE: 7/16/2007 1:28:10 PM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.fax copy of most recent grease maintenance invoice to MP. 3.get lids for recycling containers.			Eating/Drinking Establishment
38787	06/21/2007	Blue Fin Sushi	By RYGIEL, KRISTINE: 7/16/2007 1:44:24 PM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.fax copy of most recent grease maintenance invoice to MP. 3.cover mops/brooms stored outside, or store indoors.	7/26/07 follow up by Mike Emerson. Restaurant obtained spill kit.		Eating/Drinking Establishment
38791	06/15/2007	La Bonne Bouffe	By RYGIEL, KRISTINE: 7/16/2007 2:54:38 PM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.keep trash enclosure clean, bin lids closed. 3.cover laundry bin and store mop bucket indoors. 4.fix leaky hose or find source of water in trash area and repair.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38802	06/11/2007	Nrgize Lifestyle Cafe	By RYGIEL, KRISTINE: 7/16/2007 3:48:47 PM inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2. keep trash bin lids closed.			Eating/Drinking Establishment
38803	06/06/2007	Beachside Grill (formerly Bella Rosa)	By RYGIEL, KRISTINE: 7/16/2007 4:00:01 PM Inspection by PBS&J	no violations, but corrective actions: 1. keep a record of trained employees			Eating/Drinking Establishment
38813	05/14/2007	Honey's Bistro	By RYGIEL, KRISTINE: 7/17/2007 9:12:43 AM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.obtain spill kit, keep accessible to employees. 3. keep empty boxes in cardboard bin or under cover. 4.fax most recent grease trap maintenance invoice to MP			Eating/Drinking Establishment
38823	05/24/2007	Skedaddles (Target)	By RYGIEL, KRISTINE: 7/17/2007 9:46:45 AM Inspection by PBS&J	No violations, but corrective actions: 1.fax business cert and most recent grease maintenance invoice to MP. 2.train employees on SW mgmt, keep a log. 3.clean litter under trash compactor outside.	Follow up on 7/31/07 by Mike Emerson. Obtained grease pick up company info. will get business certificate info from store manager.		Eating/Drinking Establishment
38824	05/21/2007	Mister Sushi	By RYGIEL, KRISTINE: 7/17/2007 10:31:49 AM Inspection by PBS&J	No violations, but corrective actions: 1.dont dump mop water or clean floor mats outside. 2.sweep leaves outside w/ broom instead of hosing off. 3.obtain spill kit. 4. fax property manager name, phone, fax to MP. 5.obtain business certificate.	7/18/07 Mike Emerson contacted manager Yoshinori juroki and requested overhead cover and 2nd containment for grease. 8/27/07 they have grease bmps, need spill kit		Eating/Drinking Establishment
38825	05/24/2007	Stater Brothers	By RYGIEL, KRISTINE: 7/17/2007 11:15:07 AM Inspection by PBS&J	no violations, but corrective actions: 1.keep a log of trained employees. 2. fax most recent grease trap maintenance invoice to MP- Done.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38826	05/16/2007	Champagne French Bakery Cafe	By RYGIEL, KRISTINE: 7/17/2007 12:01:43 PM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.fax copy of current bus. cert and power washing company info to MP. 3.obtain spill kit, keep accessible to employees.	8/1/07 Mike Emerson contacted store manager anna montes to fax power washing info to him. 8/9/07 Mike Emerson called and requested power washing info. received via fax on 8/9/07. Ellis Enterprises 562-493-5550		Eating/Drinking Establishment
38827	05/16/2007	7-Eleven #21805	By RYGIEL, KRISTINE: 7/17/2007 1:18:26 PM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.keep spill response kit accessible to employees. 3.fax copy of current bus cert to MP.			Eating/Drinking Establishment
38828	06/20/2007	El Cortez	By RYGIEL, KRISTINE: 7/17/2007 1:32:03 PM Inspection by PBS&J	no violations, but corrective actions: 1.conduct annual storm water training for employees. 2.obtain spill kit. 3.provide City with copy of valid business license.	Mike Emerson completed follow up inspection on 8/13/07. Dropped off business certificate application.		Eating/Drinking Establishment
38855	05/14/2007	E Street Cafe	By RYGIEL, KRISTINE: 7/18/2007 2:02:13 PM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2. obtain spill kit, keep accessible to employees.			Eating/Drinking Establishment
38858	05/16/2007	Wendy's #3015	By RYGIEL, KRISTINE: 7/19/2007 8:45:39 AM Inspection by PBS&J By RYGIEL, KRISTINE: 7/19/2007 8:53:17 AM Have inspector Mike Emerson look into overhead coverage and secondary containment.	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.clean grease on the outside of grease bin- do not allow any wash water to enter storm drain. 3.obtain spill kit, keep accessible to employees.	Follow up by Mike Emerson on 7/23/07. Informed Gabriel Lira, asst manager, that he needs overhead coverage and 2nd containment for grease storage by 8/23/07. 8/28/07 follow up showed grease BMPs in place.		Eating/Drinking Establishment
38883	05/16/2007	The Original Pancake House	By RYGIEL, KRISTINE: 7/19/2007 4:35:48 PM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on sw mgmt, keep a log. 2.obtain spill kit, keep accessible to employees.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38884	05/16/2007	Encinitas Cafe	By RYGIEL, KRISTINE: 7/19/2007 5:00:46 PM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep log. 2.get more kitty litter for spill kit.			Eating/Drinking Establishment
38885	05/24/2007	Kealani's	By RYGIEL, KRISTINE: 7/20/2007 8:28:19 AM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep a log.			Eating/Drinking Establishment
38886	05/24/2007	Pizzicato	By RYGIEL, KRISTINE: 7/20/2007 8:56:17 AM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2. keep bin lids closed, trash in containers. 3.consider contacting prop manager regarding persistent trash problems in trash bin enclosure.			Eating/Drinking Establishment
38887	05/29/2007	Isabelle Briens	By RYGIEL, KRISTINE: 7/20/2007 9:31:00 AM Inspection by PBS&J	no violations, but corrective actions: 1.keep trash cans, laundry, and paint under covered area. 2.train employees on SW mgmt, keep a log.	Follow up by Mike Emerson on 7/24/07. Business cleaned and resealed grease area and obtained overhead coverage and secondary containment.		Eating/Drinking Establishment
38893	06/04/2007	Smart & Final	By RYGIEL, KRISTINE: 7/20/2007 9:55:29 AM Inspection by PBS&J	no violations, but corrective actions: 1. train employees on SW mgmt, keep a log. 2. keep trash bin lids closed.			Eating/Drinking Establishment
38896	06/04/2007	Tuscan Sun deli	By RYGIEL, KRISTINE: 7/20/2007 10:21:05 AM Inspection by PBS&J	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2. get lid for small trash can or keep can indoors. 3. keep bin lids closed.			Eating/Drinking Establishment
38900	06/06/2007	Miyabi	By RYGIEL, KRISTINE: 7/20/2007 10:49:34 AM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.do not put cigarette butts or other debris down the storm drain inlet.			Eating/Drinking Establishment
38901	06/06/2007	Pino's Cucina Italiana	By RYGIEL, KRISTINE: 7/20/2007 11:20:21 AM Inspection by PBS&J	no violations, but corrective actions: 1.keep record of trained employees. 2.cover linen bin to keep dry during rain.			Eating/Drinking Establishment
38902	06/14/2007	Seaside Market	By RYGIEL, KRISTINE: 7/20/2007 11:31:14 AM Inspection by PBS&J	no violations, but corrective actions: 1.train employees on SW mgmt, keep log. 2.clean grease spill near trash compactor and litter in loading area. 3.mop up water spilled near loading area. 4.post spill response plan. 5.keep record of oil pickup.			Eating/Drinking Establishment

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38980	05/21/2007	Pizza Hut	By RYGIEL, KRISTINE: 7/25/2007 1:31:38 PM Inspection by PBS&J	no violations but corrective actions: 1.train employees on SW mgmt, keep a log. 2.keep trash bin lids closed, trash area clean.			Eating/Drinking Establishment

CityGIS

Basic Training

Manual

City of Encinitas

August, 2007

CityGIS Interface Components

A. This is the ***Table of Contents*** (TOC) of the application. This is where you will see which layers of GIS data are in the map.

- Layers can be turned on and off by adding a check mark in the square box next to the layer.
- Layers can be expanded and collapsed by clicking the plus sign on and off, expanding the layer reveals legend symbols or additional data layers in the group. Many layers are grouped together. You can expand a group to see all the layers it contains.

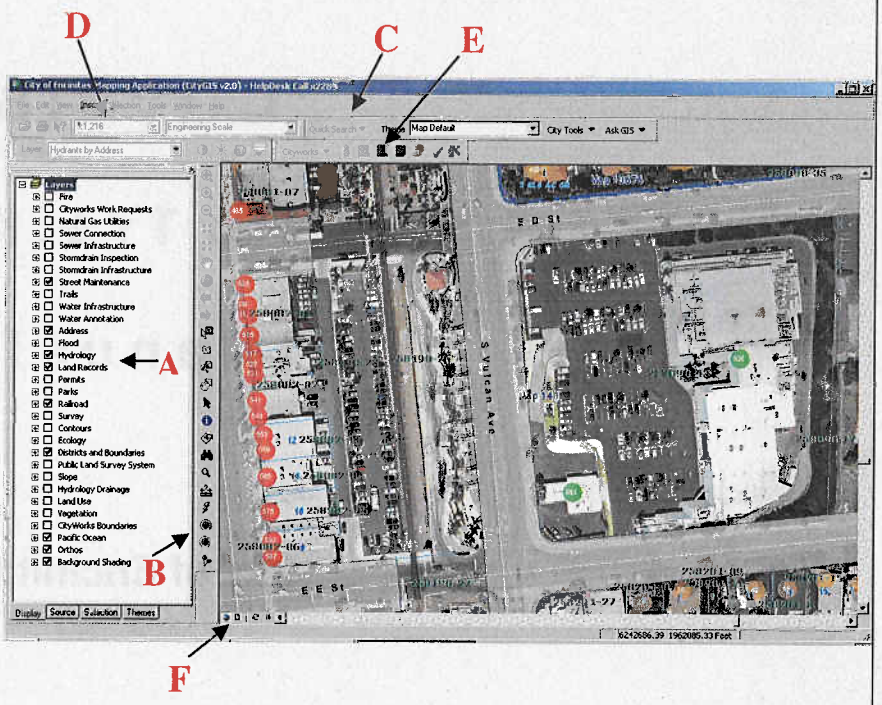
B. This is the ***Standard Map Tool Bar***.

C. This is the ***CityGIS Toolbar*** containing four menus: 1) Quick Search, 2) Theme Selector, 3) City Tools and 4) Ask GIS.

D. ***Scales*** – shows Absolute map scale and a handful of corresponding Engineering map scales.

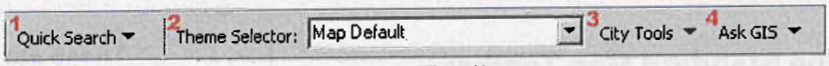
E. ***Cityworks Toolbar*** – if you're a Cityworks user, the toolbar will appear. You need to be logged in to Cityworks for this toolbar to be active.

F. ***Data View*** – This is your working view. ***Layout View*** – this is your printing view, which defaults to a D size map (36"x24") layout. Pay attention to the scale when switching from Data View to Layout View.



CityGIS Toolbar

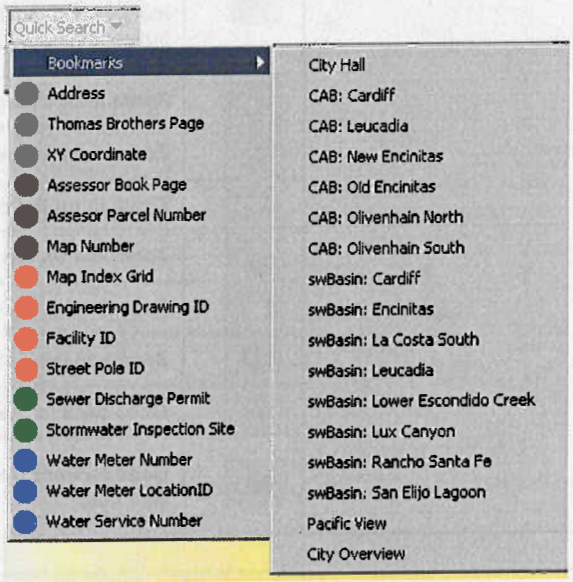
The CityGIS Toolbar contains **four** menus that have been created by the GIS Division. For this training, we will review menus 1 and 2.



Custom Toolbar

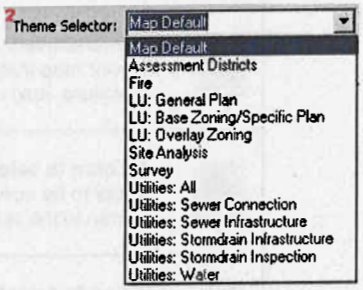
Menu 1: Quick Search

Clicking on this button produces a drop-down menu listing items that you can search on.



Menu 2: Theme Selector

Clicking on this button produces a drop-down menu containing themes based on the layers in the TOC.



Selecting a theme will turn on/turn off layers in the TOC based on a particular focus of interest, for example, "Utilities: All" will show all Water, Stormwater, and Sewer Infrastructure that's been mapped (input into GIS).

The Standard Map Toolbar

	These are some of the functions of the tool bar.	
Panning and Zooming		**Continuous Zoom In/Out and Pan.** This tool allows you to zoom in or out on the map, and also allows you to pan. To zoom in or out, hold down the left mouse button and move the mouse. To pan, hold down the right mouse button and drag the map.
		**Zoom in** by clicking a point or dragging a box
		**Zoom out** by clicking a point or dragging a box
		**Zoom in on the center** of your map
		**Zoom out on the center** of your map
		**Pans** the data by dragging the display in any direction
		**Zooms to the full extent** of your data in the map
		**Goes back to the previous extent** of the data your were viewing in your map
		**Goes forward through the sequence of extents** you have been browsing in your map

Selecting and Identifying		**Unselect/clear the currently selected features** in all layers. You will need to have some features selected for this tool to be active. Click on the tool and it will clear the selected set of features.
		**Interactively Selects Features** geographic features belonging to layers on your map that are currently set as "selectable". To Select more than one feature, hold down the shift key while using this tool to select features.
		**Zoom to selected features.** You will need to have features selected for the tool to be active. Click on the tool and it will automatically pan and zoom the map to the selected features.
		**Pan to selected features.** You will need to have features selected for the tool to be active. Click on the tool and it will automatically pan the map to the selected features.
		**Identify the feature you click on.** An Identify Results box will pop up after the feature is clicked on using this tool. Make sure the correct layer to identify is listed in the "Layers" drop-down list. Any attribute information that is stored in the GIS database for the feature you identified will display in the "Identify Results" window.
		**Site Profiler tool.** This is similar to the Identify tool above, except that it will report back all kinds of information about the location that you clicked on using this tool.

Miscellaneous Tools		**Measure Distances** on the map. The distance is shown in the display units for the current data frame. For Encinitas, distances measured on the map are in feet.
		**Find Map Coordinates** on the map. Use this tool to click on a feature or location on the map. It will return x,y coordinates in Stateplane and Lat/Long Decimal Degrees.

Exercise 1: Working with the TOC

Most of the time, you should be able to choose a theme from the Theme Selector on the CityGIS toolbar to turn on the data you need. However, in some cases, you may want to turn layers on or off manually – and you can do that by finding the layer you want in the TOC (many layers are buried as you will see) and turning it on or off.

1. Change the theme to 'Utilities: Sewer & Storm Infrastructure' (Choose from the drop-down list in the Theme Selector).

2. Expand 'Pipe Infrastructure' then 'Sewer Infrastructure' in the TOC. Expand 'swr Manhole'. (click on the +)
   This shows the symbol legend for Manholes. As you can see, Manholes are symbolized by both their type and status. What's the color of active drop manholes?
3. _____

4. Turn off the Orthos

5. Turn on both the 10-ft Index Topo and the 2-ft Topo under Contours > 2005 Contour (black). (*Hint: Make sure to check on all "parent" groups).*
   Why does one draw but not the other? _____

Exercise 2: Panning and Zooming, and Changing Scale

There are several zoom and pan tools to choose from. Experiment with them and determine which ones you like to use best.

1. Go back to the City Hall extent. (*Click on 'Quick Search', then choose 'Bookmarks', then click on 'City Hall'.)*

2. Return to Map Default. (*Choose 'Map Default' at the top of the Theme drop-down list.*)

3. Zoom in to the intersection of 'D' Street and Vulcan using one of the Zoom In tools on the Standard Toolbar.

4. Change the scale to 1" = 50 ft using the Engineering scale.

5. Change the scale to 1" = 100 ft using the Absolute scale (*HINT: In Encinitas' GIS, to find the Engineering scale, absolute scale is always divided by 12, since we map everything in Stateplane NAD83 feet, so to get 1" = 100 ft, just multiply 100 x 12 and put that value in the absolute scale box). What's the value?* _____

6. Zoom out until you see Second St using on of the Zoom Out tools on the Standard Toolbar.

7. Pan the map over to the west until you see the coastline.

8. Get back to the City Hall map extent by choosing 'City Hall' from the 'Bookmarks' under the 'Quick Search' drop-down list.

Exercise 3: Changing Themes and Searching for an Address or Intersection

Some of the most important functions you will use are selecting the right theme to work in (which theme has the data you are interested in?) and searching. There are a number of different ways to get to a particular location, or to find a particular feature. We'll explore a few of the search options in this exercise.

Address and Intersection Search HINTS:

- *Make sure your map is zoomed in enough so that when the search is executed, it will be easy for you to tell where the search result is. Usually the 'City Hall' map extent is a good default to start with when searching for intersections or addresses*
- *Spell out street names (e.g. don't put 'El Cam Real')*
- *Don't worry about case – the locator is not case-sensitive (e.g. no need to capitalize the first letter)*

- *If you know the suffix – blvd, ave, st, rd, etc – include it if you want – but it's not absolutely necessary that you include it… it just helps sometimes – especially if streets have the same name, but different suffixes (e.g. Quail Gardens Dr and Quail Gardens Ln)*
- *If you type in an intersection and it's not being found, check the box 'Show all candidates'… this will improve your search*

1. Find a theme that interests you, and change the map to that Theme.

2. **Search for an Intersection.**

   a. Choose Quick Search > Address. Make sure the 'Addresses' tab is showing in the 'Find' window that pops up.

   b. Change the Address Locator to 'GIS.Street Name or Intersection'.

   c. Type in an intersection in the 'Street or Intersection' box and hit 'Enter' or click the 'Find' button. You can use any one of these 'intersection connectors' to separate the Street Names: **& | @ and at** (For example: el camino real & encinitas blvd).

   d. Once an intersection is located, it will appear in the box at the bottom (along with any other search results). Find the one that you want, right-click on it and choose 'Zoom to'.

3. **Search for an Address.** Do the same as above, but make sure the Address Locator is set to 'GIS.Address'. Type in an address, such as 1690 Wandering Rd. Once found, right-click on a search result and choose 'Zoom to'.

Exercise 4: Identifying and Selecting Features

Besides the actual features on the map, there is also a lot of 'attribute' information stored about the features – this is information that's kept in a table for each layer (also known as a 'feature class'). By using some of the tools on the Standard toolbar, you can find out more information about a particular location or feature that you are interested in. Also, selecting features is a necessary skill to learn if you will be creating work orders in Cityworks and you need to associate the work order to a particular feature or features.

1. **Get information about a particular location using the Site Profile tool.**
   The Site Profile tool is an efficient way for users to find a lot of information about a particular site.

   a. Go back to the 'Map Default' theme and the 'CAB Leucadia' extent (under Quick Search > Bookmarks).

   b. Zoom in until Parcels draw on the map.

   c. Select the 'Site Profile' tool in the Standard Toolbar.

   d. Click on a parcel with the 'Site Profile' tool. Look through the different tabs to get different information about the location.

      (General tab) How many site addresses are located on the parcel you chose? _____
      (Boundaries tab) What sewer district is the parcel in? _____
      (County Parcel tab) What's the APN? _____
      (Zoning tab) What's the General Plan zoning? _____

   e. Close the Site Profile tool (click on the 'x' in the top right corner)

2. **Get information about a particular feature using the Identify tool.**
   The Identify tool can help you get information about a particular feature – such as a pipe – that you would not be able to access using the Site Profile tool.

   a. Change the theme to 'Utilities: Water Infrastructure'.

   b. Zoom in to an intersection.

   c. Select the Identify tool on the Standard toolbar.

d. When the 'Identify Results' window pops up, choose <Visible layers> in the Layers drop-down list. Click on a water infrastructure feature, such as a valve or a pipe to see the information stored in the GIS database about that feature.

(NOTE: You can increase the size of the 'Identify Results' window by hovering over the bottom edge or corner of the window, then clicking and holding the mouse button down, and dragging the corner or edge to resize the window, or you can use the scroll bar on the side of the Identify Results window to scroll down and see additional attribute information.)

3. **Select features on the map.**
You will need to select a feature(s) when you are creating a work order in Cityworks, so that the work order is associated with a particular feature(s).

a. Close the Identify Results window. (Click on the 'x' in the top right corner)

b. Set the Engineering scale to 1" = 100'.

c. Find 'w Hydrant' in the TOC (Look under the 'Pipe Infrastructure' group, then the 'Water Infrastructure' group).

d. **Right**-click on 'w Hydrant' in the TOC and choose 'Selection > Make this the only selectable layer'.

e. Choose the 'Select Features' tool on the Standard toolbar.

f. With the tool, draw a box around a Hydrant on the map. When it's selected, it will highlight in a cyan color.

g. To clear the selected set, click on the 'Clear Selected Features' tool on the Standard toolbar.

IMPORTANT: If there are no features selected anywhere in the map, then the 'Clear Selected Features', 'Zoom to Selected Features' and 'Pan to Selected Features' tools will all be inactive (grayed out). Taking a quick look at these tools can help you determine if anything's selected... because you won't necessarily be able to tell... something could be selected on the other side of the City and you wouldn't know about it just by looking at the current map view. A good rule of thumb would be to click on the 'Clear Selected Feature(s)' tool first, before selecting what you want. That way you won't get any 'incorrect' features added to your work order.

Exercise 5: Finding Features by their FacilityID

As a Cityworks user, you may need to occasionally find a feature on a work order. When you select features and associate them with a work order, the FacilityID is listed on the work order. This will make more sense after you've taken the Cityworks training session. In any case, you can use the FacilityID Search to find a feature that's on a work order.

1. **Search for a feature by its FacilityID**

a. Change your theme to 'Utilities: Sewer & Storm Infrastructure'.

b. Get back to the City Hall map extent.

c. Choose 'FacilityID' from the 'Quick Search' drop-down list.

d. Find 'swr main public' in the Layer drop-down list of the Facility ID Search window. *(Hint: When you type the first letter of the layer name (in this case "s") you will automatically jump down to the first layer starting with "s" in the drop-down list)*

e. Type 12849 in the FacilityID box. Click Search.

f. The map will zoom to and select the sewer main that has the Facility ID of 12849SMAIN.

g. Unselect the feature using the 'Clear Selected Features' tool.

Exercise 6: Measure Distances and Get Coordinates

This exercise will get you familiar with a couple of handy tools.

1. **Measure approximate distances on the map.**

   a. Change the Theme to 'Map Default'.

   b. Click on the 'Measure' tool on the Standard toolbar.

   c. Click on the map with the tool. Measure something like the road right-of-way, or the width of a building.

   d. Drag the tool to the other side of the feature you are measuring and click again.

      What's the Segment Length? _____

   e. You can double click the tool to end the Measure session, else you can continue to measure additional segments. Double-click when you are done.

2. **Find Map Coordinates.**

   a. Click on the 'Find Map Coordinates' tool on the Standard toolbar.

   b. Click on an Intersection with the tool. A box will pop up with the coordinates of the meter you click on. *What are the State Plane coordinates (no need to write out the numbers to the right of the decimal point)?*

      _____

      What are the Lat/Long coordinates (just include 3 numbers past the decimal point)?

      _____

Congratulations! If you have successfully completed all the exercises above, you are well on your way to becoming an efficient CityGIS user!!

As a bonus – I'll let you in on one more thing.... You can click on 'Ask GIS' in the CityGIS toolbar, and select 'Submit User Request'... this will send an email to the GIS Division. We log all your requests – whether it is a bug fix, a data update, or an enhancement to the CityGIS application. We try to incorporate what we can in future releases of CityGIS.

CityWorks Training-I Manual

City of Encinitas

August, 2007

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Introduction

This training manual was designed to be City of Encinitas Cityworks specific, but departmentally generic. Each department or division may have its own specific task oriented procedures and may not use all documentation shown in this manual. Your personal login controls what access and privileges you have within Cityworks. All Map functionality covered here is accessible through the City's standard GIS application – CityGIS.

Getting Started

1) To access the training version of CityGIS, locate the following icon **(CityGIS_Train)** on your desktop. Double-click this icon to begin.



   a) A login screen for Cityworks is displayed. For training purposes make sure the database is set to "Cityworks", and then enter **'cwtrain'** for the User ID and **'gis'** for the Password for this training. Select the "Save Password" checkbox, and then click "OK."
   *(*Note: Normal operation requires your specific Cityworks username and password)*



Cityworks Login

   b) CityGIS will load and display with the default map layers and toolbars visible. Take a moment to locate the Cityworks toolbar, shown on the right.



Cityworks Toolbar

   c) If the Cityworks login screen did not appear, or the toolbar is not visible, click "Tools" on the CityGIS menu bar and then "Extensions." Check the box for



2) You are ready to start using Cityworks! Let's explore the functionality of the Cityworks Toolbar:

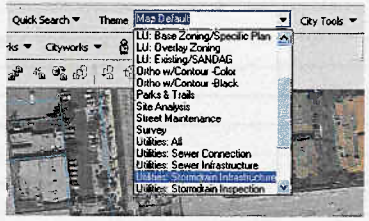


   a) ***Cityworks Dropdown Menu***: Displays additional Cityworks tools and commands.
   b) ***Create & Search Service Request Tool***: Performs creation and query of service requests.
   c) ***Create Work Order on Selected Feature Tool***: Performs creation of work order on selected asset.
   d) ***Search Work Order on Selected Feature Tool***: Performs query of work orders on selected asset.
   e) ***Cityworks Asset Identify Tool***: Returns information on selected Assets.
   f) ***Identify Cityworks Event Feature Tool***: Identifies Cityworks Event Features. *Not used at this time.
   g) ***Selectable Layers Tool***: Displays checkboxes for setting selectable CityGIS layers.
   h) ***Move Request/Work Order Location Tool***: *Un-usable at this time.

Turning on Specific Groups of Layers

CityGIS table of contents holds all available layers. To display specific groups of layers, you can select them from the Theme drop down list.

For training classes only, there is a 'Training' Theme available.



Creating a Service Request

Documenting the Problem

1) Create a new request by clicking on the **Service Request** button on the toolbar.

2) Select the type of problem from the **problem tree** by opening a folder and selecting a problem. The request is now ready to use.

   Cityworks menus are set to save the view from the last time they were used. So, if the Problem Tree is not visible, select the "Request" button on the main toolbar, then select the tree icon and the problem tree will appear.

3) Change the **Priority** if necessary.

4) Select the person to **Submit** request to, from the drop down list, or accept the defaulted person if there is one.

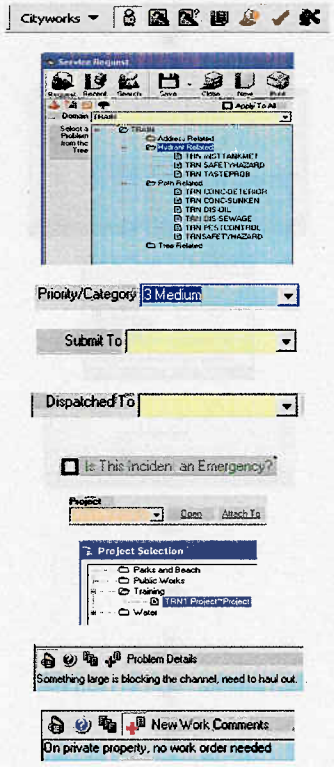
5) Select person to **Dispatch** request to, from the drop down list, or accept the default.

6) If the problem is an **emergency** click check box 'Is this incident an emergency?'

7) If the problem should be grouped with a **Project**, then use **"Attach To"** to attach it to an existing project. This pops up the project folder menu. Choose your department and the appropriate project, then click ok.

8) Enter supporting text in **'Problem Details'** window. This is limited to 256 characters.

9) Any additional useful information, or information gathered at the site should be entered in the **'Work Comments'** section.



Coast Highway 101 roads.

b) Select the correct street
c) Enter customer information or copy up the incident address.

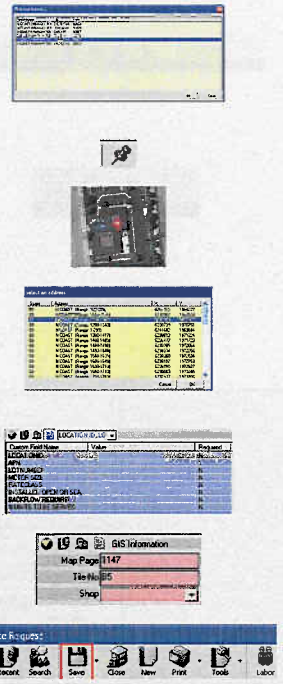
11) Associate the Service Request to an **Address or Location**

a) Click the **red pushpin** button to spatially locate the incident on the map.
b) If you have not filled in the house number, and are not using an intersection, you will receive a list of all valid address on the street.
c) Click on the header of the second column to sort the list by address number.
d) Now when you click on an address the map will pan to that location and display a red crosshairs on top of the address.
e) Find the correct address and click the 'OK' button.
f) Be sure to update the incident address by filling in the number.

12) Fill out any custom fields that were created for your department in the lower right pane by choosing the **Custom Data** icon if it is not already visible.

13) Choose the **GIS information** button to see the Thomas Brothers Page and Grid information in the lower right pane.

14) Complete the Service Request by clicking on the **'Save'** button at the top of the SR form.



Entering Labor (time) Information

1) Any time spent on investigating the problem can be documented clicking the **'Labor'** button and the screen at the right will appear.

2) Choose the staff from the list on the left, enter the hours and date of investigation, and



Creating a Work Order

From a Service Request

1) **Open** the proper Service Request if it is not already open.

2) **Click** on the **Red Push Pin** to spatially locate the Request.

3) **Switch to CityGIS**. You will see cross hairs indicating the location of the incident. Use the pan/zoom tools if necessary to zoom into the location. Get close enough to have the assets turn on. Use the **'Select Features'** tool to **select the proper asset**. (You may have to look at the detail information from the service request to locate the correct asset.) It will change to a cyan highlighted color once selected.

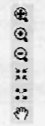
4) **Click** on the "Create WO on selected Asset" button from the Cityworks Toolbar.

5) If you have multiple types of assets selected, the form at the right will appear. Turn **OFF** the **'X'** to the left of each asset you **DO NOT** want attached to your work order.

6) The system will display a form that asks if you want the new work order related to the open Service Request, and lists several pieces of information that will be transferred from the service request to the work order. Check all the check boxes and **Click 'OK'**.

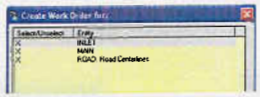
7) The system will display the form: 'Work Order'. Based on the asset selected, the form will display the Utility, selected Asset, and list the available types of Work Orders for that asset. **Double click** the type of work order needed from the right hand column.

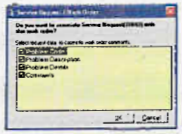


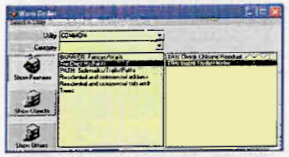










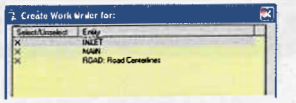


2) **Click** on the "Create WO on selected Asset" button from the Cityworks Toolbar.

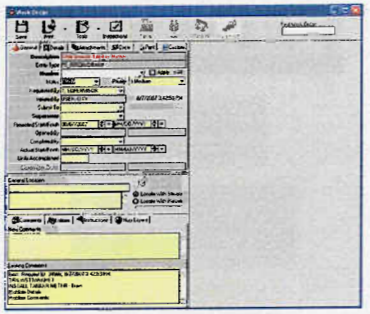
3) If you have multiple types of assets selected, the form at the right will appear. Turn **OFF** the **'X'** to the left of each asset you **DO NOT** want attached to your work order.

4) The system will display the form: 'Work Order'. Based on the asset selected, the form will display the Utility, selected Asset, and list the available types of Work Orders for that Asset. **Double click** the type of work order needed from the right hand column.









Fill out the additional required information:

1) The Work Order form will open. **Change the following fields** to the appropriate values:

   a) 'Priority' (if necessary)
   b) 'Submit To'
   c) 'Supervisor'

2) Notice that under the **'Comments'** tab you will see the Problem Details and Problem Comments from the Service Request, if the Work Order was opened from a Service Request. You can **add additional comments at any time.**

3) If there is additional information about the location such as the name of a business, ne/se corner, or linear feet, it may be helpful to type it into the 'General Location' box right below the address. This information gets printed with the Work Order.

Save Work Order

Click the **'Save'** button to record the work order and to give it a Work Order number. No labor, material, equipment, or inspections can be entered until the Work Order is saved.



Adding Labor, Equipment, and Material to a Work Order



Open the Work Order if it is not already open.

Labor

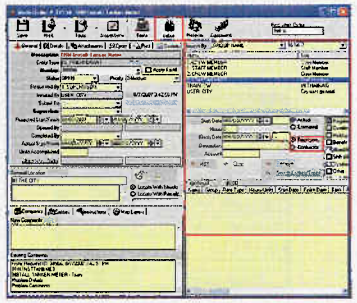
1) If you click the **'Labor'** button, the screen on the right appears.

2) If entering staff time Select **'Group Name'** under 'Search By'; then Select **'Staff'** or the appropriate group from the drop down list on the right side. This will populate the list of employees to choose from. Highlight one or more staff to add to the work order.

   If entering contractor time/cost change the option to **Contractor,** Select **'Contractor Hierarchy'** under search by, and select a contractor from the list.

3) Then fill in the **'Hours'**, **'Start Date/Time';' Finish Date/Time'**. Enter 'Amount' for contractors.

4) Click the **'Add'** button to add the employee's or contractor's time and cost.

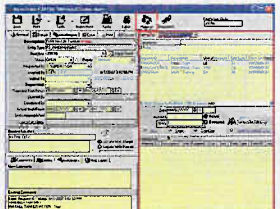


Material

1) If you click the **'Material'** button, the screen on the right will appear.

2) To complete the materials form, click on the **'HIERARCHY'** on the search by drop-down list. You will see a screen containing folders and a list of materials similar to the one on the right.

3) Select the correct material.



Equipment/Vehicles

1) If you click the **'Equipment'** button, the screen on the right will appear.

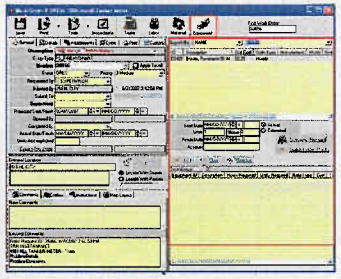
2) To complete the Equipment form, click on the **'HIERARCHY'** from the search by drop-down list. You will see a screen that looks like the one on the right.

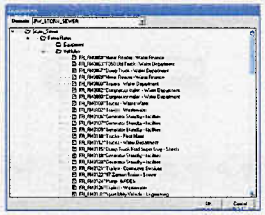
3) Find the correct equipment or vehicle and select it.

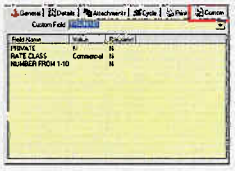
4) If the equipment is NOT provided by a contractor, fill out the **'Hours'** and click the **'Add'** button. *NOT the units.*

5) If the equipment was provided by a contractor, click on the **'Contractor Provided'** button and fill out the Contractor, Hours, Units, and Total Cost fields and click 'OK'

   Note: The rates in the system are the standardized citywide rates. Items starting with 'FR' use FEMA rates, otherwise the item uses city rates.







Work Order Custom Fields

1) Fill out any custom fields that were created for your domain in the upper left pane by choosing the **'Custom'** tab. Click in the value column to enter information. Click the **'General'** tab to return to the main panel.

Entering Inspections

Open your Inspection work order if not already open.

4) **Select** the correct inspection from the 'Template' drop down list.

5) **If** inputting multiple Inspections with the same inspection date, copy the date and inspectedby information to all the assets you have in the work order by checking the '**Apply to all Entities**' box in the lower left hand corner

6) You must **save the inspection** by clicking the '**Save**' button ***PRIOR*** to filling out any 'Observations'.

7) **Click 'Yes'** when asked if you want to create a new inspection.

8) If you checked the 'Apply to all Entities' box then Click **OFF** the 'Apply to all Entities' box in the lower left hand corner.

9) Choose the asset in the ID/Type dropdown list. *Note: If you chose to 'Apply to all Entities' then drop down in the list and rechoose the first one even though it is selected.*

10) **Click** on the '**Observations**' tab.

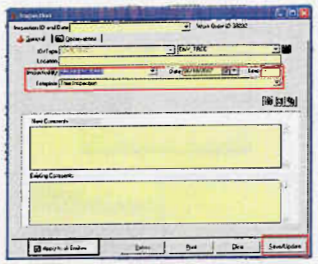
11) **Answer** each question and click on '**Add**' after each answer. *Note: if it is a 'free form' answer, you will need to click Add twice to bypass the 'explanation' field.*

12) When you are at the end of the question list, **click** the '**Save/Update**' button to save the inspection results. Click '**Yes**' to update.

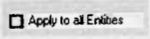
13) If you have multiple assets, return to the General tab of the Inspection form and select the next Facility ID from the ID drop down list, and repeat steps 9-12.

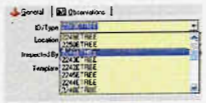
14) **Add** any other **desired comments** to the New Comments section on the General Tab, and click 'Save/Update'.

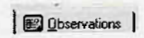
15) **Close** the inspection window when complete.

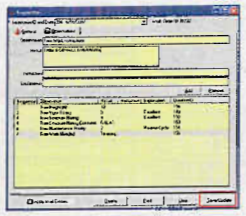


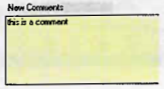












Closing a Work Order



After all inspections are completed and labor, equipment, material, costs, and comments are entered into the work order, the time period of the work should be entered and the work order closed from the **General** tab.

1) Select the staff from the '**Completed By**' drop down list.

2) **Click** on the down arrows on '**Actual Start/Finish**' dates and enter the start and finish dates for all work completed.

3) Use the blue '**Close Work Order**' button. Once closed, a work order can not be altered.

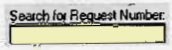
Searching

Quick Find Service Requests

1) **Click** on '**Create/Search Service Request**' button.

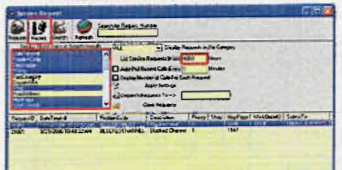


2) '**Search for Request Number**' field is available in the top right corner of any request screen. If you know the Request number you can type it in here and it will open.



OR

3) The '**Recent**' button on the top request tool bar opens the following screen.
   a. Single click on any '**Display these items in Search Result**' field from the list in the upper left box will highlight it. Any highlighted field will show in the list in the lower pane.
   b. Change the number of hours in the '**List Service Requests in last __ Hours**' to show those service requests in the list at in the bottom



Searching Service Requests

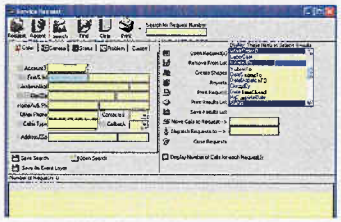
1) **Click** on **'Create/Search Service Request'** button.



2) **Click** on **'Search'** button from the top Service Request tool bar. Then choose **'Clear'** to clear any old search criteria from the forms.



3) The form on the right appears with several tabs and choices to use in searching for Service Requests. Below are some typically used choices. Any number of choices can be used in a single search. Use the **'Clear'** button to clear all forms of all choices.



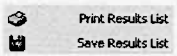
   a. **'Caller'** tab
      i. **Last Name** or **Address** to look up a specific request from a caller or location
   b. **'General'** tab
      i. **Initiated** date ranges when you know the approximate date the request was created
      ii. **Closed** date ranges when you know the approximate date the request was closed
      iii. **Initiated By, Submt To,** and **Closed By** fields to find requests related to specific staff
   c. **'Status'** tab
      i. **Status** field to limit the list to Open or Closed requests
      ii. **Category** or **Project** field to find specific groupings or types of requests
      iii. **Past Hours** similar to the **'Recent'** button.
   d. **'Problem'** tab
      i. Used to search for requests of a specific problem type
   e. **'Custom'** tab
      i. Used to search custom fields



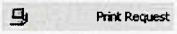
   the search will display in the lower section of the form and list information for the fields that are highlighted from the **'Display these items in Search Result'** list.

6) Double click on any Service Request in the list to open it.

7) You can print the list of Service Requests by choosing the **'Print Results List'** on the right side of the main search form. You can also save the list to a text file using the **'Save Results List'**.



8) You can print a single request or multiple requests (the entire request) from the list by highlighting the requests in the list you wish to print, and choosing the **'Print Request'** on the right side of the main search form.



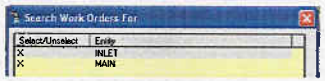
Searching Work Orders on an Asset

1) **In CityGIS** use the **'Find'** tool to locate an address or intersection in the map. Use the pan/zoom tools if necessary to zoom into the location. Use the **'Select Features'** tool to **select the proper asset**. It will change to a cyan highlighted color once selected.



2) Select the **'Search Work Orders on selected features'** button from the Cityworks menu.

3) If you have multiple types of assets selected, the form at the right will appear. Turn **OFF** the **'X'** to the left of each asset you **DO NOT** want to search for work orders on.

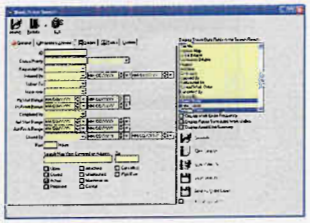


4) This will bring up a list of Work Orders that are related to the asset. Double click any of the work orders to open them.

2) Select the **'Search Work Orders on selected features'** button from the Cityworks menu.



9) The form on the right appears with several tabs and choices to use in searching for Work Orders. Below are some typically used choices. The General tab for Work Order Searches contains most the regularly used search criteria. Any number of choices can be used in a single search. Use the **'Clear Search'** button in the lower right panel to clear all forms of all choices.



   a. **'General'** tab
      i. **ID** field to enter a known work order ID
      ii. **Status** field to limit the search to Closed or Open work orders
      iii. **Initiated By** with date ranges when you want to limit the search to the person that initiated the work order, and/or the approximate date the work order was created
      iv. **Closed By** with date ranges when you want to limit the search to the person responsible for closing the work order and/or the approximate date the work orders were closed
      v. **Actual Start/Finish** date ranges to limit the time period the work order was completed in
      vi. **Past Hours** returns work orders initiated in the past number of hours
   b. **'Facilities/Activities'** tab
      i. Allows you to limit the search to specific assets or work order types.
   c. **'Details'** tab
      i. **Project, Map Page, Tile No.** fields to retrieve groups of

10) Single click on the fields from the **'Display these items in Search Result'** list in the right side box to highlight it. Any highlighted field will show in the list of search results.



11) **Click** on **'Search'** button in the lower right portion of the form to perform the search. The Work Orders that match the search will display in a **'Results'** form and list information for the fields that are highlighted from the **'Display these items in Search Result'** list.



12) The list of Work Orders can be saved to a text file using the **'Save List'** button at the bottom of the Results screen, or each highlighted (selected) work order can be printed by using the **'Print'** button at the bottom of the Results screen.





End of Cityworks Training I

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

Appendix D-4

STORM WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Type of Inspection: ☐ Annual (Date): _____ ☐ Follow-up (Date): _____ ☐ Complaint Investigation	
Business Name:	Size: SQ FT
Street Address:	Mailing Address:
Contact Person(s):	Property Manager:
Business Phone # :	Property Manager's Phone # :
Business Fax# :	Property Manager's Fax # :
How many employees does restaurant have? _____	Are they trained in storm water mgmt? ___Yes ___No
Does facility have a current Encinitas business certificate? Yes No #: _____ Exp: _____	
Does facility have a map/sketch of the site with flow lines and storm drains? ____Yes ____No ____Unknown	
Discharge observed? ____Yes ____No If yes, describe: _____	

A. Grease Management	Yes	No	N/A	Comments
1. Does facility have a grease trap or grease interceptor?				
2. Where is it located? ___Under the sink ___Outside ___Other: _____				
3. Who maintains the grease trap?	Contact Info: _____			
4. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
5. How many grease fryers are at facility? _____				
6. How often is fryer oil replaced? ___Weekly ___Monthly ___Every 6 months ___Annually ___Other _____				
7. How is used oil disposed of? ___Outside rendering service ___Sanitary sewer/sink ___Other: _____				
Company Name: _____ Phone #: _____				
8. Do oil-recycling/grease bins have overhead coverage?				
9. Do oil-recycling/grease bins have secondary containment?				
10. Are deep fryer oil-recycling drums stored properly?				
B. Cleaning	**Yes**	**No**	**N/A**	**Comments**
11. At what time is the restaurant cleaning performed? _____				
12. How are kitchen floor mats cleaned? ___Hose off outside ___Clean inside (mop sink) ___Cleaning Service ___Other: _____				
13. Where is used cleaning water discharged? _____				
14. Does the facility hose off/pressure wash the site?				
If so, how often? _____				
Is a pressure washing company used? Yes No	Name/Number: _____			
Is wash water captured?				
15. Are storm drain inlets free of grease & other food debris?				

Comments:

C. Materials and Wastes	Yes	No	N/A	Comments
16. Is the site free of litter and debris?				
17. Are adequate trash containers provided?				
18. Are adequate recycling containers provided?				
19. Is the trash/recycling area enclosed, free of litter/debris?				
20. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				

Facility: Date:	Yes	No	N/A	Comments
21. Are any outdoor material storage areas adequately				
covered and labeled?				
22. Is there an accessible spill response kit?				
23. Is there a spill response plan? (If yes, provide to inspector)				
24. Are loading and unloading areas free of spills and debris?				

Comments:

D. Other Storm Water Management	Yes	No	N/A	Comments
25. Any evidence of illicit connections and illegal discharges?				
26. Any evidence of unauthorized releases to storm drains?				
27. If yes, have the appropriate authorities been notified?				
28. Are there any other potential storm water pollution				
issues or concerns?				
If yes, explain:				
29. Are there any structural BMPs on or near the site?				
If so, how often are they maintained? Provide maintenance records.				

F. Violations

___No violations have been noted at this time.	
___No violations have been noted, but required corrective actions are described below.	
___Violation of storm water ordinance or other applicable regulations were found.	

(Attach Copy of NOV or Administrative Citation)

G. Corrective Actions

Is corrective action needed?	☐ Yes	☐ No	

As per Encinitas Municipal Code Section 20.08.110, the following corrective actions must be implemented. Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

1 _____

2 _____

3 _____

4 _____

5 _____

Owner/operator has been notified of corrective actions both verbally and by: ☐ Photocopy ☐ Fax ☐ Mail	

H. Describe informational, educational, or BMP information distributed:

___City of Encinitas Restaurant Brochure Eng/Span, ___County of San Diego-What's Cooking Guide Eng/Span,	

___Only Rain Brochure, ___Storm Water Poster, ___Training CD, ___Other: _____

I. Follow Up Inspection? Yes or No (circle one) Date: _____

Comments:

Inspector Name _____	**Facility Contact Name (print)** _____
Inspector Signature _____	**Facility Contact Signature** _____
Date _____	**Date** _____
Recommended City Actions: _____	

FOR OFFICE USE ONLY	**ASSESSMENT (circle appropriate level - "5" is a high level)**
	Level of knowledge regarding stormwater issues: 1 2 3 4 5
	Level of cleanliness, BMP implementation, orderliness of site: 1 2 3 4 5

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

STORM WATER HOTLINE:
760-633-2787

http://cwp.ci.encinitas.ca.us

Inspector Name _____

Date ____/____/_____ Time _____ AM / PM Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Business Name _____

Street Address _____ Mailing Address _____

Email _____ _____

Responsible Person(s) _____ Property Manager _____

Business Phone # (_____) _____ - _____ ext._____ Property Manager's # _____

Business Fax # (_____) _____ - _____ APN Number _____

B. FACILITY/SITE INFORMATION

Principal activity: _____

SIC Code(s) _____

Does SIC Code best represent principal activity: ☐ Yes ☐ No

What is recommended SIC Code(s)? _____ New JURMP Classification? _____

Does facility have a current Encinitas business certificate? ☐ Yes ☐ No #_____ Exp._____

Is this facility currently listed in the City of Encinitas JURMP Inspection List? ☐ Yes ☐ No ☐ Unknown

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☐ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID #_____

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☐ Yes ☐ No

Has facility conducted previous storm water monitoring programs? ☐ Yes ☐ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: _____

Approximate distance to water bodies: ☐ < 200 ft. ☐ 200 – 1000 ft. ☐ > 1000 ft.

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: _____

_____

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area covered by industrial or commercial activities: _____ square feet

Approximate % impervious surface of this area _____ %

Exposed areas of intensive outdoor activity: _____

D. BMP Assessment

D.1 General

BMPs	N/A	Yes	No	Comments
1. Is the site free of litter and debris?				
2. Are discharge locations free of sediment and debris?				
3. Are parking lots, sidewalks and streets free of sediment and debris?				
4. Is pressure washing of parking lots or sidewalks conducted at the facility?				
a. If yes, is wash water captured?				
b. Please provide contact name and phone number info for pressure washing company.				
5. Are roof downspouts directed away from areas of potential pollutants?				
6. How many employees do you have? Are employees trained in storm water management? If so, provide a list of employees who have participated.				

D.2 Landscaping

7. Are adequate erosion prevention measures employed? (vegetation or physical stabilization)				
8. Are irrigation systems programmed to minimize over-watering and runoff?				
9. Is reclaimed water used for irrigation?				
10. Are stockpiles of soil or landscape waste equipped to prevent runoff transport?				

D.3 Materials and Wastes

11. Are adequate trash containers provided?				
12. Are adequate recycling containers provided?				
13. Is the trash/recycling area enclosed and free of litter and debris?				
14. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
15. Are outdoor material storage areas adequate (covered area with secondary containment)?				
16. Are outdoor storage containers properly labeled?				
17. Is there an accessible spill response kit?				
18. Is there a spill response plan? If so, please provide to inspector.				
19. Are storage tanks equipped with secondary containment?				
20. Is secondary containment free of spills and rainwater?				
21. Are loading and unloading areas free of spills and debris?				

D.4 Equipment and Vehicles

22. Are exposed parking areas free of significant spills and leaks?				
23. Are heavy equipment and vehicles stored in garages or under canopies?				
24. Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?				
25. Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?				

BMPs	N/A	Yes	No	Comments
26. Is vehicle washing preformed in a contained area where runoff does not enter the MS4?				
D.5 Food Establishments				
27. Does facility have a grease trap or grease interceptor?				
28. Who maintains the grease trap? Company Name: Phone #				
29. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
30. Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
31. How many grease fryers are at the facility? _____				
32. About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually ☐ Other_____				
33. How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____				
Company Name: Phone #				
34. Do oil-recycling/grease bins have overhead coverage?				
35. Do oil-recycling/grease bins have secondary containment?				
36. Are deep fryer oil-recycling drums stored properly?				
37. At what time is restaurant cleaning performed? _____				
38. Are biodegradable soaps used for cleaning activities?				
39. How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:_____				
40. Where is used cleaning water discharged? _____				
41. Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
42. Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
43. Is the site free of evidence of illicit connections and illegal discharges?				
44. Is the site free of evidence of unauthorized releases to storm drains?				
45. If not, have the appropriate authorities been notified?				
D.7 Commercial Nurseries N/A ☐				
46. Does nursery minimize water use and runoff during irrigation? What type of irrigation is used?				
47. Does nursery use controlled release fertilizers or other conservative fertilizing practices?				
48. Does nursery implement integrated pest management techniques to prevent pesticide pollution?				
D.8 Other				
49. Are there any other potential storm water pollution issues or concerns? If yes, explain below.				
50. Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?				
51. Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.				

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION SUMMARY

FACILITY: _____ DATE: _____

E. VIOLATIONS

- ☐ No violations have been noted at this time
- ☐ No violations have been noted, but required corrective actions are described below.
- ☐ Violation of storm water ordinance or other applicable regulations were found.
  (Attach Copy of NOV or Administrative Citation)

F. CORRECTIVE ACTIONS

Is corrective action needed? ☐ Yes ☐ No

As per Encinitas Municipal Code Section 20.08.110, the following corrective actions must be implemented. Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

1 _____

2 _____

3 _____

4 _____

5 _____

Owner/operator has been notified of corrective actions both verbally and by: ☐ Photocopy ☐ Fax ☐ Mail

G. Describe informational, educational or BMP information distributed: ☐ City of Encinitas Restaurant Brochure English/Spanish, ☐ County of San Diego-What's Cooking Guide English/Spanish, ☐ City of Encinitas Automotive Brochure English/Spanish, ☐ County of San Diego-Green Wrench Guide English/Spanish. OTHER: _____

H. FOLLOW UP INSPECTION? YES or NO (CIRCLE ONE) **DATE:** _____

COMMENTS _____

_____

_____

INSPECTOR NAME _____ **FACILITY CONTACT NAME (PRINT)** _____

INSPECTOR SIGNATURE _____ **FACILITY CONTACT SIGNATURE** _____

DATE _____ **DATE** _____

I. RECOMMENDED CITY ACTIONS

_____

_____

FOR OFFICE USE ONLY

Labor: ____Hours _____Mins

Vehicle#_____

Work Order # _____

Follow-up WO#_____

ASSESSMENT (circle appropriate level - "5" is a high level)

Level of knowledge regarding storm water issues: **1. 2. 3. 4. 5.**

Level of cleanliness, BMP implementation, orderliness of site: **1. 2. 3. 4. 5.**

Appendix E

E-1 Brochures (English/Spanish)
E-2 General Storm Water Brochure
E-3 Storm Drain Stenciling
E-4 Encinitas Clean Water Webpage
E-5 Door Hanger
E-6 Watershed Pencil
E-7 Restaurant Storm Water BMP Poster
E-8 Automotive Storm Water BMP Poster
E-9 NCSWP Construction Brochure
E-10 NCSWP Pet Waste and Watershed Surveys
E-11 Encinitas Environmental Services Guide


Mantenimiento
Automotriz
Automotive
Clean


Empresas Constructoras
Developers
Simple and Cost Effective Ways to
Comply with Storm Water Regulations
Clean


Contratando un
Hombre Anto
Hiring a
Handy Man
Clean


Diazinón
Diazinon
Clean


Los Restaurantes
Ayudar
Nuestras
Restaurants Can
Help Keep our
Waterways Clean
Clean


Cuidado del
Patio y del jardín
Yard & Garden
Care
Clean

Only Rain in the Storm Drain!

A Clean Environment is Important to All of Us!



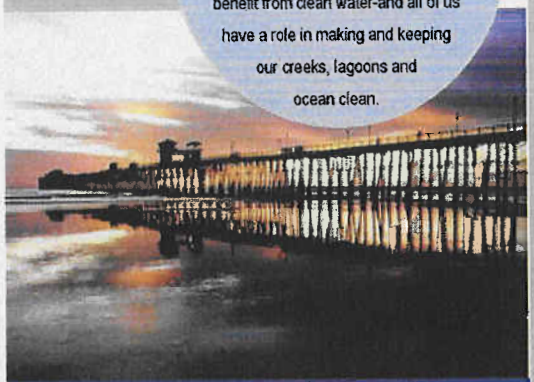
One of the greatest resources we have in San Diego County is our natural waterways. Yet every year, our creeks, lagoons and ocean are degraded by pollution.

In recent years, sources of water pollution like industrial waters from factories have been greatly reduced. however, now the majority of water pollution occurs from things like cars leaking oil, fertilizers from lawns and gardens, failing septic tanks, residential car washing and pet waste washing into the storm drains and into our waterways and ocean.

All these sources add up to a pollution problem! But each of us can do small things to help prevent pollution in our waters-and that adds up to a huge pollution solution!

Why do we need a Clean Environment?

Having a clean environment is of primary importance for our health and economy. Clean waterways provide commercial opportunities, recreation, fish habitat and add beauty to our landscape. All of us benefit from clean water-and all of us have a role in making and keeping our creeks, lagoons and ocean clean.



North County Storm Water Program

City of Carlsbad	760-602-2799	City of Oceanside	760-435-5800
City of Del Mar	858-755-9313	City of San Marcos	760-744-1050
City of Encinitas	760-633-2787	City of Solana Beach	858-720-2470
City of Escondido	760-839-4668	City of Vista	760-726-1340 x1686

County of San Diego 888-846-0800

North County Storm Water Program
County Storm Water Hotline: 888-846-0800

Only Rain in the Storm Drain!

Only Rain in the Storm Drain!

What YOU can do to help keep our creeks, lagoons and ocean clean...

Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to carry rain water away from developed areas to prevent flooding. Untreated storm water and the pollutants it carries flow directly into the creeks, lagoons and ocean. keep reading for suggestions on how you can help keep our creeks, lagoons and ocean clean . . .

Dispose of Yard Waste More Frequently

By disposing of grass, leaves, shrubs, and other organic matter more frequently — less will wash into storm drains.

Sweep or Rake

Sweep up debris and put it in a trash can. Do not use a hose to wash off sidewalks, parking areas and garages. Rake up yard waste and start a compost pile.

Clean up After Your Pets

Take a bag when you walk your pets and be sure to always clean up after them. Flush pet waste down the toilet or dispose of it in a sealed plastic bag and throw it in the trash.

Care for Your Cars

Fix fluid leaks immediately. When you change your oil, recycle it properly. For the recycling center nearest you, call 1-800-CLEANUP.

Reduce Use of Landscape Chemicals

Decrease the use of lawn and garden care products such as pesticides, insecticides, weed killers, fertilizers, herbicides and other chemicals. Avoid over-irrigation which washes chemicals tinto the gutter and storm drains.

Use Soap Sparingly

When washing your car at home, use soap sparingly, divert washwater to landscaped areas and pour your bucket of soapy water down the sink. Never wash your car in the street.

Buy Non-Toxic Products

When possible, use non-toxic products for household cleaning. If you must use a toxic cleaning product, buy small quantities, use it sparingly and properly dispose of unused portions. For the Household Hazardous Waste collection facility nearest you, call 1-800 CLEANUP.

For more information on how you can prevent the pollution of our creeks, lagoons and ocean or to report a problem, please call the County Storm Water HOTLINE at (888) 846-0800.

Information for this brochure has been provided by the North County Storm Water Program, which includes the cities of Carlsbad, Del Mar, Encinitas, Escondido, Oceanside, Vista, San Marcos and Solana Beach and the County of San Diego.

Educational BMP Installed at all Municipal Drain Inlets



welcome to... The City of Encinitas
Search: GO

View Text Version
After Hours non-911 Emergencies call: (760)633-2922
City Hall Open Fri. 11/23/06

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Government

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e-Zoning Lookup
Sign up for Parks & Rec
Subscribe to City e-Alerts
Documents Archive
Online water bill payment

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State of California
US Government

Engineering

City Attorney | City Clerk | City Manager | **Engineering** | Finance | Fire And Marine Safety | Parks And Recreation | Planning And Building | Public Works
San Dieguito Water District

Clean Water Program

Clean Water Program Hotline (760) 633-2787

Inquiries About the Program? Call Hotline or email npdesmail@ci.encinitas.ca.us

Frequently Asked Questions About Storm Drain Pollution (PDF)

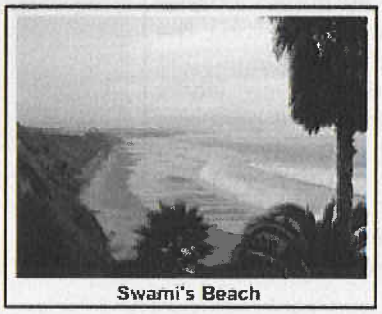
Clean Water Questions and Answers

Refund Letter

Moonlight Beach Urban Runoff Treatment Facility Final Report

UV Treatment Facility Effectiveness Assessment Presentation (ppt 11MB)

Cottonwood Creek Urban Runoff Assessment and Action Plan: Complete Document (2.23mb)
Pages 1 - 15
Pages 16 - 30
Pages 31 - 41


Swami's Beach

Program History

The NPDES permitting system was established under Section 402 of the Clean Water Act (CWA) of 1972. In 1987 the CWA was amended to require municipal storm water dischargers to effectively prohibit non-storm water discharges to their storm drain system and to implement controls to reduce pollutants in storm water to the maximum extent practicable. On January 24, 2007, the Regional Water Quality Control

Board (RWQCB), San Diego Region issued an NPDES Permit (Order No. R9-2007-0001, NPDES No. CAS0108758) to 20 jurisdictions (Copermittees) that make up the San Diego County's urbanized area. The basis of this permit was the determination by the RWQCB that: *"Urban runoff discharges from [storm drain systems] are a leading cause of receiving water quality impairment in the San Diego Region and throughout the United States. As runoff flows over urban areas, it picks up harmful pollutants such as pathogens, sediment (resulting from human activities), fertilizers, pesticides, heavy metals, and petroleum products."*

Program Details



The RWQCB's Municipal Permit requires each Copermittee in the region to develop a Jurisdictional Urban Runoff Management Program (JURMP). The goal of the City of Encinitas' JURMP is to protect and improve the quality of urban runoff and storm water in order to improve the water quality of the local water bodies (Pacific Ocean and beaches of Encinitas, Batiquitos Lagoon, San Elijo Lagoon, Cottonwood Creek, Escondido Creek, and Encinitas Creek). To accomplish this goal, the City has established a **Clean Water Program**. Essential duties of the Clean Water Program include public education, inspecting, water monitoring, and enforcing activities related to compliance with the RWQCB's Municipal Permit.

Staff performs inspections of commercial and industrial facilities to ensure business-related activities do not contribute to storm drain pollution. Clean Water Program staff monitor and test runoff water for common and priority pollutants, using the data to track and identify violators. Violators of the Encinitas Storm Water Ordinances are written formal correct work notices and, in some instances, cited and taken to court.

In addition, the City has new regulations requiring new development projects and construction sites to control storm water pollution. This includes adherence to the Best Management Practices Manual Part II, which requires construction storm water quality control and post-construction controls to treat storm water runoff throughout the life of the project. Best Management Practices (BMP) Manual Part I provides compliance guidance to engineers, developers and contractors, as well as existing businesses. During construction, contractors are required to comply with the City's updated Grading Ordinance (currently being updated), which requires erosion and sediment control measures as well as material management practices to prevent contaminants from reaching our storm drains.

The goal of the Clean Water Program is to ensure our storm drain runoff does not pollute our creeks and close our beaches. Pollution-free beaches result in a stronger economy for the City of Encinitas and healthier places to live, work and play.



Moonlight Beach on 4th of July

In an effort to improve the quality of water flowing into our creeks and onto our beaches, the City began another aggressive pollution abatement program by creating the Public Works National Pollutant Discharge Elimination System (NPDES) Division. The NPDES Division works closely with the City's Clean Water Program and performs cleaning and maintenance activities on the City's storm water conveyance systems. During the dry summer months, storm drain catch basins and pipes accumulate trash, debris and other unwanted waste. Without the efforts of our crews, unmanaged waste would flow into our creeks and directly onto our beaches.

Watershed Activities

In addition to the JURMP, the Municipal Permit also requires that the City collaborate with other jurisdictions on a watershed level. A watershed is the area of land that drains to a common discharge point. Encinitas is in the Carlsbad Watershed along with seven other Copermittees including the cities of Carlsbad, Escondido, Oceanside, San Marcos, Solana Beach and Vista and the County of San Diego. These Copermittees have developed a Watershed Urban Runoff Management Program (WURMP) to collectively reduce pollutants in the water bodies throughout the watershed. The WURMP describes the collaborative plans and efforts to reduce the impacts of urban activity on receiving water quality within the Carlsbad Watershed to the maximum extent practicable (MEP). As with the JURMP, an Annual Report is required by the RWQCB.

Other Resources

- Certified Used Oil Recycling Centers
- Household Hazardous Waste Collection Sites
- Pick Up After Your Dog
- Best Management Practices (BMP)
- Manual - Parts I and II
- Storm Water Brochures
- Equestrian Related Water Quality Management

Ph. (760) 633-2600 | TDD (Hearing Impaired) (760) 633-2700 | Fax (760) 633-2627 | 505 S. Vulcan Avenue, Encinitas, CA 92024-3633
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Preventing pollution is less costly for taxpayers than cleaning up "after the fact." The following tips can help protect the health of our community and environment from pollutants.

- **Maintain your vehicle.** Fix oil leaks. Use an absorbent material, like cat litter, to clean up spills and take it to a household hazardous waste (HHW) facility. Recycle used motor oil. Call 1-800-CLEANUP for a HHW and used oil recycling center near you.
- **Use soaps sparingly.** If washing your car at home, use biodegradable soap sparingly. Try to wash on a grassy area. Use a bucket and a hose with a shut-off nozzle. Divert the dirty water onto landscaping or down a household sink.
- **Try nontoxic products.** If you must use a toxic household product, buy only what you need. Dispose of household hazardous waste properly. Call 1-800 CLEANUP.
- **Reduce use of landscaping chemicals.** If you must use fertilizers, pesticides, herbicides, etc., follow directions carefully, use them sparingly and avoid over-watering.
- **Clean up after your pets.** Flush pet waste down the toilet or seal it in a plastic bag and put it in the trash.
- **Recycle yard waste frequently.** Sweep grass clippings and other yard materials from driveways and streets and put in recycling container. Start a compost pile!
- **Sweep up debris on your sidewalk and driveway.** Prevent erosion and debris from leaving your property.
- **Throw your litter in a trash container.**

La prevención de la contaminación es menos costosa para los contribuyentes que su limpieza "después de lo ocurrido". Si usted sigue los siguientes consejos, puede ayudar a proteger la salud de nuestra comunidad y el medio ambiente.

- **Mantenga sus vehículos en buen estado.** Repare las goteras de aceite. Esparza las piedrecillas para los deshechos de gatos (cat litter) u otros materiales absorbentes sobre los derrames de aceite para limpiarlos, y luego llévelo a los lugares designados para desechar los materiales domésticos peligrosos. Recicle el aceite de motor. Llame a 1-800-CLEANUP para saber cuál es el centro de desecho de materiales domésticos peligrosos y de reciclaje de aceite de motor más cerca de su domicilio.
- **Use poca jabón.** Cuando lave su auto en casa, use poco jabón biodegradable. Use un reductor de agua. Tire el agua sucia por el drenaje sanitario interior.
- **Compre productos no tóxicos.** Si usa productos domésticos que son tóxicos, compre solo lo que necesite. Disponga de los desechos peligrosos de manera correcta. Llame a 1-800-CLEANUP.
- **Reduzca el uso de productos químicos de jardinería.** Si usted debe usar fertilizantes, pesticidas, etc., siga las instrucciones cuidadosamente y evite el regar demasiado.
- **Limpie los desechos de sus mascotas.** Tire los desechos de sus mascotas en el inodoro o póngalos en una bolsa plástica cerrada herméticamente y tírela en la basura.
- **Recicle los desechos de su jardín frecuentemente.** Barra los restos de césped y otros materiales de jardín sobre la entrada de su casa, garaje y banqueta, luego póngalos en el recipiente de reciclables. Comience un cúmulo de abono!
- **Barra la basura de su banqueta y entrada de garaje.**
- **Tire sus desechos en el basurero.**

Help!

Pollutants were found in your neighborhood storm drain.



¡Ayude!

Contaminantes fueron encontrados en las alcantarillas de su vecindario.

For more information,
please contact your agency.

City of Carlsbad	760-602-2799
City of Del Mar	858-755-9313
City of Encinitas	760-633-2787
City of Escondido	760-839-4668
City of Oceanside	760-435-5800
City of San Marcos	760-744-1050
City of Solana Beach	858-720-2470
City of Vista	760-726-1340 x1686
County of San Diego	1-888-846-0800

Para más información,
por favor llame su agencia.

Information for this brochure has been provided by the North County Storm Water Program, which includes the cities of Carlsbad, Del Mar, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, Vista and the County of San Diego.

La información para este folleto ha sido proveída por el Programa de Alcantarillas del Condado Norte (North County Storm Water Program), el cual incluye la ciudades de Carlsbad, Del Mar, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, Vista y el Condado de San Diego.

Did you know that storm drains are not connected to the sanitary sewer system or to treatment plants?

Anything that **FLOWS** into a storm drain, except rainwater, pollutes our creeks, rivers, lakes, lagoons and ocean.

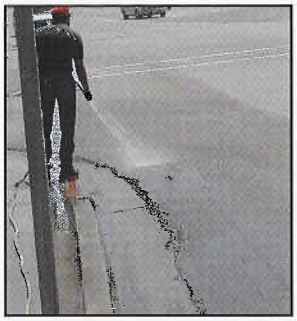
Usted sabe que la alcantarilla de la calle no esta conectada con el sistema de drenaje sanitario de su casa o la planta de tratamiento de aguas negras.

Cualquier cosa que **CORRE** a la alcantarilla, con la excepción del agua de lluvia, contamina nuestros arroyos, ríos, lagos, lagunas y el mar.









Our field staff found the following pollutant(s) spilled or dumped into a storm drain near your home:

Empleados de la ciudad encontraron los siguientes contaminantes derramados o tirados en las alcantarillas de su vecindario:

- ❑ Motor Oil (Aceite de motor)
- ❑ Grease (Grasa)
- ❑ Antifreeze/Transmission Fluids (Anticongelante/Fluido de transmisión)
- ❑ Detergents (Detergentes)
- ❑ Solvents/Degreaser (Solventes/Desengrasantes)
- ❑ Paint/Paint Products (Pintura/Productos de la pintura)
- ❑ Pesticides/Fertilizers (Pesticidas/Fertilizantes)
- ❑ Home Improvement Waste (Desechos de Renovación de la casa)
- ❑ Animal Waste (Desechos de animales)
- ❑ Yard Waste (Desechos del jardín)
- ❑ Dirt and Gravel (Lodo y grava)
- ❑ Trash (Basura)
- ❑ Other (Otro_____)





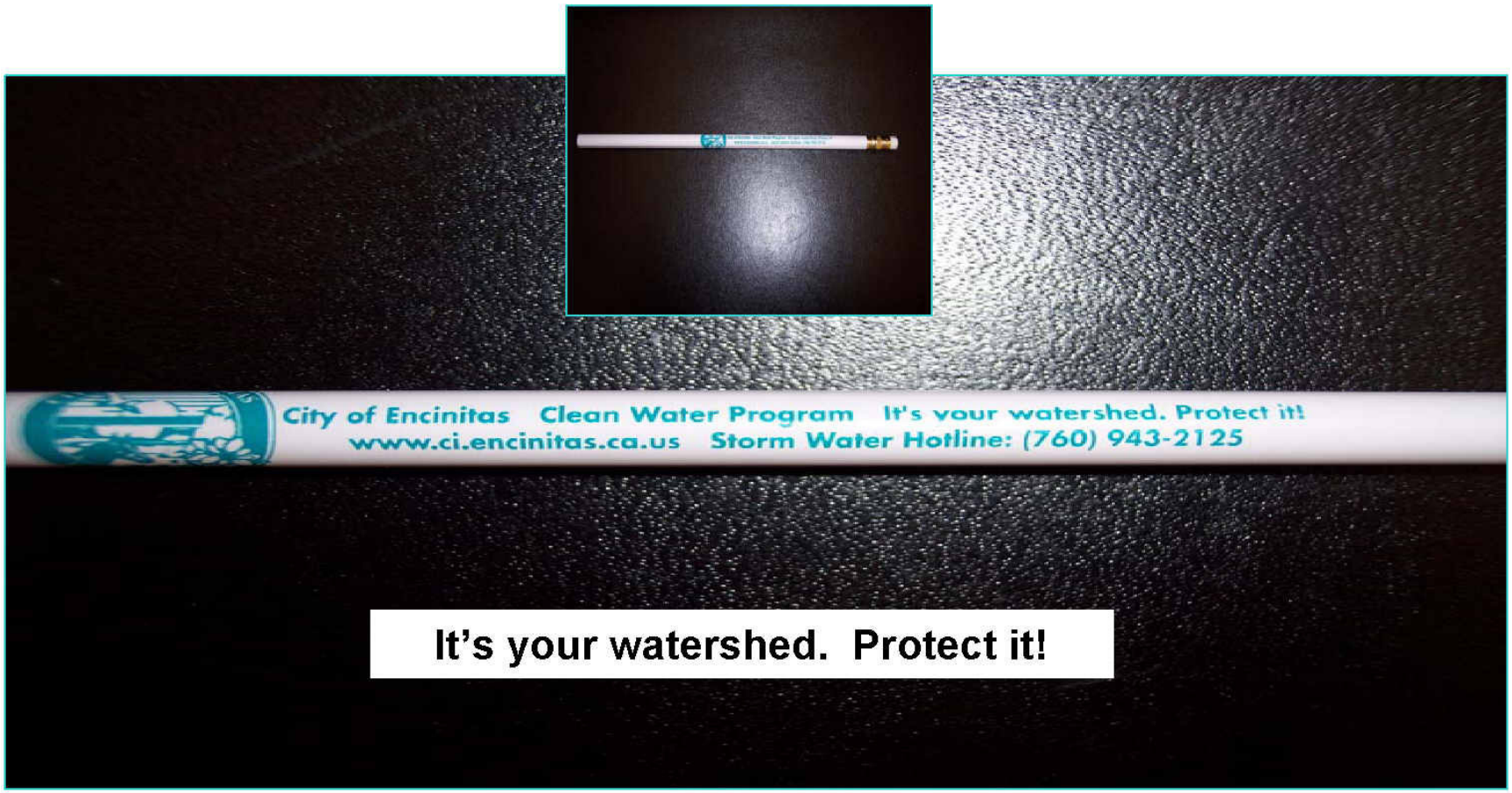




Dumping pollutants into a storm drain not only hurts our environment, but is also illegal. However, YOU can help prevent storm water pollution. Check out the prevention tips on the back…

Si tira los contaminantes en la alcantarilla no solo daña nuestro medio ambiente y también es ilegal. Sin embargo, USTED puede ayudar a prevenir la contaminación en las alcantarillas. Por favor, lea los consejos del dorso…

Appendix E-6


City of Encinitas Clean Water Program It's your watershed. Protect it!
www.ci.encinitas.ca.us Storm Water Hotline: (760) 943-2125
It's your watershed. Protect it!

STORM WATER PROTECTION IS IN GOOD HANDS...YOURS!



Prevent wash water from entering the storm drain. Dispose of wash water used to clean mats and outdoor/indoor areas into a mop sink, toilet or other drain connected to the sanitary sewer.
Prevenga que el agua que usa para lavar entre en las alcantarillas. Disponga del agua con que lavó las carpetas (alfombrillas) y las áreas internas/externas en el fregadero para trapos, inodoros u otras cañerías conectadas a las cloacas de los sanitarios.

Keep dumpster areas clean and lids closed. Do not fill dumpsters with liquid waste or hose them out. If dumpsters or tallow/grease bins need to be cleaned or replaced, contact the leasing company.
Mantenga las área de los basureros limpios y las tapas cerradas. No llene los basureros con agua sucia ni tampoco los limpie con la manguera. Si los basureros o los recipientes de grasa tienen que ser limpiados o reemplazados, por favor llame a la compañía de renta.





Cleanup spills using rags or absorbents and dispose in the trash. Do not hose away spills.
Limpie los derrames usando trapos o absorbentes y tírelos en la basura. No limpie los derrames con la manguera.

Dry sweep or vacuum outdoor areas. Instead of hosing, sweep or vacuum "drive-throughs", parking lots, outdoor patios, sidewalks and dumpster or tallow bin areas. If you must use water for cleaning, contain, collect and dispose of it properly.
Barra en seco o pase la aspiradora en las áreas de afuera. En vez de limpiarlas con la manguera, barra o aspire las "áreas de manejo" (drive-throughs), estacionamientos, patios externos, aceras, y basureros o áreas de recipientes de sebo/grasa. Si usted debe usar agua para limpiar, conténganlos, recoléctelo y deshágase de ellos correctamente.





Take care of grease and oil. Regularly pump grease traps and interceptors to prevent sewer overflows. Concentrated waste oil and grease must be collected in a tallow/grease bin and disposed of by a certified waste grease hauler. Never pour grease or oil into a sink, floor drain, storm drain or dumpster.
Cuide las grasas y aceites. Limpie las áreas recolectoras de grasa y los interceptores regularmente para prevenir los desbordes de las cloacas. Los deshechos de aceites y grasa concentrados deben ser recolectados en un recipiente para sebo/grasa, y recogidos por un transportador certificado de deshechos de grasa. Nunca tire grasa o aceite en el fregadero, cañerías del suelo, alcantarillas o basureros.



Storm water and the pollutants it carries flow directly into the nearest creek, river, lake or lagoon, eventually reaching the ocean. Do your part to help keep our waters clean for you, your family and our environment.



El agua de las alcantarillas y los agentes contaminadores llevan el agua directamente a arroyos, ríos, lagos y lagunas, y finalmente llegan al océano. Haga su parte ayudando a mantener nuestras aguas para usted, su familia y el medio ambiente.

This poster was brought to you by the North County Storm Water Program in cooperation with the Los Angeles Storm Water Program. Call your local agency for more information.

City of Carlsbad	760-602-2799	City of Oceanside	760-435-5800
City of Del Mar	858-755-9313	City of San Marcos	760-744-1050
City of Encinitas	760-633-2787	City of Solana Beach	858-720-2470
City of Escondido	760-839-4668	City of Vista	760-726-1340
County of San Diego	888-846-0800	www.projectcleanwater.org	

Este cartel es traído para usted por el Programa de Limpieza de Alcantarillas del Condado Norte, en cooperación con el Programa de Limpieza de Alcantarillas de Los Angeles. Llame a su agencia local para más información.

STORM WATER PROTECTION IS IN GOOD HANDS...YOURS!

Operate a clean dry shop. Sweep, mop or vacuum instead of hosing down garage floors or outdoor work areas.
Opere un negocio seco y limpio. Barra, trapee o aspire en vez de limpiar con la manguera los pisos de los garages o áreas de trabajo exteriores.





Prevent spills and leaks. Develop spill prevention and response procedures. Use drip pans and ground cloths under vehicles. Drain and recycle fluids from wrecked or leaking vehicles as soon as possible.
Prevenga los derrames y goteras. Desarrolle un plan para prevenir y responder a estos derrames. Use recipientes recolectores y trapos debajo de los vehículos. Tire y recicle los fluido de los vehículos chocados o que tengan filtraciones/ goteras tan pronto como sea posible.



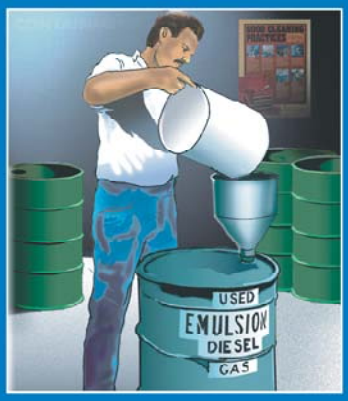
Prevent wash water from entering storm drains. Use a commercial car wash facility for cleaning vehicles. Commercial car wash runoff into the storm drain is illegal.
Prevenga que el agua sucia entre por las alcantarillas. Use un negocio comercial de lavado de auto. Es ilegal que el agua usada por los negocios de lavado de auto comerciales entre en las alcantarillas.

Protect outdoor work and storage areas. Cover equipment/ materials and work/ storage areas. Place bulk fluids in secondary containment.
Proteja las áreas de trabajo y almacenamiento exteriores. Cubra los equipos y materiales y áreas de trabajo/almacenamiento. Ponga los fluidos en grandes cantidades en recipientes secundarios.



Clean parts in a self contained sink/drum unit when working with solvents. Inspect parts washing units daily for leaks and make necessary repairs immediately. Use aqueous cleaning solutions instead of solvents when possible. Recycle used solutions through a licensed hazardous waste hauler.
Limpie los repuestos en una unidad de fregadero/tambor junto cuando trabaje con liquido solventes. Inspeccione las partes de la unidad de limpieza diariamente para detectar goteras y haga los arreglos necesarios inmediatamente. Use soluciones solubles en agua, en vez de los líquidos solventes cuando sea posible. Recicle las soluciones usadas por medio de una compañía con licencia para transportar deshechos peligrosos.





Dispose of waste properly. Recycle oil, oil filters and antifreeze. Never pour liquids down the gutter or storm drain.
Disponga de los deshechos correctamente. Recicle el aceite, los filtros de aceites y los anticongelantes. Nunca debe tirar liquidos por las alcantarillas o rejillas.



Storm water and the pollutants it carries flow directly into the nearest creek, river, lake or lagoon, eventually reaching the ocean. Do your part to help keep our waters clean for you, your family and our environment.



El agua de las alcantarillas y los agentes contaminadores llevan el agua directamente a arroyos, ríos, lagos y lagunas, y finalmente llegan al océano. Haga su parte ayudando a mantener nuestras aguas para usted, su familia y el medio ambiente.

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Water Quality Regulations for Construction Sites

Dear Contractor,

The North County Storm Water Program (NCSWP) is a collective of jurisdictions in northern San Diego County working together to protect our watersheds. We believe that reducing pollution is critical to maintaining our communities' way of life.

It is our hope that this brochure will help you identify activities that are recognized to cause water pollution and implement appropriate Best Management Practices (BMPs) to minimize their impact. By providing you with these tools, we hope to make your job easier while keeping our waterways clean.

Each jurisdiction will be inspecting their construction sites to ensure the protection of water quality. We look forward to seeing the BMPs presented in this brochure implemented at your sites.

Together we have the ability to preserve and improve the quality of life in our communities.

Sincerely,

The North County Storm Water Program

Contact Phone Numbers:

City of Carlsbad
760-602-2719

City of San Marcos
760-744-1050

City of Encinitas
760-633-2787

City of Del Mar
858-755-9313

City of Oceanside
760-435-5800

City of Solana Beach
858-720-2470

City of Vista
760-726-1340

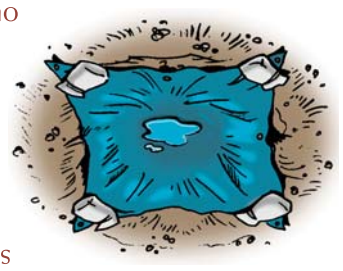
Best Management Practices

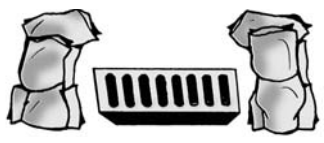
The following is a list of BMPs and pollution prevention measures that shall be implemented at all construction sites:

1. **Conduct daily site cleanings.**
2. **Develop spill response and containment procedures.**
3. **Educate employees and subcontractors about BMPs.**
4. **Develop an erosion control plan for wind and rain.**
5. **Regularly maintain all BMPs at project site.**

Construction materials such as paint, dirt and trash often find their way into our storm drains, polluting the environment and jeopardizing our creeks, rivers, lakes, lagoons, and ocean.

The NCSWP is working with contractors to implement what are known as Best Management Practices (BMPs) on all construction sites. That is, methods used to keep pollution out of our storm drains and off public property, such as sidewalks, streets, parkways and alleys. Carrying out and maintaining these BMPs on the construction site is critical to protecting our ocean and lagoons.



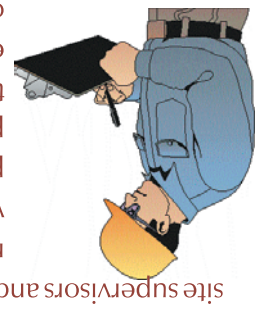


Right-of-Way Permitting

We understand that there are times when space on construction sites is limited. If at any point, you (as a contractor or subcontractor) need to use the public right-of-way in order to work or store materials, you must apply for a special permit. This permit allows you to use the City's right-of-way for activities such as scaffolding, sidewalk repair, and other construction activities. Please contact your local jurisdiction for more information.

Inspection and Enforcement Program

Each jurisdiction has established an enforcement program to ensure that all businesses operate in compliance with all appropriate storm water laws and other City requirements. Contractors, site supervisors and property owners can be held responsible for violations, which may lead to a civil penalty of up to $10,000 per day and/or reimbursing the local jurisdiction for all expenses associated with clean up.



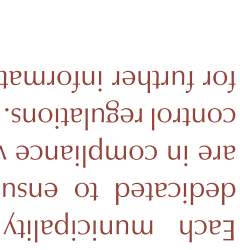
Water Quality Regulations for Construction Sites

All construction sites are required to implement Best Management Practices (BMP) to prevent storm water pollution. This brochure is intended to assist your construction site in understanding BMP requirements.

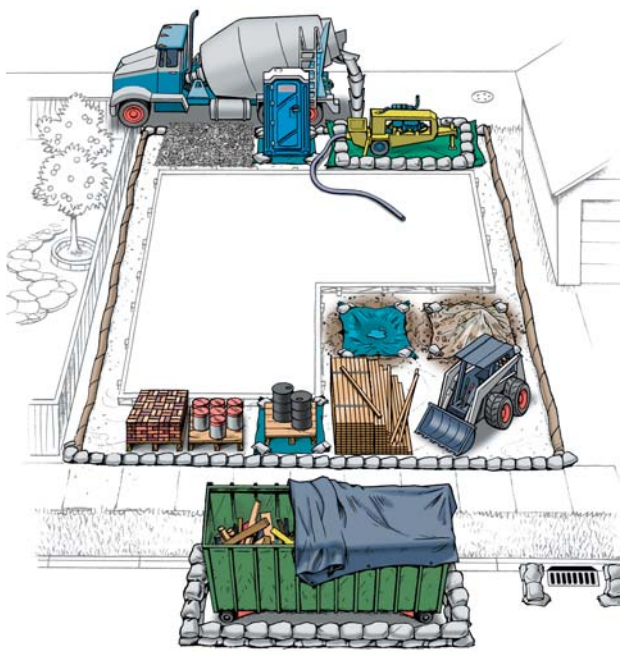
Each municipality has one or more persons dedicated to ensuring that all construction sites are in compliance with state and local storm water control regulations. Contact your local municipality for further information.

Construction sites can contribute pollutants, such as sediment, metals, and chemicals, to our local creeks, rivers, lakes, lagoons, and ocean. These pollutants make their way down our streets and into storm drains, eventually discharging to the nearest body of water.

In 1972, the environmental Protection Agency developed regulations to control water pollution. As a result, the National Pollutant Discharge Elimination System (NPDES) Permit was created. NPDES permits are issued to municipalities as well as construction sites. In addition to complying with local regulations, which are governed by our municipal NPDES permit, you may be required to obtain a permit through the State of California under the NPDES permit, you may be required to obtain a State General Construction Permit (99-08-DWQ). All construction sites over one acre are required to obtain coverage under this permit.



A Pollution Prevention Guide for the Construction Industry



North County Storm Water Program

Carlsbad • Del Mar • Encinitas • Oceanside
• San Marcos • Solana Beach • Vista

Only Rain in the Storm Drain

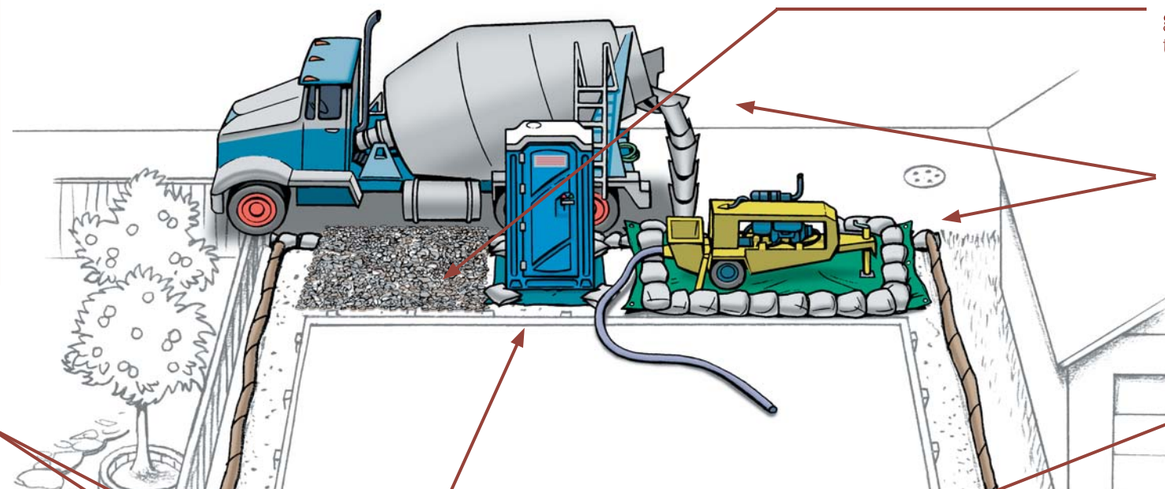
Best Management Practices

Site Overview

Protecting our water resources improves our quality of life and preserves the local environment for our children and future generations.

Untreated storm water and/or unintentional spills at work sites can flow into storm drains and pollute creeks, rivers, lakes, lagoons or the ocean. These discharges are prohibited by law.

The following drawing illustrates Best Management Practices (BMPs) that are recommended for construction sites in North County cities to protect storm drains and minimize pollution. Please check for local requirements.



Materials Storage

All building materials and fuel stored on the site must be contained and covered. It is illegal for contractors to wash out paint brushes in the street or dump any residues in the storm drain. Paint brushes and spray guns must be contained and disposed of properly.

Tracking Controls

All entrances and exits on the site must have coarse gravel or steel shaker plates to limit offsite sediment tracking.

Concrete Trucks/Pumpers

Pumpers must be surrounded by perimeter controls, such as gravel bags. Plastic sheets also must be placed beneath concrete pumpers at all times., and residual materials must be cleaned up as well. Washout areas must be used whenever cleaning trucks.

Washout area

The disposal of "wet" construction materials should be handled in the washout area. This includes paint, stucco and concrete. Use a berm and/or plastic

NORTH COUNTY
STORM WATER PROGRAM

City of Carlsbad City of Del Mar City of Encinitas
City of Escondido City of Oceanside City of Poway
City of San Marcos City of Solana Beach City of Vista
County of San Diego

Please take our pet waste survey!

1. What is your zip code? _____

2. Where do you most often walk your dog?

__ My neighborhood
__ At the park
__ At the beach
__ I don't walk my dog
__ Other _____

3. **What happens to the pet waste that is not picked up?**

__ I don't know
__ It disintegrates
__ It fertilizes the ground
__ It gets washed to creeks, lagoons, and the ocean
__ Someone comes later to clean it up
__ Other

4. **If you saw people not picking up after their pet, what would be your reaction?**

__ I would not care
__ I would report them to the City
__ I would be surprised
__ I would ask them to pick it up
__ I don't know what I could or would do
__ Other _____

5. **Why do you think people would not pick up after their pet? (Check all that apply)**

__ They don't care
__ They don't know they're supposed to
__ There's no one around to see them
__ They didn't bring a bag
__ There was nowhere to throw it away
__ They think it's gross
__ Other

6. **What do you think the City can do or should do about the pet waste problem?**

_____

_____

NORTH COUNTY
STORM WATER PROGRAM

City of Carlsbad City of Del Mar City of Encinitas
City of Escondido City of Oceanside City of Poway
City of San Marcos City of Solana Beach City of Vista
County of San Diego

Please take our survey!

1. **What is a watershed?**
   - __ **A place for us to dump our unwanted chemicals or wash water**
   - __ **A land area that drains to the nearest river, lake, or ocean**
   - __ **An area where water is treated and cleaned for our use**
   - __ **A large habitat for frogs**
   - __ **Other** _____

2. **Do you live in a watershed?**
   - __ **Yes**
   - __ **No**

NORTH COUNTY
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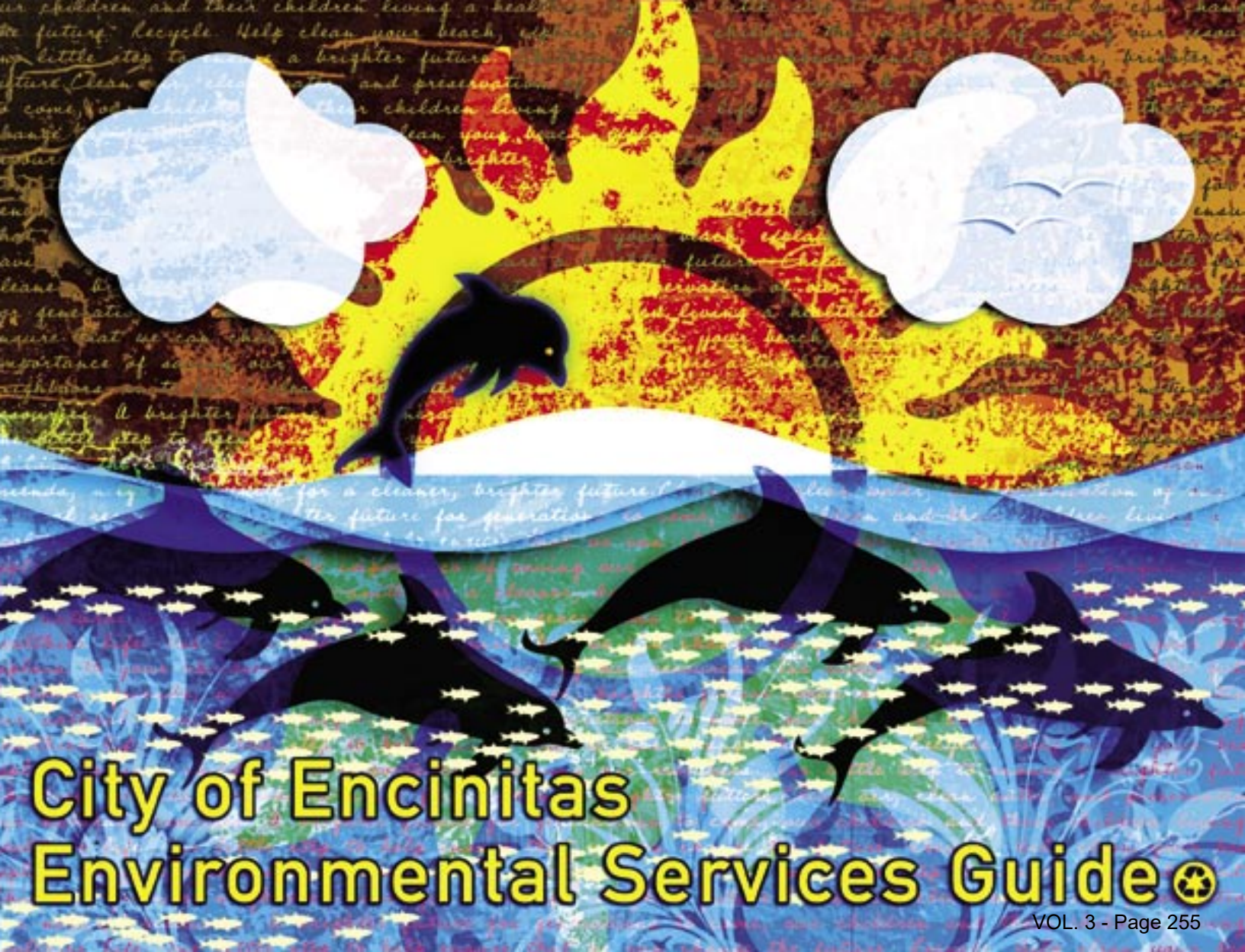
   - __ **An area where water is treated and cleaned for our use**
   - __ **A large habitat for frogs**
   - __ **Other** _____

2. **Do you live in a watershed?**
   - __ **Yes**
   - __ **No**


City of Encinitas
Environmental Services Guide

Door-to-door HHW Pickup

"It is nice to be able to dispose of the wastes in a safe manner to protect the environment, but the fact that it is convenient is even better! Just make the call, get an appointment and put the items out front; they even give you a reminder call for your appointment."
Diane L., Olivenhain

Home Composting

"After taking the city-sponsored composting classes offered by the City of Encinitas and the Solana Center, I was set on the right track to managing my home composting bins."
Master Composter John N., New Encinitas

Buyback Centers

"Our PTA recently initiated plastic bottle recycling. In just one month we were able to collect $70 and we hope to bring in at least $800 next school year. All the money we make will be used to maintain our new garden."
Nancy K., Ocean Knoll third-grade teacher

Curbside Recycling

"By recycling all of our paper, cardboard, plastic, glass, and cans, we were surprised to learn that our family of five ended up with only two bags of trash per week. This allowed us to use the smaller of the two trash cans offered, saving our family money, while helping protect the environment."
Mike and June, Leucadia

Funded By:

City of Encinitas / California Department of Conservation
California Integrated Waste Management Board: Zero Waste—You Make It Happen!

City of Encinitas

505 S. Vulcan Ave.
Encinitas, CA 92024
(760) 633-2600
Monday – Friday, 7:00 a.m. – 6:00 p.m.
City offices are closed every other Friday.
www.ci.encinitas.ca.us

EDCO Waste and Recycling Services

224 Las Posas
San Marcos, CA 92069
(760) 436-4151
www.edcodisposal.com/services/encinitas

Holiday schedule

When a holiday falls on a weekday or a Sunday, collection will be delayed one day for the remainder of the week.

EDCO does not offer services on the following holidays:

New Year's Day	Memorial Day
Independence Day	Labor Day
Thanksgiving Day	Christmas Day

Solana Center for Environmental Innovation

137 N. El Camino Real (past the Sheriff's Station at the end of the road)
Encinitas, CA 92024
(760) 436-7986
Monday – Friday, 8:30 a.m. – 4:30 p.m.
www.solanacenter.org

Curbside collection

Place your refuse, recycling, and green waste containers at the curb prior to 6 a.m. on your collection day. They are collected once a week on the same day. Please set your containers in an unobstructed area, at street level, with the wheels against the curb, or at the edge of the roadway. Do not obstruct traffic lanes, including bike lanes and sidewalks. Always leave enough space for your postal carrier to access your mailbox.



Trash collection

Use gray waste container provided by EDCO to dispose of non-hazardous/ non-recyclable household waste.

Residential recycling

All recyclables go in the “single stream” blue bin for curbside recycling (no separation is necessary).

What is recyclable?



Glass bottles and jars: Clear and colored glass. Please rinse. No need to remove labels. Glass plates, mirrors, and light bulbs are not recyclable.

Cardboard, mixed paper, and newspapers: Includes cardboard and non-waxy paperboard (i.e., cereal boxes), all paper including magazines, newspapers, envelopes with plastic windows, junk mail, and miscellaneous coupons. Please flatten or cut boxes to a maximum size of 3 ft. x 3 ft.

Cans: Aluminum and steel cans – including dry paint cans and empty aerosol cans.

Plastic containers: Plastic bottles and jugs marked 1 or 2, and all beverage containers labeled CA Redemption Value or CA Cash Refund including:

- Food and beverage containers: Soda, water, salad dressing, cooking oil, etc.
- Jars and canisters: Peanut butter jars, mayonnaise jars, aspirin bottles, 35 mm film canisters, etc.
- Cleaning products and detergents: Empty bleach, detergent, soap, shampoo, drain cleaners, etc.
- Automotive and yard care products: Empty motor oil, antifreeze, plant food, herbicide containers, etc.

* Non-CRV plastics with recycling labels numbered 3 through 7 are not accepted.
* Reduce your trash bill by requesting a smaller trash bin and an additional recycling bin.

Did you know?

Glass takes over one million years to decompose.

Recycling a glass jar saves enough energy to light a 100-watt light bulb for four hours.

- California Department of Conservation

Yard waste recycling

Customers are required to provide their own sturdy container, not to exceed 32 gals. and 50 lbs. NEVER place yard waste in plastic bags. "Go Green" yard waste collection decals are available from EDCO, (760) 436-4151.

Yes: Grass clippings, weeds, leaves, hedge trimmings, Christmas trees (no stands or ornaments), and tree limbs. All wood debris must be cut and bundled, but should not exceed 4 ft. x 1.5 ft. in dimension.

No: Dirt, rocks, concrete, animal waste, cactus, ice plants, palm fronds, succulents, frosted or artificial Christmas trees, lumber, or construction waste.

Christmas tree recycling

EDCO offers Christmas tree pickup with the residential yard waste pick-up. Please call EDCO at (760) 436-4151 each holiday season for more information.

Recycling centers

EDCO recycling drop-off

(no redemption fees paid – drop-off only)

137 N. El Camino Real (past the Sheriff's Station)
Encinitas, CA 92024

Hours of operation: Open 24 hrs.

What is accepted?

See the "What is recyclable" section.
PLEASE NO: household hazardous waste, electronic waste, furniture, appliances, plastic bags, or plastics that are not labeled 1 or 2.



Buyback recycling centers

Buyback services including CRV materials: CRV stands for California Redemption Value. CRV is offered on most beverage containers in California. Deposits of $0.05 on containers under 24 oz. and $0.10 on containers 24 oz. and larger are refunded on beverage containers marked with "CRV." Examples include glass/plastic bottles and cans such as carbonated soft drinks, beer, wine coolers, distilled spirit coolers, carbonated and mineral water, non-carbonated water, sports drinks, coffee and tea drinks, fruit drinks, fruit juices packed in containers less than 46 oz., and vegetable juice in containers 16 oz. or less. No CRV deposits are charged on wine bottles. CRV deposits are refunded when you recycle your CRV beverage containers at one of the recycling centers listed in this section.

EDCO certified buyback center

224 S. Las Posas Road
San Marcos, CA 92069
(760) 744-2700

Hours of operation: Monday – Friday, 8 a.m. – 4 p.m.,
Saturday 8 a.m. – 3 p.m. Closed daily from noon to 1 p.m.

Buyback services include: CRV aluminum cans, plastic 1 or 2, and glass containers.

Recycling drop-off: Paper, cardboard, and non-CRV household containers. Computer monitors and televisions free of charge. Keyboards, computer drives, and printers accepted for a nominal fee.

Did you know?

It takes 80-100 years for an aluminum can to decompose.

Recycling one aluminum can saves enough electricity to operate a TV for three hours.

- California Department of Conservation

rePLANET recycling center

262 N. El Camino Real (behind Vons)
Encinitas, CA 92024
(877) 737-5263
www.replanetusa.com

Hours of operation: Tuesday – Saturday,
9:30 a.m. – 5 p.m. Closed from 1:00 -1:30 p.m.

Items accepted: All CRV beverage containers made from aluminum, glass, and plastic ♺1 through ♺7



rePLANET recycling center - Tomra North America

Miramar recycling center

5165 Convoy Street
San Diego, CA 92111
(858) 268-8971

Hours of operation: Monday – Friday, 11 a.m. – 4:30 p.m., Saturday – Sunday, 7:30 a.m. – 4:30 p.m.

Items accepted: Accepts all CRV containers for buyback. Computers, monitors, and CPUs (central processing units) are accepted for free. Printers, other computer accessories, mattresses and box springs, and appliances are accepted for a nominal fee. No HHW accepted.

Did you know?

Aluminum cans are recycled into soda cans, license plates, pie plates, aluminum foil, and more.
- www.myclearwater.com

Waste Management



Locations:
2265 Jimmy Durante Blvd.
Del Mar, CA 92014

5960 El Camino Real
Carlsbad, CA 92008
(800) DUMPSTER
(800) 386-7783

Buyback: All CRV materials such as beverage containers made from aluminum, glass, and plastic ♳ through ♷

Drop–off: Mixed paper including cardboard, catalogs, magazines, and newspaper. Non-CRV containers such as tin cans, glass containers, plastic ♳ or ♴, and household batteries.

Other acceptable items: CRT's such as televisions, computer monitors, and laptops are free of charge. For all other electronics there is a nominal fee.

Hours of operation: Tuesday – Saturday, 8:00 a.m. – 4:00 p.m.
Closed daily from 1:00 – 1:40 p.m.

Household Hazardous Waste

Household Hazardous Waste (HHW) includes products labeled Dangerous, Caution, Flammable, Poison, Toxic, or Corrosive and should be disposed of properly. It is dangerous, and illegal, to discard HHW into the trash, into the storm drain, or down the sewer drain. Chemicals disposed of in illegal hazardous waste containers can be released into the environment and contaminate our air, water, and possibly the food we eat. HHW also includes electronic and universal waste.

• Aerosols • Asbestos • All purpose cleaners • Antifreeze • Auto fluids • Disinfectants
• Drain openers • Fertilizers • Furniture polishes • Gasoline • Insecticides • Kerosene
• Lighter fluid • Latex paint • Oven cleaner • Oil-based paint • Pesticides • Pool chemicals
• Solvents • Thinners • Used oil and oil filters • Varnishes

Electronic Waste and Universal Waste

Electronic waste, or E-Waste, is a popular, informal name for electronic products nearing or at the end of their "useful life," and includes cell phones, computers, televisions, VCRs, stereos, copiers, and fax machines which contain lead and other hazardous materials. The improper disposal of these items can be hazardous to humans and the environment. Universal waste, or U-Waste, includes rechargeable and single-use household batteries, fluorescent tubes, and mercury thermostats. See the list below for items that should never be thrown in the trash.

• Answering machines • Auto batteries • Cell phones • Computers • Copiers • Fax machines
• Computer monitors • DVD players • Fluorescent lamps and tubes • VCRs • Stereos • Radios
• Household batteries • Mercury gauges • Mercury pilot light sensors • Telephones • Televisions
• Mercury thermostats • Metal halide lamps • Microwave ovens • Sodium vapor lamps



Did you know?

Recycling a stack of newspaper just 3 ft. high can save one tree.
One tree can filter up to 60 lbs. of pollutants from the air each year.
Making recycled paper instead of new paper uses 64% less energy and uses 58% less water.

- www.resourcefulschools.org

How to properly dispose of HHW, E-Waste, and U-Waste:



Re-use the materials if possible

Ask a friend or neighbor if they could use your materials that you no longer need.

Home pickup

Door-to-door collection service is available for all Encinitas residents for a nominal collection fee. The service is free of charge for qualifying homebound elderly and disabled citizens. This service does not include pickup of regular trash, business waste, medical or biological waste, explosives, ammunition, or radioactive material.

Drop-off locations*

(HHW, E-waste, and U-Waste)

Vista HHW facility

1145 E. Taylor St.
Vista, CA 92084
(across from City of Vista Public Works Yard at Laguna Lane)

Poway HHW facility - City of Poway Materials Handling Yard

12325 Crosthwaite Circle
Poway, CA 92064
(in the South Poway Business Park)

Hours of operation for Vista and Poway facilities: 9 a.m. – 3 p.m. on Saturdays only, except holiday weekends.
For further information on home pick-ups and drop-offs (including small business waste),
Call (800) 444-4244

*It is illegal to transport more than 15 gals. or 125 lbs. of hazardous waste.

Encinitas used oil collection sites

Drop off used motor oil at the following locations and receive $0.16 per gallon. Call for hours of operation. If oil is contaminated, please refer to HHW for disposal.

Auto Zone
120 Leucadia Blvd.
(760) 942-2662

Brad's Foreign & Domestic
65 Westlake St., Suite 200-C
(760) 753-6217

Charlie's Foreign Car
751 Second St.
(760) 753-4969

Encinitas Foreign and Domestic Auto Repair*
901 Second St.
(760) 632-0830

Herman Cook Volkswagen*
1435 Encinitas Blvd.
(760) 753-6256

Jiffy Lube*
221 N. El Camino Real
(760) 632-1155

Kragen Auto Parts*
180 N. El Camino Real
(760) 753-4911

Valvoline Instant Oil Change
127 S. El Camino Real
(760) 943-1517

Pep Boys*
256 N. El Camino Real
(760) 944-7007



Did you know?

If all Americans recycled their used oil, the U.S. could save 1.3 million barrels of oil per day.
- California Integrated Waste Management Board

* Locations that also accept used oil filters.

Encinitas plastic bag recycling

Clean, dry, empty plastic grocery and newspaper bags can be deposited in designated collection bins at the following participating Encinitas grocery stores. You can also reuse your grocery bags more than once or use canvas or other non-disposable bags to help reduce waste.

Albertson's
479 Encinitas Blvd.
134 N. El Camino Real

Ralph's
125 N. El Camino Real

Vons
262 N. El Camino Real
453 Santa Fe Drive

Stater Brothers
1048 N. El Camino Real

Styrofoam peanuts and packing material

UPS Store, Postal Annex, or other mail stores will accept Styrofoam peanut packaging, non-popped bubble wrap, and other plastic and foam packing material for reuse.

Tires (small fee may apply)

Discount Tire Store
107 N. El Camino Real
Encinitas, CA 92024
(760) 634-2202

Evans Tire and Service Center
206 N. El Camino Real
Encinitas, CA 92024
(760) 942-2162

Big-O-Tires
2615 State Street
Carlsbad, CA 92008
(760) 720-5212

Discount Tire Store
685 San Rodolfo
Solana Beach, CA 92075
(858) 481-6387

Appliances

E-Z Rental (fees vary)
116 Azalea Dr.
Vista, CA 92083
(760) 734-1301
www.pickupoldappliances.com
Pick up, haul away, or drop off

Miramar Recycling Center (nominal fee)
5165 Convoy St.
San Diego, CA 92111
(858) 268-8971

Lee's Iron and Metal (free drop off)
1315 Lee Dr.
Vista, CA 92083
(760) 724-1330



Construction debris (concrete/asphalt)

Hanson Aggregates
3701 Haymar Dr.
Carlsbad, CA 92008
(858) 586-0611
Some restrictions apply. Call for details.

Construction debris
(untreated lumber, wood pallets, yardwaste)

Agri-Service
3210 Oceanside Blvd.
Oceanside, CA 92054
(760) 439-9920
Some restrictions apply. Call for details.

Scrap metal and iron

Lee's Iron and Metal

1315 Lee Dr.
Vista, CA 92083
(760) 724-1330

Ecology Auto Wrecking

1330 Airport Road
Oceanside, CA 92054
(760) 966-2866
Auto parts and appliances. Batteries and tires NOT accepted.



Bulky item pickup

EDCO will pick up large or bulky household items by special arrangement. Examples of bulky items include: refrigerators, washers, dryers, sofas, chairs, mattresses, water heaters, beds (disassembled), tables (with legs removed), or other household items too large to be picked up by your weekly trash truck. Pickups are on Fridays by appointment. Fees vary by item.

Free self haul

Each year, residential trash customers receive a coupon from EDCO which is good for free disposal of one load of bulky items and other residential waste at the Palomar Transfer Station located at 5960 El Camino Real in Carlsbad. Household Hazardous Waste is NOT accepted at the transfer station. Residents of apartment complexes and other residential properties where the trash bill is handled by a property management company will need to contact EDCO for further info.

Did you know?

Half of all the polyester carpet manufactured in the U.S. is made from recycled soda bottles.
- California Department of Conservation

Ocean protection

The ocean begins at your front door.

Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to carry rainwater away from developed areas to prevent flooding. Untreated storm water and the pollutants it carries flow directly into our creeks, rivers, lagoons, and the ocean.

Storm water pollution can have a serious impact on water quality in Encinitas. Pollutants from the storm drain system can harm marine life as well as coastal and wetland habitats. They can also degrade our recreational beach areas and contribute to beach postings.



Storm water pollution comes from a variety of sources, including:

- Sediment from construction, home improvement, and landscaping projects
- Excess pesticides and fertilizer from lawns, gardens, greenhouses, and nurseries
- Trash/litter
- Oil and metals from cars
- Detergents, cleaners, and solvents from car washing and power washing activities
- Bacteria from pet waste

Did you know?

One gallon of oil can pollute about one million gallons of water.
- California Integrated Waste Management Board

We all live in a watershed

A watershed is an area of land which drains all the water into creeks, rivers, lagoons, and eventually the ocean. The City of Encinitas drains into Cottonwood Creek, Moonlight Beach, San Elijo Lagoon, and Batiquitos Lagoon.

HEALTHY WATERSHEDS = HEALTHY COMMUNITIES

In Encinitas we are surrounded by water and your actions either help or hurt the environment. Healthy watersheds are vital to our quality of life. Here are some tips to help keep our community clean:

- Properly dispose of all trash and debris
- Use fertilizers and pesticides sparingly. For more information visit: www.ipm.ucdavis.edu
- Adjust sprinklers and prevent over-watering. For more information visit: www.bewaterwise.com
- When possible, take your car to a commercial car wash
- Keep your car properly maintained to prevent fluid leaks
- Volunteer at cleanup events in Encinitas
- Pick up after your pets

To report an illegal discharge or for more information, visit us online at:
www.ci.encinitas.ca.us/resident/environment/cleanWP
or call our Clean Water Hotline at (760) 633-2787.



Home composting

Composting is nature's way of recycling. It is the controlled natural decomposition of organic materials such as leaves, grass clippings, prunings, and fruit, vegetable, and grain scraps. Over time, the sun, worms, and microorganisms break down organic materials into compost. Using the finished compost in your landscaping is a great way to return nutrients to the soil and help conserve water.

The Solana Center for Environmental Innovation provides free composting workshops for City of Encinitas residents. Visit the Solana Center website for more information at www.solanacenter.org, or call (760) 436-7986 x 216 to learn more.

Home compost bins (Biostack and Wriggly Wranch worm bins) are subsidized by the City of Encinitas for Encinitas residents, and are available at the Solana Center for $35 (retail value $119), price subject to change.




CITY OF ENCINITAS
Incorporated 1986


EDCO
WASTE & RECYCLING SERVICES
"We'll Take Care of It"


RECYCLE
USED OIL


Solana Center
for Environmental Innovations


CleanHarbors
ENVIRONMENTAL SERVICES

Appendix F

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City of Encinitas
Storm Water Best Management Practices Manual, Part II

STORM WATER MANUAL

FOR NEW DEVELOPMENT

AND REDEVELOPMENT

A Manual for Construction & Permanent Post Construction Storm Water Best Management Practices Requirements

Introduced: November 12, 2002
Adopted: December 11, 2002
Modified: April 9, 2003

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I. INTRODUCTION

I.1. Best Management Practice Manual Part II Organization

This manual describes how to comply with the permanent improvement and construction phase storm water requirements for new development projects in the City of Encinitas. This manual further guides the project applicant through the selection, design, and incorporation of storm water BMPs into the project's design plan.

This manual groups development-related storm water BMPs into two categories:

1. *construction BMPs*, which are practices, procedures, devices or materials used to prevent the transport and introduction of pollutants both on and from a project site during construction; and
2. *permanent BMPs*, which are the site design features, source control features, and treatment control BMPs that become a permanent part of a project's design and remain functioning throughout the "use" phase of a project site. (See the definitions for site design, source control and treatment control BMPs in this appendix).

Section I, "Introduction," describes storm water pollution background information and legal or regulatory requirements associated with storm water pollution control.

Section II, "Project Review & Permitting Process," outlines the project plan review and approval process all permits. Applicants should use Section II as the roadmap to navigate through this manual and ensure storm water requirements are accurately and efficiently incorporated into their projects during project review. The remaining sections provide technical information necessary to incorporate the storm water requirements.

Section III, "Permanent Storm Water BMP Selection Procedure," lists the permanent storm water BMP requirements, which are organized into a progression intended to demonstrate a typical project planning and design process and to maximize storm water protections while minimizing project costs. Section IV, "Construction Storm Water BMP Performance Standards," describes the City's construction storm water BMP standards. Section V, "Implementation & Maintenance of Requirements," describes how the implementation and the maintenance of construction and permanent BMPs must be assured for all permits. For permanent BMPs, this section provides a process and the requirements for executing a maintenance agreement with the City. Section VI contains appendices to the Best Management Practice Manual Part II that are either necessary or designed to provide guidance in completing the storm water requirements in this manual.

I.2. Background

Urban runoff discharged from municipal storm water conveyance systems has been identified by local, regional, and national research programs as one of the principal causes of water quality problems in most urban areas. The City of Encinitas' storm water conveyance system, which collects runoff and rainwater from our streets, rooftops,

driveways, parking lots, and other impervious areas and conducts flows directly to our beaches and lagoons without receiving treatment (our storm water conveyance system is separate from our sanitary sewer system). Urban runoff potentially contains a host of pollutants like trash and debris, bacteria and viruses, oil and grease, sediments, nutrients, metals, and toxic chemicals. These contaminants can adversely affect receiving and coastal waters, associated wildlife, and public health. Urban runoff pollution is a year-round problem because of the many urban water uses that discharge runoff to the storm water conveyance system.

Storm water pollution can negatively affect human health and aquatic plant and animal life. Potentially harmful viruses and bacteria are now found in our coastal waters along with soil particles, solids/debris, litter, oil, grease, and chemical compounds. Oil and grease from parking lots, pesticides, cleaning solvents, and other toxic chemicals can contaminate storm water and these contaminants can be transported into receiving waters—the beaches, lagoons, and creeks we all enjoy. Fertilizer constituents from nurseries, lawns, and golf courses or leaking septic tanks can cause algal blooms and encourage microbial growth to create an increasing spiral of biological activity known as eutrophication. Disturbances of the soil from construction can allow silt to wash into storm channels and receiving waters making them muddy, turbid, and inhospitable to natural aquatic organisms. Many artificial surface treatments such as galvanized metal, paint, or preserved wood containing metals contribute to pollution by storm water run-on or leaching by storm water as the surfaces corrode, flake, dissolve, or decay. Heavy metals, such as copper from automobile brakes and lead and chromium from paints and primer coatings, are toxic to aquatic organisms and may bio-accumulate.

Land development and construction activities significantly alter drainage patterns and contribute pollutants to urban runoff primarily through erosion, the removal or change of existing natural vegetation during construction, and the creation of new impervious surfaces such as parking lots, which often permanently contribute pollutants throughout the “use” of the project site. When homes, work places, recreational areas, roads, parking lots, and structures are built, new impervious areas are built- creating the potential for a “double-negative” impact to water quality. First, the natural landscape’s ability to infiltrate and cleanse storm water and urban runoff is “capped” by the impervious surfaces. As impervious surfaces increase, water that normally would have percolated into the soil to be naturally filtered flows over the land surface directly to downstream wetlands, creeks, and eventually the Pacific Ocean. Accordingly, increases in impervious cover can increase the frequency and intensity of storm water flows. Second, new impervious surfaces often become a source of pollutants associated with development which include automotive fluids, cleaning solvents, toxic or hazardous chemicals, detergents, sediment, metals, pesticides, oil and grease, and food wastes. These pollutants, which are often temporarily captured on impervious surfaces, are transported to the storm water conveyance system by storm water and urban runoff. The pollutants flow untreated through the storm water conveyance system and ultimately into our creeks, rivers, beaches, and lagoons. With the growing concerns of urban runoff and storm water pollution, local, state, and federal agencies devised regulations requiring development planning and construction controls to treat storm water-related pollution from new development projects before it reaches any receiving waters.

The Municipal Storm Water National Pollutant Discharge Elimination System (NPDES) Permit (Municipal Permit), issued on February 21, 2001 to the City of Encinitas, the County of San Diego, the Port of San Diego, and 17 other cities in the region by the San Diego Regional Water Quality Control Board (Regional Board), requires the development and implementation of storm water regulations addressing storm water pollution issues in development planning and construction associated with private and public development projects. Specifically, private and public development projects are required to include storm water best management practices (BMPs) both during construction, and in the projects permanent design in order to reduce pollutants discharged from the project site to the maximum extent practicable (see Appendix G for a detailed description of the various types and categories of BMPs discussed in this manual).

The primary objectives of the Best Management Practice Manual Part II requirements are to:

1. Effectively prohibit non-storm water discharges; and
2. Reduce the discharge of pollutants from storm water conveyance systems to the Maximum Extent Practicable (MEP statutory standard) both during construction and throughout the use of a developed site.

To address pollutants that may be generated from new development once the site is in use, the Municipal Permit further requires that the City implement a series of permanent BMPs described in a document called the Model Standard Urban Storm Water Mitigation Plan, or SUSMP (pronounced “sue-sump”), which was approved by the Regional Board on June 12, 2002.

This manual is an uncodified ordinance adopted pursuant to the City of Encinitas Watercourse Protection, Storm Water Management and Discharge Control Ordinance codified in Chapter 20.08 of the Encinitas Municipal Code. It is Part II of the City of Encinitas Storm Water Best Practices Manual and provides instructions on the City’s construction phase and permanent BMP requirements, based on the Model SUSMP, for new projects in the City of Encinitas. It applies to all projects even if the project is currently under review or previous approvals have been obtained.

I.3. Legal Framework

The requirement to implement storm water BMP requirements for development projects is based on Section 402 (p) of the Clean Water Act. The Federal Clean Water Act amendments of 1987 established a framework for regulating storm water discharges from municipal, industrial, and construction activities under the NPDES program. Under the Federal Clean Water Act, municipalities throughout the nation are issued a Municipal NPDES Permit. The primary goal of the Municipal Permit is to stop polluted discharges from entering the storm water conveyance system and local receiving and coastal waters.

In California, the State Water Resources Control Board (SWRCB), through the nine Regional Boards, administers the NPDES storm water municipal permitting program. Based on the San Diego Municipal Permit issued by the San Diego Regional Board, the

City is required to develop and implement construction and permanent storm water BMPs addressing pollution from new private and public development projects.
In order to comply with the conditions of the Municipal Permit, the City of Encinitas adopted the City of Encinitas Watercourse Protection, Storm Water Management and Discharge Control Ordinance ("Storm Water Ordinance") codified in Chapter 20.08 of the Encinitas Municipal Code. This manual is an uncodified ordinance adopted by reference as Part II of the City of Encinitas Storm Water Best Practices Manual. The Municipal Permit requires the City to categorize and prioritize land uses in order to establish effective BMPs. The Storm Water Ordinance authorizes the City Engineer to establish Best Management Practices (BMPs), including permanent improvements, for all types of land uses.

The City Engineer may establish alternative Best Management Practices. The allowable use of alternative BMPs at a specific site shall be determined at the sole discretion of the City Engineer. The City Engineer may establish Best Management Practices for a specific site or activity if necessary to reduce Pollutants to the Maximum Extent Practicable or to comply with an order of the San Diego Regional Water Quality Control Board. The City Engineer may also establish additional Best Management Practices for a specific site if the City Engineer determines that the Best Management Practices implemented at the site have not reduced the pollutants to the Maximum Extent Practicable."

II. PROJECT REVIEW & PERMITTING PROCESS

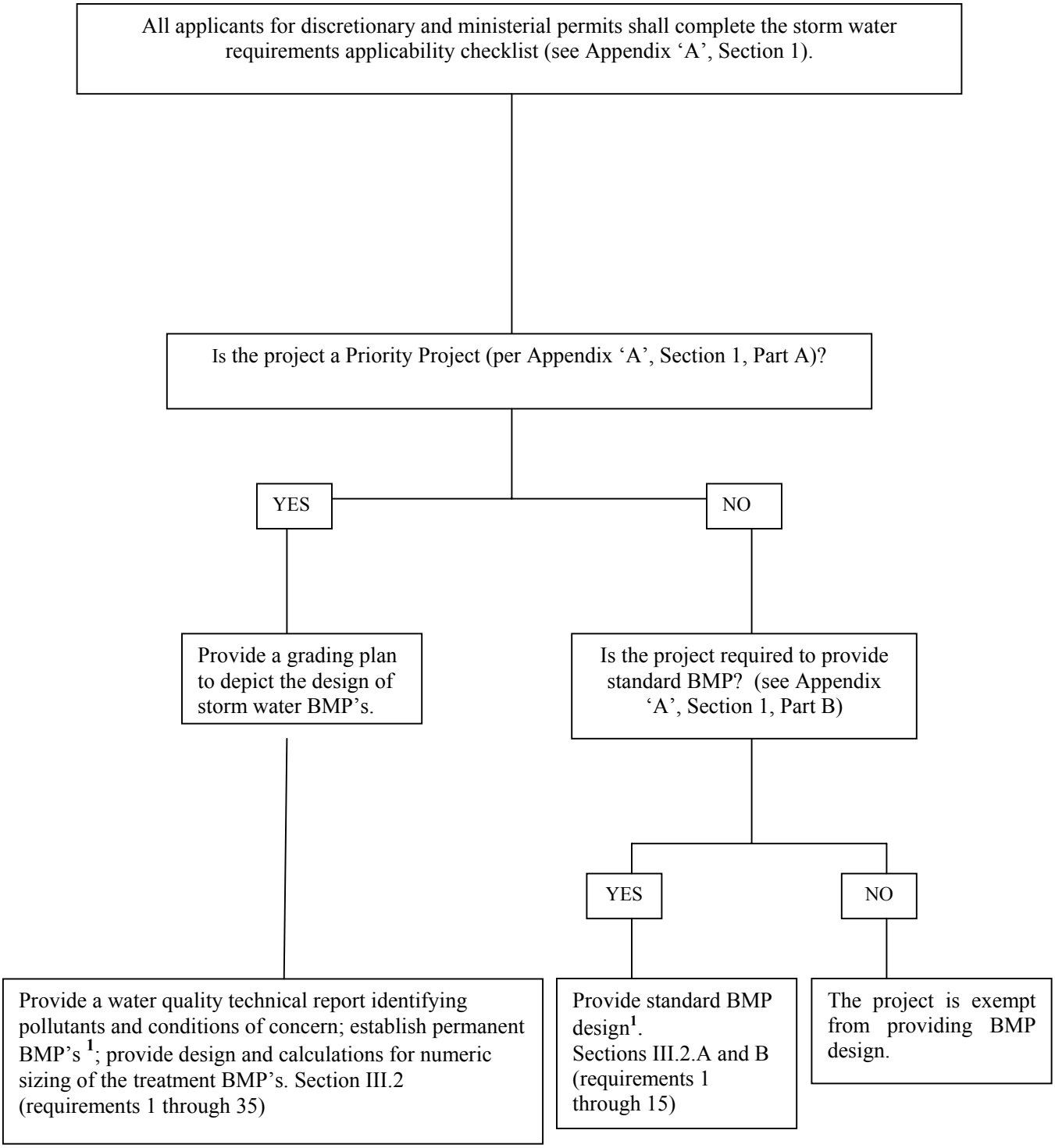
The City of Encinitas Storm Water Management Ordinance requires that all new development and redevelopment activities comply with the storm water pollution prevention requirements per the Municipal Code Chapter 20.08 and Grading and Erosion Control Chapter 23.24. These storm water pollution prevention requirements, which are described in detail in Section III, "Permanent Storm Water Best Management Practices Selection Procedure," and Section IV, "Construction Storm Water Best Management Practices Performance Standards," are site specific and vary based on the project's potential impact on the quality of receiving waters.

The steps below describe the elements of the plan review and permitting processes for storm water best management practice (BMP) requirements. The flow chart in Figure I, "Post-Construction Storm Water Quality Review Process", demonstrates how storm water requirements are incorporated into projects requiring subdivision approvals, development permits or other discretionary actions. The flow chart in Figure II, "Construction Storm Water Quality Review Process", describes how storm water requirements are incorporated into projects during the construction permit review process.

II.1 Step 1: Determine Applicable Storm Water BMP Requirements

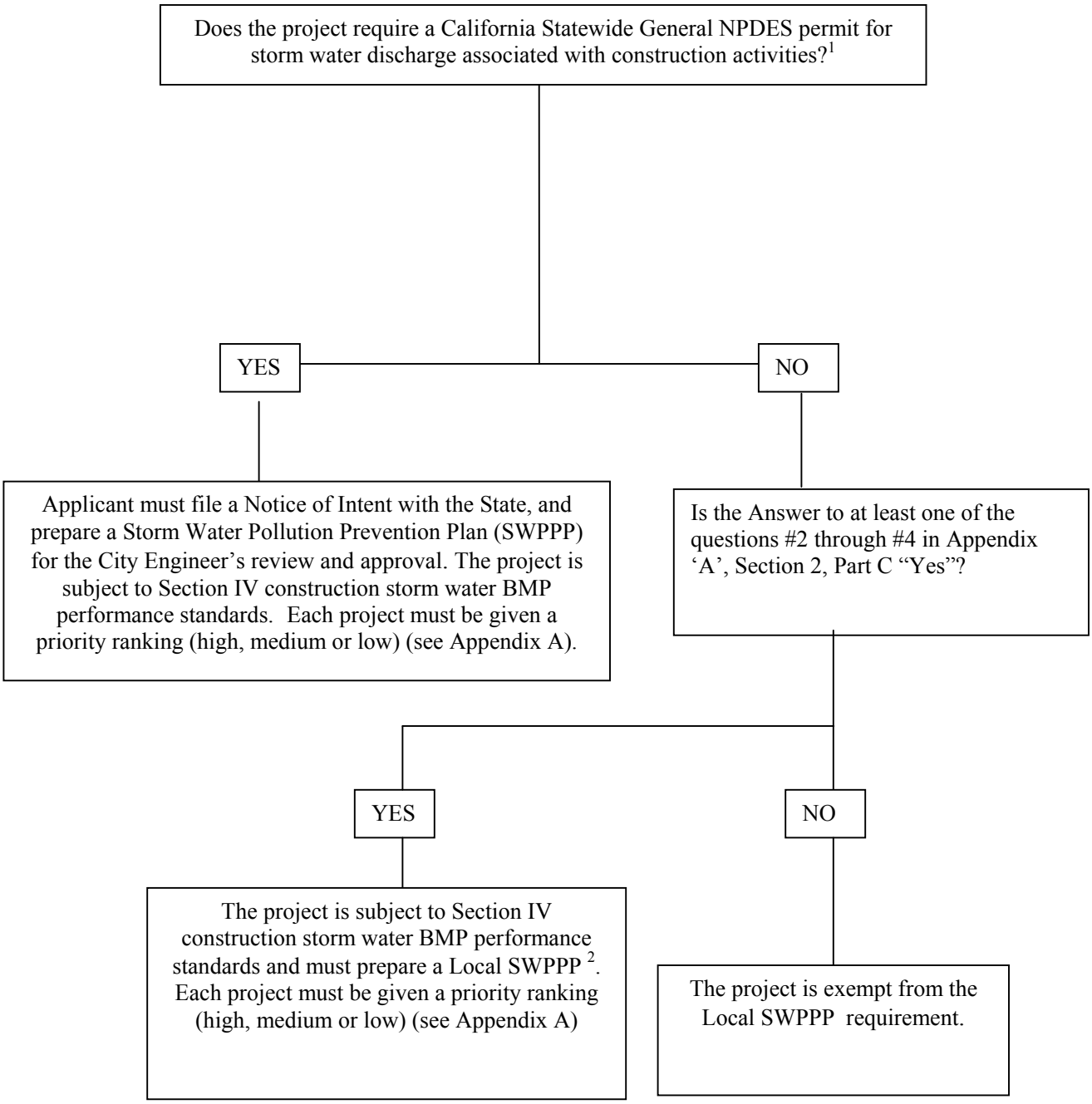
Prior to submittal of plan check documents, applicants must complete the "Storm Water Requirements Applicability Checklist" in Appendix A to determine if their project is subject to permanent and construction storm water best management practice (BMP) requirements. (Note: this form must be completed for all permit applications, even if previous approvals exist. Projects with previous approvals will be required to comply with the storm water requirements in this document). This checklist must be completed, signed by the responsible party for the project, and submitted with the permit application. For private projects, the project design must include all required permanent BMPs for the application package to be deemed complete.

Figure I: Post-Construction Storm Water Quality Review Process



[1] ***BMP selection and design are subject to the approval of the City Engineer***

Figure II: Construction Storm Water Quality Review Process



1. Projects propose land disturbance of more than 1 acre .
2. BMP selection and design are subject to the approval of the City Engineer

II.1.A. Permanent Storm Water BMP Requirements

II.1.A.i.Standard Requirements. Projects subject to standard permanent storm water requirements must incorporate the site design and source control requirements identified in Sections III.2.A and B (requirements 1 through 15) into the project (see Table 1). Refer to Step 2: "Prepare & Submit Appropriate Plans," for guidance in the BMP design process.

II.A.1.ii. Priority Project Requirements. Projects subject to priority project permanent storm water requirements must incorporate all applicable requirements in Section III.2, "Establish Permanent Storm Water Best Management Practices," (requirements 1 through 33) into the project design. The major difference between the BMP requirements for priority projects and non-priority projects (standard BMPs) is that treatment control BMPs for priority projects must be sized based on the numeric sizing criteria (Section III.2 requirement 31). Non-priority projects are not required to meet numeric sizing criteria. Priority projects BMP requirements include the site design and source control BMPs, BMPs applicable to individual priority project categories, and treatment control BMPs. If a priority project meets more than one priority project category definition, as shown in Table 1, the project is subject to all BMPs applicable to individual priority project categories. For example, if a project proposes to build 50 attached residential units and a 6,000 square foot restaurant with a 70-space surface parking lot, the project would be subject to the individual priority project category BMP requirements for "Attached Residential Development", "Restaurants", and "Parking Lots" as shown in Table 1 below. Refer to Step 2, "Prepare & Submit Appropriate Plans", for guidance in the permanent BMP design process.

Table 1. Standard Development Project & Priority Project Storm Water BMP Requirements Matrix.

	Site Design BMPs(1)	*Source Control BMPs(2)*	*BMPs Applicable to Individual Priority Project Categories(3)*										*Treatment Control BMPs(4)*
			a. Private Roads	b. Residential Driveways & Guest Parking	c. Dock Areas	d. Maintenance Bays	e. Vehicle Wash Areas	f. Equipment Wash Areas	g. Outdoor Processing Areas	h. Surface Parking Areas	i. Fueling Areas	j. Hillside Landscaping	
Standard Projects	R	R	O	O	O	O	O	O	O	O	O	O	O
Priority Projects:													
Detached Residential Development	R	R	R	R								R	S
Attached Residential Development	R	R	R										S
Commercial Development >100,000 ft^2	R	R			R	R	R		R				S
Automotive Repair Shop	R	R			R	R	R	R			R		S
Restaurants	R	R			R			R					S
Hillside Development >5,000 ft^2	R	R	R									R	S
Parking Lots	R	R								R(5)			S
Streets, Highways & Freeways	R	R											S

R = Required; select one or more applicable and appropriate BMPs from the applicable steps in Section III.2.A-D, or equivalent as identified in Appendix B.
O = Optional/ may be required by City staff. Applicants are encouraged to incorporate treatment control BMPs and BMPs applicable to individual priority project categories into the project design as appropriate. City staff may require one or more of these BMPs where appropriate.
S = Select one or more applicable and appropriate treatment control BMPs from Appendix B.
(1) Refer to Section III.2.A.
(2) Refer to Section III.2.B.
(3) Priority project categories must apply specific storm water BMP requirements where applicable. Priority projects are subject to the requirements of all priority project categories that apply.
(4) Refer to Section III.2.D.
(5) Applies if the paved area totals >5,000 square feet or has >15 parking spaces and is potentially exposed to urban runoff.

II.1.B. Construction Storm Water BMP Requirements

Projects subject to the construction storm water best management practices requirements must comply with the standards included in Section IV, “Construction Storm Water BMP Performance Standards”, as appropriate given site conditions, season, project design, and construction methods. Each project must be given a priority ranking (high, medium or low) for the construction phase (see Appendix A). The prioritization will determine the inspection frequency by City staff but will not change the construction BMP requirements. Refer to Step 2-B “Construction Storm Water BMPs”. .

II.2 Step 2 – Prepare & Submit Appropriate Plans.

After determining the general categories of storm water requirements that apply to the project in Step 1 (e.g., construction BMPs, standard permanent BMPs, and/or priority project permanent BMPs), refer to the instructions in this step (see below) to determine what analysis and/or specific BMP requirements in Sections III and IV of the Best Management Practice Manual Part II must be provided and/or incorporated into the project[1].

II.2.A. Permanent Storm Water BMPs

Section III, "Permanent Best Management Practices Selection Procedure", contains a process for reviewing the project site location and preliminary project design before progressively identifying and incorporating site design BMPs, source control BMPs, requirements for individual priority project types, and treatment control BMPs into the project design. The procedure is organized so that the level of analysis required is commensurate with the potential pollutant type and quantity, the location of the project relative to sensitive receiving waters, and the type of storm water requirements that apply to a particular project.

II.2.A.i.Standard Requirements. Projects subject to only standard permanent BMP requirements need only to complete the "Identify Pollutants from the Project Area" procedure (Section III.1.A) and then incorporate the requirements in Section III.2.A, "Site Design BMPs", and Section III.2.B, "Source Control BMPs" (requirements 1-15). Applicants must incorporate all necessary permanent BMPs into the project plans prior to submittal, regardless of project type. Analysis of the project's anticipated pollutants of concern must also be included with the project submittal.

II.2.A.ii. Priority Project Requirements. Projects subject to the priority project permanent BMP requirements must complete all of the analyses required in Section III.1, "Identify Pollutants and Conditions of Concern", and incorporate all of the applicable BMP requirements in Section III.2, "Establish Storm Water BMP Requirements" (requirements 1-33). Applicants must incorporate all necessary permanent BMPs into the project plans prior to submittal, regardless of project type. In addition, projects subject to priority project requirements must prepare and submit a Water Quality Technical Report in accordance with Appendix C. Analysis of the project's anticipated pollutants of concern, anticipated pollutants of concern in downstream receiving waters, and conditions of concern must also be included in the Water Quality Technical Report as part of the project submittal.

II.2.B. Construction Storm Water BMPs

Section IV, "Construction Storm Water BMP Performance Standards", describes the construction site management requirements with which contractors must comply. In

[1] Projects are only required to provide applicable BMPs. For example, an attached residential development project subject to the priority project requirements would not have to meet the "private road" requirements in this manual if no private roads were proposed. In addition, the City Engineer may approve proposed alternatives to the BMP requirements in this manual if they are determined to be applicable and equally effective.

addition, Section IV lists the performance standards that construction sites must meet and provides a list of erosion control, sediment control, and materials management BMPs for reference. Each project must be given a priority of high, medium or low (see Appendix A). (Note: Prioritization of construction projects will determine the inspection frequency by City staff and may be changed during the construction process based on the potential for pollutants to be discharged from the site.)

II.2.B.i.Construction Projects Over 5 Acres (until March 10, 2003 – see below). Those projects that have been determined to require construction BMPs in Step 1 must identify the construction BMPs to be implemented in accordance with the performance standards in Section IV, "Construction Storm Water BMP Performance Standards". If a project disturbs 5 acres or more (to be reduced to 1 acre on March 10, 2003), the applicant must provide a Storm Water Pollution Prevention Plan (SWPPP) identifying all construction BMP requirements required by Section IV, in accordance with Order No. 99-08-DWQ of the State General Permit for Storm Water Discharges Associated with Construction Activity (State General Construction Permit). Consistent with the State General Construction Permit, the City will require that BMPs be installed and maintained for all applicable projects in addition to good housekeeping and site and materials management. Appendix E provides general guidelines for preparation of a SWPPP as well as a more detailed checklist on how to meet the requirements. The City of Encinitas BMP Manual also provides general guidelines and design for construction projects. The City requires that a copy of the NOI and SWPPP be submitted with the plan check package.

II.2.B.ii. Construction Projects Under 5 Acres (until March 10, 2003 – see below). Those projects that have been determined to require construction BMPs in Step 1 must identify the construction BMPs to be implemented in accordance with the performance standards in Section IV, "Construction Storm Water BMP Performance Standards." For projects that disturb less than 5 acres (to be reduced to 1 acre on March 10, 2003) and are determined to have a potential to impact water quality during construction, the applicant must provide a Local SWPPP, which identifies all construction BMP requirements required by Section IV with the project submittal. The Local SWPPP shall depict the BMPs to be implemented during construction in order to reduce/eliminate discharge of pollutants into the storm drain conveyance system. The Local SWPPP shall include but not be limited to erosion and sediment control BMPs, good housekeeping measures, and site and materials management. The City of Encinitas BMP Manual also provides general guidelines and design for construction projects.

After preparing plans and supporting documents according to the requirements in this manual, submit plans to the City Engineering for review (See Step 3).

II.3 Step 3 – Determine Adequacy of Proposed Plans.

The City Engineer will review submitted plans for compliance with the applicable storm water requirements contained in this manual. The City Engineer may approve proposed alternatives to the BMP requirements in this manual if they are determined to be applicable

and equally effective. Additional analysis or information may be required to enable staff to determine the adequacy of proposed BMPs and will be requested through plan check comments following the conclusion of a staff review cycle. After all storm water requirements have been approved by the City Engineer, proceed to Step 4 to assure implementation and maintenance of the approved BMPs through permit conditions, plan notes, and if necessary, maintenance agreements.

II.4 Step 4 -- Assure Implementation & Maintenance of Requirements.

Applicants must provide assurances that permanent storm water BMPs will be constructed and permanently maintained throughout the use of a developed site, and that construction BMPs will be implemented and maintained until construction is complete. The summaries below describe how construction and permanent BMP requirements must be assured during permit review processes. After the City Engineer has approved all construction and/or permanent BMPs, refer to Section V, “Implementation & Maintenance Of Requirements” to determine how construction and permanent BMP implementation and maintenance will be assured.

II.4.A. Permanent Storm Water BMPs

For all projects, permanent storm water maintenance requirements shall be incorporated into the project design and be shown on the plans. The maintenance plans for permanent BMPs shall be prepared by a registered civil engineer in the State of California and approved by the City Engineer prior to approval of the discretionary permit and/or final permits (grading, public improvements, building, or other ministerial permits). The permit approval shall include the “Permanent BMP Implementation And Maintenance Requirement” listed in Section V.3, “Implementation & Maintenance Of Requirements”. In addition, permanent BMP maintenance requirements shall be noted on the plans. No modifications of the permanent storm water BMPs are allowed unless the City Engineer has approved the modifications and a permit showing the proposed changes has been obtained from the City Engineer.

II.4.B. Construction BMPs

For projects requiring construction permits, construction BMP requirements shall be incorporated into the project design and shown on the plans prior to the issuance of any permits. Construction BMP maintenance requirements shall also be noted on the plans. Any construction BMP requirements that cannot be shown graphically must be noted on the plans.

III. PERMANENT BEST MANAGEMENT PRACTICES SELECTION PROCEDURE

All projects must complete the analysis required in the subsections of Section III.1.A. below. Priority projects should also complete sections III.1.B and III.1.C.

III.1. Identify Pollutants and Conditions of Concern

III.1.A. Identify Pollutants from the Project Area

Using Table 1, identify the project's anticipated pollutants. Pollutants associated with any hazardous material sites that have been remediated or are not threatened by the proposed project are not considered a pollutant of concern. Projects meeting the definition of more than one project category shall identify all general pollutant categories that apply.

Table 2. Anticipated and Potential Pollutants Generated by Land Use Type.

	General Pollutant Categories								
Project Categories	Sediments	Nutrients	Heavy Metals	Organic Com-pounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P(1)	X
Commercial Development >100,000 ft^2	P(1)	P(1)		P(2)	X	P(5)	X	P(3)	P(5)
Automotive Repair			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	
Hillside Development >5,000 ft^2	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X		

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site.
(2) A potential pollutant if the project includes uncovered parking areas.
(3) A potential pollutant if land use involves food or animal waste products.
(4) Including petroleum hydrocarbons.
(5) Including solvents.

III.1.B. Identify Pollutants of Concern in Receiving Waters

For priority projects, Identify all the pollutants that the proposed project generates based on Table 2 and list the pollutant on the Water Quality Technical Report.

III.1.C. Identify Conditions of Concern

For priority projects, the following analysis shall be conducted and reported in the project's Water Quality Technical Report:

1. Evaluate the project's conditions of concern in a drainage study report prepared by a registered civil engineer in the State of California, with experience in the science of stream and river generated surface features (i.e., fluvial geomorphology) and water resources management. The report shall consider the project area's location (from the larger watershed perspective), topography, soil and vegetation conditions, percent impervious area, natural and infrastructure drainage features, and any other relevant hydrologic and environmental factors to be protected specific to the project area's watershed.
2. As part of the drainage study, the applicant's civil engineer shall conduct a field reconnaissance to observe and report on downstream conditions, including undercutting erosion, slope stability, vegetative stress (due to flooding, erosion, water quality degradation, or loss of water supplies) and the area's susceptibility to erosion or habitat alteration as a result of any future upstream development.
3. The drainage study shall compute rainfall runoff characteristics from the project area including, at a minimum, runoff peak flow rates before and after development, velocities, time of concentration, and retention volume. These characteristics shall be developed for the two-year and 10-year frequency, Type B storm, of six-hour or 24-hour duration (Based on County of San Diego Hydrology Manual, Intensity Duration Design), during critical hydrologic conditions for soil and vegetative cover[2]. The drainage study shall also report the project's conditions of concern based on the hydrologic and downstream conditions discussed above. Where downstream conditions of concern have been identified, the drainage study shall establish that pre-project hydrologic conditions that minimize impacts on those downstream conditions of concern would be either improved or maintained by the proposed project, satisfactory to the City Engineer, by incorporating the permanent BMP requirements identified in Section III.2, below.

III.2. Establish Permanent Storm Water Best Management Practices

After identifying the project's pollutants of concern, and conditions of concern (for priority projects) in Section III.1, projects subject to standard or priority project requirements shall implement all applicable site design and source control BMPs listed below. Projects subject to priority project requirements must also implement the BMPs applicable to individual priority project categories as well as structural treatment control BMPs. Applicants may employ alternative comparable and equally effective site design and source control BMPs (including requirements applicable to individual priority project categories) that are satisfactory to the City Engineer.

[2]. Design storms can be found at http://www.wrcc.dri.edu/pcpnfreq.html.

Projects are encouraged to address these objectives through the creation of a hydrologically functional project design that attempts to mimic the natural hydrologic regime. Mimicking a site's natural hydrologic regime can be pursued by:

- Reducing imperviousness, conserving natural resources and areas, maintaining and using natural drainage courses in the storm water conveyance system, and minimizing clearing and grading.
- Providing runoff storage measures dispersed uniformly throughout a site's landscape through the use of a variety of detention, retention, and runoff practices.
- Implementing on-lot hydrologically functional landscape design and management practices.

These design principles offer an innovative approach to urban storm water management, one that does not rely on the conventional end-of-pipe or in-the-pipe structural methods but instead uniformly or strategically integrates storm water controls throughout the urban landscape. Useful resources for applying these principles, referenced in the appendix, include *Start at the Source* (1999), and *Low-Impact Development Design Strategies* (1999) (see Appendix E). Effective source controls offer another strategy to reduce a project's need for treatment. Therefore, projects shall incorporate, where applicable, storm water BMPs into the project design, in the following progression:

- Site Design BMPs
- Source Control BMPs
- BMPs for Individual Priority Project Categories (these are site design and source control BMPs)
- Treatment Control BMPs

The series of best management practices listed in Section III.2 have been organized sequentially to allow the applicant and design professional to incorporate site design BMPs, source control BMPs, and where necessary, requirements applicable to individual priority project categories and treatment control BMPs in this progression.

III.2.A. Site Design BMPs

Maintain Pre-Development Rainfall Runoff Characteristics

Control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion by applying the following concepts:

1. Minimize impervious footprint. (1) Increase building density (number of stories above or below ground); (2) construct walkways, trails, patios, overflow parking lots and alleys, and other low-traffic areas with permeable surfaces, such as pervious concrete, porous asphalt, unit pavers, and granular materials; (3) construct streets, sidewalks, and parking lot aisles to the minimum widths necessary, provided that public safety and a walkable environment for pedestrians are not compromised; and (4) minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.
2. Conserve natural areas. (1) Concentrate or cluster development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural, undisturbed condition; and (2) Use natural drainage systems to the maximum

extent practicable. Refer to the Environmentally Sensitive Lands regulations of the Land Development Code (LDC § 142.01, et. seq.) for more guidance in protecting environmentally sensitive lands.

3. Minimize Directly Connected Impervious Areas. (1) Where landscaping is proposed, drain rooftops into adjacent landscaping prior to discharging to the storm water conveyance system; and (2) where landscaping is proposed, drain impervious parking lots, sidewalks, walkways, trails, and patios into adjacent landscaping.
4. Maximize canopy interception and water conservation. (1) Preserve existing native trees and shrubs; and (2) plant additional native or drought tolerant trees and large shrubs in place of non-drought tolerant exotics.

Protect Slopes and Channels

5. Convey runoff safely from the tops of slopes.
6. Vegetate slopes with native or drought tolerant vegetation.
7. Stabilize permanent channel crossings.
8. Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion. Energy dissipaters shall be installed in such a way as to minimize impacts to receiving waters.

III.2.B. Source Control BMPs

Design Outdoor Material Storage Areas to Reduce Pollution Introduction

9. Hazardous materials with the potential to contaminate urban runoff shall be: (1) placed in an enclosure such as, but not limited to, a cabinet, shed, or similar structure that prevents contact with rain, runoff, or spillage into the storm water conveyance system; and (2) protected by secondary containment structures such as berms, dikes, or curbs. The storage area shall be paved and sufficiently impervious to contain leaks and spills, and it shall have a roof or awning to minimize direct precipitation within the secondary containment area.

Design Trash Storage Areas to Reduce Pollution Introduction

10. Trash storage areas shall: (1) be paved with an impervious surface, designed not to allow run-on from adjoining areas, and screened or walled to prevent off-site transport of trash; ~~or~~ and, (2) contain attached lids on all trash containers that exclude rain or ~~(3)~~ contain a roof or awning to minimize direct precipitation.

Limited exclusion: detached residential homes.

Use Efficient Irrigation Systems & Landscape Design

11. Employ rain shutoff devices to prevent irrigation during and after precipitation.
12. Design irrigation systems to each landscape area's specific water requirements.
13. Use flow reducers or shutoff valves triggered by a pressure drop to control water loss

in the event of broken sprinkler heads or lines.

Limited exclusion: detached residential homes.

Provide Storm Water Conveyance System Stenciling and Signage

14. Provide concrete stamping, or the equivalent, of all storm water conveyance system inlets and catch basins within the project area with prohibitive language (e.g., “No Dumping – I Live Downstream”), satisfactory to the City Engineer. Stamping may also be required in Spanish.
15. Post signs utilizing prohibitive language and/or graphical icons prohibiting illegal dumping at public access points along channels and creeks within the project area, trailheads, parks, and building entrances.

III.2.C. BMPs Applicable to Individual Priority Project Categories

Where identified in Table 1, the following requirements shall be incorporated into applicable priority projects. Projects shall adhere to each of the individual priority project category requirements that apply to the project (e.g., a restaurant with more than 15 parking spaces would be required to incorporate the requirements for " g. Equipment Wash Areas” and "h. Parking Areas" into the project design).

a. Private Roads

16. The design of private roadway drainage shall use at least one of the following (for further guidance, see Start at the Source [1999]): (1) rural swale system- street sheet flows to vegetated swale or gravel shoulder, curbs at street corners, and culverts under driveways and street crossings; (2) urban curb/swale system- street sloping to the curb, periodic swale inlets drain to vegetated swale/biofilter; or (3) dual drainage system- precipitation up to 0.6” or rainfall intensity of up to 0.2 inch/hour captured in street catch basins and discharged to adjacent vegetated swale or gravel shoulder.

b. Residential Driveways & Guest Parking

17. Driveways shall have one of the following: (1) shared access; (2) wheel strips (paving only under tires); or (3) design allowing the drainage of runoff into landscaping prior to discharging to the storm water conveyance system.
18. Uncovered temporary or guest parking on private residential lots shall be: (1) paved with a permeable surface; or (2) designed to drain into landscaping prior to discharging to the storm water conveyance system.

c. Dock Areas

19. Loading/unloading dock areas shall include the following: (1) covered loading dock areas or design drainage to preclude urban run-on and runoff; and (2) Direct connections to storm drains from depressed loading docks (truck wells) are prohibited.

d. Maintenance Bays

20. Maintenance bays shall include at least one of the following: (1) indoor repair/ maintenance bays ; or, (2) design to preclude urban run-on and runoff.

21. Maintenance bays shall include a repair/maintenance bay drainage system to capture all wash water, leaks, and spills. Connect drains to a sump for collection and disposal. Direct connection of the repair/maintenance bays to the storm water conveyance system is prohibited.

e. & f. Vehicle & Equipment Wash Areas

22. Areas for washing/steam cleaning of vehicles and areas for outdoor equipment/accessory washing and steam cleaning shall be self-contained to preclude run-on and run-off, covered with a roof or overhang, and equipped with a clarifier or other pretreatment facility, or properly connected to the sanitary sewer with written permission from the local sewer district.

g. Outdoor Processing Areas

23. Outdoor processing areas shall: (1) cover or enclose areas that would be the most significant source of pollutants; or,(2) slope the area toward a dead-end sump;

24. Grade or berm processing area to prevent run-on from surrounding areas.

25. Installation of storm drains in areas of equipment repair is prohibited.

h. Surface Parking Areas

26. Where landscaping is proposed in surface parking areas (both covered and uncovered), incorporate landscape areas into the drainage design.

27. Overflow parking (parking in excess of the project's minimum parking requirements) may be constructed with permeable paving.

i. Non-Retail Fueling Areas

Non-Retail fueling areas shall be designed with the following:

28. Fuel dispensing area that is: (1) paved with Portland cement concrete or equivalent smooth impervious surface (asphalt concrete is prohibited); (2) designed to extend 6.5 feet (2.0 meters) from the corner of each fuel dispenser, or the length at which the hose and nozzle assembly may be operated plus 1 foot (0.3 meter), whichever is less; (3) sloped to prevent ponding; (4) separated from the rest of the site by a grade break that prevents run-on of urban runoff; and (5) designed to drain to the project's treatment control BMP(s) prior to discharging to the storm water conveyance system.

29. Overhanging roof structure or canopy that is: (1) equal to or greater than the area within the fuel dispensing area's grade break; and (2) designed not to drain onto or across the fuel dispensing area.

j. Hillside Landscaping

30. Hillside areas disturbed by project development shall be landscaped with deep-rooted, drought tolerant plant species selected for erosion control, to the satisfaction of the

City Engineer.

III.2.D. Treatment Control BMPs

31. Where identified in Table 1, and after site design and source control BMPs have been incorporated into the project, applicants of priority projects shall design a single or combination of treatment control BMPs designed to infiltrate, filter, and/or treat runoff from the project footprint to one of the "Numeric Sizing Treatment Standards" listed in Table 3, below. Applicants must use the Structural Treatment BMP Selection Procedure outlined in Section III.2.D.i below to select appropriate treatment control BMPs. Applicants are encouraged to design projects so that runoff is treated by site design BMPs such as rooftop runoff treated in landscaping, so that it may be applied towards the numeric sizing treatment standards, satisfactory to the City Engineer. In addition, applicants are encouraged to apply a "drainage basin approach" in meeting the treatment requirements. Treating entire hydrologic sub-drainages, which often extend off-site, is an equitable, environmentally sound regional solution that applies treatment requirements to hydrologically defined areas, rather than legally defined parcels. When integrated with other projects, this approach can provide a more efficient and cost effective method of treatment by locating fewer, more effective BMPs to treat entire sub-drainages once, like pieces of a puzzle. In all instances, structural treatment BMP(s) may be located on- or off-site, used singly or in combination, or shared by multiple new developments, pursuant to the following criteria:

    (a) All structural treatment control BMPs shall infiltrate, filter, and/or treat the required runoff volume or flow prior to discharging to any receiving water body supporting beneficial uses, including, but not limited to, wetlands originally constructed as mitigation for habitat loss and receiving waters that contain structural BMPs. A BMP may not be constructed in these areas unless the use is approved by the Regional Water Quality Control Board;

    (b) Multiple post-construction structural treatment control BMPs for a single priority project shall collectively be designed to comply with the numeric sizing treatment standards;

    (c) Shared BMPs shall be operational prior to the use of any dependent development or phase of development. The shared BMPs shall only be required to treat the dependent developments or phases of development that are in use;

    (d) Interim storm water BMPs that provide equivalent or greater treatment than is required may be implemented by a dependent development until each shared BMP is operational. If interim BMPs are selected, the BMPs shall remain in use until permanent BMPs are operational.

    e) If mechanical facilities are proposed for structural treatment of the storm water, the applicant shall provide facilities that are easy to maintain and are capable of removing all pollutants of concerns generated by the proposed priority project. At least 50% of the required structural treatment capacity shall be provided using natural treatment media such as a grassy swale or vegetated detention pond.

Table 3. Numeric Sizing Treatment Standards.

Table 3. Numeric Sizing Treatment Standards.

Volume

1. Volume-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) :

the volume of runoff produced from a 24-hour 85th percentile storm event. The required detention volume shall be calculated based on the following formula. The detention volume shall be designed to discharge the detained storm water in 24 to 48 hours.

Detention Volume, V = A a C P
A= Area, C= Co-efficient of Runoff, P=0.6 inch 85th percentile precipitation event

i. Regression constant, a = 1.299 [WEF, Tbl 5.4, p.177]

OR

Flow

2.

Natural filtration system shall be designed to effectively treat storm water and prevent erosion. WEF Manual of Practice No. 23 / ASCE Manual and Report on Engineering Practice No. 87 should be used for sizing of natural filtration system. City Engineer may approve other flow based design approach at his/her own discretion.

i. Natural filtration systems such as grassy swales, desilting ponds, wet ponds, and other bio-filtration systems should be used for storm water treatment. Natural storm water treatment systems are normally capable of removing a wider range of pollutants than mechanical systems. Natural systems are also less prone to failure and require less maintenance. If mechanical filtration is proposed, the filtration system must be capable of removing all pollutants generated by the proposed project and at least 50 percent of the required treatment capacity shall be provided using a natural filtration system. The City Engineer may waive the minimum 50 percent natural filtration requirement for redevelopment projects and road construction projects.

III.2.D.i. Structural Treatment BMP Selection Procedure

Priority projects shall select a single or combination of treatment BMPs from the categories in Table 4 that maximize pollutant removal for the particular pollutant(s) of concern. Any pollutants the project is expected to generate should be given top priority in selecting treatment BMPs.

To select a structural treatment BMP using the Structural Treatment Control BMP Selection Matrix (Table 4), each priority project shall implement a single or combination of structural treatment BMPs from Table 4 that are effective for pollutant removal of the identified pollutants of concern determined to be most significant for the project. Selected BMPs must be effective for the widest range of pollutants of concern anticipated to be generated by a priority project (as identified in Table 1).

Alternative storm water BMPs not identified in Table 4 may be approved at the discretion of the City Engineer, provided the alternative BMP is as effective in removal of pollutants of concern as other feasible BMPs listed in Table 4.

Table 4. Structural Treatment Control BMP Selection Matrix.

Pollutant of Concern	***Treatment Control BMP Categories***						
	Biofilters	Detention Basins	Infiltration Basins(1)	Wet Ponds or Wetlands	Drainage Inserts	Filtration	Hydrodynamic Separator Systems(2)
Sediment	M	H	H	H	L	H	M
Nutrients	L	M	M	M	L	M	L
Heavy Metals	M	M	M	H	L	H	L
Organic Compounds	U	U	U	U	L	M	L
Trash & Debris	L	H	U	U	M	H	M
Oxygen Demanding Substances	L	M	M	M	L	M	L
Bacteria	U	U	H	U	L	M	L
Oil & Grease	M	M	U	U	L	H	L
Pesticides	U	U	U	U	L	U	L

(1) Including trenches and porous pavement.
(2) Also known as hydrodynamic devices and baffle boxes.

L: Low removal efficiency
M: Medium removal efficiency
H: High removal efficiency
U: Unknown removal efficiency

Sources: *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters* (1993), *National Stormwater Best Management Practices Database* (2001), and *Guide for BMP Selection in Urban Developed Areas* (2001).

III.2.D.ii. Restrictions on the Use of Infiltration Treatment BMPs

32. Treatment control BMPs that are designed to primarily function as infiltration devices shall meet the following conditions (these conditions do not apply to treatment BMPs which allow incidental infiltration and are not designed to primarily function as infiltration devices, such as grassy swales, detention basins, vegetated buffer strips, constructed wetlands, etc.): (1) urban runoff from commercial developments shall undergo pretreatment to remove both physical and chemical contaminants such as sedimentation or filtration prior to infiltration; (2) all dry weather flows shall be diverted from infiltration devices except for those non-storm water discharges authorized pursuant to 40 CFR 122.26(d)(2)(iv)(B)(1): diverted stream flows, rising ground waters, uncontaminated ground water infiltration [as defined at 40 CFR 35.2005(20)] to storm water conveyance systems, uncontaminated pumped ground water, foundation drains, springs, water from crawl space pumps, footing drains, air conditioning condensation, flow from riparian habitats and wetlands, water line flushing, landscape irrigation, discharges from potable water sources other than water main breaks, irrigation water, individual residential car washing, and de-chlorinated swimming pool discharges; (3) pollution prevention and source control BMPs shall be implemented at a level appropriate to protect groundwater quality at sites where infiltration structural treatment BMPs are to be used; (4) the vertical distance from the base of any infiltration structural treatment BMP to the seasonal high groundwater mark shall be at least 10 feet. Where groundwater does not support beneficial uses,

this vertical distance criterion may be reduced, provided groundwater quality is maintained; (5) the soil through which infiltration is to occur shall have physical and chemical characteristics that are adequate for proper infiltration durations and treatment of urban runoff for the protection of groundwater beneficial uses; (6) the horizontal distance between the base of any infiltration structural BMP and any water supply wells shall be 100 feet or as determined appropriate by the City Engineer.

*III.2.D.*iii. *Restrictions on the Use of Mechanical Treatment BMPs*

33. Biofilters, desilting ponds, wet ponds, and other natural storm water treatment and filtration systems should be used for storm water pollution control. Natural storm water treatment systems are normally capable of removing a wider range of pollutants than to mechanical systems. Natural filtration facilities are also less prone to failure and require less maintenance than mechanical systems. If mechanical treatment is proposed the system must be capable of removing all pollutants generated by the proposed project and at least 50 percent of the required treatment capacity shall be provided using a natural treatment system. City Engineer may waive the minimum 50 percent natural treatment requirement at his/her own discretion if the project proponent demonstrate proven adequacy of the proposed mechanical treatment system. Engineer may require a testing, monitoring and reporting program for mechanical treatment systems secured with adequate material and performance bond, in order to assure proper performance and eliminate the potential for downstream impact.

Structural Treatment Limited Exclusions

(a.) Proposed restaurants where the land area for development or redevelopment is less than 5,000 square feet are excluded from the numerical sizing criteria requirements listed in Table 3.

(b.) Where significant redevelopment results in an increase of less than 50 percent of the impervious surfaces of a previously existing development, and the existing development was not subject to priority project requirements, the numeric sizing criteria apply only to the addition, not to the entire development.

IV. CONSTRUCTION STORM WATER BMP PERFORMANCE STANDARDS

Those projects that have been determined to require construction BMPs in Steps 1 and 2 of Section II, must identify the construction BMPs to be implemented in accordance with the performance standards in this section. The construction BMPs must be identified in a Storm Water Pollution Prevention Plan or Local SWPPP for projects disturbing more than or less than 5 acres, respectively (to be reduced to 1acre on March 10, 2003). These plans must be prepared in accordance with the guidelines in Appendix D.

It is the responsibility of the property owner and/or contractor to select, install, and maintain appropriate BMPs. A list of construction BMPs is provided for reference in Appendix E. BMPs must be installed in accordance with an industry recommended standard or in accordance with the requirements of the State General Construction Permit. More information about BMPs is provided in the Model Construction Program for San Diego Copermittees, the City of Los Angeles "Reference Guide for Storm water Best Management Practices", State Storm Water BMP Manuals, and Caltrans Standard BMP handbook.

This section of the BMP Manual establishes the minimum BMPs for construction sites in the City of Encinitas. These minimum BMPs are established as directed in the City's Storm Water Municipal NPDES Permit, issued by the Regional Water Quality Control Board (Order No. 2001-01). In response to the Municipal NPDES Permit, the City has revised the Storm Water Ordinance (Storm Water Management Ordinance, EMC Chapter 64.08) and the Grading Ordinance (Grading, Erosion, and Sediment Control Ordinance, EMC Chapter 23.24). All sites must, at all times, comply with the requirements of both of these ordinances.

Best management practices are to be shown on building plans, grading plans, and improvement plans. They are generally presented in the form of erosion and sediment control plans. The following section presents the minimum BMPs that must be included in these plans. In addition, the City requires that either a certification of compliance with the California General Permit for construction Activities (NOI) or a Storm Water Management Plan Checklist be submitted for all projects. This requirement is presented in Section 3 below. Plans will be reviewed by Engineering staff during plan check and construction sites will be inspected in order to verify compliance with the minimum BMPs outlined herein, in the Grading Ordinance, and in the Storm Water Management Ordinance. Failure to comply with these regulations can result in Notice of Violations, Stop Work Orders, Citations, and fines.

BMP requirements differ between the wet season (Oct. 1 – Apr. 30) and the dry season (May 1 – Sept. 30), the type of the project and topography of the site, as described below.

IV.1. Site Management Requirements

Construction is a dynamic operation where changes are expected. Storm water BMPs for construction sites are usually temporary measures that require frequent maintenance to maintain effectiveness and may require relocation, revision, and re-installation, particularly as project grading progresses. Therefore, owner/contractor self-inspections are required. They shall be performed by the owner's/contractor's Qualified Contact Person specifically

trained in storm water pollution prevention site management and storm water BMPs, including the installation and maintenance of sediment and erosion control measures. Additional qualified persons may assist with the inspection activities under the direction of the Qualified Contact Person. A Qualified Contact Person is required for all sites during both wet and dry weather conditions.

There are four primary purposes of the self-inspections conducted by owners and contractors:

- To ensure that the owners/contractors take full responsibility for managing storm water pollution caused by their activities.
- To ensure that storm water BMPs are properly documented and implemented and are functioning effectively.
- To identify maintenance (e.g., sediment removal) and repair needs.
- To ensure that the project proponents implement their storm water management plans.

A self-inspection checklist, noting date, time, conditions, and inspection date, must be kept on-site and made available for inspection, if requested. Self-inspections must be performed by a Qualified Contact Person according to the following schedule:

- Daily forecasting at all times
- At 24-hour intervals during extended rainfall events
- Daily evaluations as earth moving/grading is being conducted during the wet season
- Weekly (every 7 days) in the dry season as earth moving/grading is progressing

Storm water pollution prevention site management requirements include:

A. A qualified person who is trained and competent in the use of BMPs shall be on site daily, although not necessarily full time, to evaluate the conditions of the site with respect to storm water pollution prevention. This qualified contact person shall represent the contractor/ owner on storm water issues.

B. The qualified person shall implement the conditions of the Storm Water Pollution Prevention Plan, contract documents and/or local ordinances with respect to erosion and sediment control and other waste management regulations. They shall be kept on site and available to the City inspector at all times.

C. The qualified person is responsible for monitoring the weather and implementation of any emergency plans as needed. The weather shall be monitored on a 5-day forecast plan and a full BMP protection plan shall be activated when there is a 40% chance of rain.

D. The qualified person is responsible for overseeing any site grading and operations and evaluating the effectiveness of the BMPs. This person shall modify the BMPs as necessary to keep the dynamics of the site in compliance. This person or other qualified persons are responsible for checking the BMPs routinely for maintenance and documenting the BMPs being implemented.

IV.2. Performance Standards

The City Engineer will evaluate the adequacy of the owner's/contractor's site management for storm water pollution prevention, inclusive of BMP implementation, on construction sites based on performance standards for storm water BMPs. Poor BMP practices shall be challenged. Performance standards shall include:

A. No measurable increase of pollution (including sediment) in runoff from the site.
B. No slope erosion.
C. Water velocity moving offsite must not be greater than pre-construction levels and shall be discharged in a fashion that will not increase erosion potential downstream.

A site will be considered inactive if construction activities have ceased for a period of 7 or more consecutive calendar days. At any time of year, an inactive site must be fully protected from erosion and discharges of sediment. It is also the owner's/contractor's responsibility at both active and inactive sites to implement a plan to address all potential non-storm water discharges.

Regardless of any inspections conducted by the City, property owners or contractors are required to prevent any construction-related materials, wastes, spills or residues from entering a storm water conveyance system.

IV.3. Minimum Best Management Practices

Construction sites are placed in a category of high, medium and low depending on their threat to water quality to local receiving water bodies. These categories are established based primarily on soil erosion potential, site slope, site size and type, the sensitivity of receiving waters and proximity to environmentally sensitive areas. Each site's category is established by City staff based on a review of the plans, the site, or site location.

Required minimum BMPs have been established for each construction site category. If particular minimum BMPs are infeasible at any specific site, the City will require the implementation of other equivalent BMPs. The City may also require additional site specific BMPs as necessary to comply with the Municipal Permit, Storm Water Management Ordinance, and the Grading Ordinance.

IV.3.A. Dry Season Requirements (May 1 through September 30):
Medium and Low Priority Sites:

A. Perimeter protection BMPs must be installed and maintained to comply with performance standards (above).
B. Sediment control BMPs must be installed and maintained to comply with performance standards (above).
C. BMPs to control sediment tracking must be installed and maintained at entrances/exits to comply with performance standards (above).
D. Material needed to install standby BMPs necessary to completely protect the exposed portions of the site from erosion and to prevent sediment discharges, must be stored on site. Areas that have already been protected from erosion using physical stabilization or established vegetation stabilization BMPs as described below are not considered to be "exposed" for purposes of this

requirement.

E. The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a predicted storm event is defined as a forecasted, 40% chance of rain). On request, the owner/contractor must provide proof of this capability that is acceptable to the City Engineer.

F. Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The project proponent may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed. The area that can be cleared or graded and left exposed at one time is limited to the amount of acreage that the owner/contractor can adequately protect prior to a predicted rainstorm. Requirement "G" will require grading to be phased at larger sites. For example, it may be necessary to deploy erosion and sediment control BMPs in areas that are not completed but are not actively being worked before additional grading is done.

High Priority Sites (<u>in addition</u> to A. through G.):

G. Site specific BMPs that:
   1. remove pollutants from the construction site discharge,
   2. maintain or reduce the peak flow from the site during a rain event, and
   3. comply with BMPs outlined in the project SWPPP, if applicable.

<u>IV.3.B Rainy Season Requirements (October 1 through April 30):</u>

Medium and Low Priority Sites:

A. Perimeter protection BMPs must be installed and maintained to comply with performance standards (above).

B. Sediment control BMPs must be installed and maintained to comply with performance standards (above).

C. BMPs to control sediment tracking must be installed and maintained at site entrances/exits to comply with performance standards (above).

D. Material needed to install standby BMPs necessary to completely protect the exposed portions of the site from erosion, and to prevent sediment discharges, must be stored on site. Areas that have already been protected from erosion using physical stabilization or established vegetation stabilization BMPs as described below are not considered to be "exposed" for purposes of this requirement.

E. The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a predicted storm event is defined as a forecasted, 40% chance of rain). On request, the owner/contractor must provide proof of this capability that is acceptable to the City Engineer.

F. Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The

owner/contractor may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.

G. The area that can be cleared or graded and left exposed at one time is limited to the amount of acreage that the owner/contractor can adequately protect prior to a predicted rainstorm.
H. Erosion control BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.
I. Perimeter protection and sediment control BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.
J. Adequate physical or vegetation erosion control BMPs must be installed and established for all graded areas prior to the start of the rainy season. These BMPs must be maintained throughout the rainy season. If a selected BMP fails, it must be repaired and improved, or replaced with an acceptable alternate as soon as it is safe to do so. The failure of a BMP shows that the BMP, as installed, was not adequate for the circumstances in which it was used and shall be corrected or modified as necessary. Repairs or replacements must therefore put a more effective BMP in place.
K. All vegetation erosion control must be established prior to the rainy season to be considered as a BMP.
L. The amount of exposed soil allowed at one time shall not exceed that which can be adequately protected by deploying standby erosion control and sediment control BMPs prior to a predicted rainstorm.
M. A disturbed area that is not completed but that is not being actively graded must be fully protected from erosion if left for 7 or more calendar days. The ability to deploy standby BMP materials is not sufficient for these areas. BMPs must actually be deployed.

High Priority Sites (<u>in addition</u> to A. through M.):

N. Site specific BMPs that:
   1. remove pollutants from the site discharge for priority project
   2. maintain or reduce the peak flow from the construction site during a rain event for priority projects, and
   3. comply with BMPs outlined in the project SWPPP, if applicable.

V. IMPLEMENTATION & MAINTENANCE OF REQUIREMENTS

After all project BMPs have been approved by the City Engineer, applicants must ensure implementation and maintenance of the BMPs according to the processes outlined in the applicable sections for projects requesting any development permits. In addition, any project that will require a "General NPDES Permit for Storm Water Discharges Associated with Industrial Activities" shall include the following note on the plans and condition in the permit/approval:

Industrial NPDES Permit Requirement

"The Permittee or designee (or contractor for public projects) shall provide evidence of coverage under the General Industrial National Pollutant Discharge Elimination System Permit, in the form of a Notice of Intent (NOI) filed with the State Water Resources Control Board, prior to the issuance of any construction permits."

V.1. Post Construction BMPs, SUSMP

V.1.i. Permanent BMP Requirements. Applicants proposing projects that include permanent BMPs must prepare a maintenance agreement, satisfactory to the City Engineer and in conformance with the program outlined in the "Permanent Storm Water BMP Maintenance Agreement Requirements". Storm Water BMP Maintenance Agreement shall be approved prior to the issuance of any permits. The permanent BMPs shall be graphically shown on the plans where possible, and made a condition of the project's permit/approval. The permanent BMPs operation and maintenance requirements (O & M plan discussed below) shall also be noted on the plans and made a condition of the project's permit/approval.

V.2. Construction Permits

V.2.i. Construction Permits for Projects Under 5 Acres (to be reduced to 1 acre on March 10, 2003). Projects proposing to disturb less than 5 acres (1 acre on March 10, 2003) during construction shall include construction requirements, where possible, on the plans. Any remaining construction BMPs that cannot be shown graphically on the plans shall be either noted on, or stapled to, the plans (Local SWPPP) and made a condition of the permit. The project's construction priority ranking (see Appendix D) must also be noted on the construction plans. The applicant and contractor are responsible to maintain the construction BMPs throughout the construction and any construction stoppage period. Construction BMPs maintenance as well as implementation of the SWPPP and Local SWPPP shall continue until construction is completed and post construction BMPs are well established.

V.2.ii. Construction Permits for Projects Over 1 Acre. Projects proposing to disturb more than 1 acre during construction shall include all construction BMPs in a Storm Water Pollution Prevention Plan, prepared in accordance with Appendix D, "Storm Water Pollution Prevention Plan Guidelines." The construction BMPs shall also be shown on the plans, where possible. Any remaining construction BMPs that cannot

be shown graphically on the plans shall be either noted or stapled to the plans and made a condition of the permit. The project's construction priority ranking (see Appendix D) must also be noted on the construction plans. The applicant and contractor are responsible to maintain the construction BMPs throughout the construction and any construction stoppage period. Construction BMPs maintenance as well as implementation of the SWPPP and Local SWPPP shall continue until construction is completed and post construction BMPs are well established.

V.3. Permanent BMP Maintenance Agreement Requirements

Applicants shall propose a maintenance agreement assuring all permanent BMPs will be maintained throughout the "use" of a project site, satisfactory to the City Engineer (see Appendix G for a list of potential mechanisms). For discretionary projects, the City-approved method of permanent BMP maintenance shall be incorporated into the project's permit and shall be consistent with permits issued by resource agencies before decision-maker approval of discretionary actions. For projects requiring only ministerial permits, the City-approved method of permanent BMP maintenance shall be incorporated into the permit conditions before the issuance of any construction permits. In all instances, the applicant shall provide proof of execution of a City-approved method of maintenance repair and replacement before the issuance of construction approvals.

For all properties, the verification mechanism will include the project proponent's signed statement, as part of the project application, accepting responsibility for all permanent BMP maintenance, repair and replacement.

The maintenance agreement shall include the following:

1. Operation & Maintenance (O&M) Plan: The applicant shall include an Operation & Maintenance (O&M) plan, prepared satisfactory to the City Engineer, with the approved maintenance agreement, which describes the designated responsible party to manage the storm water BMP(s), employee's training program and duties, operating schedule, maintenance frequency, routine service schedule, specific maintenance activities (including maintenance of storm water conveyance system stamps), copies of resource agency permits, and any other necessary activities. At a minimum, maintenance agreements shall require the applicant to provide inspection and servicing of all permanent treatment BMPs on an annual basis. The project proponent or City-approved maintenance entity shall complete and maintain O&M forms to document all maintenance requirements. Parties responsible for the O&M plan shall retain records for at least 5 years. These documents shall be made available to the City Engineer for inspection upon request at any time.

2. Access Easement/Agreement: As part of the maintenance mechanism selected below, the applicant shall execute an access easement that shall be binding on the land throughout the life of the project, until such time that the permanent treatment BMP requiring access is replaced, satisfactory to the City Engineer.

VI. RESOURCES & REFERENCES

APPENDIX A

STORM WATER REQUIREMENTS APPLICABILITY CHECKLIST

Complete Sections 1 and 2 of the following checklist to determine your project's permanent and construction storm water best management practices requirements. This form must be completed and submitted with your permit application.

Section 1. Permanent Storm Water BMP Requirements:
If any answers to Part A are answered "Yes," your project is subject to the "Priority Project Permanent Storm Water BMP Requirements," and "Standard Permanent Storm Water BMP Requirements" in Section III, "Permanent Storm Water BMP Selection Procedure" in the *Best Management Practice Manual Part II*. If all answers to Part A are "No," and any answers to Part B are "Yes," your project is only subject only to the Standard Permanent Storm Water BMP Requirements. If every question in Part A and B is answered "No," your project is exempt from permanent storm water requirements.

Part A: Determine Priority Project Permanent Storm Water BMP Requirements.

Does the project meet the definition of one or more of the priority project categories?*	**Yes**	**No**
1. Detached residential development of 10 or more units		
2. Attached residential development of 10 or more units		
3. Commercial development greater than 100,000 square feet		
4. Automotive repair shop		
5. Restaurant		
6. Steep hillside development greater than 5,000 square feet		
7. Project discharging to receiving waters within Environmentally Sensitive Areas		
8. Parking lots greater than or equal to 5,000 ft^2 or with at least 15 parking spaces, and potentially exposed to urban runoff		
9. Streets, roads, driveways, highways, and freeways which would create a new paved surface that is 5,000 square feet or greater		
* Refer to the definitions section in the *Storm Water Standards* for expanded definitions of the priority project categories.		
Limited Exclusion: Trenching and resurfacing work associated with utility projects are not considered priority projects. Parking lots, buildings and other structures associated with utility projects are priority projects if one or more of the criteria in Part A is met. If all answers to Part A are "No", continue to Part B.		

Part B: Determine Standard Permanent Storm Water Requirements.

Does the project propose:	**Yes**	**No**
1. New impervious areas, such as rooftops, roads, parking lots, driveways, paths and sidewalks.		
2. Reconstruction of the existing impervious areas, such as rooftops, roads, parking lots, driveways, paths and sidewalks in excess of 1000 square feet.		
3. Permanent structures within 100 feet of any natural water body?		
4. Trash storage areas?		
5. Liquid or solid material loading and unloading areas?		
6. Vehicle or equipment fueling, washing, or maintenance areas?		

Does the project propose:	Yes	No
7. Require a General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (Except construction)?*		
8. Commercial or industrial waste handling or storage, excluding typical office or household waste?		
9. Any grading or ground disturbance during construction?		
10. Any new storm drains, or alteration to existing storm drains that reduces natural storm water treatment?		
*To find out if your project is required to obtain an individual General NPDES Permit for Storm Water Discharges Associated with Industrial Activities, visit the State Water Resources Control Board web site at, www.swrcb.ca.gov/stormwtr/industrial.html		

Section 2. Construction Storm Water BMP Requirements:

If the answer to question 1 of Part C is answered "Yes," your project is subject to Section IV, "Construction Storm Water BMP Performance Standards," and must prepare a Storm Water Pollution Prevention Plan (SWPPP). If the answer to question 1 is "No," but the answer to any of the remaining questions is "Yes," your project is subject to Section IV, "Construction Storm Water BMP Performance Standards," and must prepare a Local SWPPP . If every question in Part C is answered "No," your project is exempt from any construction storm water BMP requirements. If any of the answers to the questions in Part C are "Yes," complete the construction site prioritization in Part D, below.

Part C: Determine Construction Phase Storm Water Requirements.

Would the project meet any of these criteria during construction?	Yes	No
1. Is the project subject to California's statewide General NPDES Permit for Storm Water Discharges Associated With Construction Activities?		
2. Does the project propose grading or soil disturbance?		
3. Would storm water or urban runoff have the potential to contact any portion of the construction area, including washing and staging areas?		
4. Would the project use any construction materials that could negatively affect water quality if discharged from the site (such as, paints, solvents, concrete, and stucco)?		

Part D: Determine Construction Site Priority

In accordance with the Municipal Permit, each construction site with construction storm water BMP requirements must be designated with a priority: high, medium or low. This prioritization must be completed with this form, noted on the plans, and included in the SWPPP or Local SWPPP. Indicate the project's priority in one of the check boxes using the criteria below, and existing and surrounding conditions of the project, the type of activities necessary to complete the construction and any other extenuating circumstances that may pose a threat to water quality. The City reserves the right to adjust the priority of the projects both before and during construction. [Note: The construction priority does NOT change construction BMP requirements that apply to projects; all construction BMP requirements must be identified on a case-by-case basis. The construction priority does affect the frequency of inspections that will be conducted by City staff. See Section IV.1 for more details on construction BMP requirements.]

☐ *A) High Priority*

1) Projects where the site is 50 acres or more and grading will occur during the wet season
2) Projects 5 acres or more and tributary to an impaired water body for sediment (e.g., San Elijo Lagoon)
3) Projects 5 acres or more within or directly adjacent to or discharging directly to a coastal lagoon or other receiving water within an environmentally sensitive area
4) Projects, active or inactive, adjacent or tributary to sensitive water bodies

☐ *B) Medium Priority*

1) Capital Improvement Projects where grading occurs, however a Storm Water Pollution Prevention Plan (SWPPP) is not required under the State General Construction Permit (i.e., water and sewer replacement projects, intersection and street re-alignments, widening, comfort stations, etc.)
2) Permit projects in the public right-of-way where grading occurs, however SWPPPs are not required, such as installation of sidewalk, substantial retaining walls, curb and gutter for an entire street frontage, etc.
3) Permit projects on private property where grading permits are required (i.e., cuts over 5 feet, fills over 3 feet), however, Notice Of Intents (NOIs) and SWPPPs are not required.

☐ *C) Low Priority*

1) Capital Projects where minimal to no grading occurs, such as signal light and loop installations, street light installations, etc.
2) Permit projects in the public right-of-way where minimal to no grading occurs, such as pedestrian ramps, driveway additions, small retaining walls, etc.
3) Permit projects on private property where grading permits are not required, such as small retaining walls, single-family homes, small tenant improvements, etc.

APPENDIX B

EXAMPLE PERMANENT STORM WATER BEST MANAGEMENT PRACTICES

The following are a list of BMPs may be used to minimize the introduction of pollutants of concern that may result in significant impacts to receiving waters. Other BMPs approved by the City Engineer as being equal or more effective in pollutant reduction than comparable BMPs identified below are acceptable. All BMPs must comply with local zoning and building codes and other applicable regulations.

Site Design BMPs

<u>Minimizing Impervious Areas</u>

- Reduce sidewalk widths
- Incorporate landscaped buffer areas between sidewalks and streets.
- Design residential streets for the minimum required pavement widths

- Minimize the number of residential street cul-de-sacs and incorporate landscaped areas to reduce their impervious cover.
- Use open space development that incorporates smaller lot sizes
- Increase building density while decreasing the building footprint
- Reduce overall lot imperviousness by promoting alternative driveway surfaces and shared driveways that connect two or more homes together
- Reduce overall imperviousness associated with parking lots by providing compact car spaces, minimizing stall dimensions, incorporating efficient parking lanes, and using pervious materials in spillover parking areas

Increase Rainfall Infiltration

- Use permeable materials for private sidewalks, driveways, parking lots, and interior roadway surfaces (examples: hybrid lots, parking groves, permeable overflow parking, etc.)
- Direct rooftop runoff to pervious areas such as yards, open channels, or vegetated areas, and avoid routing rooftop runoff to the roadway or the urban runoff conveyance system

Maximize Rainfall Interception

- Maximizing canopy interception and water conservation by preserving existing native trees and shrubs, and planting Additional native or drought tolerant trees and large shrubs.

Minimize Directly Connected Impervious Areas (DCIAs)

- Draining rooftops into adjacent landscaping prior to discharging to the storm water conveyance system
- Draining parking lots into landscape areas co-designed as biofiltration areas
- Draining roads, sidewalks, and impervious trails into adjacent landscaping

Slope and Channel Protection

Use of natural drainage systems to the maximum extent practicable

- Stabilized permanent channel crossings
- Planting native or drought tolerant vegetation on slopes
- Energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined Channels

Maximize Rainfall Interception

- Cisterns
- Foundation planting

Increase Rainfall Infiltration

- Dry wells

Source Control BMPs

- Storm water conveyance system stenciling and signage
- Outdoor material and trash storage area designed to reduce or control rainfall runoff
- Efficient irrigation system

Treatment Control BMPs

Biofilters
- Grass swale
- Grass strip
- Wetland vegetation swale
- Bioretention

Detention Basins
- Extended/dry detention basin with grass lining
- Extended/dry detention basin with impervious lining

Infiltration
- Infiltration basin
- Infiltration trench

Pervious Paving
- Porous asphalt
- Porous concrete
- Porous modular concrete block

Wet Ponds and Wetlands
- Wet pond (permanent pool)
- Constructed wetland

Drainage Inserts
- Catch basin/storm drain inserts
- Catch basin screens

Filtration Systems
- Media filtration
- Sand filtration

Hydrodynamic Separation Systems

- Swirl concentrator
- Cyclone separator
- Baffle boxes

APPENDIX C

WATER QUALITY TECHNICAL REPORT GUIDELINES

Purpose

To describe the permanent storm water Best Management Practices (BMPs) that will be incorporated in the project to mitigate the impacts of urban runoff due to the development.

Minimum Requirements

- Prepared by Registered Civil Engineer

Organization & Content

Table of Contents
Vicinity Map
Project Description
- Narrative of project activities

Site Map
- Entire property included on one map (use key map if multi-sheets)
- Drainage areas and direction of flow
- Private storm drain system(s)
- Nearby water bodies and municipal storm drain inlets
- Location of storm water conveyance systems (ditches, inlets, storm drains, etc.)
- Location of existing and proposed storm water controls
- Location of “impervious” areas- paved areas, buildings, covered areas
- Locations where materials would be directly exposed to storm water
- Location of building and activity areas (e.g. fueling islands, garages, waste container area, wash racks, hazardous material storage areas, etc.)
- Areas of potential soil erosion (including areas downstream of project)

Pollutants and Conditions of Concern
- Project located in which Watershed
- Impaired water bodies downstream of the project and impairment
- Impacts to hydrologic regime
- Pollutants based upon land use

Types of BMPs:

Site Design BMPs
- Reduce impervious surfaces
- Conserve natural Areas
- Minimize directly connected areas
- Protect slopes and channels

Source Control BMPs

- Inlet stenciling and signage
- Materials Storage
- Trash storage
- Efficient irrigation
- Other controls (as applicable)

Structural Treatment BMPs

- Basis for selection (include targeted pollutants, justification, and alternative analysis)
- Design criteria (include calculations)
- Pollutant removal information (other than vendor specifications)
- Literature References

Maintenance (i.e. identify the responsible parties who will implement the Best Management Practices)

- Maintenance schedule
- Maintenance Costs
- Qualifications of maintenance personnel

Drainage Study

APPENDIX D

STORM WATER POLLUTION PREVENTION PLAN/LOCAL SWPPP GUIDELINES

At a minimum, the Storm Water Pollution Prevention Plan (SWPPP) or Local SWPPP, whichever is required, must cover the areas listed below. These requirements do not relieve the owner of the state SWPPP requirement; owners should also follow all applicable state SWPPP guidelines. The SWPPP must be kept on site and made available upon request of a representative of the City of Encinitas. Projects that are also required to obtain a general construction National Pollutant Discharge Elimination System (NPDES) Permit are encouraged to visit the State Water Resource Control Board's website for permit application instructions, NOI and NOT forms and guidance in preparing a Storm Water Pollution Prevention Plan (go to: www.swrcb.ca.gov/stormwtr/docs/constpermit).

Planning and Organization

- Identify the pollution prevention team members who will maintain and implement the SWPPP or Local SWPPP.
- If applicable, incorporate or reference the appropriate elements of other regulatory requirements.

Site Map

Features displayed on the map must include:

- An outline of the entire property
- Drainage areas on the property and direction of flow
- Areas of soil erosion
- Nearby water bodies and municipal storm drain inlets
- Location of storm water conveyance systems (ditches, inlets, storm drains, etc.)
- Location of existing storm water controls (oil/ water separators, sumps, etc.)
- Location of "impervious" areas- paved areas, buildings, covered areas
- Locations where materials are directly exposed to storm water
- Locations where toxic or hazardous materials have spilled in the past
- Location of building and activity areas (e.g. fueling islands, garages, waste container area, wash racks, hazardous material storage areas, etc.)

List of Significant Materials

List materials stored and handled at the site. Include the location and typical quantities.

Description of Potential Pollutant Sources

- Provide a narrative description of the site's activities and list the potential pollutant sources and the potential pollutants that could be discharged in storm water discharges from each activity.
- List non-storm water discharges including the source, quantity, frequency, and characteristics of the discharges and drainage area.

Assessment of Potential Sources

Describe which activities are likely to be sources of pollution in storm water and which pollutants are likely to be present in storm water discharges.

Best Management Practices

Describe the BMPs that will be implemented at the site for each potential pollutant and its source.

APPENDIX E

EXAMPLE CONSTRUCTION BEST MANAGEMENT PRACTICES

An effective storm water management plan is one in which all potential pollutants are recognized and a plan to control/prevent them is designed. The plan must include a combination of BMPs to target each potential pollutant. This should include the following control measures.

a) Planning and scheduling
b) Erosion Control
c) Flow Control
d) Sediment Control
e) Waste Management

A) Planning and Scheduling

Grading and clearing should be phased to reduce the amount and the duration of sediment exposure. If possible schedule grading during the dry season (Mid-April through October) particularly avoiding December through February.

Consult with the National Weather Service at (619) 289-1212 to determine the forecast during the wet season. Plan to have erosion control methods in place 24 hours prior to a rain event.

B) Erosion Control

1) Physical Stabilization

   a) Geotextiles/Mats – Used for temporary or permanent soil stabilization, and are especially effective on steep slopes and channels. Geotextiles and mats are used to reduce erosion from rainfall impact, hold soil in place, and absorb and hold moisture near the soil surface.
   b) Hydraulic Mulch –. Hydraulic mulching is an erosion control measure that consists of applying a mixture of shredded wood fiber and tackifier with hydromulching equipment. Mulches protect the soil from rainfall impact or wind.
   c) Soil Binders – Soil binding consists of applying and maintaining polymeric or lignin sultanate soil stabilizers. Soil binders typically are applied to disturbed areas requiring temporary protection from erosion.
   d) Hydroseeding – Hydroseeding consists of applying a mixture of wood fiber, seed, fertilizer and stabilizing emulsion with hydromulch equipment. It is typically applied to disturbed areas requiring temporary protection against erosion.

2) Vegetation Stabilization

   a) Preservation of existing vegetation
   b) Seeding and planting
   c) Establish permanent landscaping

C) Flow Controls

Earth Dikes– These are structures that intercept, divert, and convey surface runoff, generally sheet flow, to a sediment-trapping device or stabilized outlet.

Drainage Swales & Lined Ditches – Divert off-site runoff around the construction site, divert runoff from stabilized areas around disturbed areas, and direct runoff into sediment basins or traps.

Outlet Protection/Velocity Dissipation Devices – Physical devices composed of rock, grouted riprap, or concrete rubble placed at pipe outlets to prevent scour and reduce the velocity and/or energy of exiting storm water flows. Outlet protection is needed where discharge velocities and energies at the outlets of culverts, conduits or channels are sufficient to erode the immediate downstream reach

Slope Drains – A slope drain is a temporary pipe or lined channel to drain the top of a slope to a stable discharge point at the bottom. Slope drains are usually lined ditches used to intercept and direct surface flow away from slope areas to protect cut or fill slopes. The slope drain is applicable for any construction site where concentrated surface runoff can accumulate and must be conveyed down the slope in order to prevent erosion.

D) Sediment Control

Storm Drain Inlet Protection – Devices used at storm drain inlets to detain and/or filter sediment-laden runoff to allow sediment to settle and/or to filter sediment.

Silt Fence – A silt fence is a temporary barrier of permeable fabric designed to intercept and slow the flow of sediment-laden sheet flow runoff from exposed, erodible soil. Silt fences may be used for perimeter control, placed upstream of the point(s) of discharge of sheet flow from a site. They may also be used as interior controls below disturbed areas where runoff may occur in the form of sheet or rill erosion, and perpendicular to minor swales or ditch lines.

Sandbag Barrier – A sandbag barrier is a temporary sediment barrier consisting of stacked sandbags designed to intercept and slow the flow of sediment-laden sheet flow runoff. Sandbag barriers allow sediment to settle from runoff before water leaves the construction site.

Fiber Rolls – A fiber roll consists of materials rolled or bound into a roll and placed on a slope to intercept runoff, reduce its flow velocity, release the runoff as sheet flow, and provide some removal of sediment from the runoff.

Gravel Bag Berm – A gravel bag consists of gravel bags that are installed end-to-end to form a barrier across a slope to intercept runoff, reduce its flow velocity, release the runoff as sheet flow, and provide some removal of sediment from the runoff.

Check Dam – A check dam is a small device constructed of rock or sandbags placed across a natural or man-made channel or drainage ditch. Restricting the velocity of flow in the ditch reduces erosion of the drainage ditch.

Desilting Basin – Sediment-laden runoff is directed to a designed temporary basin that allows sediment to settle out before the runoff is discharged. A desilting basin is generally less extensive than a Sediment Basin.

Sediment Trap – A sediment trap is a small temporary ponding area with a controlled release structure formed by excavating or constructing an earthen embankment across a waterway or low drainage area. Its purpose is to collect and store sediment from sites cleared and/or graded during construction for a *short* period of time (6 months).

Sediment Basin – A sediment basin is designed with controlled release structures and is constructed by excavating or constructing an earthen embankment across a ditch or low drainage area. Its purpose is to collect and store sediment from sites cleared and graded during construction for *extended* periods of time before reestablishment of permanent vegetation and/or construction of permanent drainage structures. They should be located at the storm water outlet for the site, but not in any natural or undisturbed steam.

Off-Site Sediment Tracking

a) Stabilized construction entrances/exits – Stabilized entrance to reduce the tracking of mud and dirt onto public roads by construction vehicles.

b) Construction road stabilization – A temporary access road connecting existing public roads to a remote construction area. It is designed for the control of dust and erosion created by vehicular tracking.

E) Waste Management

Below are some methods to manage construction wastes to prevent runoff into the drainage system.

a) Spill Prevention and Control
b) Solid Waste Management
c) Hazardous Waste Management
d) Concrete Waste Management
e) Liquid Waste Management

Spill Prevention and Control

Each contractor must have a spill prevention and control plan in place prior to grading operations. The plan will include:

- Contact phone numbers, emergency and after-hours of responsible parties.
- Coordination with the City of Encinitas Public Works, Fire and Storm Water Department. Ability to control runoff through berms, gravel bags, sandbags or storm drain covers.
- Maintain absorbent material on site.

Basic Guidelines:

- Spills shall not be buried or washed with water.
- Water used for cleaning and decontamination shall not be allowed to enter storm drains or watercourses.
- Water overflow or minor water spillage shall be contained and shall not be allowed to discharge into drainage facilities.
- Proper storage, clean up and spill reporting instructions for hazardous materials stored or used on the project site shall be posted at all times.

Minor Spills

- Use absorbent materials and do not hose down or bury the material.
- Remove the absorbent material and dispose of properly.

Semi-Significant Spills

- Contain the spill.
- Notify the Inspector.
- Clean up with dry methods.
- If the spill occurs in dirt areas, contain the spill with an earthen dike.
- Dig up and properly dispose of the material.
- If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant Spills

- Notify the Inspector immediately and follow up with a report
- Notify 911
- Notifications to external agencies will require a phone call and a written report.
- Obtain the services of a Haz-Mat team immediately. Construction personnel shall not attempt to clean up the job site.

Solid Waste Management

This is the practice to minimize or eliminate the discharge of pollutants resulting from the creation of stockpiling, and removal of construction waste.

- Place trash cans on construction sites
- Prevent storm water run-on and run-off through the use of berms, dikes and temporary diversion structures.
- Solid waste storage areas shall be located at least 15 m from drainage facilities and watercourses and shall not be located in areas prone to flooding or ponding.
- Make sure that toxic liquid wastes (used oils, solvents, and paints) and chemicals (acids, pesticides, additives, curing compounds) are not disposed of in dumpsters designated for construction debris.
- Have hazardous waste hauled to an appropriate disposal and/or recycling facility.

Hazardous Waste Management

This is the practice to minimize or eliminate the discharge of pollutants from construction site hazardous waste to the storm drain system or to watercourses.

Hazardous waste on construction projects is generated from the use of:

Petroleum products	Asphalt products
Concrete curing compounds	Pesticides
Palliatives	Acids

Septic Waste	Paints
Stains	Solvents
Wood Preservatives	Roofing Tar

Or any material deemed a hazardous waste in California, Title 22.

Major components of the hazardous waste management are education, proper storage and disposal procedures, maintenance and inspection.

Concrete Waste Management

This is the practice to minimize or eliminate the discharge of pollutants of concrete waste materials to the storm drain system. The discharge of pollutants to storm water from concrete waste can be prevented. Some ways to reduce concrete wastes in storm water are:

- Store dry and wet materials under cover
- Avoid mixing excess amounts of fresh concrete on-site
- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams
- Perform the washout of concrete trucks off-site or in designated areas
- Do not allow excess concrete to be dumped on-site, except in designated areas
- On-site washout areas should be located at least 50 ft. from storm drains, creeks, ditches.
- Do not wash out slurries generated from saw-cutting, coring, grinding, grooving, and hydro-concrete demolition into the storm drain or drainage course.
- Educate employees, subcontractors and suppliers on concrete waste management
- Once concrete wastes are washed into the designated areas and allowed to harden, the concrete shall be broken up, removed, and disposed of.
- Holes, depressions or other ground disturbance caused by the removal of the temporary concrete washout facilities shall be back-filled and repaired.
- Inspect weekly.

Liquid Waste Management

This is the practice to prevent discharge of pollutants to the storm drain system as a result of the creation, collection, and disposal of non-hazardous liquid waste.

Some ways to reduce liquid waste in storm water are:

- Employee, subcontractor and suppliers training
- Contain liquid waste in a controlled area, such as a holding pit, sediment basin or portable tank.
- Capture all liquid waste running off a surface, which has the potential to affect the storm drain system.
- Do not allow liquid wastes to flow or discharge uncontrolled.
- Inspect employees and subcontractors to ensure appropriate practices.
- Inspect containment areas.

APPENDIX F

SUGGESTED RESOURCES

SUGGESTED RESOURCES	HOW TO GET A COPY
Better Site Design: A Handbook for Changing Development Rules in Your Community (1998) Presents guidance for different model development alternatives.	Center for Watershed Protection 8391 Main Street Ellicott City, MD 21043 410-461-8323 www.cwp.org
California Urban runoff Best Management Practices Handbooks (1993) for Construction Activity, Municipal, and Industrial/Commercial Presents a description of a large variety of Structural BMPs, Treatment Control, BMPs and Source Control BMPs	Los Angeles County Department of Public Works Cashiers Office 900 S. Fremont Avenue Alhambra, CA 91803 626-458-6959
Caltrans Urban runoff Quality Handbook: Planning and Design Staff Guide (Best Management Practices Handbooks (1998) Presents guidance for design of urban runoff BMPs	California Department of Transportation P.O. Box 942874 Sacramento, CA 94274-0001 916-653-2975
Design Manual for Use of Bioretention in Stormwater Management (1993) Presents guidance for designing bioretention facilities.	Prince George's County Watershed Protection Branch 9400 Peppercorn Place, Suite 600 Landover, MD 20785
Design of Stormwater Filtering Systems (1996) by Richard A. Claytor and Thomas R. Schuler Presents detailed engineering guidance on ten different urban runoff-filtering systems.	Center for Watershed Protection 8391 Main Street Ellicott City, MD 21043 410-461-8323
Development Planning for Stormwater Management, A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), (May 2000)	Los Angeles County Department of Public Works http://dpw.co.la.ca.us/epd/ or http://www.888cleanLA.com
Florida Development Manual: A Guide to Sound Land and Water Management (1988) Presents detailed guidance for designing BMPs	Florida Department of the Environment 2600 Blairstone Road, Mail Station 3570 Tallahassee, FL 32399 850-921-9472
Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters (1993) Report No. EPA–840-B-92-002. Provides an overview of, planning and design considerations, programmatic and regulatory aspects, maintenance considerations, and costs.	National Technical Information Service U.S. Department of Commerce Springfield, VA 22161 800-553-6847
Guide for BMP Selection in Urban Developed Areas (2001)	ASCE Envir. and Water Res. Inst. 1801 Alexander Bell Dr. Reston, VA 20191-4400 (800) 548-2723

SUGGESTED RESOURCES	HOW TO GET A COPY
Low-Impact Development Design Strategies - An Integrated Design Approach (June 1999)	Prince George's County, Maryland Department of Environmental Resource Programs and Planning Division 9400 Peppercorn Place Largo, Maryland 20774 *http://www.co.pg.md.us/Government/DER/PPD/pgcounty/lidmain.htm*
Maryland Stormwater Design Manual (1999) Presents guidance for designing urban runoff BMPs	Maryland Department of the Environment 2500 Broening Highway Baltimore, MD 21224 410-631-3000
National Stormwater Best Management Practices (BMP) Database, Version 1.0 Provides data on performance and evaluation of urban runoff BMPs	American Society of Civil Engineers 1801 Alexander Bell Drive Reston, VA 20191 703-296-6000
National Stormwater Best Management Practices Database (2001)	Urban Water Resources Research Council of ASCE Wright Water Engineers, Inc. (303) 480-1700
Operation, Maintenance and Management of Stormwater Management (1997) Provides a thorough look at storm water practices including, planning and design considerations, programmatic and regulatory aspects, maintenance considerations, and costs.	Watershed Management Institute, Inc. 410 White Oak Drive Crawfordville, FL 32327 850-926-5310
Potential Groundwater Contamination from Intentional and Non-Intentional Stormwater Infiltration	Report No. EPA/600/R-94/051, USEPA (1994).
Preliminary Data Summary of Urban runoff Best Management Practices (August 1999) EPA-821-R-99-012	*http://www.epa.gov/ost/stormwater/*
Reference Guide for Stormwater Best Management Practices (July 2000)	City of Los Angeles Urban runoff Management Division 650 South Spring Street, 7th Floor Los Angeles, California 90014 *http://www.lacity.org/san/swmd/*
Second Nature: Adapting LA's Landscape for Sustainable Living (1999) by Tree People Detailed discussion of BMP designs presented to conserve water, improve water quality, and achieve flood protection.	Tree People 12601 Mullholland Drive Beverly Hills, CA 90210 (818) 623-4848 Fax (818) 753-4625
Start at the Source (1999) Detailed discussion of permeable pavements and alternative driveway designs presented.	Bay Area Stormwater Management Agencies Association 2101 Webster Street Suite 500 Oakland, CA 510-286-1255

SUGGESTED RESOURCES	HOW TO GET A COPY
Stormwater Management in Washington State (1999) Vols. 1-5 Presents detailed guidance on BMP design for new development and construction.	Department of Printing State of Washington Department of Ecology P.O. Box 798 Olympia, WA 98507-0798 360-407-7529
Stormwater, Grading and Drainage Control Code, Seattle Municipal Code Section 22.800-22.808, and Director's Rules, Volumes 1-4. (Ordinance 119965, effective July 5, 2000)	City of Seattle Department of Design, Construction & Land Use 700 5th Avenue, Suite 1900 Seattle, WA 98104-5070 (206) 684-8880 *http://www.ci.seattle.wa.us/dclu/Codes/sgdccode.htm*
Texas Nonpoint Source Book – Online Module (1998)www.txnpsbook.org Presents BMP design and guidance information on-line	Texas Statewide Urban Runoff Quality Task Force North Central Texas Council of Governments 616 Six Flags Drive Arlington, TX 76005 817-695-9150
The Practice of Watershed Protection by Thomas R. Shchuler and Heather K. Holland	Center for Watershed Protection 8391 Main Street Ellicott City, MD 21043 410-461-8323 www.cwp.org
Urban Storm Drainage, Criteria Manual – Volume 3, Best Management Practices (1999) Presents guidance for designing BMPs	Urban Drainage and Flood Control District 2480 West 26th Avenue, Suite 156-B Denver, CO 80211 303-455-6277

APPENDIX G

POTENTIAL PERMANENT TREATMENT BMP MAINTENANCE MECHANISMS

1. Project proponent agreement to maintain storm water BMPs: The City may enter into a contract with the project proponent obliging the project proponent to maintain, repair and replace the storm water BMP as necessary into perpetuity. Security may be required.
2. Assessment districts: The City may approve an Assessment District or other funding mechanism created by the project proponent to provide funds for storm water BMP maintenance, repair and replacement on an ongoing basis. Any agreement with such a District shall be subject to the Public Entity Maintenance Provisions above.
3. Lease provisions: In those cases where the City holds title to the land in question, and the land is being leased to another party for private or public use, the City may assure storm water BMP maintenance, repair and replacement through conditions in the lease.
4. Public entity maintenance: The City may approve a public or acceptable quasi-public entity (e.g., the County Flood Control District, or annex to an existing assessment district, an existing utility district, a state or federal resource agency, or a conservation conservancy) to assume responsibility for maintenance, repair and replacement of the permanent treatment BMP. Unless acceptable to the City, public entity maintenance agreements shall ensure estimated costs are front-funded or reliably guaranteed, (e.g., through a trust fund, assessment district fees, bond, letter of credit or similar means). In addition, the City may seek protection from liability by appropriate releases and indemnities. The City shall have the authority to approve storm water BMPs proposed for transfer to any other public entity within its jurisdiction before installation. The City shall be involved in the negotiation of maintenance requirements with any other public entities accepting maintenance responsibilities within their respective jurisdictions; and in negotiations with the resource agencies responsible for issuing permits for the construction and/or maintenance of the facilities. The City must be identified as a third party beneficiary empowered to enforce any such maintenance agreement within their respective jurisdictions.

The City may accept alternative maintenance mechanisms if such mechanisms are as protective as those listed above.

APPENDIX H

DEFINITIONS

"Attached Residential Development" means any development that provides 10 or more residential units that share an interior/exterior wall. This category includes, but is not limited to: dormitories, condominiums and apartments.

"Automotive Repair Shop" means a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.

“Best Management Practices” see: Municipal Code Section 20.08.030 Definitions

"Commercial Development" means any development on private land that is not exclusively heavy industrial or residential uses. The category includes, but is not limited to: mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses, hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, plant nurseries, car wash facilities, and other light industrial complexes.

"Commercial Development greater than 100,000 square feet" means any commercial development that with a project footprint of at least 100,000 square feet.

"Detached Residential Development" means any development that provides 10 or more freestanding residential units. This category includes, but is not limited to: detached homes, such as single-family homes and detached condominiums.

"Directly Connected Impervious Area (DCIA)" means the area covered by a building, impermeable pavement, and/ or other impervious surfaces, which drains directly into the storm water conveyance system without first flowing across permeable vegetated land area (e.g., lawns).

"Environmentally Sensitive Areas" see: Municipal Code Section 20.08.030 Definitions.

"Hillside" means lands that have a natural gradient of 25 percent (4 feet of horizontal distance for every 1 foot of vertical distance) or greater and a minimum elevation differential of 50 feet, or a natural gradient of 200 percent (1 foot of horizontal distance for every 2 feet of vertical distance) or greater and a minimum elevation differential of 10 feet.

"Hillside development greater than 5,000 square feet" means any development that would create more than 5,000 square feet of impervious surfaces in hillsides with known erosive soil conditions.

"Infiltration" means the downward entry of water into the surface of the soil.

"Maximum Extent Practicable (MEP)" see: Municipal Code Section 20.08.030 Definitions.

"New Development" means land disturbing activities; structural development, including construction or installation of a building or structure, the creation of impervious surfaces; and land subdivision.

"Parking Lot" means land area or facility for the temporary parking or storage of motor vehicles used personally, or for business or commerce.

"Projects Discharging to Receiving Waters within Environmentally Sensitive Areas" means all development and significant redevelopment that would create 2,500 square feet of impervious surfaces or increase the area of imperviousness of a project site to 10% or more of its naturally occurring condition, and either discharge urban runoff to a receiving water within an environmentally sensitive area (where any portion of the project footprint is located within 200 feet of the environmentally sensitive area), or discharge to a receiving water within an environmentally sensitive area without mixing with flows from adjacent lands (where the project footprint is located more than 200 feet from the environmentally sensitive area).

"Project Footprint" means the limits of all grading and ground disturbance, including landscaping, associated with a project.

"Receiving Waters" see Municipal Code Section 20.08.030 Definitions. The definition of receiving waters shall not be construed to prohibit the use or maintenance of ~~constructed wetlands (in contrast to naturally occurring wetlands)~~ wetlands which were originally constructed as a Best Management Practice.

"Residential Development" see: Municipal Code Section 20.08.030 Definitions means any development on private land that provides living accommodations for one or more persons. This category includes, but is not limited to: single-family homes, multi-family homes, condominiums, and apartments.

"Restaurant" means a stand-alone facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812).

"Significant Redevelopment" see: Municipal Code Section 20.08.030 Definitions means development that would create or add at least 5,000 square feet of impervious surfaces on an already developed site. Significant redevelopment includes, but is not limited to: the expansion of a building footprint; addition to or replacement of a structure; replacement of an impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Significant redevelopment does not include trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots; new sidewalk construction, pedestrian ramps, or bikelane on existing roads; and replacement of damaged pavement.

"Site Design BMP" means any project design feature that reduces the creation or severity of potential pollutant sources or reduces the alteration of the project site's natural flow regime. Redevelopment projects that are undertaken to remove pollutant sources (such as existing surface parking lots and other impervious surfaces) or to reduce the need for new roads and other impervious surfaces (as compared to conventional or low-density new development) by incorporating higher densities and/or mixed land uses into the project

design, are also considered site design BMPs.

"Source Control BMP (both structural and non-structural)" means land use or site planning practices, or structures that aim to prevent urban runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimize the contact between pollutants and urban runoff. Examples include roof structures over trash or material storage areas, and berms around fuel dispensing areas.

"Storm Water Best Management Practice (BMP)" see: Municipal Code Section 20.08.030 Definitions.

"Storm Water Conveyance System" see: Municipal Code Section 20.08.030. Definitions.

"Streets, Roads, Highways, and Freeways" means any project that is not part of a routine maintenance activity, and would create a new paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles and other vehicles. For the purposes of SUSMP requirements, Streets, Roads, Highways and Freeways do not include trenching and resurfacing associated with utility work; applying asphalt overlay to existing pavement; new sidewalk, pedestrian ramps, or bikelane construction on existing roads; and replacement of damaged pavement.

"Treatment Control (Structural) BMP" means any engineered system designed and constructed to remove pollutants from urban runoff. Pollutant removal is achieved by simple gravity settling of particulate pollutants, filtration, biological uptake, media adsorption or any other physical, biological, or chemical process.

CHAPTER 20.08
STORM WATER MANAGEMENT
(Ordinance 2002-14)

20.08.010 Title. **This Chapter shall be known as the "City of Encinitas Watercourse Protection, Storm Water Management and Discharge Control Ordinance".**

20.08.020 Purpose and Intent. **The purpose of this Chapter is to protect the health, safety and welfare of the public by regulating all discharges into the Storm Water Conveyance System and the Waters of the State in order to preserve and enhance water quality for beneficial uses by:**

(A Prohibiting non-storm water discharges to the Storm Water Conveyance System;

(B) Eliminating pollutants in Storm Water to the Maximum Extent Practicable, including pollutants from both point and non-point sources;
(C) Prohibiting activities which cause, or contribute to, exceedance of state and federal Receiving Water quality objectives.
(D) Protecting Watercourses from disturbance and pollution.

The intent of this Chapter is to use the police power of the city to regulate water quality in a manner which complies with all applicable laws related to water quality, including the federal Clean Water Act, the state Porter-Cologne Water Quality Control Act, and the conditions of any NPDES permit issued to the city.

20.08.030 Definitions.
For purposes of this Chapter, only the terms below have the following meaning:

Beneficial Uses means uses of water necessary for the survival or well being of man, plants, and wildlife. These uses of water serve to promote the tangible and intangible economic, social, and environmental goals. "Beneficial Uses" of the Waters of the State that may be protected against include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. Existing beneficial uses are uses that were attained in the surface or ground water on or after November 28, 1975; and potential beneficial uses are uses that would probably develop in future years through the implementation of various control measures. Beneficial Uses are equivalent to Designated Uses under federal law. [California Water Code Section 13050(f)].

Best Management Practices or "BMPs" means schedules of activities, pollution treatment practices or devices, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, operation and maintenance procedures, and

other management practices or devices to prevent or reduce the discharge of pollutants directly or indirectly to Storm Water, Receiving Waters, or the Storm Water Conveyance System. BMPs may be structural or non-structural. Best Management Practices include, but are not limited to, site design, source control, treatment control, natural design methods, low flow diversions to the sewer, and structures such as infiltration basins, clarifiers, , oil and grease separators and filters. BMPs may include any type of pollution prevention and pollution control measure the can help to achieve compliance with this Chapter.

Clean Water Act Section 303(d) Impaired Water Body or Impaired Water Body means an impaired water body in which water quality does not meet applicable water quality standards and/or is not expected to meet water quality standards, even after the application of technology based pollution controls required by the Clean Water Act. The discharge of urban runoff to these water bodies is significant because these discharges can cause or contribute to violations of applicable water quality standards.

Discharge when used as a verb, means to allow pollutants to directly or indirectly enter Storm Water, or to allow Storm Water or non-storm water to directly or indirectly enter the Storm Water Conveyance System or Receiving Waters, from an activity or operations. When used as a noun, "Discharge" means the pollutants, Storm Water and/or non-storm water that is discharged.

Discharger means any person engaged in activities or operations, or owning facilities, which may result in pollutants entering Storm Water, the Storm Water Conveyance System or Receiving Waters. "Dischargers" include, but are not limited to, real and personal property owners, occupants, tenants, lessees, contractors, developers, managers and employees.

Environmentally Sensitive Areas include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); water bodies designated with the RARE beneficial use by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); areas designated as preserves or their equivalent under the Multi Species Conservation Program within the Cities and County of San Diego; and any other similar environmentally sensitive areas which have been identified by the City Engineer. "Directly adjacent" means situated within 200 feet of the Environmentally Sensitive Area. "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.

Illegal Connection means a physical connection to the Storm Water Conveyance System or Receiving Waters which has not been reviewed and authorized by the City; or a permitted connection which conveys Illegal Discharges.

Illegal Discharge is any discharge to the Storm Water Conveyance System that is not composed entirely of Storm Water or is not discharged in compliance with this Chapter

Impervious Surface means constructed or modified surfaces that cannot effectively infiltrate rainfall such as building rooftops, pavement, sidewalks, driveways, etc.

Impervious Surface Area means the ground area covered or sheltered by an impervious surface, measured in plan view, i.e., as if from directly above. For example, the "impervious surface area" for a pitched roof is equal to the ground area it shelters, rather than the surface area of the roof itself.

Maximum Extent Practicable or MEP refers to the standard established by Congress in Clean Water Act section 402(p)(3)(B)(iii) that municipal dischargers of Storm Water must meet; MEP is an acceptability standard for Best Management Practices based on a level of pollutant reduction that can be achieved by the most effective set of BMPs that can be implemented and still remain practicable; MEP generally emphasizes pollution prevention and source control BMPs as the first line of defense in combination with treatment methods as a backup.

Non Point Source refers to diffuse, widespread sources of pollution. These sources may be large or small, but are generally numerous throughout a watershed. Non Point Sources include but are not limited to urban, agricultural, or industrial areas, roads, highways, construction sites, communities served by septic systems, recreational boating activities, timber harvesting, mining, livestock grazing, as well as physical changes to stream channels, and habitat degradation. Non Point Source Pollution can occur year round any time rainfall, snow melt, irrigation, or any other source of water runs over land or through the ground, picks up pollutants from these numerous, diffuse sources and deposits them into rivers, lakes, and coastal waters or introduces them into ground water.

Non-Storm Water consists of all discharges to and from a Storm Water Conveyance System that do not originate from precipitation events, i.e., all discharges from a conveyance system other than Storm Water. Non-storm water includes illegal discharges, non-prohibited discharges, and NPDES permitted discharges.

NPDES Permit means a National Pollutant Discharge Elimination System permit issued by the U.S. Environmental Protection Agency, the State Water Resources Control Board ("SWRCB"), or the California Regional Water Quality Control Board for the San Diego Region ("RWQCB").

Person means an individual, corporation, partnership, limited liability company, joint venture, non-profit organization, trust, association or governmental agency.

Pollutant is broadly defined as any agent that may cause or contribute to the degradation of water quality such that a condition of pollution or contamination is created or aggravated, including but not limited to, dredged spoil, rock, sand, or silt (excluding sediment, silt, or substances in quantities which would enter Storm Water from a natural undeveloped watershed); solid waste, animal waste, sewage, garbage, or medical waste; wrecked or discarded equipment; radioactive materials; industrial waste; any organic or inorganic contaminant; fecal coliform, fecal streptococcus, and enterococcus bacteria and other pathogens that pose a threat to human health; volatile organic carbon, surfactants, oil and grease, petroleum hydrocarbons, total organic carbon, lead, copper, chromium, cadmium, silver, nickel, zinc, cyanides, phenols, and biocides; any contaminant which can significantly degrade the quality of Receiving Waters by altering pH, total suspended or settleable solids, biochemical oxygen demand, chemical oxygen demand, nutrients, or temperature.

Pollution is the alteration of the quality of the Receiving Waters to a degree that unreasonably affects the Beneficial Use of the Receiving Waters or the facilities that serve the beneficial uses. "Pollution" also includes contamination which creates a hazard to the public health through poisoning or the spread of disease.

Point Source means any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operations, landfill leachate collection systems, vessel, or other floating craft from which pollutants are or may be discharged.

RWQCB means the California Regional Water Quality Control Board for the San Diego Region.

Receiving Waters means all waters that are "Waters of the State" within the scope of the State Water Code, including but not limited to, natural streams, creeks, rivers, reservoirs, lakes, ponds, water in vernal pools, lagoons, estuaries, bays, the Pacific Ocean, and ground water.

Significant Redevelopment means the creation or addition of at least 5,000 square feet of impervious surfaces on an already developed site. Significant Redevelopment includes, but is not limited to: the expansion of a building footprint or addition or replacement of a structure; structural development including an increase in gross floor area and/or exterior construction or remodeling; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces.

State General Construction Storm Water Permit means NPDES Permit No. CAS000002, Waste Discharge Requirements for Discharges of Storm Water Associated with Construction Activities, and any amendments thereto.

State General Industrial Storm Water Permit means NPDES Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities, and any amendments thereto.

Storm Water means runoff which originates from precipitation events. "Storm Water" is that portion of precipitation that flows across a surface to the storm drain system or Receiving Waters. Examples of this phenomenon include: the water that flows off a building's roof when it rains (runoff from an impervious surface); the water that flows into streams when snow on the ground begins to melt (runoff from a semi-pervious surface); and the water that flows from a vegetated surface when rainfall is in excess of the rate at which it can infiltrate into the underlying soil (runoff from a pervious surface). During precipitation events in urban areas, rain water picks up and transports pollutants through Storm Water Conveyance Systems, and ultimately to Receiving Waters.

Storm Water Conveyance System means private and public drainage facilities within the City of Encinitas by which Storm Water may be conveyed to waters of the United States, including but not limited to, streets, roads, catch basins, natural and artificial channels, natural and artificial drainage features, aqueducts, canyons, stream beds, gullies, curbs, gutters, ditches, and storm drains. Historic and current development make use of natural drainage patterns and features as conveyances for urban runoff. Urban streams used in this manner are part of the Storm Water Conveyance System regardless of whether they are natural, man-made, or partially modified features. In these cases, the urban stream is both a Storm Water Conveyance System and a Receiving Water.

Structural BMP means a BMP that relies on either a physical condition (other than an entirely natural and undisturbed condition), or on a constructed or installed device to reduce or prevent pollutants in stormwater discharges and exempt non storm water discharges. Constructed or enhanced BMPs that depend on natural materials and processes (e.g., constructed drainage swales or buffers, or constructed wetlands), that require periodic maintenance to function as designed, are Structural BMPs.

SWRCB means the State Water Resources Control Board.

Watercourse means any natural or artificial stream, river, creek, ditch, channel, canal, conduit, culvert, drain, waterway, gully, ravine, arroyo or wash, in which surface waters flow in a definite direction or source, either continuously or intermittently, and which has a definite channel and a bed or banks. A channel is not limited to land covered by minimal or ordinary flow, but also includes land covered during times of high water.

Waters of the State means any water, surface or underground, including saline waters within the boundaries of California. The definition of the "Waters of the State" is broader than that for the "Waters of the United States" in that all water in the State is considered to be a

"Waters of the State" regardless of circumstances or condition. Under this definition, a municipal storm sewer system (MS4) is always considered to be a "Waters of the State". [California Water Code Section 13050 (e)].

Waters of the United States means water subject to the regulatory jurisdiction of the United States under the Federal Clean Water Act and applicable case law. In general, this includes "navigable" waters, waters tributary to "navigable" waters, and adjacent wetlands. [40 Code of Federal Regulations section 122.2.]

Wet season means October 1 thru April 30.

20.08.040 Illegal Discharges.

A. Discharge of Storm Water. No person shall discharge Storm Water directly or indirectly into the Storm Water Conveyance System or Receiving Waters, unless discharged in compliance with this Chapter.

B. Discharge of Non-storm water Prohibited. No person shall discharge non-storm water directly or indirectly into the Storm Water Conveyance System or Receiving Waters.

C. Exemptions.

1 Separately Permitted Discharges. Storm Water discharges regulated under a valid facility-specific NPDES permit or facility specific RWQCB Waste Discharge Requirements permit are exempt from discharge prohibitions established by this Chapter, provided compliance with all relevant permit conditions is maintained to the satisfaction of the RWQCB and the City Engineer. Facilities and activities whose Storm Water discharges are regulated under a general permit, including the State General Industrial Storm Water Permit, State General Construction Storm Water Permit and the State General De-Watering Permit, are not exempted from this Chapter.

2 Categorically Exempt Discharges. The following categories of non-storm water discharges are exempt from discharge prohibitions established by this Chapter, if all required BMPs are installed, implemented and maintained:

a. air conditioning condensation;
b. discharges from potable water sources other than water main breaks;
c. diverted stream flows (provided required permits are obtained);
d. flows from emergency fire fighting activities;
e. flows from riparian habitats and wetlands;
f. foundation drains (not including active groundwater dewatering systems);
g. individual residential washing of vehicles;

h. irrigation water;
i. landscape irrigation;
j. lawn watering;
k. rising ground water;
l. springs;
m. swimming pool discharges (if dechlorinated to less than one PPM chlorine);
n. uncontaminated ground water infiltration to storm drains;
o. uncontaminated pumped ground water;
p. water from crawl space pumps;
q. water from footing drains (not including active groundwater dewatering systems);
r. water line flushing.

3. Public Health and Safety Exemptions. Discharges determined by the City Engineer to be necessary to protect public health and safety are exempt from discharge prohibitions established by this Chapter, provided any conditions on such discharges imposed by the City Engineer are satisfied and the City Engineer makes written findings supporting the exemption.

4. On-Site Wastewater Systems. Discharges to the subsurface from properly functioning permitted site waste water systems are not prohibited by this Chapter.

5. Exemptions Not Absolute. Any exempt discharge described above which the City Engineer determines is a significant source of pollutants to Receiving Waters shall be prohibited unless the Discharger complies with additional BMPs imposed by the City Engineer to reduce pollutants in the discharge to the Maximum Extent Practicable and the BMPs are effective. Such prohibitions shall take effect after written notice to the Discharger by the City Engineer containing a schedule for compliance based on the necessity to protect public health and safety or the environment.

20.08.050 Notification and Mitigation of Illegal Discharges.

A Discharger shall immediately notify the City Engineer of an Illegal Discharge and take immediate action to control and contain the Illegal Discharge. The Discharger shall also mitigate any damage caused by the Illegal Discharge.

The City Engineer may order the Discharger to prepare and implement an approved mitigation plan with a time schedule for completion.

20.08.060 Illegal Connections. No person shall establish, use, or maintain an Illegal Connection to the Storm Water Conveyance System or the Receiving Waters.

20.08.070 Littering and Sweeping.

No person shall throw, deposit, leave, maintain, keep or permit to be thrown, deposited, placed, left or maintained, any refuse, pet waste, rubbish, garbage, or other discarded or abandoned objects, in or upon any street, alley, parking lot, sidewalk, curb, gutter, storm drain, catch basin, conduit, or other drainage structure or lot except in receptacles maintained for the regular disposal of garbage. Impervious surfaces which drain directly or indirectly into the Storm Water Conveyance System shall be kept free of dirt and debris by regular sweeping. The sweepings shall be placed in garbage receptacles and shall not be allowed to enter the Storm Water Conveyance System.

20.08.080 Compliance with Best Management Practices.

No Discharger shall fail to implement, install, use or maintain Best Management Practices established by the City Engineer pursuant to this Chapter.

20.08.090 Conclusive Determination of Maximum Extent Practicable.

The Best Management Practices established by the City Engineer shall reduce pollutants from the use or activity to the Maximum Extent Practicable. For purposes of enforcement of this Chapter, the City Engineer's determination of the Maximum Extent Practicable shall be conclusive.

20.08.100 Establishment and Prioritization of Best Management Practices For Construction Activities, New Development, Significant Redevelopment and Existing Development.

A. The City Engineer shall establish written Best Management Practices for the following uses:

1. Construction Activities
2. New Development and Significant Redevelopment
3. Existing Industrial Development
4. Existing Commercial Development
5. Existing Residential Development.
6. Existing Municipal Areas and Activities
7. Agricultural Activities
8. Any other use if it is necessary to reduce Pollutants entering receiving waters to the Maximum Extent Practicable.

The document containing the Best Management Practices established by the City Engineer shall be entitled the "The City of Encinitas Storm Water Best Management Practices Manual" and shall be considered an appendix to this Chapter. The appendix may be adopted by Resolution of the City Council. (Ord. 2002-01).

B. The City Engineer shall establish priorities for implementation and enforcement of Best Management Practices based on the threat to water quality for each use described in the subsection above.

1. Each site of Construction Activities shall be categorized as a high, medium, or low priority threat to water quality by considering the following:

a. soil erosion potential;
b. site slope;
c. project size and type;
d. sensitivity of receiving water bodies;
e. proximity to receiving water bodies;
f. non-storm water discharges;
g. any other relevant factors.

2. Each site of New Development or Significant Redevelopment in the following list shall be categorized as a high priority threat to water quality:

a. Home subdivisions of 100 housing units or more. This category includes single-family homes, multi-family homes, condominiums, and apartments.

b. Home subdivisions of 10-99 housing units. This category includes single-family homes, multi-family homes, condominiums, and apartments.

c. Commercial developments greater than 100,000 square feet. This category is defined as any development on private land that is not for heavy industrial or residential uses where the land area for development is greater than 100,000 square feet. The category includes, but is not limited to: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; commercial airfields; and other light industrial facilities.

d. Automotive repair shops. This category is defined as a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.

e. Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet.

f. All hillside development greater than 5,000 square feet. This category is defined as any development which creates 5,000 square feet of impervious surface which is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.

g. Environmentally Sensitive Areas: All development and redevelopment located within or directly adjacent to or discharging directly to an environmentally sensitive area (where discharges from the development or redevelopment will enter Receiving Waters within the environmentally sensitive area), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition.

h. Parking lots 5,000 square feet or more or with 15 or more parking spaces and potentially exposed to urban runoff. Parking lot is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce.

i. Street, roads, highways, and freeways. This category includes any paved surface which is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles.

Natural BMPs such as constructed wetlands, grassed swales, biofilters, wet ponds, and vegetated filter strips, shall be utilized whenever practicable for all New Development and Significant Redevelopment.

3. Each site of Existing Industrial Development shall be categorized as a high, medium, or low priority threat to water quality by considering the following:

a. type of industrial activity (SIC Code);
b. materials used in industrial processes;
c. wastes generated;
d. pollutant discharge potential;
e. non-storm water discharges;
f. size of facility;
g. proximity to receiving water bodies;
h. sensitivity of receiving water bodies;

i. whether the industrial site is subject to the statewide General Industrial Permit;
j. any other relevant factors.

At a minimum the high priority industrial sites shall include the following:

a. industrial facilities that are subject to section 313 of Title III of the Superfund amendments and Reauthorization Act of 1986 (SARA);
b. industrial facilities tributary to a Clean Water Act Section 303(d) Impaired Water Body, where a facility generates pollutants for which the water body is impaired;
c. industrial facilities within or directly adjacent to or discharging directly to coastal lagoons or other Receiving Waters within Environmentally Sensitive Areas;
d. facilities subject to the statewide General Industrial Permit;
e. all other industrial facilities that the City Engineer determines are contributing significant pollutant loading to its Storm Water Conveyance System, regardless of whether such facilities are covered under the statewide General Industrial Permit or other NPDES permit.

4. Each site of Existing Commercial Development in the following list shall be categorized as a high priority threat to water quality:

a. Automobile mechanical repair, maintenance, fueling, or cleaning;
b. Airplane mechanical repair, maintenance, fueling, or cleaning;
c. Boat mechanical repair, maintenance, fueling, or cleaning;
d. Equipment repair, maintenance, fueling, or cleaning;
e. Automobile and other vehicle body repair or painting;
f. Mobile automobile or other vehicle washing;
g. Automobile (or other vehicle) parking lots and storage facilities;
h. Retail or wholesale fueling;
i. Pest control services;
j. Eating or drinking establishments;
k. Mobile carpet, drape or furniture cleaning;
l. Cement mixing or cutting;
m. Masonry;
n. Painting and coating;
o. Botanical or zoological gardens and exhibits;
p. Landscaping;
q. Nurseries and greenhouses;
r. Golf courses, parks and other recreational areas/facilities;

s. Cemeteries;
t. Pool and fountain cleaning;
u. Marinas;
v. Port-a-Potty servicing;
w. Other commercial sites or sources that the City Engineer determines may contribute a significant pollutant load to the Storm Water Conveyance System;
x. Any commercial site or source tributary to a Clean Water Act section 303(d) impaired water body, where the site or source generates pollutants for which the water body is impaired;
y. Any commercial site or source within or directly adjacent to or discharging directly to a coastal lagoon or other receiving water within an Environmentally Sensitive Area.

5. The City Engineer shall identify residential areas and activities which are a high priority threat to water quality. At a minimum, these shall include:

a. Automobile repair and maintenance;
b. Automobile washing;
c. Automobile parking;
d. Home and garden care activities and product use (pesticides, herbicides, and fertilizers);
e. Disposal of household hazardous waste (e.g., paints, cleaning products);
f. Disposal of pet waste;
g. Disposal of green waste;
h. Any other residential source that the City Engineer determines may contribute a significant pollutant load to the Storm Water Conveyance System;
i. Any residence tributary to a Clean Water Act Section 303(d) Impaired Water Body, where the residence generates pollutants for which the water body is impaired;
j. Any residence within or directly adjacent to or discharging directly to a coastal lagoon or other Receiving Waters within an Environmentally Sensitive Area.

6. Each Existing Municipal Area or Activity shall be categorized as a high, medium, or low threat to water quality by considering the following:

a. type of municipal area or activity;
b. materials used;
c. wastes generated;
d. pollutant discharge potential;
e. non-storm water discharges;
f. size of facility or area;

g. proximity to receiving water bodies;

h. sensitivity of receiving water bodies;
i. any other relevant factors.

At a minimum, the high priority municipal areas and activities shall include the following:

(1) Roads, streets, highways, and parking facilities.
(2) Flood management projects and flood control devices.
(3) Areas and activities tributary to a Clean Water Act Section 303(d) Impaired Water Body, where an area or activity generates pollutants for which the water body is impaired.
(4) Areas and activities within or adjacent to or discharging directly to coastal lagoons or other Receiving Waters within Environmentally Sensitive Areas.
(5) Municipal waste facilities such as active or closed municipal landfills; publicly owned treatment works (including water and wastewater treatment plants) and sanitary sewage collection systems; municipal separate storm sewer systems; incinerators; solid waste transfer facilities; land application sites; uncontrolled sanitary landfills; corporate yards including maintenance and storage yards for materials, waste, equipment and vehicles; sites for disposing and treating sewage sludge; and hazardous waste treatment, disposal, and recovery facilities.
(6) Municipal airfields.
(7) Other municipal areas and activities that the City Engineer determines may contribute a significant pollutant load to the Storm Water Conveyance System.

7. All agricultural activities are subject to this Chapter, including activities that are not subject to a grading permit. The BMPs established by the City Engineer for agricultural activities shall be in addition to the BMPs established for the activity in another category such as Construction Activities, Existing Commercial, New Development or Significant Redevelopment

20.08.110 Site Specific Best Management Practices.

The City Engineer may establish written Best Management Practices for a specific site or activity if necessary to reduce pollutants to the Maximum Extent Practicable or to comply with an order of the San Diego Regional Water Quality Control Board.

20.08.120 Alternative Best Management Practices.

The City Engineer may establish written alternative Best Management Practices. The allowable use of alternative BMPs at a specific site shall be determined at the sole discretion of the City Engineer.

20.08.130 Additional Best Management Practices.

The City Engineer may establish additional written Best Management Practices for a specific site if the City Engineer determines that the Best Management Practices implemented at the site have not reduced the pollutants to the Maximum Extent Practicable.

20.08.140 Minimum Best Management Practices.

All Dischargers shall install, implement and maintain at least the following minimum Best Management Practices:

A. Eroded soils. Prior to the rainy season, Dischargers must remove or secure any significant accumulations of eroded soils from slopes previously disturbed by clearing or grading, if those eroded soils could otherwise enter the Storm Water Conveyance System or Receiving Waters during the rainy season. Slopes more than five feet in height, more than 250 square feet in total area, and steeper than 3:1 (run-to-rise) that have been disturbed at any time by clearing, grading, or landscaping, shall be continuously protected from erosion.

B. Parking Lots. Dischargers with parking lots or impervious surfaces used for similar purposes shall clean the surfaces frequently and thoroughly in a manner that does not cause non-storm water discharge to the Storm Water Conveyance System. In most cases, this will require dry cleaning methods such as sweeping and removal of dirt and debris. The dirt and debris shall be disposed of in a manner which prevents it from entering the Storm Water Conveyance System or the Receiving Waters. At least one cleaning shall be completed in September of each year.

C. Storage of Materials and Wastes. All materials and wastes with the potential to pollute urban runoff shall be stored in a manner that either prevents contact with rainfall and Storm Water, or contains contaminated runoff for treatment and disposal.

D. Use of Materials. All materials with the potential to pollute urban run off, including but not limited to, cleaning and maintenance products used outdoors, fertilizers, pesticides and herbicides, shall be used in accordance with label directions. If a label cautions against use of a product where it may enter water or waterways, or cautions that the product may be toxic or have toxic effects, the product may not be disposed of or rinsed into Receiving Waters or the Storm Water Conveyance System.

E. Self Inspection for Illegal Discharges. All Dischargers, except residential single family home Dischargers, shall inspection their facilities, activities, operations and procedures at least annually to detect illegal connections and illegal discharges. The self inspection shall be documented in records kept on the premises for at least five years

F. Inspection, Maintenance, Repair and Upgrading of BMPs. Structural BMPs must be inspected by the Discharger before predicted rain events and following actual rain events. These BMPs must be maintained so that they continue to function as designed. Structural BMPs which fail must be repaired as soon as it is safe to do so. If the failure of a structural or nonstructural BMP indicates that the BMPs in use are inappropriate or inadequate to the circumstances, the BMPs must be modified or upgraded to prevent any further failure in the same or similar circumstances. All sediment and debris in catch basins must be removed prior to the wet season and disposed of in a manner which prevents it from entering the Storm Water Conveyance System or the Receiving Waters.

20.08.150 Discharger Sampling, Testing, Monitoring, and Reporting.

The City Engineer may require Dischargers to perform sampling, testing, monitoring and reporting of results as a Best Management Practice. In addition, the City Engineer may order a Discharger to conduct testing or monitoring and to report the results to the City if

1. the city Engineer determines that testing or monitoring is needed to determine whether BMPs are effectively preventing or reducing pollutants in Storm Water to the Maximum Extent Practicable, or to determine whether the facility is a significant source of contaminants to Waters of the State; or

2. the City Engineer determines that testing or monitoring is needed to assess the impacts of an illegal discharge on health, safety or the environment; or

3. an Illegal Discharge has not been eliminated after written notice by the City Engineer; or

4. the Discharger is in violation of any provision of this Chapter; or the Regional Water Quality Control Board requires the City to provide information on the Discharger's activities.

Testing and monitoring ordered pursuant to this section may include the following:

1. Visual monitoring of dry weather flows, wet weather erosion, or BMPs;
2. Visual monitoring of premises for spills or discharges;

3. Laboratory analyses of Storm Water or non-storm water discharges for Pollutants;
4. Background or baseline monitoring or analysis; and
5.Monitoring of Receiving Waters or sediments that may be affected by Pollutant discharges by the Discharger.

The City Engineer may direct the time and manner in which the results of required testing and monitoring are reported, and shall determine when required sampling, testing or monitoring may be discontinued. The sampling, testing, monitoring and reporting shall be at the expense of the Discharger.

20.08.160 City Authority to Sample, Inspect and Monitor.

A. Regulatory Inspections. The City Engineer or his designee may inspect the premises of any Discharger at reasonable times and in a reasonable manner to carry out the purposes of this Chapter. If a Discharger refuses to allow entry for an inspection, an inspection warrant shall be obtained prior to inspection.

B. Scope of Inspections. Inspections may include all actions necessary to determine whether any Illegal Discharges or Illegal Connections exist, whether the BMPs installed and implemented are adequate to comply with this Chapter, whether those BMPs are being properly maintained, and whether the Discharger complies with other requirements of this Chapter. This may include sampling, metering, monitoring, visual inspections, and records review. Where samples are collected the Discharger may request and receive split samples. Records, reports, analyses, or other required information may be inspected and copied, and photographs taken for purposes of enforcement of this Chapter.

C. Installation of Sampling Devices. As part of the inspection, the City Engineer may authorize the installation of sampling or metering devices.

20.08.170 Establishment of a Fee.

The City Council may establish a fee by resolution to recover the cost of inspection, sampling, metering or monitoring by the City Engineer.

20.08.180 Local Storm Water Pollution Prevention Plan.

The City Engineer may require a Discharger to prepare and submit a Local Storm Water Pollution Prevention Plan (Local SWPPP) for approval as a Best Management Practice (BMP). In addition, the City Engineer may require a Discharger to prepare and submit a Local SWPPP for approval if (1) the Discharger is not in compliance with this Chapter; or (2) the facility or activity is a significant source of pollutants to the Receiving Waters despite

compliance with this Chapter. Any Discharger required to submit and to obtain approval of a Local SWPPP shall install, implement and maintain the BMPs specified in the approved Local SWPPP.

The Local SWPPP shall identify the BMPs that will be used by the Discharger to prevent or control pollutants in Storm Water to the Maximum Extent Practicable. If the facility is an industrial facility, the Local SWPPP submitted to the City shall at a minimum meet the requirements of the State NPDES General Industrial Storm Water Permit. If the activity at issue is a construction or land disturbance activity, the Local SWPPP submitted to the City shall at a minimum meet the requirements of the State NPDES General Construction Storm Water Permit.

Additional minimum Local SWPPP requirements are;

1. An inventory of all materials on site that may adversely affect Storm Water quality.

2 A description of measures which will be taken to reduce the possibility of accidental spillage resulting from equipment failure or employee error.

3. A description of onsite spill control procedures and equipment to prevent pollutants from entering the Storm Water Conveyance System.

4. A site map showing all building structures, materials and waste storage areas, outdoor equipment storage areas, vehicle service areas, paved areas, areas of existing and potential erosion, storm drain inlets, points of discharge to the Storm Water Conveyance System, and an estimate of the size of the facility and the size of the Impervious Surface Area.

5. A description of the Storm Water monitoring program conducted on the site, if any.

6. A documented employee training program which includes, but is not limited to, the following topics:

a. Laws, regulations and local ordinances relating to Storm Water pollution prevention, and an overview of the potential impacts of pollutants in Storm Water on the Receiving Waters.

b. Proper handling of all materials and wastes to prevent spillage.

c. Proper mitigation of spills, including spill response, containment and cleanup procedures.

d. Visual monitoring of all effluent streams to ensure that no Illegal Discharges enter the Storm Water Conveyance System.

e. Discussion of the differences between the Storm Water Conveyance System and the sanitary sewer system.

f. Identification of all onsite connections to the Storm Water Conveyance System.

g. Preventative maintenance and good housekeeping procedures.

h. Material management practices employed by the facility to reduce or eliminate pollutant contact with Storm Water.

Training materials shall be kept onsite and records of attendance shall be retained for at least five years.

20..08.190 Violation of a State NPDES Permit. A violation of a State NPDES General Construction Storm Water Permit , a State NPDES General Industrial Storm Water Permit or a State General De Watering Permit shall also be considered a violation of this Chapter and may be enforced as such.

20.08.200 Watercourse Protection.

A. Every person owning or occupying real property through which a Watercourse passes shall keep and maintain the Watercourse within the property free of trash, debris, excessive vegetation, and other obstacles which would pollute, contaminate or retard the flow of water through the Watercourse; shall maintain the private structures on the property in a manner which will prevent the structures from interfering with the use, maintenance and physical integrity of the Watercourse; shall not remove vegetation in a manner which will increase erosion or remove more healthy vegetation than is necessary for maintenance of the flow.

B. No person shall commit, or cause to be committed, the following acts, unless a written permit has been obtained from the City Engineer and the appropriate state and federal agencies:

1. Discharge pollutants into or connect any pipe or channel to a Watercourse;

2. Modify the natural flow of water in a Watercourse;

3. Carry out development within fifty feet of any Receiving Water;

4. Deposit in, plant in, remove any material from a Watercourse, including its banks, except as required for ordinary and necessary maintenance;

5. Construct, alter, enlarge, connect to , change, or remove any structure in a Watercourse; or

6. Place any loose or unconsolidated material (including animal manure) along side of or within a Watercourse so as to cause a diversion of the flow, or to allow the material to be carried away by Storm Water.

7. A grading permit or building permit may satisfy the requirements of this subsection at the discretion of the City Engineer. Any City permit does not affect the permit requirements of state or federal agencies.

20.08.210 Permits and Approvals.

Compliance with this Chapter shall be a condition of every permit or approval granted or issued by the City. Failure to comply with this Chapter shall be grounds for revocation of any such permit or approval.

20.08.220 Violation is a Nuisance.

The City Council hereby declares that any violation of this Chapter is a public nuisance.

20.08.230 Enforcement of this Chapter.

A. Misdemeanor Violation. Notwithstanding any other provision of this Code, a violation of this Chapter is a misdemeanor punishable by a fine of not more than one thousand dollars ($1,000) or imprisonment in the County Jail for a period of not more than six months or both fine and imprisonment. Any such violation may be charged as an infraction at the discretion of the City Attorney . Any person convicted of an infraction under the provisions of this Chapter shall be punishable by a fine not to exceed two hundred fifty dollars ($250) for a first or second offense in one year, and not to exceed five hundred dollars ($500) for a third violation in one year.

B. Orders of the City Engineer. The City Engineer is authorized to issue Cease and Desist Orders or Stop Work Orders to any person who is in violation of this Chapter. Failure to comply with a written order of the City Engineer shall be a violation of this Chapter and shall be grounds for the imposition of the civil penalties described in this section.

C. Civil Penalties. Any person who violates a provision of this Chapter may be assessed a civil penalty not to exceed one thousand dollars ($1,000) for each violation, for each day the violation is committed, continued, permitted or maintained. The civil penalties may be imposed by the City Manager after written notice and a hearing before the City Manager or his designee at which the person may present evidence and cross examine the witnesses in support of the charges. Civil penalties may also be assessed by the court in a civil action filed by the City to enforce the provisions of this Chapter.

D. Abatement. Any violation of this Chapter may be abated as a public nuisance and costs of abatement may be recovered by the City as allowed by law.

E. Administrative Fines. Any violation of this Chapter is subject to administrative fines as provided by this Code.

F. Judicial Action. This Chapter is enforceable by any judicial action allowed by law, including, but not limited to, injunctive relief.

G. Liens. Costs of enforcement of this Chapter, including but not limited to, costs of investigation, sampling and monitoring costs, and unpaid administrative fines and civil penalties, shall constitute a lien against the real property on which the violation occurs and on the real property of any person who violates this Chapter until such lien is satisfied. The lien may be recorded and executed in the same manner as a judgment lien. Prior to the recordation of the lien, the property owner shall be given written notice of the lien and an opportunity to contest the validity of the lien and the amount at a hearing held by the City Manager or his designee.

H. Remedies Not Exclusive. Remedies under this Chapter shall be in addition to each other, and in addition to any other legally available remedy, and do not limit or supersede any other enforcement action, civil, criminal or administrative.

20.08.240 Severability. If any section, subsection, or part of this Chapter is declared invalid by a court of competent jurisdiction, the remaining provisions shall continue to be valid and enforceable so as to effectuate the purpose and intent of this ordinance.

SW

APPENDIX F-3
CITY OF ENCINITAS
STORM WATER POLLUTION CONTROL CHECKLIST AND CERTIFICATION

All projects within the City of Encinitas are required to implement storm water Best Management Practices (BMPs), consisting of both construction phase BMPs and permanent post-construction BMPs. Construction phase BMPs, discussed in Section IV of the City of Encinitas Best Management Practice Manual, Part II, consist of temporary erosion and sediment control measures. In contrast permanent, post-construction BMPs are designed to treat storm water and urban runoff for the life of the project and are to be maintained in good working order by the property owner(s). These permanent post-construction BMPs are required through the Standard Urban Stormwater Mitigation Program (SUSMP) mandated by the State of California and the City of Encinitas. The City of Encinitas regulates storm water discharges under the Municipal Code, Chapter 20.08, Storm Water Management, and the City of Encinitas BMP Manual, Part II, which can be found at the following website: (http://www.ci.encinitas.ca.us/Government/CityD/EngineeringSDL/Clean+Water+Program/Clean+Water+Program.htm). **Construction phase and post-construction BMPs are <u>both</u> necessary (and required) to help reduce the pollution in our streams, lagoons, and oceans.**

This checklist is designed to guide applicants in the selection and incorporation of BMPs that are acceptable to the City of Encinitas. It is focused on permanent post-construction BMPs, which must be incorporated into the site design of projects during the conceptual phases of project planning. The final design for post-construction BMPs shall be incorporated into the grading plan and building site plan. To determine the BMPs required for your project, fill out the checklists below.

STEP 1: PROJECT TYPE IDENTIFICATION

Complete Table 1 and 2 below to determine if your project is a "Priority", "Standard" or "Exempt" project. This category will dictate the BMPs that are required at your site. A more thorough explanation of the selection criteria and required BMPs can be obtained from the City's BMP Manual, Part II.

Table 1: Determine PRIORITY PROJECT Category.

Does the project meet the definition of one or more of the priority project categories?	**Yes**	**No**
1. Detached residential development of 10 or more units		
2. Attached residential development of 10 or more units		
3. Commercial development greater than 100,000 square feet		
4. Automotive repair shop		
5. Restaurant		
6. Steep hillside development greater than 5,000 square feet		
7. Project discharging to receiving waters within Environmentally Sensitive Areas		
8. Parking lots greater than or equal to 5,000 ft^2 or with at least 15 parking spaces, and potentially exposed to urban runoff		
9. Streets, roads, driveways, highways, and freeways which would create a new paved surface that is 5,000 square feet or greater		
Limited Exclusion: Trenching and resurfacing work associated with utility projects are not considered priority projects. Parking lots, buildings and other structures associated with utility projects are priority projects if one or more of the criteria in Part A are met.		

Table 2: Determine STANDARD PROJECT Category.

Does the project propose?:	**Yes**	**No**
1. New impervious areas, such as rooftops, roads, parking lots, driveways, paths and sidewalks.		
2. Reconstruction of the existing impervious areas, such as rooftops, roads, parking lots, driveways, paths and sidewalks in excess of 1000 square feet.		
3. Permanent structures within 100 feet of any natural water body?		
4. Trash storage areas?		
5. Liquid or solid material loading and unloading areas?		
6. Vehicle or equipment fueling, washing, or maintenance areas?		

Does the project propose?:	Yes	No
7. Require a General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (Except construction)?		
8. Commercial or industrial waste handling or storage, excluding typical office or household waste?		
9. Any grading or ground disturbance during construction?		
10. Any new storm drains, or alteration to existing storm drains that reduces natural storm water treatment?		

Priority Projects: If your answer to any question in Table 1 is "Yes"; your project is a "Priority Project". If all answers to Table 1 are "No", continue to Table 2.

Standard Projects: If all answers to Table 1 are "No", but the answer to any question in Table 2 is "Yes", your project is a "Standard Project".

Exempt Projects: If all answers to Table 1 and Table 2 are "No", your project is "Exempt". Exempt projects shall implement construction phase BMPs as required.

Designate Project Category (check appropriate box)

☐ **Priority Project** ☐ **Standard Project** ☐ **Exempt**

STEP 2: DETERMINE BMP REQUIREMENTS

Fill out the BMP Checklist below for your project type to guide you in the BMP selection process.

Priority Projects: Priority Projects shall incorporate Priority and Standard Project Post-construction BMPs[1], in addition to meeting the applicable construction phase BMPs. All Priority Projects must include a numerically-sized flow-based, volume-based, or approved alternative storm water treatment system. In addition, projects falling into the groups described in Items (d) – (f) of Table 3 below must provide the specific treatment BMPs noted.

Table 3: PRIORITY PROJECT Post-construction BMP Checklist

	Yes	No
a) Will a flow-based system be used to treat runoff? i) grassy/ gravel swale _____ ii) other: _____ Please note that the flow-based system must meet all of the following criteria: i) minimum travel time of 9 minutes _____ ii) maximum velocity of .9 ft/sec _____ iii) maximum flow depth of 2" _____ iv) maximum slope for treatment of 2% _____ v) design based upon a rainfall intensity of .2 in/hr over entire site acreage _____ vi) runoff from all hardscape areas routed to the flow-base system _____		

[1] BMP requirements are more completely described in the City of Encinitas Best Management Practice Manual, Part II

Table 3 (cont.): PRIORITY PROJECT Post-construction BMP Checklist	**Yes**	**No**
b) Will a volume-based system be used to treat runoff? i) detention basin _____ ii) manufactured underground storage/infiltration _____ iii) other:_____ Please note that the volume-based system must meet all of the following design criteria: i) a retention time of not less than 24 hours and not more than 48 hours _____ ii) a volume determined using .6" of precipitation over the entire site acreage _____ iii) an overflow/ bypass design for volume exceedance _____ iv) runoff from all hardscape areas routed to the detention basin _____		
c) Will an approved alternate system be utilized for numerically sized treatment? Please specify: _____		
d) Gas stations, automotive centers, and parking lots, shall install fossil fuel/ hydrocarbon filters in all storm drain inlets. Are filters planned for the project? (Use N/A not applicable)		
e) Trash enclosures shall be covered and surface runoff directed away from the enclosures. Is this requirement planned into project design? (Use N/A if no trash enclosures are proposed)		
f) New roads shall include measures to treat the roadway runoff. Does the project design include treatment for proposed roadway runoff? (Use N/A if no new roads are proposed)		

Standard Project: Standard Projects shall incorporate Standard Project Post-construction BMPs in addition to meeting the applicable construction phase BMPs. All Standard Projects must provide biofiltration meeting at least one of the standards listed under Item (c) below, and the site must be designed such that the answers to Items (a), (b), and (c) below are "Yes".

Table 4: STANDARD PROJECT Post-construction BMP Checklist

	Yes	**No**
a) Is runoff from hardsurface areas such as roofs and driveways routed over natural treatment areas (grass, gravel, non-erosive landscape) prior to discharge from the site?		
b) Does runoff from **all** proposed hardsurface areas receive biofiltation (no Directly Connected Impervious Areas [DCIA])?		
c) Will all trash enclosures be covered and surface runoff directed away from the enclosures (if trash enclosures are proposed)?		
d) Is biofiltration implemented for runoff? Check applicable method below: i) grassy or gravel swale at a maximum slope of 2% and minimum width of 3 ft. ____ ii) relatively flat landscape or turf areas ____ iii) driveway grass strip at least 1 foot wide ____ iv) pervious pavement and/or pavers with at least 50% opening ____ v) underground gravel filtration/ percolation system ____ vi) other (list):		

Storm Water Certification
(To be completed for all project categories)

I hereby acknowledge that both construction and permanent post-construction storm water BMPs are required for this project and will be designed and constructed in accordance with the City of Encinitas BMP Manual, Part II. I certify that the information provided above is complete and correct.

_____

Owner or Engineer Signature Print Name Date

APPENDIX F- 4

Stormwater Condition Excerpts:

EG1 Grading Conditions

EG10 In accordance with Section 23 .24.370 (A) of the Municipal Code, no grading permit shall be issued for work occurring between October 1st of any year and April 15th of the following year, unless the plans for such work include details of protective measures, including desilting basins or other temporary drainage or control measures, or both, as may be deemed necessary by the field inspector to protect the adjoining public and private property from damage by erosion, flooding, or the deposition of mud or debris which may originate from the site or result from such grading operations.

ED1 Drainage Conditions

ED2 The owner shall exercise special care during the construction phase of this project to prevent any offsite siltation. The owner shall provide erosion control measures and shall construct temporary desiltation/detention basins of type, size and location approved by the Engineering Services Director. The basins and erosion control measures shall be shown and specified on the grading plan and shall be constructed to the satisfaction of the Engineering Services Director prior to the start of any other grading operations. Prior to the removal of any basins or facilities so constructed, the area served shall be protected by additional drainage facilities, slope erosion control measures, and other methods required or approved by the Engineering Services Director. The owner shall maintain the temporary basins and erosion control measures for a period of time satisfactory to the Engineering Services Director and shall guarantee their maintenance and satisfactory performance by cash deposit and bonding in amounts and types suitable to the Engineering Services Director.

ED2A An erosion control system shall be designed and installed onsite during all construction activity. The system shall prevent discharge of sediment and all other pollutants onto adjacent streets and into the storm drain system. The City of Encinitas Best Management Practice Manual shall be employed to determine appropriate storm water pollution control practices during construction.

ED2M The developer shall exercise special care during the construction phase of this project to prevent any offsite siltation. The developer shall provide erosion control measures and shall construct temporary desiltation/detention basins of type, size and location as approved by the Engineering Services Director. The basins and erosion control measures shall be shown and specified on the grading plan and shall be constructed to the satisfaction of the Engineering Services Director prior to the start of any other grading operations. Prior to the removal of any basins or facilities so constructed the area served shall be protected by additional drainage facilities, slope erosion control measures and other methods required or approved by the Engineering Services Director. The developer shall maintain the temporary basins

and erosion control measures for a period of time satisfactory to the Engineering Services Director and shall guarantee their maintenance and satisfactory performance through cash deposit and bonding in amounts and types suitable to the Engineering Services Director.

ESW1 Storm Water Pollution Control Conditions

ESW2 Grading projects with a disturbed area of greater than 1 acre must also meet additional requirements from the State Water Resources Control Board (SWRCB). Those additional requirements include filing a Notice of Intent (NOI) and preparing a Stormwater Pollution Prevention Plan (SWPPP).

ESW3 Best Management Practice shall be utilized for storm water pollution control to the satisfaction of the City Engineer. The surface run off shall be directed over grass and landscaped areas prior to collection and discharge onto the street and/or into the public storm drain system. If pipes are used for area drainage, inlets shall be located to allow maximum flow distance over grass and non-erodable landscape areas. A grass lined ditch, reinforced with erosion control blanket, or a rip-rap lined drainage ditch shall be used instead of a concrete ditch where feasible. Hardscaped areas and driveways shall be sloped toward grassy and landscaped areas. Driveways with a grass- or gravel-lined swale in the middle can be used if the site topography does not allow for the discharge of driveway runoff over landscaped areas. The **Grading Plan/ Tentative Map/ Permit Site Plan** shall identify all landscape areas designed for storm water pollution control (SWPC). A note shall be placed on the plans indicating that the modification or removal of the SWPC facilities without a permit from the City is prohibited.

ESW4 Priority Projects shall implement a single or a combination of storm water Best Management Practice methods in order to reduce to the maximum extent practicable the quantity of pollutants entering the public storm drain system or any receiving body of water supporting beneficial uses. All Priority Projects shall construct and implement a structural treatment control BMP, such as natural bio-filtration system or a treatment detention basin, designed to infiltrate, filter, or treat a quantity of storm runoff equal to or greater than the volume generated by a 0.6” precipitation storm event in a duration of twenty-four hours or the maximum flow rate produced by a rainfall of 0.2 inches during each hour of a storm event. The filtration system shall be designed based upon best management practice standards and must be approved by the City Engineer. A covenant approved by the City shall be recorded against the property to ensure the professional maintenance, repair, and replacement of the storm water quality BMP as necessary into perpetuity. The covenant shall also detail the funding mechanism for the required maintenance. An IOD for a public storm drain easement shall be offered to the City and shall cover all storm water treatment facilities and additional areas needed for maintenance and access. A **Grading Plan/ Tentative Map/ Permit Site Plan** identifying all landscape areas designed for storm water pollution control (SWPC) and Best Management Practice shall be submitted to

the City for Engineering Services Department approval. A note shall be placed on the plans indicating that the modification or removal of the SWPC facilities without a permit from the City is prohibited.

ESW5 The project must meet storm water quality and pollution control requirements. The applicant shall design and construct landscape and/or turf areas and ensure that all flows from impervious surfaces are directed across these areas prior to discharging onto the street. A **Grading Plan/ Tentative Map/ Permit Site Plan** identifying all landscape areas designed for storm water pollution control (SWPC) and Best Management Practice shall be submitted to the City for Engineering Services Department approval. A note shall be placed on the plans indicating that the modification or removal of the SWPC facilities without a permit from the City is prohibited.

ESW6 Storm Water Pollution Control (SWPC) facilities shall be designed and approved by the City Engineer and secured with a performance bond prior to the issuance of a **grading / building** permit for this project.

ESW7 For storm water pollution control purposes, a grassy swale reinforced with City-approved geosynthetic fabric shall be provided along the pavement edge. A covenant approved by the City shall be recorded against the property to ensure the property owners will be responsible for the maintenance, repair, and replacement of the grassy swale as necessary into perpetuity.

ESW8 For storm water pollution control purposes, a decomposed granite (DG) swale reinforced with a City-approved geosynthetic fabric shall be provided along the pavement edge. A covenant approved by the City shall be recorded against the property to ensure the property owners will be responsible for the maintenance, repair, and replacement of the DG swale as necessary into perpetuity.

ESW9 For storm water pollution control purposes, all runoff from all roof drains shall discharge onto grass and landscape areas prior to collection and discharge onto the street and/or into the public storm drain system. Grass and landscape areas designated for storm water pollution control shall not be modified without a permit from the City. A note to this effect shall be placed on the **Grading/Permit Site** plan.

ESW10 The design of drainage for private roadways and other impervious surfaces shall incorporate Best Management Practices for storm water pollution control. Private roadway drainage for this project shall incorporate one or more of the following:

A) A rural swale system to direct street sheet flows into a vegetated swale or stabilized decomposed granite (DG)/gravel shoulder and includes curbs at corners and culverts under driveways and at street crossings;

B) An urban curb and gutter system with periodic inlets to collect and direct flows into a vegetated swale/biofilter;

C) A dual drainage system in which precipitation of up to .6” or a rainfall intensity of

up to .2 inches per hour is captured into street catch basins and discharged into an adjacent vegetated swale or gravel shoulder.

Additional Conditions (excerpts)

Grassy Swale

A minimum 6-foot wide grassy swale reinforced with City-approved geosynthetic mat fabric shall be provided along the pavement edge.

Detention/ Infiltration Basin for Runoff Mitigation

Runoff from this property drains to the adjacent property. The applicant shall design and construct an underground infiltration basin to receive all site runoff discharging onto the adjacent property. The infiltration basin shall be an underground storage basin filled with ¾" crushed rock and lined with a City-approved filter fabric. The surface runoff shall enter the crushed rock filled storage through a grate inlet and disperse via a 4" perforated pipe running laterally through the crushed rock. The detention/infiltration basin shall be designed consistent with Engineering Standard Condition ED8 in order to ensure that the impact of the runoff on the adjacent property is less than or equal to the predevelopment condition.

APPENDIX F- 5
Stormwater Pollution Control BMP Notes
Relative to Construction Activities

Concrete Washout

- Contractor shall establish and use an adequately sized concrete washout area to contain washout wastes on site. It is illegal to wash concrete, slurry, mortar, stucco, plaster and the like into the stormwater conveyance system or any receiving water. Contractor shall post a sign designating the washout location.

Construction Site Access

- A stabilized construction site access shall be provided for vehicles egress and ingress to prevent tracking dirt off site. This shall include using material such as gravel and/or corrugated steel panels/plates.

Construction Vehicles

- A specific area away from gutters and stormdrain shall be designated for construction vehicles parking, vehicle refueling, and routine equipment maintenance. All major repairs shall be made off-site.

Erosion Control

- Erosion control must be provided for all erosive surfaces. Sloped surfaces especially shall be protected against erosion by installing erosion resistant surfaces such as erosion control mats, adequate ground cover vegetation, and bonded fiber matrix.
- No excavation and grading activities are allowed during wet weather.
- Diversion dikes shall be constructed to channel runoff around the construction site. Contractor shall protect channels against erosion using permanent and temporary erosion control measures.
- Remove existing vegetation only when absolutely necessary. Large projects shall be conducted in phases to avoid unnecessary removal of the natural ground cover. Do not remove trees or shrubs unnecessarily; they help decrease erosion.
- Temporary vegetation must be planted on slopes or where construction is not immediately planned for erosion control purposes. Erosion shall be prevented by planting fast-growing annual and perennial grasses to shield and bind the soil.
- Plant permanent vegetation as soon as possible, once excavation and grading activities are complete.
- Water usage for dust control shall be minimized.

On-site Construction Material Storage

- Stored materials shall be contained in a secure place to prevent seepage and spillage. Contractor shall store these products where they will stay dry out of the rain. Contractor shall provide secondary containment for all fuel stored on-site.
- Eliminate or reduce pollution of stormwater from stockpiles kept on-site. Stockpiles may include soil, paring materials, asphalt concrete, aggregate base, etc. Stockpiles shall be located away from concentrated stormwater flows and stormdrain inlets. Stockpiles shall be covered or protected with soil stabilization measures and provided with a temporary sediment barrier around the perimeter at all times.

Training

- Contractors' employees who perform construction in the City of Encinitas shall be trained to be familiar with the City of Encinitas stormwater pollution control requirements. These BMP notes shall be available to everyone working on site. The property owner(s) and the prime contractor must inform subcontractors about stormwater requirements and their own responsibilities.

Waste Management

- Contractor shall be responsible for properly disposing of all waste and unused construction materials. Dumping of unused or waste products on the ground, where water can carry them into the conveyance system is strictly prohibited.
- No seepage from dumpsters shall be discharged into stormwater. Berms/dikes shall be placed around dumpsters to divert the natural storm runoff. Dumpsters shall be checked frequently for leaks. Dumpster lids shall remain closed at all times. Dumpsters without lids shall be placed within structures with impervious roofing or covered with tarps in order to avoid rain contact with any trash material.
- Many construction materials, including solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and cleared vegetation can be recycled. Non-recyclable materials must be taken to an appropriate landfill or disposed of as hazardous waste. For information on disposal of hazardous material, call the **Hazardous Waste Hotline** toll free at (800) 714-1195. For information on landfills and to order dumpsters call **EDCO** at (760) 436-4151.
- Pollutants shall be kept off exposed surfaces. Place trash cans and recycling receptacles around the site.
- Portable toilets must be in good working order and checked frequently for leaks. Contractor shall provide secondary containment and locate portable toilets away from stormdrain inlets on pervious surfaces.
- All construction debris shall be kept away from the street, gutter, and stormdrain. Contractor must routinely check and clean up material that may have traveled away from construction site

APPENDIX F-6: Development Projects Reviewed by Plancheck During FY 2006-07

Project Number	Approval Date	Address	Project Description	Priority	Maintenance Agreement?	BMP Type
0096	07/05/06	2010-2012 Cambridge	05-090 Ferlito	no	no	grass swales
9318	07/06/06	Santa Fe at Evergreen	04-040 Bluewater	yes	yes	bioswale/ landscape
9180	07/07/06	1610 Neptune	03-157 Brem	no	no	landscape
0184	07/07/06	2271 Montgomery	04-045 Etemad	no	no	landscape
0138	07/07/06	727 Dewitt Ave	05-151 Gaines, Campbell	no	no	landscape
0011	07/10/06	1521 Summit	05-063 1521 Summit LLC	no	yes	grass swales
9264	07/12/06	2896 Lone Jack (Jackie Ln)	Kron	no	no	grass swales
9367	07/12/06	781 Gardenview Ct	04-185 Lemara Holdings	yes	yes	bioswale
9080	07/13/06	1531 San Elijo	Alkhas 04-007	no	no	landscape
0116	07/13/06	348 Horizon Dr	Chabot	no	no	landscape
0125	07/17/06	361 Birmingham	05-211 Wilson	no	no	landscape
9481	07/18/06	Quail Gardens 12 lot sub	03-104 Barratt American	yes	yes (HOA)	swales and mechanical
9318	07/18/06	Santa Fe at Evergreen	04-040 Bluewater	yes	yes	bioswales
0112	07/18/06	1174 Hymettus	05-245 Werner	no	no	detention basin, grass swales
9459	07/18/06	211 Saxony Rd	04-059 hebrew hms	yes	yes	bioswales; detention basin
0126	07/18/06	2009-2011 Manchester	05-194 Wilson	no	no	landscape
0177	07/21/06	329 Lake Drive	04-187 Kunewalder	yes	yes	bioswales
0172	07/24/06	819 Saxony	Haunert	no	no	*retaining wall, no BMPs required*
9580	07/25/06	Vacant lot on Dove Hollow Ln	Robinson, Chuck	yes	yes	infiltration basin, bioswales
0501	07/26/06	2159 Glasgow	Venrick	no	no	grass swales
0127	08/02/06	2335 Manchester Ave	05-150 Cooley	no	no	landscape area
0224	08/03/06	1739 Freda Ln	Rodriguez	no	no	grass swale
6391	08/04/06	Traebert Ranch	00-032 Emmet	no	no	vegetated swales
9053	08/07/06	1396 Rubenstein	Wilder	no	no	landscape
0148	08/07/06	2274 Edinburg Ave	05-006 Grayeb	no	no	landscape
9057	08/08/06	201 Quail Road	02-217	yes	yes	bioswales
9267	08/09/06	1926 Oxford Ave	04-139 Murphy Res	no	no	landscape
0266	08/09/06	735 Del Rio Ave	Berry	no	no	landscape
1565	08/10/06	104 Neptune	02-245 Finn	no	no	landscaped area, grass swales
0249	08/15/06	3645 Copper Crest Rd	Davis	no	no	bioswale
0218	08/16/06	640 Rancho Santa Fe	Poole	no	no	grass swales
0152	08/17/06	1219 Neptune Ave	05-275, Yousko	no	no	landscape
0261	08/18/06	1945 Lake Dr	Good	no	no	bioswales
0142	08/18/06	946-950 Woodgrove	Park Place HOA	no	no	*slope repair, no BMPs required*
0181	08/21/06	3342 Wildflower Valley Dr	Stehly	yes	no	bioswales
0157	08/21/06	2309-2311 Oxford	05-189 Del Mar	no	no	landscape
9005	08/23/06	175 La Costa	02-013 Campbell	no	no	detention basin
9356	08/23/06	3442 Fortuna Ranch	Watkins	no	no	landscaped area
0255	08/24/06	1877 Olivenhain Rd	Garner	yes	yes	*TBD, not approved yet*
0195	08/24/06	388 Hillcrest	Winter	no	no	*TBD, not approved yet*
0064	08/24/06	1817 Sheridan Rd	Stahovich	no	no	landscape
6242	08/30/06	Fortuna Ranch & Rancho Summ 264	89-031	yes	yes	roadside bioswale
0153	08/31/06	111-125 Chesterfield	Ford-DWO, L.P.	yes	yes	mechanical
0135	08/31/06	487 Bristol	05-134, Struthers	no	no	*sewer main extension, no BMPs required*
0246	09/01/06	4036 Manchester Ave	Pegel Family Trust	no	no	detention basin, bioswales
0051	09/05/06	Hillcrest Dr	05-120 Najar	no	no	bioswales

APPENDIX F-6: Development Projects Reviewed by Plancheck During FY 2006-07

Project Number	Approval Date	Address	Project Description	Priority	Maintenance Agreement?	BMP Type
0065	09/12/06	1441 Hygeia	05-252 Penwarden	no	no	grass swales
0061	09/13/06	1552 Summit	04-246 Walsh	no	yes	grass swales
0275	09/13/06	427 Naiad	Markoff 05-035	no	no	bioswales
9576	09/13/06	843 San Dieguito	04-143 Erwin, Bill & Julie	no	no	bioswales
0088	09/18/06	175 Florita St	06-021, 06-022 Gray	no	no	bioswales
0100	09/19/06	1646 Somerset	05-196 Bilski	no	no	grass swales
0060	09/26/06	3275 Poppy Hills Ln	99-207 Sides	yes	yes	bioswale/ landscape
0186	09/28/06	1019 Oldham Way	Jamison	no	no	bioswales
0279	09/28/06	3430 Via Monte Verde	Dunham	no	no	bioswales
9067	09/28/06	Lake Drive	Geyser	no	no	bioswales
6442	09/28/06	Manchester Ave	98-039 Enc Country Day	yes	yes	detention basin
0087	09/28/06	354 Santa Fe	05-127 Scripps Health	yes	yes	detention basin, grass swales
0313	10/03/06	2339 11th St	Saber	no	no	bioswales
9215	10/05/06	155 Quail Gardens	04-244 Martin, Sunshine Nursery	yes	yes	swale
0299	10/05/06	202 Lindsey Ln	Gerkin	no	no	landscape
9294	10/10/06	477 N El Camino Real	03-235 North Coast Medical	yes	yes	underground detention basin, bioswale
1412	10/11/06	Lone Jack Rd	00-186 Decarion	no	no	bioswales
0070	10/11/06	1275 Quail Gardens	04-239 Enc Ranch Golf	no	no	grass swales
9512	10/11/06	422 Andrew	05-129 Camargo	no	no	infiltration basin, grass swales
7828	10/12/06	Lake Dr	01-090 Best in West	yes	yes	bioswales with underground pipes
1469	10/13/06	Sheilds	01-301 1555 Bella Vista	yes	yes (HOA)	bioswales
0169	10/18/06	510 El Camino Real	Christian Fellowship Church	yes	yes	bioswale/ inlet filters
9350	10/23/06	364 Liverpool	03-247 Avazian	no	no	landscape
0331	10/24/06	171 Kilkenny	05-099 Kayajanian	no	no	landscape
0289	10/31/06	216 N Coast Hwy 101	03-258, Net Leased Real Properties	no	no	landscape
0183	11/01/06	3234 Olivenhain Farms	Helmbacher	yes	yes	grass swales
0220	11/01/06	430 Andrew	Haggblom	no	no	landscaped area
0307	11/02/06	Phoebe St and Hwy 101	Sawtooth 04-219	yes	yes (HOA)	detention chamber
0308	11/02/06	Phoebe St and Hwy 101	Sawtooth 04-220	yes	yes (HOA)	detention chamber
9477	11/06/06	728 Dewitt Ave	04-100 Eisman	no	no	bioswales
9577	11/07/06	175 N Vulcan Ave	04-251 Miller	no	yes	bioswales
0276	11/07/06	Phoebe St and Hwy 101	Sawtooth 04-219, 04-220	yes	yes	mechanical filter
0250	11/08/06	271 Delphinium	Shelton	no	no	bioswales
0178	11/08/06	1330 Bello Mar	Bonanno	no	no	landscape
0199	11/14/06	402 Sheffield	04-281 Toth, Erturk	no	no	swales
0365	11/15/06	4305 Manchester	Byron homes, MPP San Diego LLC	no	no	treatment basin
0187	11/20/06	1060 Urania Ave	05-007 TPM Petersen	yes	yes	mechanical/detention pit
0052	11/20/06	1320 Summit	1320 Summit LLC, Sheriff	no	no	bioswales
0353	11/22/06	224 Andrew	04-286 Eaton Beach McCarter	yes	yes	bioswale
0286	11/27/06	2265 Manchester Ave	05-205 Lee	no	no	landscaped area
0345	11/28/06	943 Arden	Alvarez	no	no	landscaped area
0269	11/30/06	519 Arden	Petrucci/Pham	no	no	landscaped area
0377	12/04/06	3474 Dove Hollow Rd	Mundy	no	no	sewer plan
0235	12/07/06	361 Rancho Santa Fe Rd	Karen Stephen	no	no	grass swales
9055	12/08/06	1308-1310 El Camino Real	01-239 Berryman	yes	yes	detentiaon basin and bioswale
0354	12/08/06	1713 Gascony	Skyloft	no	no	*slope repair, no BMPs required*

APPENDIX F-6: Development Projects Reviewed by Plancheck During FY 2006-07

Project Number	Approval Date	Address	Project Description	Priority	Maintenance Agreement?	BMP Type
0369	12/08/06	1415 Rainbow Ridge	05-273 Holland	yes	yes	bioswale
0375	12/26/06	748 Rancho Santa Fe	Nava	no	no	infiltration basin, grass swales
0419	12/27/06	1972 Crest	Shipper	*TBD*	*TBD*	*TBD, not approved yet*
9058	12/28/06	1616 Neptune	Refold	no	no	*approved before FY 06-07*
9019	12/28/06	Rothenberg 02-282	289 Hillcrest	no	no	landscape
0407	01/09/07	554 Neptune	05-059 Gault	no	no	*no BMPs required*
0405	01/10/07	2297 Newcastle	06-148 Jones	no	no	swales and vegetation
0423	01/17/07	399 Hillcrest Dr	06-087 Nunez	no	no	grass swale
9303	01/18/07	887 Brittany	04-112 Riley	yes	yes	detention basin
9209	01/19/07	268 Sunset	Ragone 03-067	no	no	bioswale
0047	01/23/07	1133 Hermes	06-184 Calvo / Edwards	no	no	bioswales
0386	01/24/07	3535 Manchester Ave	05-148 Belmont Corp	yes	yes	underground storage chambers, bioswales
9294	01/24/07	477 N El Camino Real	03-235 North Coast Medical	yes	yes	bioswale/ structural unit train
9263	01/24/07	Burgundy Rd	Galiley	no	no	landscape
0427	01/25/07	S Vulcan and Vist del Rey	Hacienda de la Playa	no	no	none required (retaining wall)
0414	01/29/07	4455 Manchester Ave	Rite Aid 05-027	yes	yes	mechanical bioswales
0413	01/30/07	651 Quail Gardens	Cole	no	no	landscaping
0394	01/31/07	282 Neptune	05-161 Zagara	no	yes	filter inserts and landscaping
9332	02/02/07	234 Rancho Santa Fe	Richard Sinnett related 502-CS, 9332-I	no	no	*retaining wall, no BMPs required*
502	02/02/07	Rancho Santa Fe Rd	Nava	no	no	*sewer main extension, no BMPs required*
0482	02/02/07	1864 Crest Dr	05-270 Woods	yes	yes	bio-basin
0106	02/07/07	Wildflower Valley	Franklin	no	no	bioswales
0483	02/07/07	540 La Costa	01-292 Chevron	yes	yes	bioswale/ inlet filters
9167	02/13/07	Hygeia	04-110 Beltran	no	no	infiltration basin, grass swales
0245	02/13/07	Lilac Summit	Killion	no	no	grass swales
9602	02/14/07	Lone Hill Lane	06-009 Gish	no	no	bioswales
9253	02/15/07	701-721 S Vulcan Ave	03-029 Beach Town Bungalows	no	no	landscape
9170	02/16/07	Oxford at Kilkenny	03-227 Weekes preferred property	no	no	landscape
9262	02/20/07	840 Bracero	03-018 JDSK Invest	yes	yes	bioswales
0278	02/26/07	3403 Bumann Rd	Somers	no	no	rock swales
0226	02/28/07	1319 Lux Canyon Dr	03-099 Lux	no	no	bioswales
0287	02/28/07	140 Range St	Finkbiner	no	no	grass swales
577	03/02/07	Bristol Avenue	Malone	no	no	*sewer main extension, no BMPs required*
0198	03/02/07	Somerset and Caretta Way	Galloway	no	yes	grass swales
0429	03/07/07	3592 Jasmine Crest	Weber	no	no	landscaping
9479	03/12/07	1338 Rubenstien	Moss	no	no	*approved before FY 06-07*
0385	03/13/07	1575 Crest Dr	Griffith	no	yes	grass swales
0010	03/16/07	160 Fourth	05-139 Winship	no	no	landscaping, bioswales
0202	03/20/07	411 Bristol	05-115 Zinkich	no	no	swales
0475	03/22/07	986 Hygeia	Lavia	no	no	*TBD, not approved yet*
9228	03/22/07	3230 Bella Colina	Kootchick	no	no	bioswale
9283	03/23/07	267 Sanford	03-128 Newman-Buch, LLC	no	yes	bioswales
0306	03/27/07	2351 San Elijo	05-185 Chesnut	no	no	grass swales
0061	03/28/07	801 Orpheus Ave	City of Encinitas	yes	yes	bioswale/ landscape
1508	03/28/07	Basil Street	02-236 Knafou	no	no	bioswale
0474	03/30/07	763 Second St	06-097 CWK Properties LLC	no	no	grass swales

APPENDIX F-6: Development Projects Reviewed by Plancheck During FY 2006-07

Project Number	Approval Date	Address	Project Description	Priority	Maintenance Agreement?	BMP Type
0185	04/02/07	1423 Rainbow Ridge Ln	Batley Enterprises	no	no	grass swales
0302	04/13/07	1405-1407 San Elijo	06-053 Schroeder	no	no	grass swales
9286	04/17/07	2477 Oxford	04-064, MOURAO	no	no	grass swales
6169	04/17/07	2100 N Coast Hwy	Encinitas Beach Resort	yes	yes	bioswale/ landscape
0214	04/18/07	301 Cantle Ln	Watts	no	no	grass swales
0280	04/26/07	368 E Glaucus St	Newby 05-258	no	yes	landscaped areas; bioswales
0476	04/26/07	501 Chesterfield	06-059 Maasen & Clark	no	no	landscape
0296	04/27/07	907-911 Bracero	04-186 Stanton	no	yes	bioswales
0389	04/27/07	554 Stratford	Samuelson	no	no	landscape
0437	04/28/07	200-52 El Camino Real	05-121 WRI El Camino LP	yes	yes	mechanical filter
0497	04/30/07	681 2nd St	06-043 Harrison	no	no	grass swales
0325	04/30/07	Lone Jack Rd	05-202 Rimmer	yes	yes	grass swales
0494	05/01/07	1025 Arcadia Rd	Radakovich	no	no	*TBD, not approved yet*
0366	05/01/07	742-744 Dewitt	05-201 Mosberg	no	no	landscape
9561	05/02/07	303 Santa Fe Drive	05-044 Santa Fe Dr Properties	no	yes	grass swale, mechanical/structural, SD filter
9301	05/09/07	Halcyon Rd	04-216, Holland	yes	yes	grass swales
214	05/10/07	301 Cantle Ln		no	no	bioswales
0528	05/10/07	402-404 Second St	06-050 Kopion Group	no	*TBD*	*TBD, not approved yet*
0442	05/16/07	1925 Cambridge Ave	06-032 Murray	no	yes	detention basin, landscaping
0493	05/17/07	Vulcan Ave	02-225 Bagley	no	no	grass swales
0364	05/22/07	115 Princehouse Ln	04-049 Cordova	no	no	bioswales
0462	05/22/07	70 N Coast Hwy 101 thru 90 N Coas	05-108 Encinitas Artist Lofts	yes	yes	mechaical/bioswales
0388	05/26/07	1435 Lake Dr	05-265 Cavanaugh & Deering	yes	yes	grass swales
0396	05/29/07	1408 Summit	06-090 Butler	no	no	detention basin, grass swales
0324	05/29/07	525 Birmingham	Strebe	no	no	none required
1453	05/30/07	1069 Double LL	McComas	no	no	detention basin, bioswales
0443	05/31/07	1066 Gardena	04-259 Red Point Homes	no	yes	grass swales
0094	06/06/07	1020 Calle Anacapa	04-010 Hughes	yes	no	bioswales
0315	06/06/07	3740 Fortuna Ranch Rd	04-010 Hughes	no	no	bioswales
0395	06/07/07	520 Fourth St	06-229 GEIERMAN	no	no	grass swales
0215	06/07/07	Brighton and Rossini	04-075 Fuller	no	yes	grass swales
0572	06/08/07	135 Daphne St	Dewald	no	no	landscape
0563	06/12/07	3637 Copper crest	Berg	*TBD*	*TBD*	*TBD, not approved yet*
9300	06/13/07	Calle Margatita	Talbot/Jones	no	no	swales
0372	06/13/07	1657 N Vulcan	03-090 Shea Homes, Coral Cove	yes	yes	detention basin, grass swales
0562	06/14/07	1302 Encinitas Blvd	03-205 HARLOFF	yes	yes	detention basin, grass swales
0551	06/14/07	243 Glaucus	05-079 LACKRITZ	no	yes	grass swales
0580	06/14/07	Rancho Santa Fe Rd	Sinnett	no	no	*sewer main extension, no BMPs required*
7967	06/18/07	Megan Lane	Brown	no	no	*approved before FY 06-07*
0409	06/22/07	3364 Calle Margarita	Bertha	no	no	rock swales
0465	06/22/07	1045 Via De Felicita	Wilson	no	no	landscape area

APPENDIX F-7

Recording Requested By:)
)
City Engineer)
)
When Recorded Mail to:)
City Clerk)
City of Encinitas)
505 South Vulcan Avenue)
Encinitas, CA 92024) SPACE ABOVE FOR RECORDER'S USE ONLY

PRIVATE STORM WATER TREATMENT
MAINTENANCE AGREEMENT

Assessor's Parcel No. [redacted] Project No.: [redacted]
W.O. No.: [redacted]

THIS AGREEMENT for the periodic maintenance and repair of that certain private storm water treatment facilities, the legal description and/or plat of which is set forth in Exhibit “B” attached hereto and made a part hereof, is entered into by [redacted], a California Corporation which shall include the Developer to the extent the Developer retains any ownership interest in any land covered by this agreement.

WHEREAS, this Agreement is required as a condition of approval by the City of Encinitas of Grading Permit [redacted]; and

WHEREAS, Developer is the owner of certain real property described in Exhibit “A” that will use and enjoy the benefit of said storm water treatment facilities(s) (Said real property is hereinafter referred to as the "property"); and

WHEREAS, it is the desire of the Developer that said private storm water treatment system be maintained in a safe and usable condition by the owners; and

WHEREAS, it is the desire of the Developer to establish a method for the periodic maintenance and repair of said private storm water treatment facilities and for the apportionment of the expense of such maintenance and repair among existing and future owners; and

WHEREAS, there exists a benefit to the public the private storm water facilities be adequately maintained on a regular and periodic basis; and

WHEREAS, it is the intention of the Developer that this Agreement constitute a covenant running with the land, binding upon each successive owner of all or any portion of the property.

NOW THEREFORE, IT IS HEREBY AGREED AS FOLLOWS:

1. The property is benefited by this Agreement, and present and successive owners of all or any portion of the property are expressly bound hereby for the benefit of the land.

2. The cost and expense of maintaining the private storm water treatment facilities shall be paid by the owner of the heirs, assigns and successors in interest of each such owner.

3. In the event any of the herein described parcels of land are subdivided further, the owners, heirs, assigns and successors in interest of each such newly created parcel shall be liable under this Agreement for their then pro rata share of expenses and such pro rata shares of expenses shall be computed to reflect such newly created parcels.

4. The repairs and maintenance to be performed under this Agreement shall be limited to the following: reasonable and improvements and maintenance work to adequately maintain said private storm water treatment facilities to permit access to said facilities. Repairs and maintenance under this Agreement shall include, but are not limited to, repairing access roadbeds, repairing and maintaining drainage structures, removing debris, if any, and other work reasonably necessary and proper to repair and preserve the private storm water treatment facilities for their intended purposes.

5. If there is a covenant, agreement, or other obligation imposed as a condition of the development, the obligation to repair and maintain the private storm water treatment facilities as herein set forth shall commence when improvements have been completed and approved by the City.

6. Any extraordinary repair required to correct damage to said storm water treatment facilities that results from action taken or contracted for by the owners or their successors in interest shall be paid for by the party taking action or party contracting for work which caused the necessity for the extraordinary repair. The repair shall be such as to restore the storm water treatment facilities to the condition existing prior to said damage.

7. Any liability of the owners for personal injury to an agent hereunder, or to any worker employed to make repairs or provide maintenance under this Agreement, or to third persons, as well as any liability of the owners for damage to the property of agent, or any such worker, or of any third persons, as a result of or arising out of repairs and maintenance under this Agreement, shall be borne, by the owners as they bear the costs and expenses of such repairs and maintenance. Owners shall be responsible for and maintain their own insurance, if any. By this Agreement, the Developer does not intend to provide for the sharing of liability with respect to personal injury or property damage other than that attributable to the repairs and maintenance undertaken under this Agreement.

8. Owners shall jointly and severally defend and indemnify and hold harmless City, City's engineer and its consultants and each of its officials, directors, officers, agents and employees from and against all liability, claims, damages, losses, expenses, personal injury and other costs, including costs of defense and attorney's fees, to the agent hereunder or to any owner, any contractor, any subcontractor, any user of the storm water treatment facilities, or to any other third persons arising out of or in any way related to the use of, repair or maintenance of, or the failure to repair or maintain the private storm water treatment facilities.

Nothing in the Agreement, the specifications or other contract documents or City's approval of the plans and specifications or inspection of the work is intended to include a review, inspection acknowledgement of a responsibility for any such matter, and City, City's engineer and its consultants, and each of its officials, directors, officers, employees and agents, shall have no responsibility or liability therefore.

11. The foregoing covenants shall run with the land and shall be deemed to be for the benefit of the land of the owners and each and every person who shall at anytime own all or any portion of the property referred to herein.

12. It is understood and agreed that the covenants herein contained shall be binding on the heirs, executors, administrators, successors, and assignees of each of the owners.

13. It is the purpose of the signatories hereto that this instrument be recorded to the end and intent that the obligation hereby created shall be and constitute a covenant running with the land and any subsequent purchaser of all or any portion thereof, by acceptance of delivery of a deed and/or conveyance regardless of form, shall be deemed to have consented to and become bound by these presents, including without limitation, the right of any person entitled to enforce the terms of this Agreement to institute legal action as provided in Paragraph 8 hereof, such remedy to be cumulative and in addition to other remedies provided in this Agreement and to all other remedies at law or in equity.

14. The terms of this Agreement may be amended in writing upon majority approval of the owners and consent of the City.

15. This Agreement shall be governed by the laws of the State of California. In the event that any of the provisions of this Agreement are held to be unenforceable or invalid by any court of competent jurisdiction, the validity, and enforceability of the remaining provisions shall not be affected thereby.

16. If the Property constitutes a "Common Interest Development" as defined in California Civil Code Section 1351(c) which will include membership in or ownership of an "Association" as defined in California Civil Code Section 1351(a), anything in this Agreement to the contrary notwithstanding, the following provisions shall apply at and during such time as (i) the Property is encumbered by a "Declaration" (as defined in California Civil Code Section 1351(h), and (ii) the Common Area of the property (including the private storm water treatment facilities) is managed and controlled by an Association:

(a) The Association, through its Board of Directors, shall repair and maintain the private storm water treatment facilities and shall be deemed the "agent" as referred to in Paragraph 7 above. The Association, which shall not be replaced except by amendment to the Declaration, shall receive no compensation for performing such duties. The costs of such maintenance and repair shall be assessed against each owner and his subdivision interest in the Property pursuant to the Declaration. The assessments shall be deposited in the Association's corporate account.

(b) The provisions in the Declaration which provide for assessment liens in favor of the Association and enforcement thereof shall supersede Paragraph 8 of the Agreement in its entirety. No individual owners shall have the right to alter, maintain or repair any of the Common Area (as defined in California Civil Code Section 1351(b) in the Property except as may be allowed by the Declaration.

(c) This Agreement shall not be interpreted in any manner, which reduces or limits the Association's rights and duties pursuant to its Bylaws and Declaration.

IN WITNESS WHEREOF, the parties have executed this Agreement
This_____day of_____, 2005.

Developer:

_____

_____
Print Name and Title

Signature of DEVELOPER must be notarized. Attach the appropriate acknowledgement.

APPENDIX F-8
CEQA Initial Study Checklist (Water Quality Section Only)

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
VIII. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☐
b) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems?	☐	☐	☐	☐
c) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☐
d) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☐	☐
e) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☐
f) Expose people or structures to inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☐
g) Substantially conflict with city-adopted water quality standards or waste discharge requirements?	☐	☐	☐	☐
h) Substantially alter the existing drainage pattern of the site or area, including the alteration of a stream or river course, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☐
i) Result in a substantial degradation of receiving water quality during construction activities?	☐	☐	☐	☐
j) Propose a land use or an on-site activity that would substantially degrade receiving water quality?	☐	☐	☐	☐
k) Substantially increase any pollutant for which a tributary water body is listed on the Clean Water Act Section 303(d) list?	☐	☐	☐	☐
l) Substantially degrade surface water quality within wetland, fresh, marine, or recreational waters?	☐	☐	☐	☐
m) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☐
n) Substantially degrade groundwater quality?	☐	☐	☐	☐

Appendix G

G-1 Construction Inventory FY 2006-07
G-2 Map of Construction Sites FY 2006-07
G-3 FY 2006-07 Construction Site Storm Water Checklist
G-4 Sample of 2007 Erosion Control Letter

Inspector	Permit #	Site Address	Site Street Name	APN	Priority
Ben Oliver	9117 GI	236-238	Andrew Ave	216-052-0900	HIGH
Ben Oliver	9336 GI	290	Andrew Ave	216-052-0800	HIGH
Ben Oliver	9156 GI	736	Fourth Ave	258-153-0500	HIGH
Ben Oliver	9048 GI	235	La Costa Ave	216-052-71-00	HIGH
Ben Oliver	9370 GI	406	La Costa Ave	216-030-5200	HIGH
Ben Oliver	9512 GI	422	Andrew Ave	216-063-1800	LOW
Ben Oliver	220 GI	430	Andrew Ave	216-063-3300	LOW
Ben Oliver	269-GI	519	Arden Dr	258-103-02	LOW
Ben Oliver	19 GI	1316	Bello Mar Dr	216-500-0600	LOW
Ben Oliver	1537 GI	2015-2025	Cambridge Avenue	260-391-0300	LOW
Ben Oliver	9177 GI	740	Cornish Drive	258-211-18-00	LOW
Ben Oliver	72 GI	1604	Crest Dr	262-031-0100	LOW
Ben Oliver	47 GI	1133	Hermes	254-252-5700	LOW
Ben Oliver	9212 GI	376	Hillcrest Drive	216-081-3700	LOW
Ben Oliver	7800 GI	3542	Jasmine Crest	264-540-0100	LOW
Ben Oliver	7628 GI	225	La Costa Ave	216-052-2700	LOW
Ben Oliver	7628GI	235	La Costa Ave	216-052-2700	LOW
Ben Oliver	299 GI	202	Lindsey	258-420-0500	LOW
Ben Oliver	0127 GI	2335	Manchester	2610910700	LOW
Ben Oliver	215-GI	427	Naiad St	256-242-47	LOW
Ben Oliver	9285 GI	330	Neptune Avenue	256-352-0100	LOW
Ben Oliver	9170 GI		Oxford and Kilkenny	261-113-1800	LOW
Ben Oliver	9021 GI	1450	Paseo De Las Flores	254-614-0700	LOW
Ben Oliver	9575-GI	1270	Rubenstein Ave	260-071-2700	LOW
Ben Oliver	9253 GI	701-721	S Vulcan Ave	258-214-1200	LOW
Ben Oliver	9080 GI	1455	San Elijo Avenue	260-620-5400	LOW
Ben Oliver	9283 GI	267	Sanford	254-111-5800	LOW
Ben Oliver	64-GI	1817	Sheridan Rd	216-071-16	LOW
Ben Oliver	9103 GI	115	Verdi Ave	260-266-1100	LOW
Ben Oliver	0103 SG	1079	Vulcan Ave	252-324-4600	LOW
Nick Deile	7893 GI		Pireaus and Plato	254-144-0200	HIGH
Nick Deile	345 GI	943	Arden	258-233-1800	LOW
Nick Deile	9303 GI	887	Brittany	254-362-1500	LOW
Nick Deile	9434 GI	1055	Eolus	254-392-1000	LOW
Nick Deile	0010 GI	160	Fourth St.	258-021-0800	LOW
Nick Deile	9301 GI	191	Halcyon	256-301-1300	LOW
Nick Deile	1533 GI	1098	Hymettus Ave	254-262-2200	LOW
Nick Deile	9360 GI	754	Hymettus Avenue	256-253-3200	LOW
Nick Deile	9128 GI	240	La Veta	256-361-2200	LOW
Nick Deile	9350 GI	364	Liverpool	260-384-2200	LOW
Nick Deile	7958 GI	1815	MacKinnon	260-317-0200	LOW

Appendix G-1 Construction Inventory 2006-07

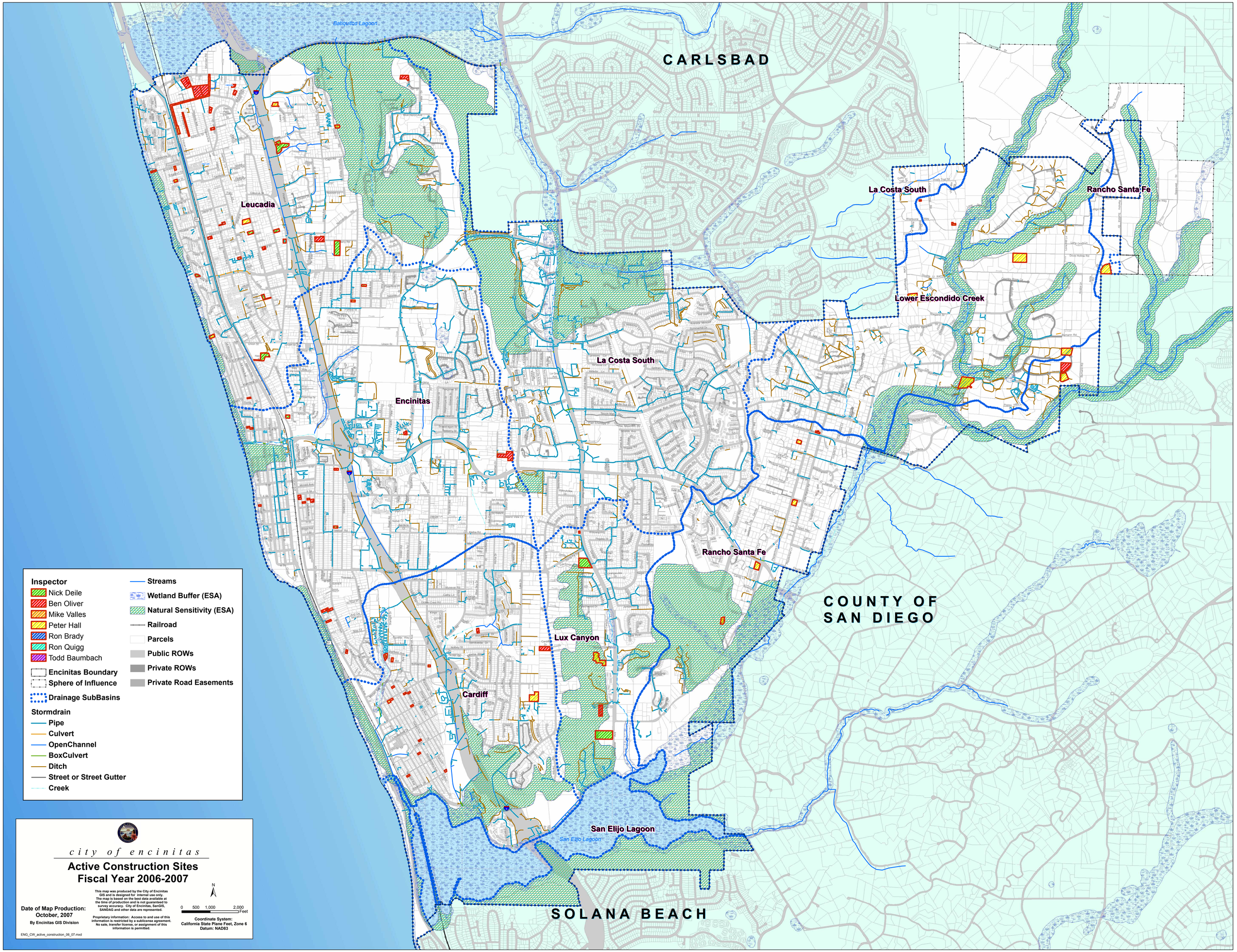
Nick Deile	9419 GI	871	Neptune Avenue	260-121-7000	LOW
Nick Deile	9488 GI	2416	Newport	261-101-2900	LOW
Nick Deile	9267 GI	1926	Oxford Avenue	260-362-1400	LOW
Nick Deile	0172 SG	819	Saxony Rd	256-236-0300	LOW
Nick Deile	199 GI	403	Sheffield	260-283-1200	LOW
Nick Deile	9054 GI	93	Sunset Drive	256-420-2000	LOW
Nick Deile	07-198		ECR Demo	259-121-18-00	MEDIUM
Nick Deile	495EX		Orpheus Ave Sewer	256-121-4100	MEDIUM
Peter Hall	9150 GI	3113	Camino Del Rancho	264-270-0800	HIGH
Peter Hall	9356 GI	3442	Fortuna Ranch Road	264-291-0400	HIGH
Peter Hall	9482 GI	1635	Gascony Road	254-172-0300	HIGH
Peter Hall	9489 GI	3515	Jasmine Crest	264-540-0700	HIGH
Peter Hall	183 GI	3234	Olivenhain Farms Rd	264-091-2000	HIGH
Peter Hall	9341 GI	454	Bristol Street	260-282-1500	LOW
Peter Hall	9564 GI	710	Cole Ranch Road	265-352-0400	LOW
Peter Hall	0266 GI	735	Del Rio	2561641700	LOW
Peter Hall	6291 GI	1747	Noma Lane	2161003200	LOW
Peter Hall	9529 GI	125	Avocado Street	254-054-6500	MEDIUM
Peter Hall	125-GI	361	Birmingham	260-382-4800	MEDIUM
Peter Hall	7601-GI	1255	Birmingham	260-430-6700	MEDIUM
Peter Hall	9300-GI	3373	Calle Margarita	264-240-1400	MEDIUM
Peter Hall	96-GI	2010-2012	Cambridge	260-384-4400	MEDIUM
Peter Hall	9522 GI	2150	Cambridge Avenue	260-404-2800	MEDIUM
Peter Hall	138 GI	727	Dewitt Avenue	258-211-1100	MEDIUM
Peter Hall	9580 GI		Dove Hollow Lane	264-232-2700	MEDIUM
Peter Hall	1563 GI	3701	Fortuna Ranch Road	264-451-1000	MEDIUM
Peter Hall	112 GI	1174	Hymettus Avenue	254-262-0600	MEDIUM
Peter Hall	126-GI	2009	Manchester	260-382-4400	MEDIUM
Peter Hall	7967-GI		Megan Ln	264-222-0500	MEDIUM
Peter Hall	9180 GI	1610	Neptune Avenue	264-040-2700	MEDIUM
Peter Hall	9486 GI	560/566	Neptune Avenue	256-084-1100	MEDIUM
Peter Hall	235-GI	361	Rancho Santa Fe Rd	259-023-3700	MEDIUM
Peter Hall	218-GI	640	Rancho Santa Fe Rd	265-355-0700	MEDIUM
Peter Hall	287-G	140	Range St.	254-054-60-00	MEDIUM
Peter Hall	9442 GI	1416	Summit Avenue	260-620-7300	MEDIUM
Ron Brady	9278 GI		Lone Hill Lane= 2 Lots	264-450-0500	HIGH
Ron Brady	9289 GI		Lone Jack & Jackie Lane	264-160-1600	HIGH
Ron Brady	9563 CN		Moonlight Beach Sewer Pump Station @ 3rd & B Street	254-000-0000	HIGH
Ron Brady	9294 GI	477	N. El Camino Real	257-470-0400	HIGH
Ron Brady	9215 GI		Quail Gardens & Encinitas Blvd.	258-130-3200	HIGH
Ron Brady	7095 GI	1060 & 1064	Wiegand St	264-240-0800	HIGH
Ron Brady	70 GI		Encinitas Ranch Club HS	254-612-0600	LOW

Appendix G-1 Construction Inventory 2006-07

Ron Brady	9286 GI	2477 & 2483	Oxford Avenue	261-113-1600	LOW
Ron Brady	1508 GI	122	Basil St	256-082-0700	MEDIUM
Ron Brady	1583 GI	417	Bridoon Terrace	264-391-2100	MEDIUM
Ron Brady	9193 GI	421	Bridoon Terrace	264-391-2000	MEDIUM
Ron Brady	9477 GI	728	Dewitt Avenue	258-214-0400	MEDIUM
Ron Brady	88 GI	175	Florita	256-391-1300	MEDIUM
Ron Brady	9367 GI	781	Gardenview Ct	257-470-1100	MEDIUM
Ron Brady	7791 GI	1766	N. Coast Hwy 101- Mobile Gas Station (formerly Arco Gas)	254-060-0400	MEDIUM
Ron Brady	1565 GI	104	Neptune Avenue	256-371-0900	MEDIUM
Ron Brady	152 GI	1219	Neptune Avenue	254-230-0600	MEDIUM
Ron Brady	9579 CN	1403	Neptune Avenue	254-221-0700	MEDIUM
Ron Brady	9058 GI	1616	Neptune Avenue	254-040-1000	MEDIUM
Ron Brady	186 G	1019	Oldham Ct	254-551-0200	MEDIUM
Ron Brady	9164 GI		Quail Gardens Drive	257-020-0100	MEDIUM
Ron Brady	9028 GI	1050	Regal Rd	258-240-3000	MEDIUM
Ron Brady	9501 GI	1350	S. Coast Hwy 101	260-030-0200	MEDIUM
Ron Brady	9459 GI	211	Saxony Rd	256-340-3400	MEDIUM
Ron Brady	61 GI	1552	Summit Avenue	260-630-4600	MEDIUM
Ron Brady	9521 GI	203-213	Third St	258-051-1300	MEDIUM
Ron Brady	73 GI	760	Third St	258-152-0800	MEDIUM
Ron Brady	279 GI & SG	3430	Via Monte Verde	264-241-1900	MEDIUM
Todd B	1469 GI	1555	Bella Vista	216-122-1600	HIGH
Todd B	0055 GI	540	Cornish Drive	258-090-1500	HIGH
Todd B	9057 GI	201	Quail Road	258-111-1900	HIGH
Todd B	1412 GI	3354	Wildflower Estates	264-091-1300	HIGH
Todd B	1412 GI		Wildflower Estates	264-270-17-2100	HIGH
Todd B	9228 GI	3230	Bella Colina	264-090-3200	LOW
Todd B	178 GI	1330	Bello Mar Dr	216-500-0500	LOW
Todd B	9262 GI	900	Blk Bracero Rd	258-370-52	LOW
Todd B	9263 GI	1653	Burgundy Rd	254-171-3900	LOW
Todd B	1604 GI	125	Chesterfield	261-041-1700	LOW
Todd B	250 GI	271	Delphinium St	257-090-4901	LOW
Todd B	0058 GI	1638	Edilee Drive	260-552-0400	LOW
Todd B	9601 GI	293	Hillcrest Drive	254-102-5900	LOW
Todd B	65-GI	1441	Hygeia Ave.	254-112-2800	LOW
Todd B	331 GI	172	Kilkenny Dr	261-102-1700	LOW
Todd B	245 GI	3351	Lilac Summit	264-091-3500	LOW
Todd B	9456 GI	2015	MacKinnon Avenue	260-394-0800	LOW
Todd B	9577 GI	175	N. Vulcan	256-400-2100	LOW
Todd B	60 GI	3275	Poppy Hills Lane	264-091-9000	LOW
Todd B	9576 GI	843	San Dieguito Drive	258-232-1100	LOW
Todd B	9140 GI	1951-53	San Elijo Avenue	260-351-0500	LOW

Appendix G-1 Construction Inventory 2006-07

Todd B	7909 GI	355	Seeman Drive	259-130-7300	LOW
Todd B	7962 GI	200	Seeman Drive	259-131-5400	LOW
Todd B	0100 GI	1646	Somerset	2603041000	LOW
Todd B	9034 GI	1470	Summit Avenue	260-620-7600	LOW
Todd B	0011 GI	1521	Summit Avenue	260-083-0500	LOW
Todd B	9209 GI	268	Sunset Drive	256-400-1000	LOW
Todd B	181-GI	3342	Wildflower Valley Dr.	264-091-7100	LOW
Todd B	0106 GI	3358	Wildflower Valley Drive	264-091-8600	LOW
Todd B	87 GI	354	Santa Fe Dr	258-240-4600	MEDIUM


Batiquitos Lagoon
CARLSBAD
Leucadia
Encinitas
La Costa South
La Costa South
Rancho Santa Fe
Lower Escondido Creek
Rancho Santa Fe
COUNTY OF SAN DIEGO
Lux Canyon
Cardiff
San Elijo Lagoon
San Elijo Lagoon
SOLANA BEACH
Inspector
Nick Deile
Ben Oliver
Mike Valles
Peter Hall
Ron Brady
Ron Quigg
Todd Baumbach
Encinitas Boundary
Sphere of Influence
Drainage SubBasins
Stormdrain
Pipe
Culvert
OpenChannel
BoxCulvert
Ditch
Street or Street Gutter
Creek
Streams
Wetland Buffer (ESA)
Natural Sensitivity (ESA)
Railroad
Parcels
Public ROWs
Private ROWs
Private Road Easements
city of encinitas
Active Construction Sites
Fiscal Year 2006-2007
Date of Map Production:
October, 2007
By Encinitas GIS Division
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N
0 500 1,000 2,000 Feet
Coordinate System:
California State Plane Feet, Zone 6
Datum: NAD83
ENG_CW_active_construction_06_07.mxd

Appendix G-3

City of Encinitas

Construction Site Storm Water Inspection Checklist

Property Address:	**Date Inspected:**
Contact Person:	**Permit No:**
Phone No:	**APN:**
Inspector:	**Size:**

Site Priority: ☐ High ☐ Medium ☐ Low

(reason for "High" designation_____)

Covered under State General Construction Permit? ☐ YES ☐ NO If yes, is SWPPP on-site? ☐YES ☐ NO

Erosion Control BMPs: ☐ Adequate ☐ Inadequate ☐ N/A

BMPs Include:
- ☐ Preserving Existing Vegetation
- ☐ Hydroseeding
- ☐ Soil Binders, Hydraulic Mulch, Bonded Fiber Matrix
- ☐ Geotextiles, Plastic Covers, Erosion Control Blankets/Mats
- ☐ Permanent Landscaping
- ☐ Diversion Channel for Run-on
- ☐ Other _____

Sediment Control BMPs: ☐ Adequate ☐ Inadequate ☐ N/A

BMPs Include:
- ☐ Perimeter Protection: ☐ gravel bags, ☐ silt fencing, ☐ fiber rolls, ☐ other _____
- ☐ Slope Protection: ☐ silt fencing, ☐ fiber rolls, ☐ slope drains, ☐ other_____
- ☐ Resource Protection (environmentally sensitive areas and waterways)
- ☐ Sediment Capture: ☐ detention basin, ☐ desilting basin ☐other_____
- ☐ Velocity Reduction: ☐ check dams, ☐ rip rap, ☐ other_____
- ☐ Off Site Sediment Tracking: ☐ gravel entrance, ☐ Temp. Construction road, ☐ other_____
- ☐ Inlet Protection: ☐ gravel bags, ☐ gravel rolls, ☐ other_____
- ☐ Other _____

Materials Management BMPs: ☐ Adequate ☐ Inadequate ☐ N/A

BMPs Include:
- ☐ Spill prevention and control program (employee education and training)
- ☐ Fuel/chemicals stored on Site: ☐ secondary containment, ☐ leak detection, ☐ other____
- ☐ Equipment Related Wastes: ☐ covered, ☐ secondary containment, ☐ other_____
- ☐ Stockpile on Site (Solids): ☐ covered, ☐ secondary containment, ☐ other_____
- ☐ Trash/Litter on Site: ☐ receptacles provided, ☐ covered, ☐ secondary containment, ☐ other _____
- ☐ Concrete Waste: ☐ designated washout area, ☐ secondary containment, ☐ other_____
- ☐ Sanitary Waste: ☐ secondary containment, ☐ located away from inlets, ☐ other_____

Enforcement: ☐ Correct Work (see Comments) ☐ Stop Work/NOV ☐ Citation (#_____)

Comments:

_____

_____

_____

_____

Signatures: City of Encinitas: _____ Date: _____

TEL 760-633-2787 / FAX 760-633-2818 505 S. Vulcan Avenue, Encinitas, California 92024-3633 TDD 760-633-2700

City of Encinitas

Appendix G-4

September 28, 2007

RE: **EROSION CONTROL**

Dear Permit Holder:

Please be advised that as of October 1, the City will enter into the wet season. The wet season brings with it a responsibility for erosion control pursuant to **23.24.370 - Wet Season Work** of the City Code. This section states the following:

A. No grading permit shall be issued for work occurring between October 1st of any year and April 15th of the following year, unless the plans for such work include details of protective measures, including desilting basins or other temporary drainage or control measures, or both, as may be deemed necessary by the field inspector to protect adjoining public and private property from damage by erosion, flooding, or the deposition of mud or debris which may originate from the site or result from such grading operations.

B. If grading is begun prior to October 1st, all protective measures shall be installed prior to October 1st. If grading is begun on or after October 1st, all protective measures shall be installed before grading is begun. All protective measures shall be maintained in good working order until April 15th of the succeeding year, where grading is done between October 1st and December 31st, or until April 15th of the same year where grading is done between January 1st and April 15th, unless their removal at an earlier date is approved by the City Engineer.

C. Where a grading permit is issued and the work is commenced after April 15th and before September 15th of any year, and the permit was issued without an Interim Erosion and Sediment Control Plan, and it appears that the grading and installation of the permanent drainage devices as authorized by the permit will not be completed prior to October 1, then on or before September 15th, the owner of the site on which the grading is being performed shall file or cause to be filed with the City Engineer an Interim Erosion and Sediment Control Plan as provided for in this Chapter and shall implement the measures contained in the approved plan by October 1. The plan check fee for the Interim Erosion and Sediment Control Plan shall be paid at the time of plan submittal and shall be in the amount provided for in this Chapter.

D. For continuation of grading activities, other than installation, maintenance, or repair of measures on the Erosion Control Plans, during the wet season, Permittee must apply for and receive, every seven days, special permission to proceed.

E. The City Engineer shall grant permission under this section on the basis of weather forecasts, site conditions, experience and other pertinent factors which indicate the activity may commence or continue without excessive erosion occurring.

F. Should the Permittee fail to submit the plans, fail to provide the protective measures or fail to obtain permission for wet season activities as required by this Chapter by the dates specified therein, it shall be deemed that a default has occurred under the conditions of the grading permit security. Thereupon the City Engineer may enter the property for the purpose of installing, by City forces or by other means, the drainage and erosion control devices

shown on the approved plans, or if there are not approved plans, as he may deem necessary to protect adjoining property from storm damage, or the City Engineer may cause the owner of the site to be prosecuted as a violator of this code, or he may take both actions.

G. The City Engineer shall have the authority to require implementation of all erosion control systems and requirements at any time of the year.

23.24.380 - Erosion Control System.

A. The faces of cut and fill slopes and project site shall be prepared and maintained to control against erosion in accordance with this Chapter. Where cut slopes are not subject to erosion due to the erosion-resistant character of the materials, such protection may be omitted upon approval by the City Engineer.

B. Paved streets, sidewalks, and other improvements shall be maintained in a neat and clean condition free of loose soil, construction debris and trash. Street sweeping or other equally effective means shall be used on a regular basis to prevent storm flows from carrying sediment and debris outside the project boundaries. Watering shall not be used to clean streets except for fine material not otherwise removed by sweeping or other mechanical means.

C. The registered civil engineer who prepared the grading plan and designed the erosion control devices shall be responsible for modification of the design of devices, as necessary, during the rainy season.

D. Desilting facilities shall be provided at drainage outlets from the graded site.

E. Desilting basins shall be designed in accordance with City standards. Permanent desilting facilities shall be designed and constructed as to be aesthetically compatible with the surrounding development and terrain.

F. Desilting basins constructed of compacted earth shall be compacted to a relative compaction of ninety (90) percent of maximum density. A soil engineering report, prepared by the soil engineer, which includes the type of field testing performed, location and results of testing shall be submitted to the City Engineer for approval upon completion of the desilting basins.

G. Equipment and workers for emergency work shall be made available at all times during the rainy season. Necessary materials shall be available onsite and stockpiled at convenient locations to facilitate rapid construction of temporary device when rain is imminent.

H. Erosion protection shall consist of effective planting of all cut slopes in excess of five (5) feet high and fill slopes more than three (3) feet high unless otherwise approved by the City Engineer. Slopes exceeding five (5) feet high will require an approved sprinkler system, as determined by the City Engineer.

I. Protection for the slopes shall be installed as soon as practicable which may be prior to rough grade approval. Effective planting shall be installed, fully germinated and effectively cover the required slopes prior to final approval unless otherwise approved by the City Engineer.

J. The erosion control provisions shall take into account drainage patterns during the current and future phases of grading throughout the rainy season.

K. All removable protective devices shown shall be in place at the end of each working day when the five (5) day rain probability forecast exceeds forty (40) percent.

L. Unvegetated slopes shall be protected in accordance with the guidelines set forth by the Erosion and Sediment Control Manual or in accordance with other requirements set forth by the City Engineer.

23.24.390 - Erosion Control Maintenance.

A. After each rainstorm exceeding 1/4-inch in a 12 hour period, silt and debris shall be removed from all temporary check berms and desilting basins and the basins pumped dry. The requirement to clean and pump permanent desilting basins will be addressed on a case by case basis.

B. After each rainstorm, the performance of the erosion control system shall be evaluated and revised and repaired as necessary.

C. Devices shall not be moved or modified without the approval of the City Engineer.

D. The contractor shall be responsible and shall take necessary precautions to prevent public trespass onto areas where impounded water creates a threat to public health, safety and welfare.

E. The contractor and Permittee or project owner shall be responsible for continual maintenance of the devices during the rainy season. In the event of failure or refusal by the contractor, Permittee, or project owner to properly maintain the devices, the City Engineer may cause emergency maintenance work to be done to protect adjacent private and public property. The cost shall be charged to the owner and shall include an initial mobilization cost plus the cost of doing the work as provided for in this Chapter.

F. In the event the City Engineer must cause emergency maintenance work to be done, he may revoke the grading permit in writing. The permit shall not be renewed until an erosion control system approved by the City Engineer is installed and a fee of one-half the amount required for the original permit paid by the owner. The City Engineer may waive installation of an erosion control system after April 15.

G. If any grading subject to the provisions of this Chapter has commenced on private property without a valid grading permit, the property owner will be required to prepare and implement an erosion control plan which has been approved by the City Engineer. In the event of failure by the property owner to install an approved erosion control system, the City Engineer may cause emergency work to be done to protect adjacent private and public property.

The full text of the Municipal Code can be accessed on the City's website at http://ci.encinitas.ca.us/.

Please address any questions regarding this work to your inspector.

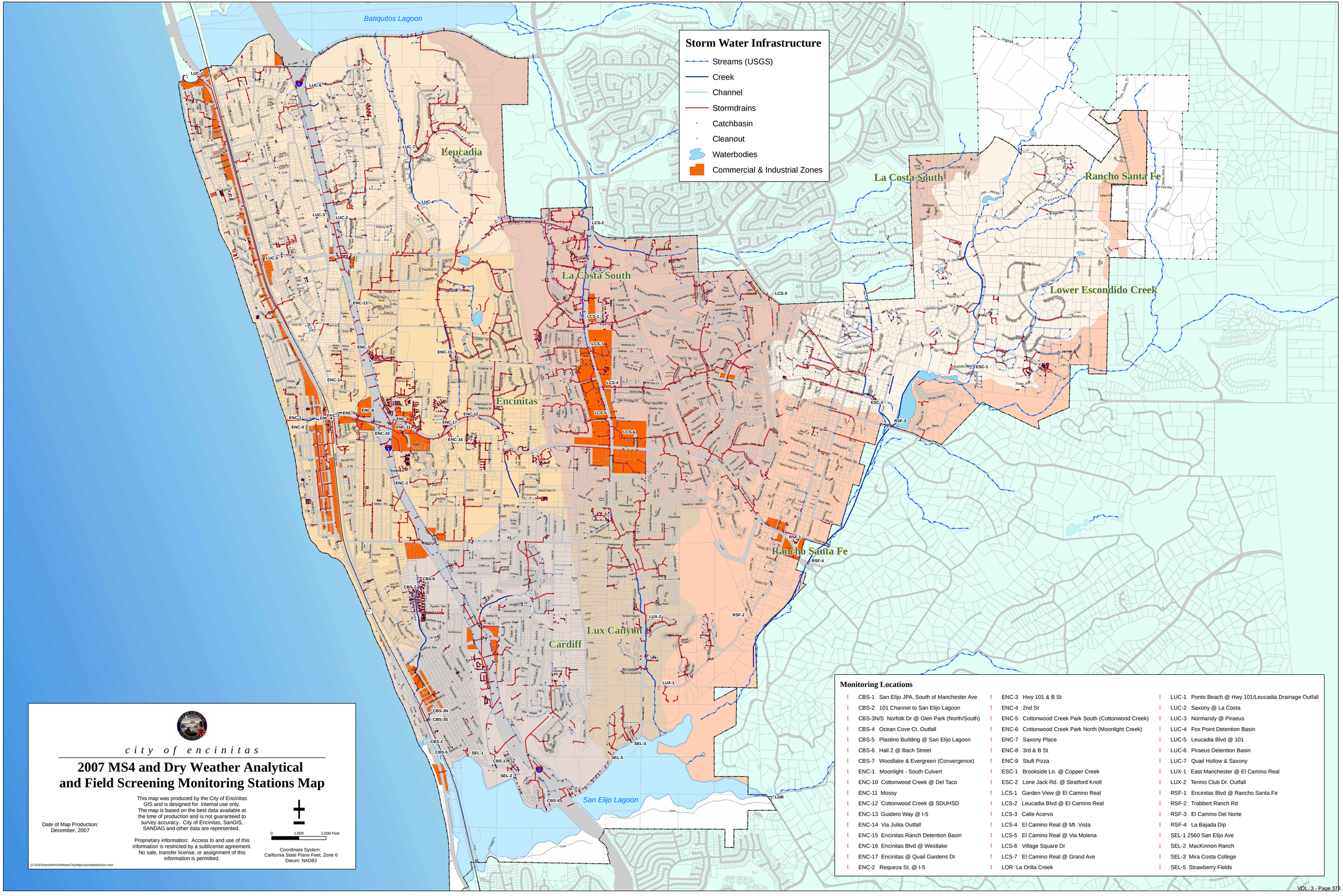
Sincerely,

Greg Shields, P.E.
Sr. Civil Engineer
Field Operations

cc: Inspector
File

Appendix H

H-1 2007 MS4 and Dry Weather Monitoring Stations Map
H-2 2007 Dry Weather Monitoring Report
H-3 Dry Weather Monitoring Field Data Sheet
H-4 Administrative Citation Form
H-5 Complaints Inspection Summary FY 2006-07
H-6 Hazardous Materials Incident Listings, Encinitas Fire Department



city of encinitas

2007 MS4 and Dry Weather Analytical and Field Screening Monitoring Stations Map

Date of Map Production:
December, 2007

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0 1,000 2,000 Feet

Coordinate System:
California State Plane Feet, Zone 6
Datum: NAD83

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Monitoring Locations

- CBS-1 San Elijo JPA, South of Manchester Ave
- CBS-2 101 Channel to San Elijo Lagoon
- CBS-3N/S Norfolk Dr @ Glen Park (North/South)
- CBS-4 Ocean Cove Ct. Outfall
- CBS-5 Plastino Building @ San Elijo Lagoon
- CBS-6 Hall 2 @ Bach Street
- CBS-7 Woodlake & Evergreen (Convergence)
- ENC-1 Moonlight - South Culvert
- ENC-10 Cottonwood Creek @ Del Taco
- ENC-11 Mossy
- ENC-12 Cottonwood Creek @ SDUHSD
- ENC-13 Guidero Way @ I-5
- ENC-14 Via Julita Outfall
- ENC-15 Encinitas Ranch Detention Basin
- ENC-16 Encinitas Blvd @ Westlake
- ENC-17 Encinitas @ Quail Gardens Dr
- ENC-2 Requeza St. @ I-5
- ENC-3 Hwy 101 & B St
- ENC-4 2nd St
- ENC-5 Cottonwood Creek Park South (Cottonwood Creek)
- ENC-6 Cottonwood Creek Park North (Moonlight Creek)
- ENC-7 Saxony Place
- ENC-8 3rd & B St
- ENC-9 Stuft Pizza
- ESC-1 Brookside Ln. @ Copper Creek
- ESC-2 Lone Jack Rd. @ Stratford Knoll
- LCS-1 Garden View @ El Camino Real
- LCS-3 Calle Acervo
- LCS-4 El Camino Real @ Mt. Vista
- LCS-5 El Camino Real @ Via Molena
- LCS-6 Village Square Dr
- LCS-7 El Camino Real @ Grand Ave
- LOR La Orilla Creek
- LUC-1 Ponto Beach @ Hwy 101/Leucadia Drainage Outfall
- LUC-2 Saxony @ La Costa
- LUC-3 Normandy @ Piraeus
- LUC-4 Fox Point Detention Basin
- LUC-5 Leucadia Blvd @ 101
- LUC-6 Piraeus Detention Basin
- LUC-7 Quail Hollow & Saxony
- LUX-1 East Manchester @ El Camino Real
- LUX-2 Tennis Club Dr. Outfall
- RSF-1 Encinitas Blvd @ Rancho Santa Fe
- RSF-2 Trabbert Ranch Rd
- RSF-3 El Camino Del Norte
- RSF-4 La Bajada Dip
- SEL-1 2560 San Elijo Ave
- SEL-2 MacKinnon Ranch
- SEL-3 Mira Costa College
- SEL-5 Strawberry Fields

Dry Weather Monitoring Assessment

May 1, 2007-September 30, 2007

Prepared for

City of Encinitas
Clean Water Program
505 South Vulcan Avenue
Encinitas, CA 92024

Prepared by

MACTEC Engineering and Consulting, Inc.
9177 Sky Park Court, Suite A
San Diego, CA 92123-4341

January 2008

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Dry Weather Analytical Monitoring

1.0 Introduction

The California Regional Water Quality Control Board, San Diego Region, requires the Copermittees to implement a Dry Weather Storm Drain Monitoring Program annually, beginning May 2002. The program is a requirement of Order No. 2001-01, NPDES No. CAS0108758, Section F.5.b and Attachment E.

This section of the Municipal Permit requires the City of Encinitas to implement a dry weather analytical monitoring program for the detection and elimination of illicit discharges and connections to the City's Municipal Separate Storm Sewer System (MS4). The goal of this program is to actively seek and eliminate illicit connections and illegal discharges as well as to characterize dry weather flows.

An illicit discharge is a point source discharge of pollutants to the MS4 that is not comprised entirely of storm water, not exempted by the City's Storm Water Ordinance, or not authorized by an NPDES Permit. The backbone of this program is the establishment of discharge prohibitions in the City's Municipal Code, Chapter 20.08 (Storm Water Management).

Dry weather monitoring of the MS4 is performed by establishing monitoring locations throughout the City to adequately cover the entire storm drain system. The program encompassed 52 monitoring locations in 2007. Monitoring of these locations includes recorded observations, field screening where flow is present, and analytical laboratory testing at selected locations, at a minimum of 25% of the locations with flow.

The City of Encinitas conducted dry weather monitoring during the period of May 1, 2007 to September 30, 2007. The analysis of the dry weather monitoring results for 2007 is contained herein.

2.0 Dry Weather Analytical Monitoring Stations

A storm drain map has been developed by the City of Encinitas in a geographical information system (GIS). The storm drain GIS is maintained in an ArcInfo platform and maintained by the City's Information Technology Division. The map is continually updated to include new additions to the MS4 as validation continues. Dry weather monitoring locations were selected based on adequate coverage of the MS4, allowing for detection of illicit discharges, characterization of flows, and a better understanding of the water quality in Encinitas. This allows for the identification and tracking of exceedances in water quality parameters, indicating the possibility of illicit discharges to the MS4. Efforts were made to cover the entire jurisdiction and isolate particular areas of the storm drain system according to factors such as drainage sub-basins, land use, previous water quality data, areas of historic illegal discharges, and environmentally sensitive areas.

3.0 Dry Weather Analytical Monitoring Procedures

The City's dry weather program uses methods and procedures in collecting and analyzing data which are consistent with those developed by the Copermittee Dry Weather Monitoring Workgroup. The elements of the dry weather program include sampling locations, sampling frequencies, field screening and sampling procedures (including monitoring parameters), recommended action levels and data interpretation, follow-up investigations, and reporting. Each of these procedures is discussed below.

Dry weather monitoring was conducted once at each selected location during the period May 1 – September 30, 2007. The City monitored 52 sites. As in the previous years, site CBS-3 was split into two sampling locations labeled North and South.

Of the 52 locations monitored, flowing or ponded water was observed at 33 sites, triggering field analysis at all 33 locations. Of the 33 locations, ponded water was observed at 8 of the locations, leaving 25 flowing sample sites. Thirty percent of the monitoring locations with water were sent for full laboratory analysis, totaling ten samples, therefore the minimum requirement of 25% was met. Twenty-two of 33 locations sampled including the 10 samples sent for full laboratory analysis were analyzed for total and fecal coliform, and enterococcus, in order to further characterize bacteria concentrations throughout the City's MS4. Bacteria is one of the high priority water quality problems in the City and watershed and therefore is analyzed more frequently.

Qualitative observations were made at all sample locations. Each location has a unique field data sheet noting observations such as color, clarity, odor, and biological characteristics. The observation and data collection sheet is included as Appendix A-H.

Field tests were performed by MACTEC Engineering and Consulting, Inc. Meters were used in determination of pH, conductivity, temperature, and turbidity. Ammonia, ortho-phosphate, nitrate, and MBAS analysis were performed with Chemetrics field kits. Where possible, flow was determined by filling a bottle of known volume using a timer and an estimation of the amount of flow captured. Flow was not able to be measured in many locations but was always noted as flowing or ponded. Action levels for the field analysis were determined by the Copermittee Monitoring Workgroup and are shown in Table 3.0. Follow-up investigations for exceedances detected in field screening were performed as soon as possible after the detected exceedance, typically within 24 hours.

Ten samples of 33 were collected for a full laboratory analysis in order to further characterize the water quality at specific locations throughout the City. When feasible, laboratory testing was performed as far down in the watershed as possible to assess water quality prior to discharge to a receiving water. Methods for laboratory analysis are based on EPA approved methods described in the Standard Methods for the Examination of Water and Wastewater, 18th edition. Follow-up investigations for exceedances detected in laboratory analyses were performed as soon as possible after receipt of data from the laboratory. The field and analytical results for each monitoring station are provided in Appendix I.

Table 3.0 Action Levels for Field Screening and Laboratory Analytical Parameters		
Field Screening Analytes	**Action Levels[1]**	**Source/ Notes**
pH	<6.5 or >9.0	Basin plan, w/ allowance for elevated pH due to excessive photosynthesis.
ortho-Phosphate (mg/L) as P	2.0	USEPA Multi-sector GP
nitrate-N (mg/L)	10.0	Basin plan, and drinking water standards
Ammonia-N (mg/L)	1.0	Workgroup experience, may also consider unionized ammonia fraction
Turbidity (NTU)	Best Professional Judgment	USEPA Multi sector general permit level-5 NTU. Typical levels are substantially higher. Base judgment on channel type and bottom
Temperature	Best Professional Judgment	Base judgment on season, air temp., channel type, shade, etc.
Conductivity (µmhos/cm) or TDS (mg/L)	Best Professional Judgment – City of Encinitas considers 5.00mS/cm (umhos/cm) an exceedance	EC may be highly elevated in some regions due to high TDS/groundwater exfiltration to surface water, mineral dissolution and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Also consider investigating unusually low EC (<800 umhos/cm) accompanied by unusual flows.
Laboratory Analytes	**Action Levels**	**Source/Notes**
MBAS (mg/L)	1.0	Basin plan, w/ allowance based on Workgroup field experience and possible field reagent interferences
Oil and Grease (mg/L)	15	USEPA multi-sector General Permit
Diazinon (µg/L)	.5	Response to diazinon and chlorpyrifos levels above 0.5 µg/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (µg/L)	.5	
Dissolved Cadmium	California Toxics Rule	Use CTR Table, 1-hour criteria to determine action level for sample.
Dissolved Copper	California Toxics Rule	
Dissolved Lead	California Toxics Rule	
Dissolved Zinc	California Toxics Rule	
Total Coliform (cfu/100 ml)	50000	Action levels are based on upper 90% confidence level of Copermittees 2002 dry weather analytical monitoring data.
Fecal Coliform (cfu/ 100 ml)	20000	
Enterococcus (cfu/100 ml)	10000	

Notes:

(1) The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry weather monitoring data should be interpreted using a variety of available information. Factors that should be considered include within site and between site sample variability

4.0 Dry Weather Data Analysis

Data analysis is based on three methods of data interpretation. The numeric action levels in Table 3.0 (determined by the Copermittee Monitoring Workgroup), is the primary method for determining when a follow-up sample is necessary in the field screening. In determining the necessity of follow-up, these action levels are used in conjunction with best professional judgment, the second method of data interpretation. Best professional judgment accounts for historical data, as well as characteristics of a sample location, which may affect sample data and not be considered an illicit discharge. An example of best professional judgment is considering previous groundwater characterizations to eliminate the need for follow-up investigations where nitrate concentrations and conductivity measurements exceeded predetermined action levels. The third method of determining exceedances in the dry weather data interpretation is through a statistical confidence interval test using the 90th-percentile confidence interval. The 90-percentile confidence interval was calculated using the data submitted by the San Diego Copermittees for the 2002 dry weather monitoring. The upper limit was used to determine outliers in bacteria data.

The following subsections contain analyses of the dry weather data collected for each of the eight sub-basins within Encinitas.

4.1 Cardiff Sub-basin

The dry weather monitoring locations include 12 sites in the Cardiff Sub-basin. All monitoring locations in the Cardiff Sub-basin drain to San Elijo Lagoon. Land use in the sub-basin is primarily residential with some commercial and agricultural uses in the upper reaches of the sub-basin. CBS-3 was divided into two locations, CBS-3 North and South, as previously described. Six of the 12 locations were field screened, as water was either flowing or ponded. Ponded water was observed at two of the 12 locations. As in years past, CBS-2 was selected for full laboratory analysis for the 2007 monitoring period. CBS-2 is an open channel that discharges directly to San Elijo Lagoon and drains commercial and residential areas.

Of the six locations where field screening was performed, four of the sites sampled had results exceeding the action levels for conductivity. Four of the sites were analyzed for bacteria and none exceeded action levels for total coliform, fecal coliform, or enterococcus.

Table 4.0 summarizes the action levels exceeded in the Cardiff Sub-basin.

Table 4.0 Cardiff Sub-basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
CBS-2	6/12/07	Flowing	Conductivity	5.81	mS/cm	5
CBS-4	6/11/07	Flowing	Conductivity	7.76	mS/cm	5
SEL-3	5/24/07	Ponded	Conductivity	5.48	mS/cm	5
SEL-2	5/29/07	Ponded	Nitrate (NO3-N)	15	mg/L	10

CBS-2

The water at the sample location at CBS-2 contained elevated conductivity. There were no other exceedances at this location; all were below action levels. The field team concluded that there were no illicit discharges or connections upstream. Land use upstream is primarily commercial and residential. Since there were no other exceedances, an upstream investigation for the elevated conductivity was not warranted and was not performed.

CBS-4

The water at CBS-4 contained elevated conductivity. There were no other exceedances at this location; all were below action levels. The water at CBS-4 was flowing out of the Cape Sebastian detention basin and was clear and colorless. Land use upstream is primarily residential with some agricultural nurseries interspersed. Since there were no other exceedances, an upstream investigation for the elevated conductivity was not warranted and was not performed.

SEL-2

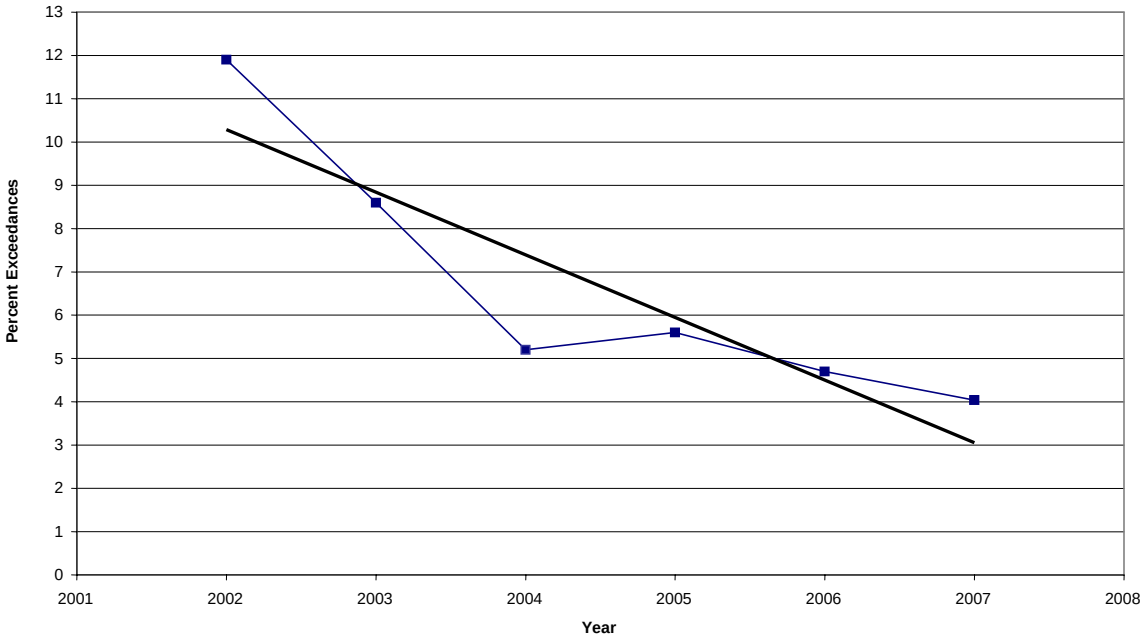
The water at SEL-2 contained elevated nitrates. There were no other exceedances at this location; all were below action levels. The water was ponded in a natural channel and originated from a small drainage area consisting of residential area. The field team conducted a cursory investigation upstream in the drainage basin, and no obvious sources were observed.

SEL-3

The water at SEL-3 contained elevated conductivity. There were no other exceedances at this location; all were below action levels. The water was ponded in a natural channel and originated from a small drainage area consisting of residential areas, a school, and a church. Since there were no other exceedances, an upstream investigation for the elevated conductivity was not warranted and was not performed.

Although several water quality exceedances are typical for the Cardiff sub-basin, water quality has been improving over the last five years of dry weather monitoring. Figure 4.1 illustrates a downward trend in water quality exceedances in Cardiff based on dry weather data collected from 2002 to 2007.

Figure 4.1 Action Level Exceedance Ratio Trend in the Cardiff Sub-basin, 2002-2007



Data collected in the Cardiff Sub-basin during the 2007 Dry Weather Monitoring Program is included in Appendix A. Figure 4.2 illustrates the Cardiff Sub-basin.

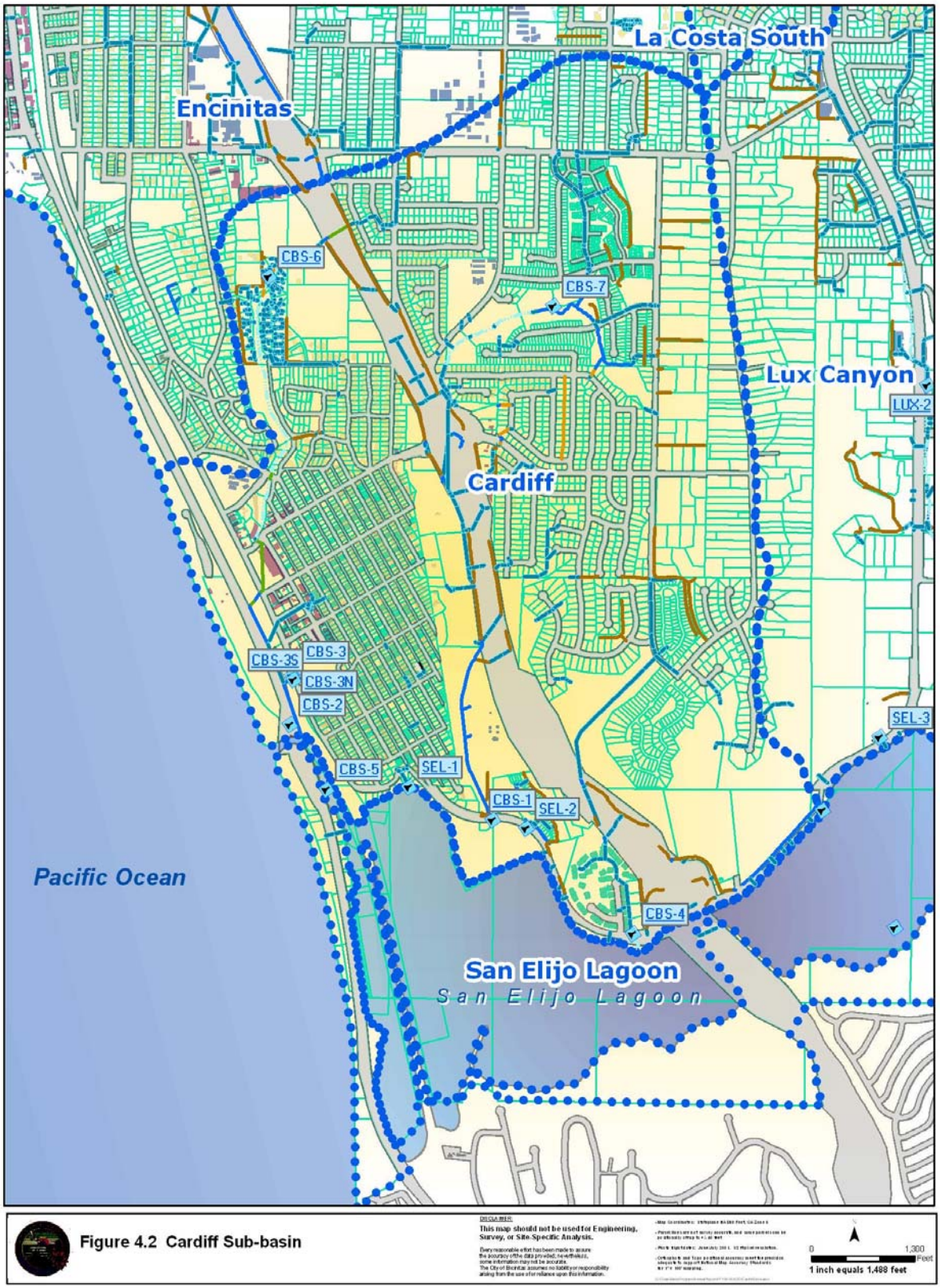


Figure 4.2 Cardiff Sub-basin

4.2 Lower Escondido Creek Sub-basin

Two monitoring locations in the Lower Escondido Creek Sub-basin were selected in natural, open channels. The land uses in this area are residential and open space with limited commercial establishments interspersed.

Table 4.1 summarizes the action levels exceeded in the Cardiff Sub-basin.

Table 4.1 Lower Escondido Creek Sub-Basin Action Level Exceedances

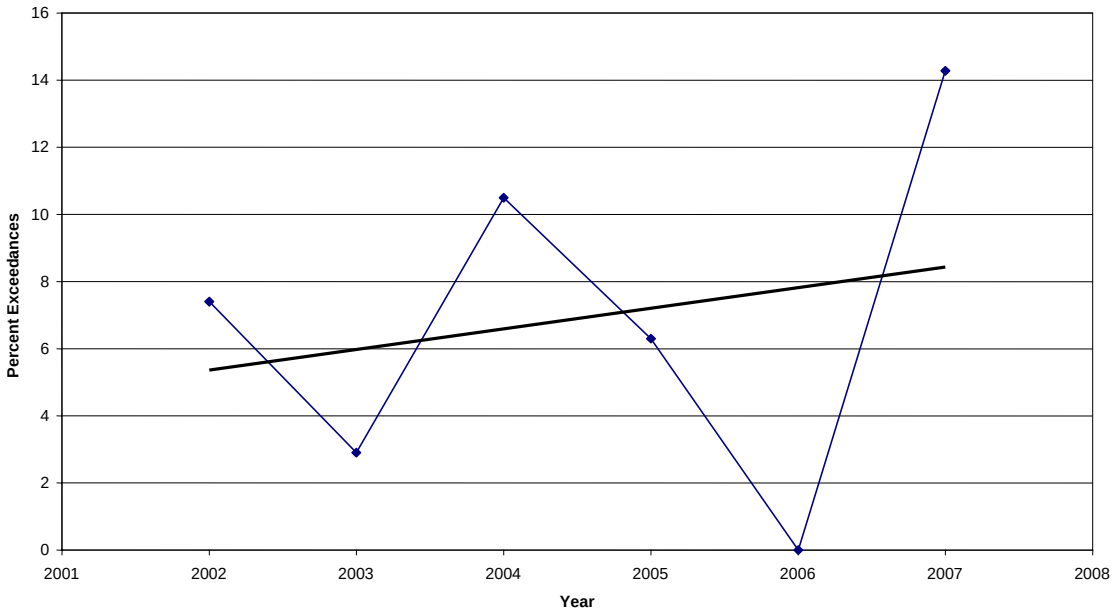
StationID	Date	Water Flow	Analyte	Result	Unit	Action Level
ESC-1	5/25/07	Flowing	Conductivity	8.02	mS/cm	5
ESC-2	5/25/07	Flowing	Conductivity	6.94	mS/cm	5

ESC-1 is located on Copper Creek, a tributary of Escondido Creek, ultimately leading to San Elijo Lagoon. There were no other exceedances at this location; all were below action levels. Land use upstream is primarily residential with open land. Since there were no other exceedances, an upstream investigation for the elevated conductivity was not warranted and was not performed.

ESC-2 is located in an open channel adjacent to a residential area along Escondido Creek. There were no other exceedances at this location; all were below action levels. Land use upstream is primarily residential. Since there were no other exceedances, an upstream investigation for the elevated conductivity was not warranted and was not performed.

The historical frequency of exceedances is variable in this sub-basin. Figure 4.3 illustrates water quality exceedance trends in the Lower Escondido Creek sub-basin based on dry weather data collected from 2002 to 2007.

Figure 4.3: Action Level Exceedance Ratio Trend in the Lower Escondido Creek, 2002-2007



Appendix B contains all data collected for the Lower Escondido Creek Sub-basin as part of the 2005 Dry Weather Monitoring Program. Figure 4.4 illustrates the Lower Escondido Creek Sub-basin.

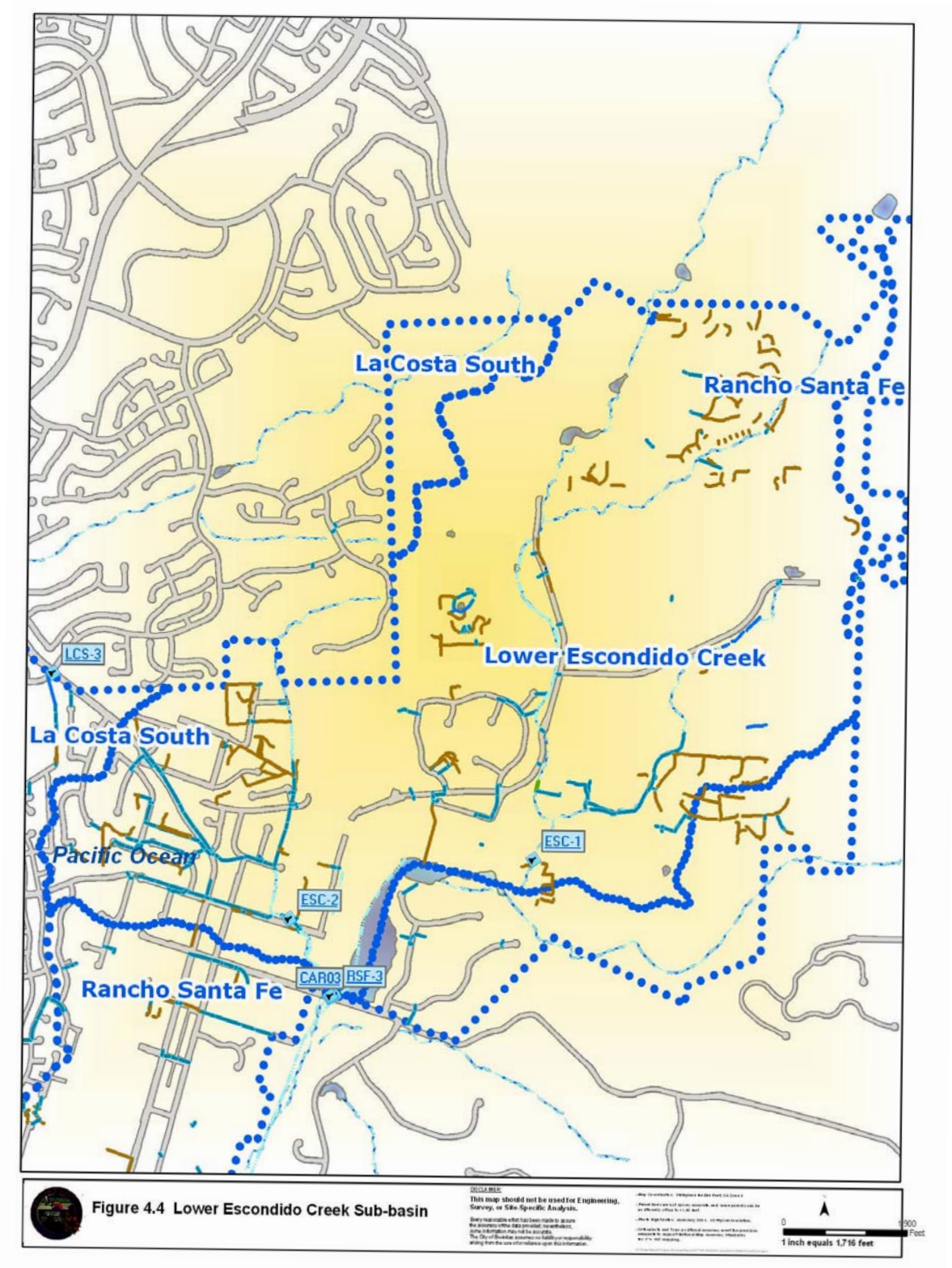


Figure 4.4 Lower Escondido Creek Sub-basin

4.3 La Orilla Creek Sub-basin

One monitoring location is routinely monitored in the dry weather program at La Orilla Creek, at the east end of San Elijo Lagoon. The location was selected based on the previous dry weather location. The majority of the contributing watershed is located within the County of San Diego, encompassing mostly residential areas and a golf course.

In 2007, the elevated conductivity persisted as in previous years. The conductivity is persistent and appears to be associated with endemic total dissolved solids (TDS) levels in the region. A full laboratory analysis was performed at LOR and no analyte concentrations exceeded established action levels.

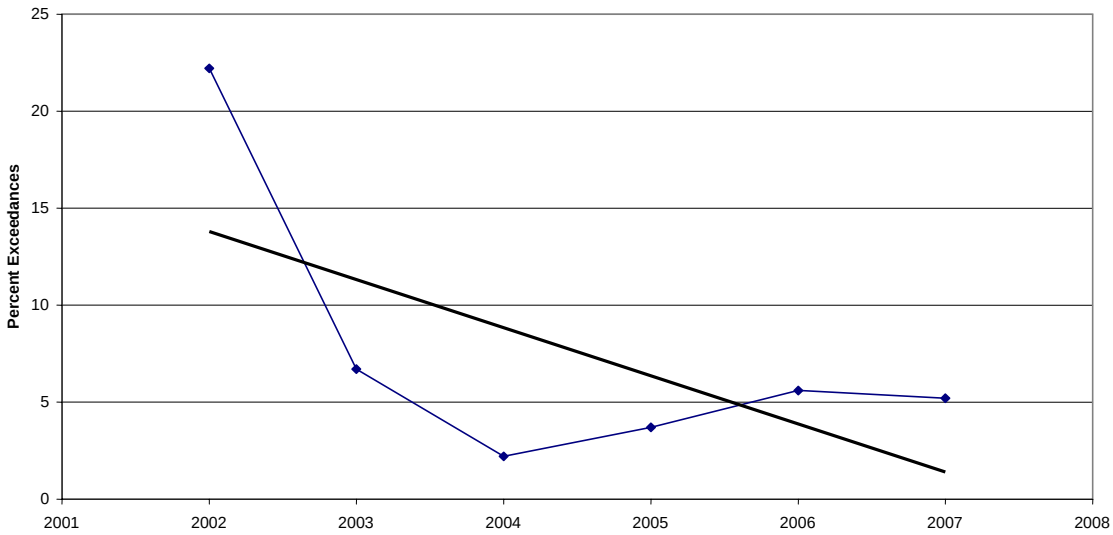
Table 4.2 presents exceedances detected in water quality in 2002 and tracks the values year to year up to the 2007 dry weather monitoring season. Parameters previously exceeding action levels, including turbidity and dissolved copper, have declined over the monitoring periods. Conductivity has remained consistently elevated. No follow-up actions were taken in 2007.

Table 4.2 Water Quality Values Obtained in La Orilla Creek, 2002-2007

Analyte	Action Level	2002	2003	2004	2005	2006	2007
Turbidity (NTU)	BPJ	56	4.79	2.91	2.7	3.13	2.65
Conductivity (uS/cm)	5	6.65	8.43	8.05	6.01	8.13	8.12
Dissolved Cu(µg /l)	CTR	42	42	31	<10.0	<.0	0.37
Hardness (mg/lCaCO3)	None	280	1780	2680	1990	2430	1982.9
Fecal Coliform (cfu/100ml)	2000	7100	1000	200	1975	1250	120

Figure 4.5 illustrates water quality exceedance trends in La Orilla Creek based on dry weather data collected from 2002 to 2007. Overall, the trend of water quality exceedances is down over the monitoring period, indicating improvements in water quality in the sub-basin.

Figure 4.5: Action Level Exceedance Ratio Trend in the La Orilla Creek Sub-basin, 2002-2007[1]



Note:
[1] Exceedance ratios vary based on total analyses; only one exceedance was recorded for each of the years for 2003-2007 for conductivity

Appendix C contains all data collected for the La Orilla Creek Sub-basin as part of the 2007 Dry Weather Monitoring Program.

4.4 La Costa South Sub-basin

Seven locations were selected for dry weather monitoring in the La Costa South Sub-basin. This sub-basin drains to Encinitas Creek flowing north into the City of Carlsbad en route to Batiquitos Lagoon. Land use in this sub-basin is largely commercial and residential. Monitoring locations for the City of Encinitas program were all located within the City of Encinitas. All seven locations were monitored in 2007. Of the seven locations, four had flowing and three had ponded water. All locations were field screened. Additionally, two were sampled for a full laboratory analysis (LCS-1 and LCS-5) and one location (LCS-6) was analyzed in the laboratory for bacteria only.

There were four water quality exceedances in this sub-basin in 2007. Table 4.3 summarizes the action level exceedances in the La Costa Sub-basin.

Table 4.3 La Costa Sub-Basin Action Level Exceedances

StationID	Date	Water Flow	Analyte	Result	Unit	Action Level
LCS-1	5/30/07	Ponded	Nitrate (NO3-N)	20	mg/L	10
LCS-5	5/30/07	Flowing	Nitrate (NO3-N)	25	mg/L	10
LCS-7	5/25/07	Flowing	Conductivity	16.49	mS/cm	5

LCS-1

The water at LCS-1 contained elevated nitrates. There were no other exceedances at this location. The water was ponded in a natural channel. Land Use in this sub-basin is primarily commercial. There was evidence of irrigation runoff upstream in the drainage basin.

LCS-5

The water at LCS-5 contained elevated nitrates. There were no other exceedances at this location. Land Use in this sub-basin is primarily commercial. There was evidence of irrigation runoff upstream in the drainage basin.

LCS-6

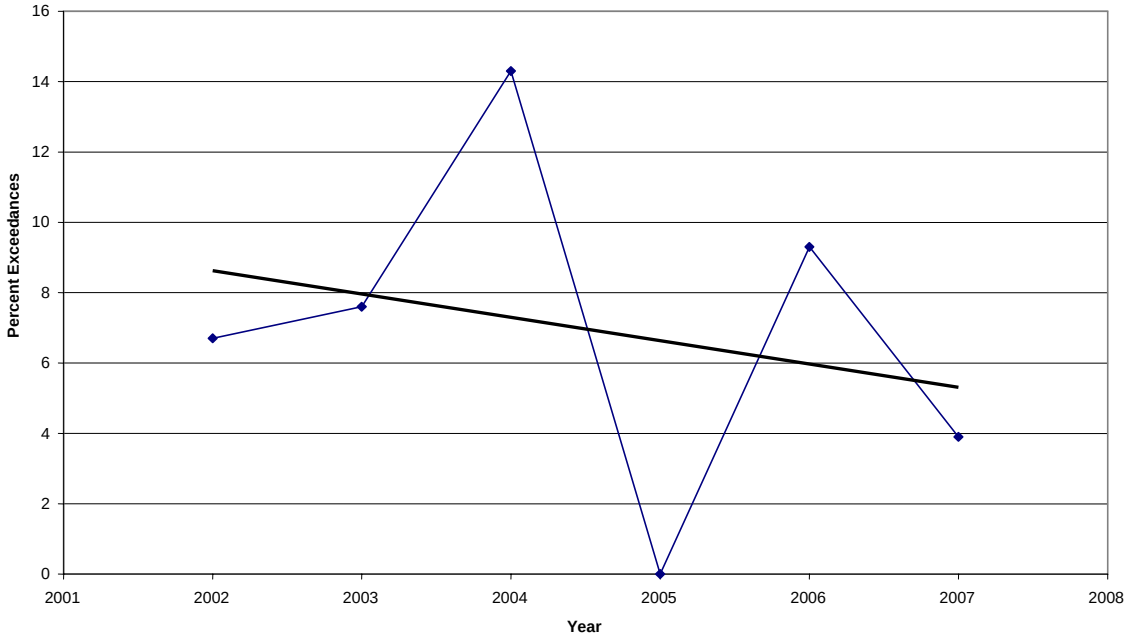
There was a trickle flow at LCS-6. There were no exceedances at this location.

LCS-7

The water at LCS-7 contained elevated conductivity. There were no other exceedances at this location. Land Use in this sub-basin is primarily commercial. The field team conducted a cursory investigation upstream in the drainage basin, and no obvious sources were observed.

Figure 4.6 illustrates water quality exceedance trends in the La Costa South Sub-basin based on dry weather data collected from 2002-2007. Overall, the trend of water quality exceedances is variable in this Sub-basin, with higher values in 2004 and 2006 when investigations located and abated two significant illegal discharges.

Figure 4.6: Action Level Exceedance Ratio Trend in the La Costa South Sub-basin, 2002-2007



Appendix D contains all data collected for the La Costa South Sub-basin as part of the 2007 Dry Weather Monitoring Program. Figure 4.7 illustrates the La Costa South Sub-basin.

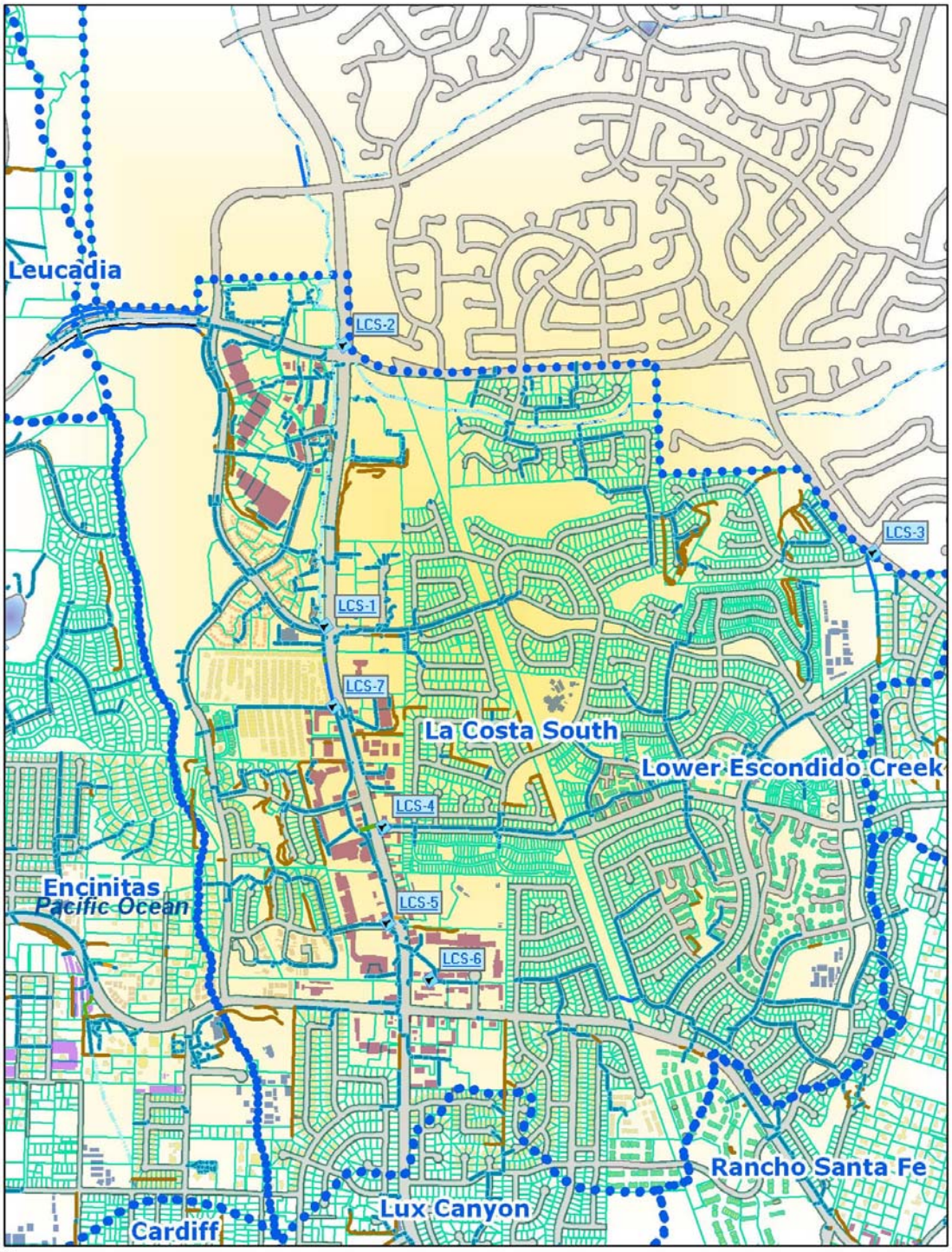


Figure 4.7 La Costa South Sub-basin

4.5 Leucadia Sub-basin

Dry weather monitoring in the Leucadia Sub-basin included monitoring of seven locations, covering distinct drainage areas throughout the basin. Land uses in the area include residential and commercial with significant, albeit decreasing, numbers of commercial growers. Of the seven locations, four sites had water to sample at the time of monitoring, two were flowing and two had ponded water (LUC-1 and LUC-6). LUC-1, 3, 4, and 6 were field screened this year. At LUC-4 a sample was collected to be analyzed in a laboratory for bacteria. Due to a general lack of water quality exceedances in the past, no samples were collected for a full laboratory analysis in this sub-basin. Water quality exceedances for 2007 are listed in Table 4.4.

Table 4.4 Leucadia Sub-basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LUC-1	6/20/07	Ponded	Nitrate (NO3-N)	16	mg/L	10
LUC-3	6/20/07	Flowing	pH	9.3	pH	9
LUC-4	6/21/07	Flowing	Orthophosphate (PO4-P)	4	mg/L	2
LUC-4	6/21/07	Flowing	Enterococcus	11750	cfu/100 ml	10000
LUC-4	6/21/07	Flowing	Total Coliform	55000	cfu/100 ml	50000
LUC-6	6/20/07	Ponded	Conductivity	6.64	mS/cm	5
LUC-6	6/20/07	Ponded	pH	9.5	pH	9

LUC-1

Nitrate exceedances persisted at LUC-1 as in previous years of dry weather monitoring. This monitoring location is low in the sub-basin and the majority of the flow appears to be groundwater containing elevated nitrate-nitrogen concentrations. Because the flow was ponded, there was no source to track upstream and an investigation was not performed.

LUC-3

The water at LUC-3 contained elevated pH and temperature as a result of low flow conditions in a concrete channel. There were no other exceedances at this location; all were below action levels. Land use upstream is primarily residential and commercial. No obvious residential or commercial sources of elevated pH were observed upstream in the drainage basin.

LUC-4

The monitoring location at LUC-4 was field screened and analyzed for bacteria in 2007. The site is located at the end of a pipe entering an isolated detention basin in a canyon. The water entering the basin is only a trickle flow during dry weather and no water leaves the basin. There was one field analysis exceedance of orthophosphate. The field team conducted a cursory investigation upstream in the adjacent residential area and observed irrigation runoff entering a catch basin from St. Albans Pl. The results of samples

collected for total coliform and enterococcus analyses were above action levels. Upon receipt of the bacteria results, the field team returned to re-sample. A confirmation sample for bacteria was collected and field analysis were conducted at the LUC-4 and at a residential curb and drain on St. Albans Pl.

Despite an exceedance for total coliform and enterococcus on the first sampling event, the follow-up samples were below the action levels and, therefore, did not confirm the exceedances, indicating a transient nature of bacteria source. In past visits to the site, animal tracks and scat were observed at the sample location. No obvious residential, commercial, or industrial sources were found during follow-up investigations. The data from the follow-up investigation is listed below in Table 4.5.

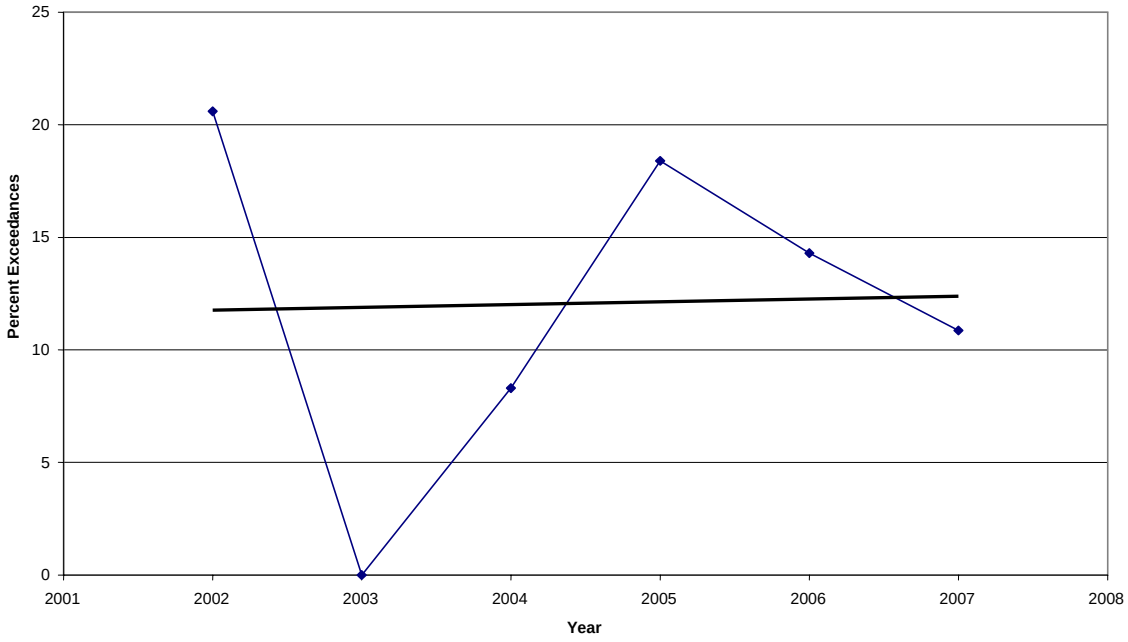
Table 4.5 Leucadia Sub-basin Follow-up Investigation

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LUC-4	6/26/07	Flowing	Ammonia	0.8	ml	1
LUC-4	6/26/07	Flowing	Chlorine	1	ml	NA
LUC-4	6/26/07	Flowing	MBAS	0.5	ml	1
LUC-4	6/26/07	Flowing	Enterococcus	4750	cfu/100 ml	10000
LUC-4	6/26/07	Flowing	Fecal Coliform	24350	cfu/100 ml	20000
LUC-4	6/26/07	Flowing	Total Coliform	32800	cfu/100 ml	50000
St. Albans Pl	6/26/07	Flowing	Ammonia	0.5	ml	1
St. Albans Pl	6/26/07	Flowing	Chlorine	1	ml	NA
St. Albans Pl	6/26/07	Flowing	MBAS	0.25	ml	1
1028 St. Albans Pl	6/26/07	Flowing	Enterococcus	<100	cfu/100 ml	10000
1028 St. Albans Pl	6/26/07	Flowing	Fecal Coliform	600	cfu/100 ml	20000
1028 St. Albans Pl	6/26/07	Flowing	Total Coliform	1000	cfu/100 ml	50000
(drain)1027 St. Albans Pl	6/26/07	Flowing	Enterococcus	100	cfu/100 ml	10000
(drain)1027 St. Albans Pl	6/26/07	Flowing	Fecal Coliform	200	cfu/100 ml	20000
(drain)1027 St. Albans Pl	6/26/07	Flowing	Total Coliform	3000	cfu/100 ml	50000
(curb)1027 St. Albans P	6/26/07	Flowing	Enterococcus	400	cfu/100 ml	10000
(curb)1027 St. Albans P	6/26/07	Flowing	Fecal Coliform	200	cfu/100 ml	20000
(curb)1027 St. Albans P	6/26/07	Flowing	Total Coliform	800	cfu/100 ml	50000

LUC-6

The water at LUC-6 contained elevated pH and conductivity, slightly over the action levels of 9.0 pH units and 5.00 mS/cm. The ponded water sampled was conveyed over an open concrete channel. The elevated pH may have been a result of high temperature and low flow conditions in the concrete channel. The elevated conductivity is likely attributable to the groundwater in the area and/or the concrete conveyance, or some combination of the two. Because the flow was ponded, there was no source to track upstream and an investigation was not performed. Water quality at this location was improved over last year.

Figure 4.8: Action Level Exceedance Ratio Trend in the Leucadia Sub-basin, 2002-2006



Appendix E contains all data collected for the Leucadia Sub-basin as part of the 2007 Dry Weather Monitoring Program. Figure 4.9 illustrates the Leucadia Sub-basin.

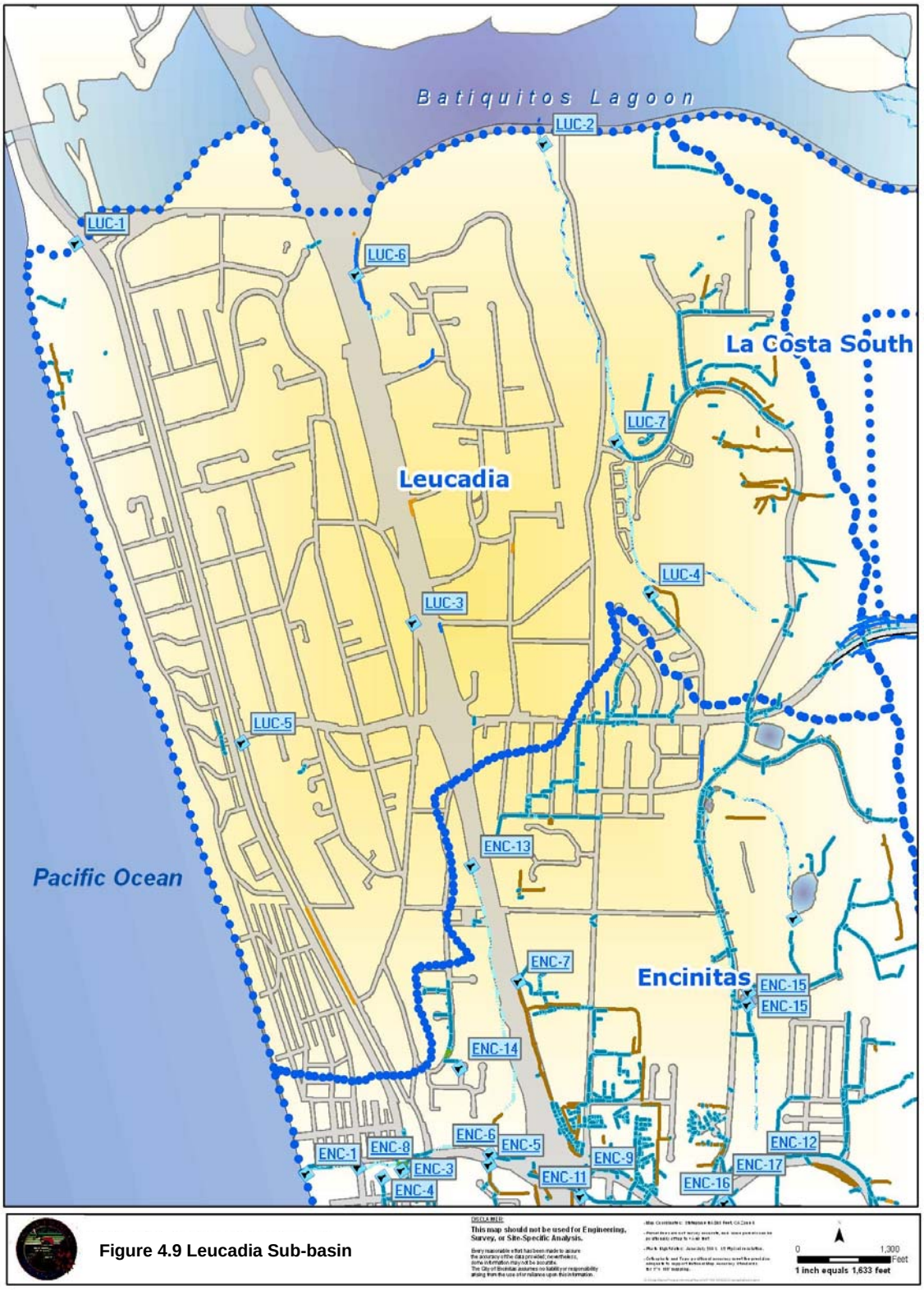


Figure 4.9 Leucadia Sub-basin

4.6 Encinitas Sub-basin

Dry weather monitoring in the Encinitas Sub-basin included 17 locations. This sub-basin has the most monitoring locations as it has historically had the most water quality exceedances. Sample locations were based on previous sampling points established in dry weather programs and special studies. This sub-basin covers the oldest area of development in the city and consists of residential and commercial land uses, including nurseries. The established sampling points isolate these specific land uses. Many of the monitoring locations were established in the Cottonwood Creek Urban Runoff Assessment and Action Plan (City of Encinitas, March 2002). The locations monitored lie along Cottonwood Creek and on tributaries of Cottonwood Creek. Of the 17 locations, 10 had water to sample, with ponded water at one location (ENC-4) and flowing water at all other locations. All 10 locations with water were field screened. Four locations were collected for full laboratory analysis, while five locations were only analyzed for bacteria at the laboratory. Of the 10 locations sampled and tested, eight of those samples exceeded water quality standards. Table 4.6 contains 2007 water quality exceedances in the sub-basin.

Table 4.6 Encinitas Sub-basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Action Level	Unit
ENC-1	5/31/07	Flowing	Conductivity	5.14	mS/cm	5
ENC-10	6/13/07	Flowing	Orthophosphate (PO4-P)	2.5	mg/L	2
ENC-10	6/13/07	Flowing	Enterococcus	10,900	cfu/100 ml	10000
ENC-11	6/14/07	Flowing	Nitrate (NO3-N)	20	mg/L	10
ENC-11	6/14/07	Flowing	Conductivity	8.36	mS/cm	5
ENC-17	6/19/07	Flowing	Orthophosphate (PO4-P)	3.5	mg/L	2
ENC-3	5/31/07	Flowing	Conductivity	5.17	mS/cm	5
ENC-5	6/14/07	Flowing	Nitrate (NO3-N)	15	mg/L	10
ENC-6	6/13/07	Flowing	Nitrate (NO3-N)	18	mg/L	10
ENC-8	6/13/07	Flowing	Conductivity	5.05	mS/cm	5

ENC-1

The water at ENC-1 contained slightly elevated conductivity. There were no other exceedances at this location; all were below action levels. Land Use in this sub-basin is primarily commercial however, no commercial sources were observed during the cursory investigation. Elevated conductivity may have been a result of the previous high tide causing residual saltwater at the mouth of the pipe.

ENC-3

The water at ENC-3 contained slightly elevated conductivity. There were no other

exceedances at this location; all were below action levels. Land Use in this sub-basin is primarily commercial however, no commercial sources were observed during the cursory investigation. Elevated conductivity may have been a result of groundwater infiltration (see the following groundwater discussion).

ENC-5

The water at ENC-5 contained elevated nitrates. There were no other exceedances at this location; all were below action levels. Land Use in this sub-basin is primarily commercial however, no commercial sources were observed during the cursory investigation. However, elevated nitrates may have been a result of a combination of irrigation runoff and groundwater infiltration at this site (see the following groundwater discussion).

ENC-6

The water at ENC-6 contained elevated nitrates. There were no other exceedances at this location; all were below action levels. Land use upstream is primarily residential. Since there were no other exceedances, an upstream investigation for the elevated conductivity was not warranted and was not performed. However, elevated nitrates may have been a result of groundwater infiltration (see the following groundwater discussion).

ENC-8

The water at ENC-8 contained elevated conductivity. There were no other exceedances at this location; all were below action levels. Land Use in this sub-basin is primarily commercial however, no commercial sources were observed during the cursory investigation. However, elevated conductivity may have been a result of groundwater infiltration (see the following groundwater discussion).

ENC-10

The water at ENC-10 contained elevated orthophosphates and entercoccus . There were no other exceedances at this location. Land Use in this sub-basin is primarily commercial however, no commercial sources were observed during the cursory investigation. There was evidence of encampments in the immediate vicinity of the outlet.

ENC-11

The water at ENC-11 contained elevated nitrates and conductivity. There were no other exceedances at this location; all were below action levels. Land Use in this sub-basin is primarily commercial however, no commercial sources were observed during the cursory investigation. Elevated nitrates and conductivity appear to be a result of groundwater infiltration; (see the following groundwater discussion).

ENC-17

The water at ENC-17 contained elevated orthophosphates. There were no other exceedances at this location. Land Use in this sub-basin is primarily commercial however, no commercial sources were observed during the cursory investigation.

Groundwater in the Encinitas Sub-basin

Historically, a significant source of nitrate and conductivity exceedances in this sub-basin appears to have been groundwater. It appears that groundwater also caused the exceedances for ENC-5, ENC-6 and ENC-11 in 2007. A detailed discussion of nitrate and conductivity exceedances is included in Appendix J of this report.

The seven water quality exceedances for conductivity and for nitrate-nitrogen (four exceedances for conductivity and three exceedances for nitrate-nitrogen) appear to be attributable to groundwater flows in the sub-basin. The locations of the conductivity exceedances are persistent from year to year and have been detected at the primary groundwater tributaries in the sub-basin: ENC-6 and ENC-11. The conductivity exceedances have been consistently accompanied by elevated levels of nitrate-nitrogen. The three additional nitrate-nitrogen exceedances are downstream of the confluence of the groundwater tributaries and the other flows in the creek. All three stations, ENC-1, 3, and 8, are west of Pacific Coast Highway 101 and samples at these locations are collected within 1,500 feet of each other. Nitrate-nitrogen concentrations remain consistent in this reach, an open channel, and a natural creek.

Figure 4.10 illustrates the parameters in which water quality criteria were exceeded in the Encinitas Sub-basin in 2002, 2003, 2004, 2005, 2006, and 2007. From this figure, it is evident that the exceedances in 2007 for most constituents are declining, with the exception of conductivity, which appears to be influenced by groundwater and is relatively consistent from year to year, and a spike in orthophosphate concentrations.

Figure 4.10: Constituents of Concern (COC) in Encinitas Sub-basin 2002-2007

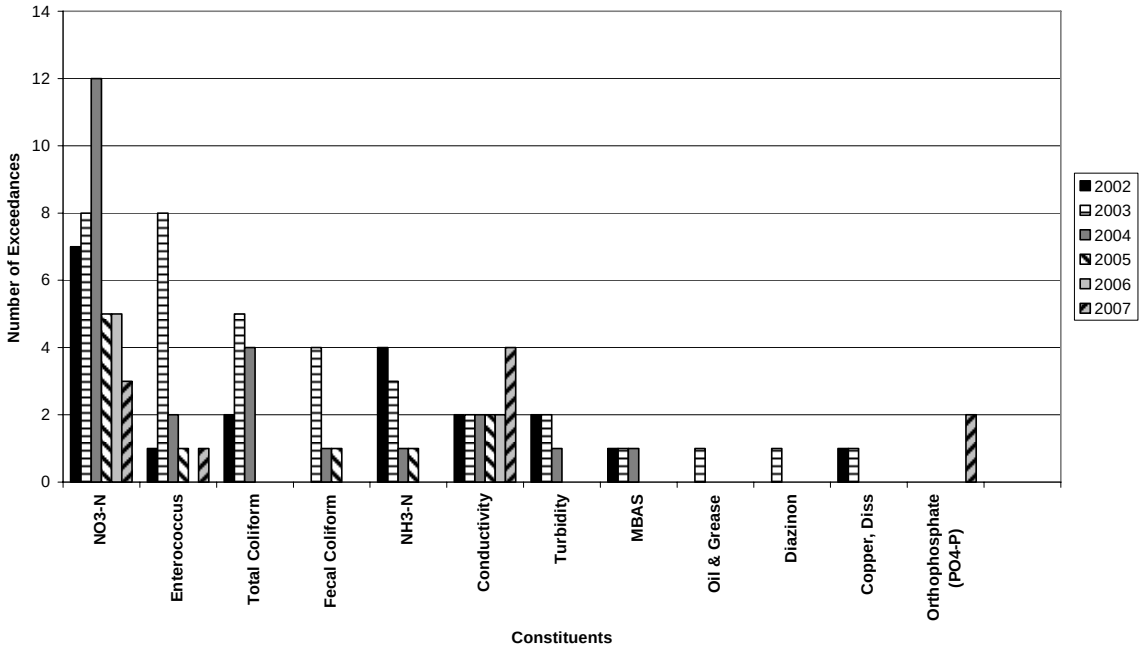
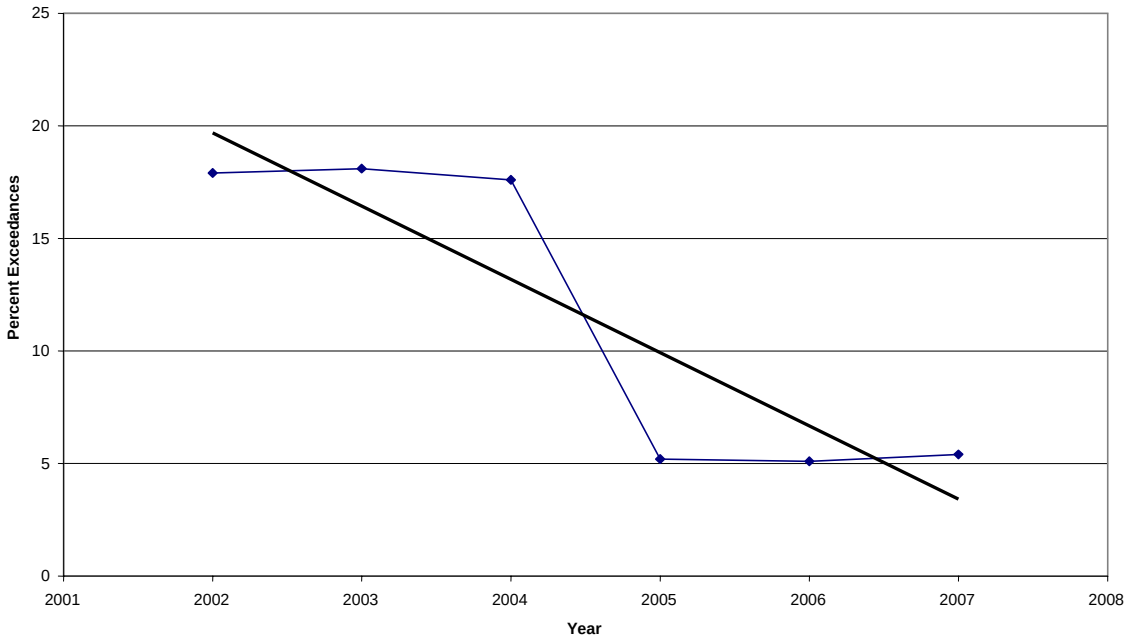


Figure 4.11 illustrates water quality exceedance trends in the Encinitas Sub-basin based on dry weather data collected from 2002-2007. Overall, the trend of water quality exceedances is down over the monitoring period, indicating improvements in water quality in the sub-basin.

Figure 4.11: Action Level Exceedance Ratio Trend in the Encinitas Sub-basin, 2002-2007



Appendix F contains all data collected in the Encinitas Sub-basin for the 2007 Dry Weather Monitoring Program. Figure 4.12 illustrates the Encinitas Sub-basin.

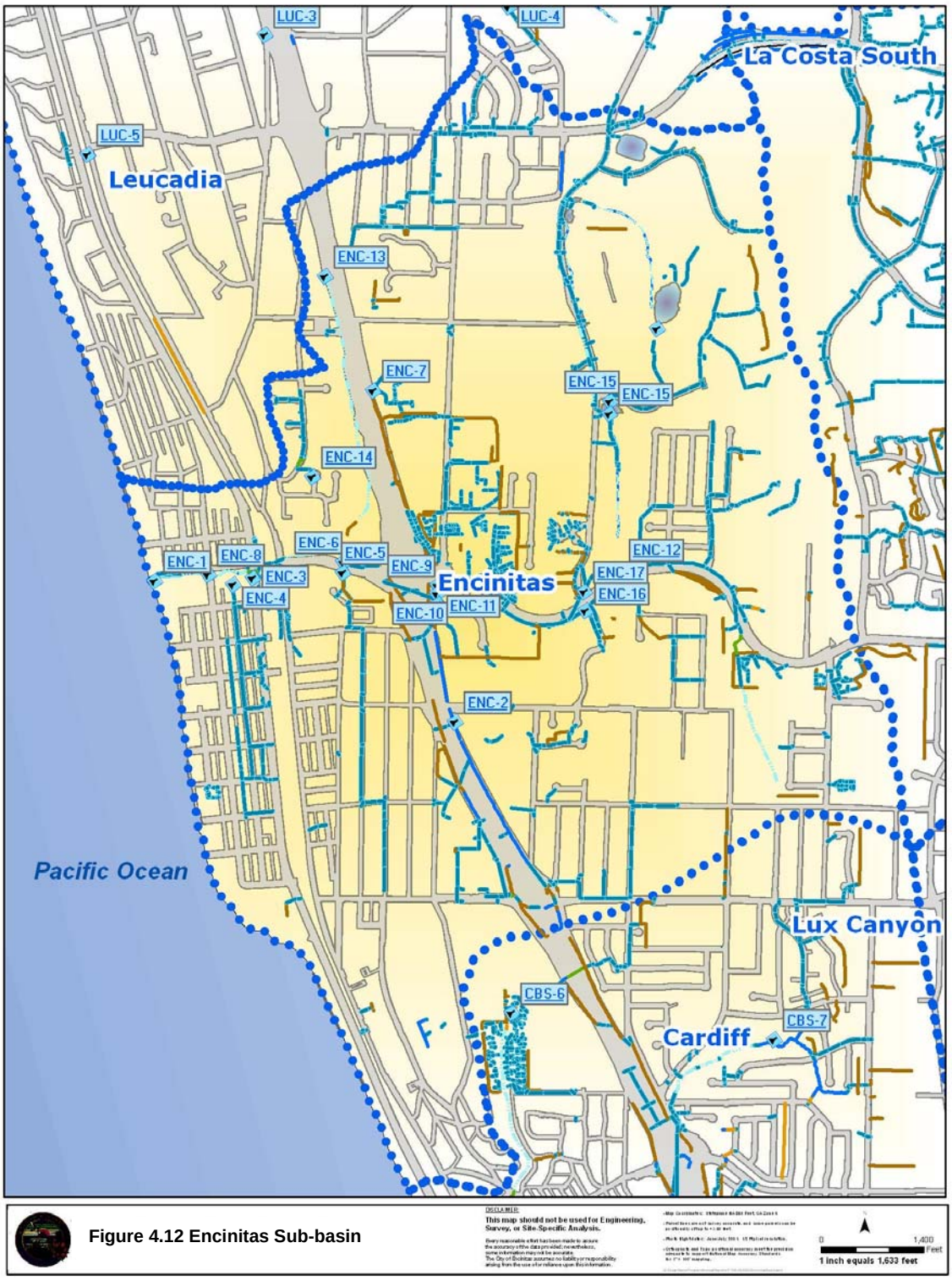


Figure 4.12 Encinitas Sub-basin

4.7 Rancho Santa Fe Sub-basin

Four locations in the Rancho Santa Fe Sub-basin are routinely monitored. RSF-1, located on a tributary to Escondido Creek at the intersection of Rancho Santa Fe Road and Encinitas Boulevard, had water ponded in a concrete energy dissipater box. This location was subject to field screening; no samples were collected for laboratory analysis. RSF-2, at Trabert Ranch Road, was dry for this monitoring season and, therefore, no samples were collected. Two of the locations, RSF-3 and RSF-4, are on the main channel of Escondido Creek at Camino del Norte and La Bajada Dip, respectively. Both of these locations were field screened and samples were collected for full laboratory analysis. Table 4.7 summarizes the action levels exceeded in the Rancho Santa Fe sub-basin.

Table 4.7 Rancho Santa Fe Sub-Basin Action Level Exceedances

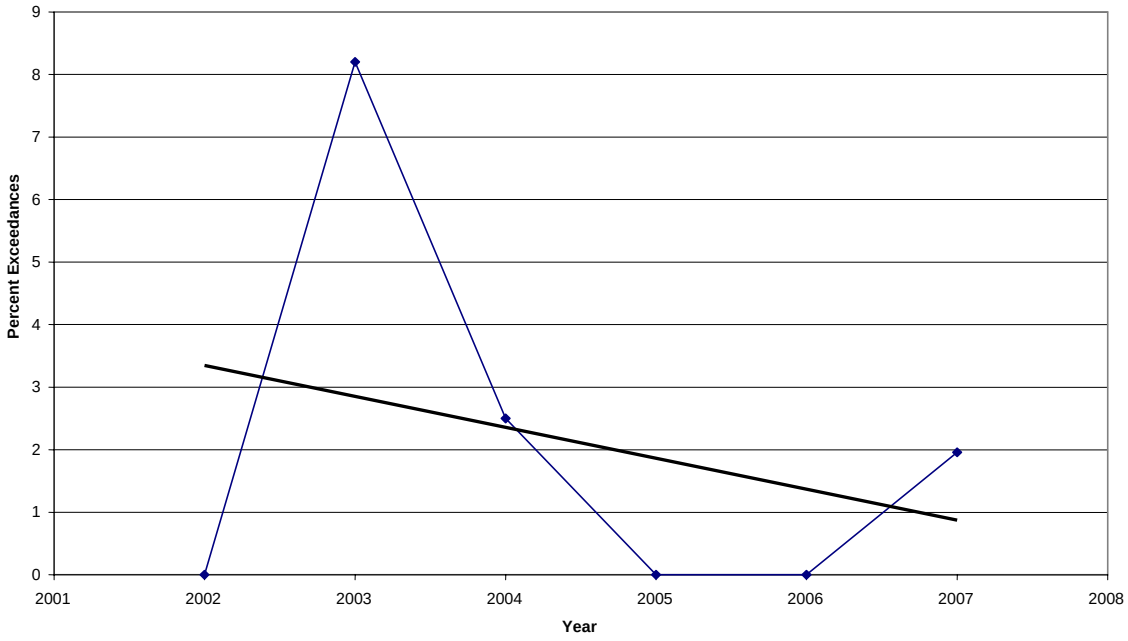
StationID	Date	Water Flow	Analyte	Result	Unit	Action Level
RSF-4	5/23/07	Flowing	Conductivity	6.2	mS/cm	5

RSF 4

The water at RSF-4 contained elevated conductivity. Land use is primarily residential. Since there were no other exceedances, an upstream investigation for the elevated conductivity was not warranted and was not performed.

Figure 4.13 illustrates water quality exceedance trends in the Rancho Santa Fe Sub-basin based on dry weather data collected from 2002 to 2007. The trend of water quality exceedances decreased from 2003 to 2006 but experienced an increase in 2007.

Figure 4.13: Action Level Exceedance Ratio Trend in the Rancho Santa Fe Sub-basin in 2002-2007



Appendix G contains all data collected in the Rancho Santa Fe Sub-basin for the 2007 Dry Weather Monitoring Program. Figure 4.14 illustrates the Rancho Santa Fe Sub-basin.

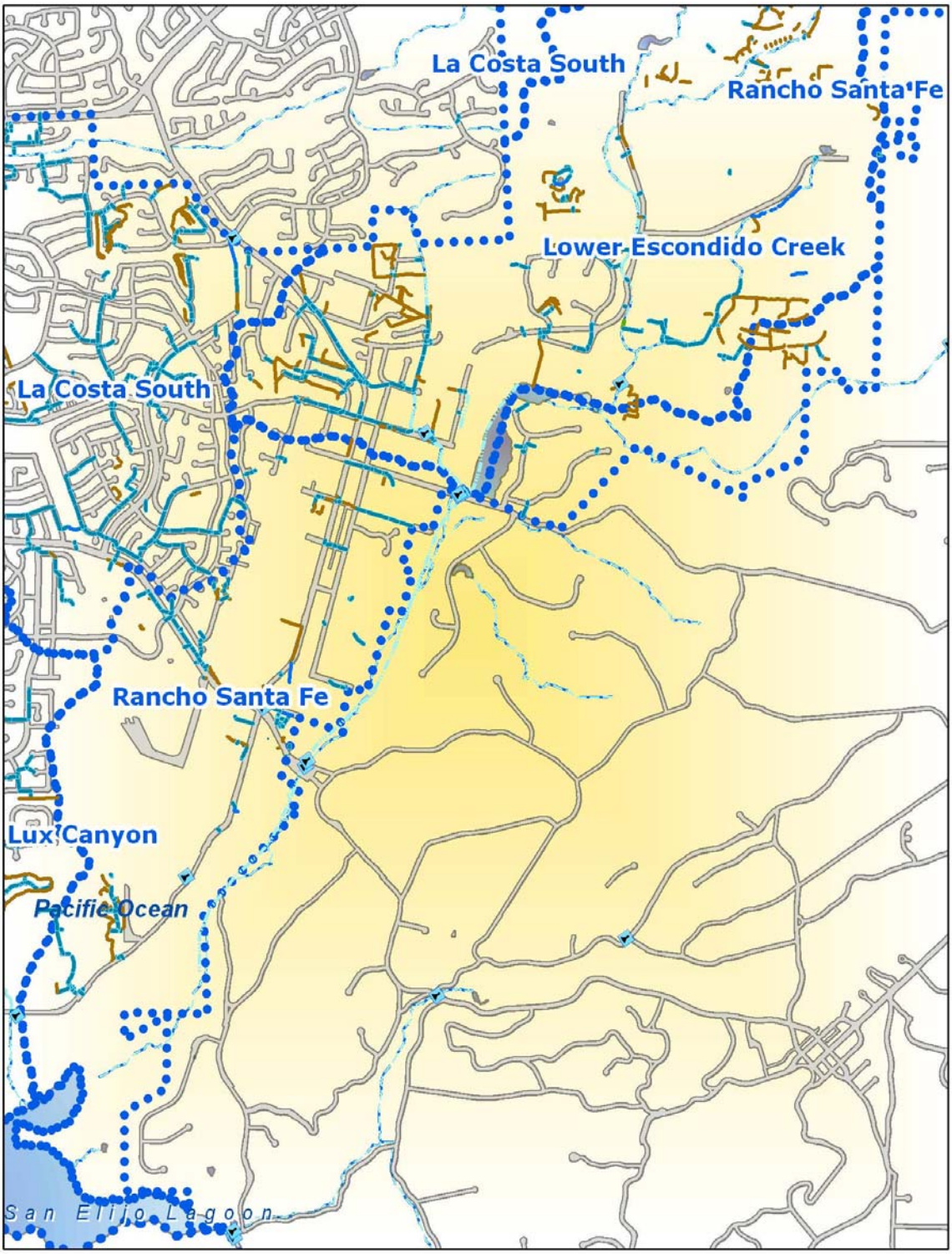
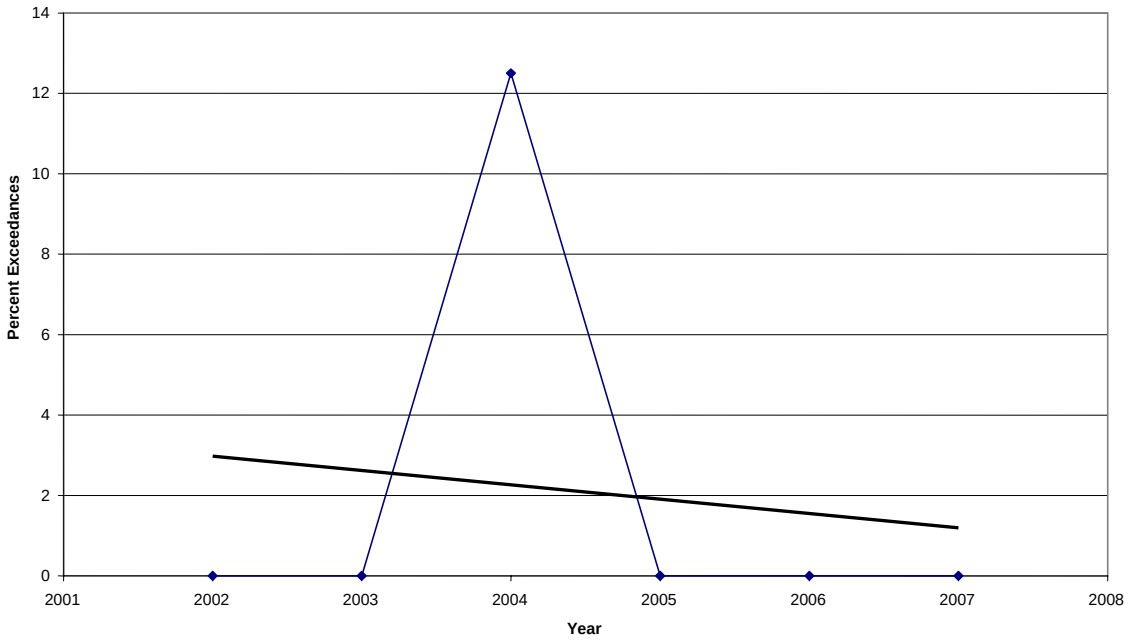


Figure 4.14 Rancho Santa Fe Sub-basin

4.8 Lux Canyon Sub-basin

Two locations are monitored in the Lux Canyon Sub-basin. LUX-1 had no flow this season and LUX-2, which is located at the Sage Canyon Drive, although flowing in years past, was also dry this monitoring season. No samples were collected at either location. Figure 4.15 illustrates water quality exceedance trends in the Lux Canyon Sub-basin based on dry weather data collected from 2002 to 2007.

Figure 4.15: Action Level Exceedance Ratio Trend in the Lux Canyon Sub-basin, 2002-2007



Appendix H contains all data collected in the Lux Canyon Sub-basin as part of the 2007 Dry Weather Monitoring Program. Figure 4.16 illustrates the Lux Canyon Sub-basin.

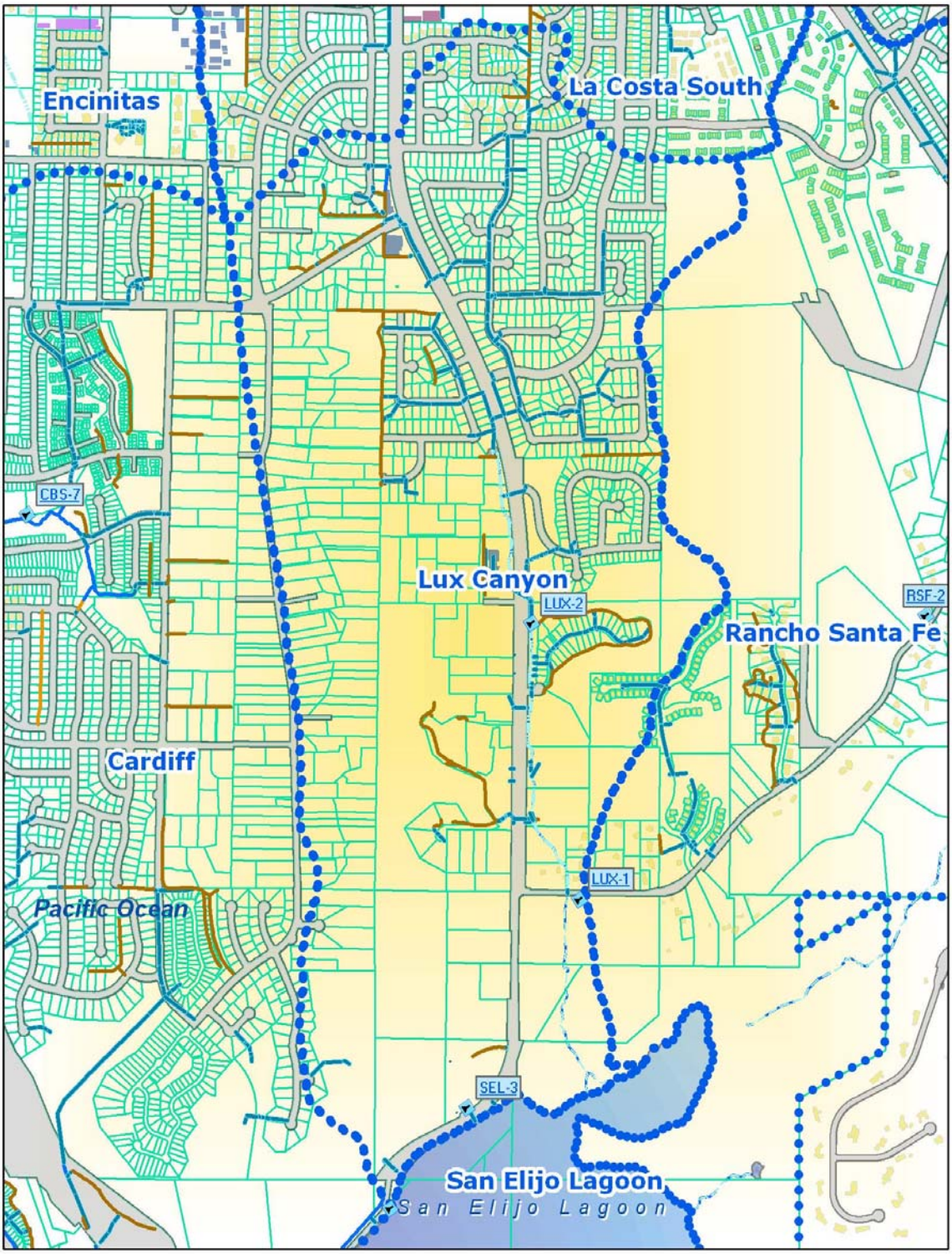


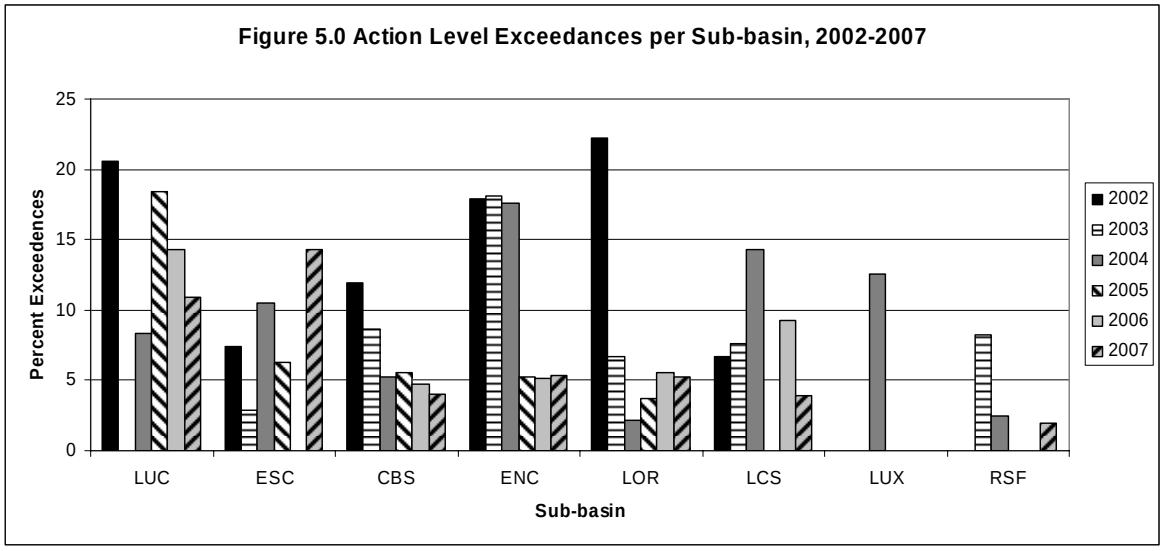
Figure 4.16 Lux Canyon Sub-basin

5.0 Summary

The comprehensive water quality monitoring performed as part of the Municipal Storm Water Permit Order 2007-01 allows the City to monitor local storm drains and creeks for illicit connections and illicit discharges. In addition, the data collected allows for characterization of the water quality in the City and subsequent prioritization of sub-basins in the watershed and pollutants of concern in those sub-basins. This section presents a summary of dry weather monitoring results for 2002-2007.

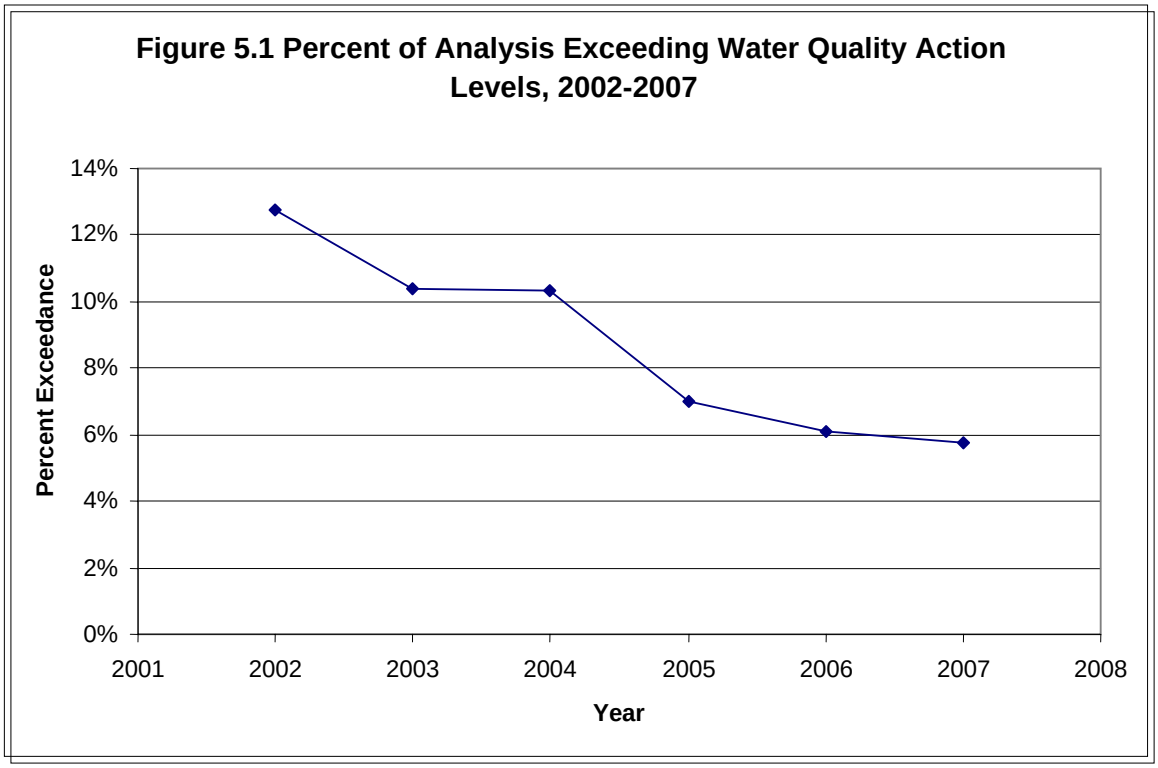
5.1 Water Quality Exceedances and Trends

Encinitas can be sub-divided into eight distinct drainage sub-basins as detailed below in Figure 5.0. According to exceedances of established water quality parameters, these sub-basins have been ranked from worst in water quality to best. Figure 5.0 illustrates the percent of analytes exceeding action levels in each sub-basin according to data collected in 2002 through 2007.



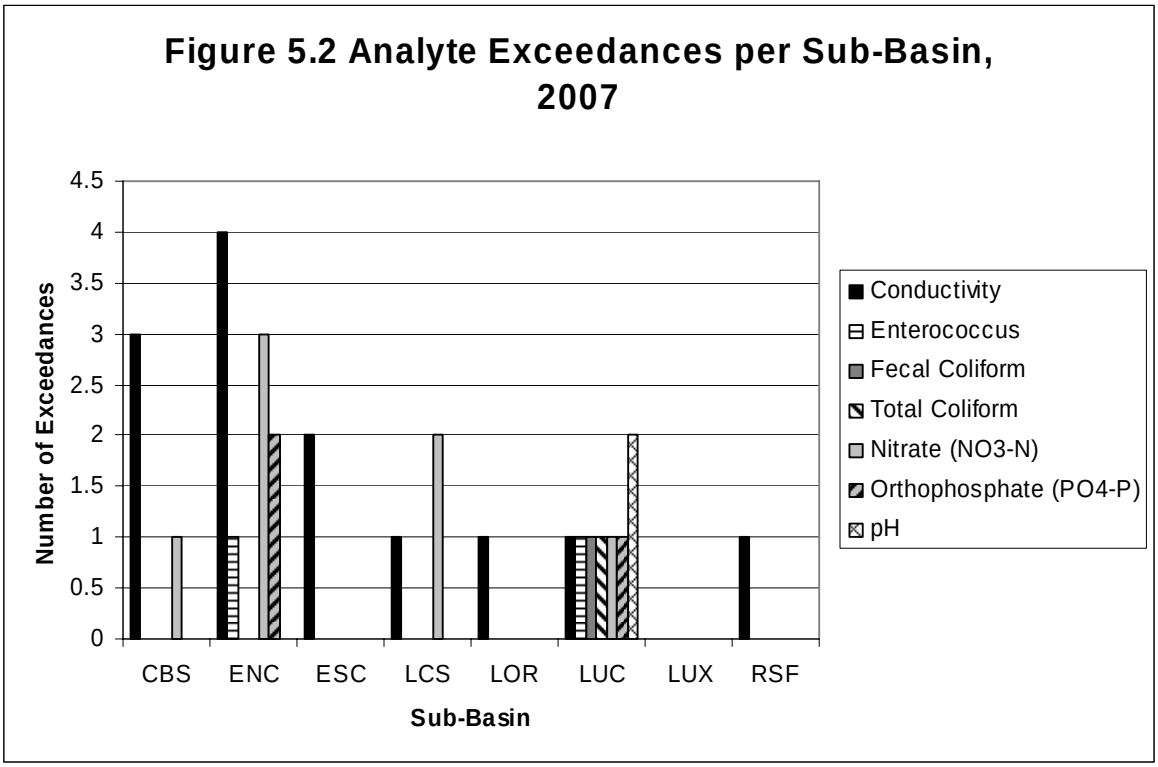
Data from Figure 5.0 illustrates that the Encinitas Sub-basin (ENC) had water quality exceedances in over 15% of the analyses in previous dry weather monitoring. In 2005 through 2007, the exceedance rates averaged 5%, showing improvements in water quality in the sub-basin. Steady improvements in water quality are also evident in the Cardiff Sub-basin (CBS) and the Rancho Santa Fe Sub-basin (RSF). The La Orilla Creek Sub-basin (LOR) has had only one exceedance in each of the past three years, however, due to the decreased number of analyses at this site; the exceedance rate is slightly higher in recent years. In 2007, there were no exceedances in the Lux Canyon Sub-basin (LUX). Rancho Santa Fe Sub-basin (RSF) and Lower Escondido Creek Sub-basin (ESC) have increased in exceedance rates in 2007 as a result of elevated conductivity levels. The La Costa South Sub-basin (LCS) has decreased to an exceedance rate of 4% this year after several illicit connections were abated and mitigated last year. Exceedance rates over 10% in Leucadia (LUC) appear to be caused by groundwater seeping into the MS4.

Overall, the trend in water quality exceedances is decreasing over the five year monitoring period as indicated in Figure 5.1.

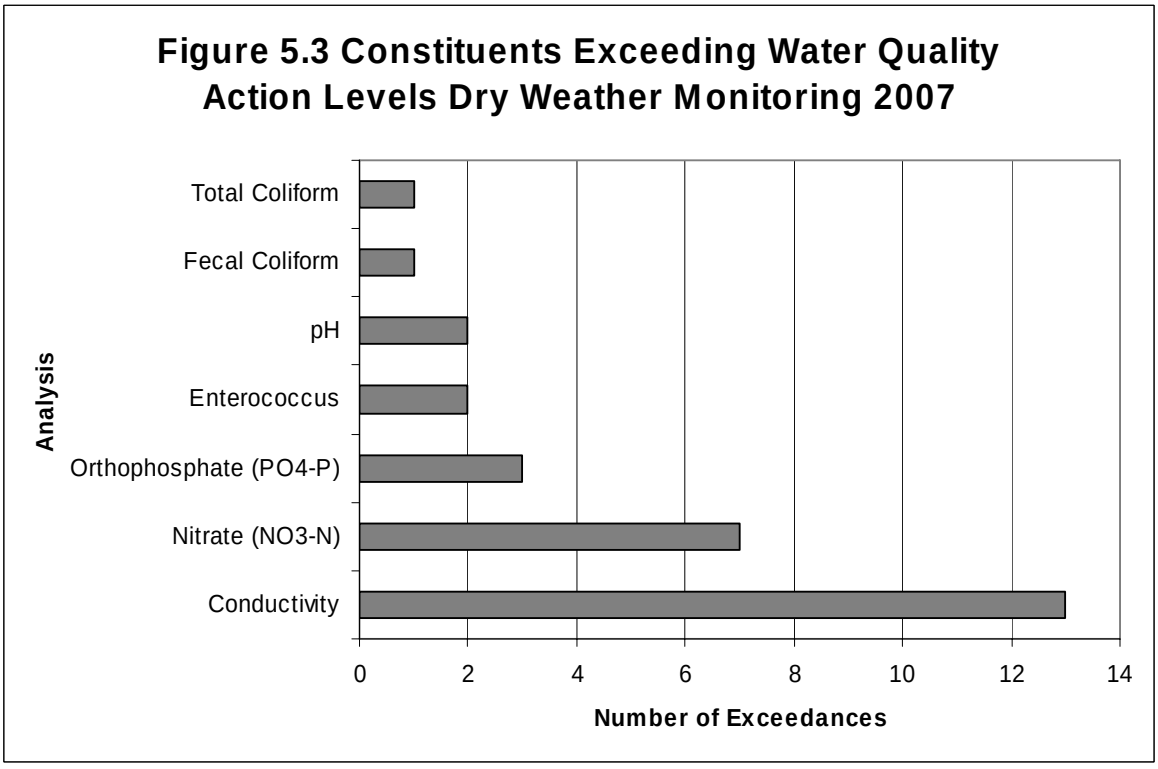


5.2 Prioritization of Constituents of Concern (COCs)

Figure 5.2 Illustrates water quality exceedances for each sub-basin in 2007. All exceedances are included in Figure 5.2



The COCs are sub-divided to further prioritize water quality issues in the sub-basins. Exceedances per COC in 2007 are illustrated in Figure 5.3.



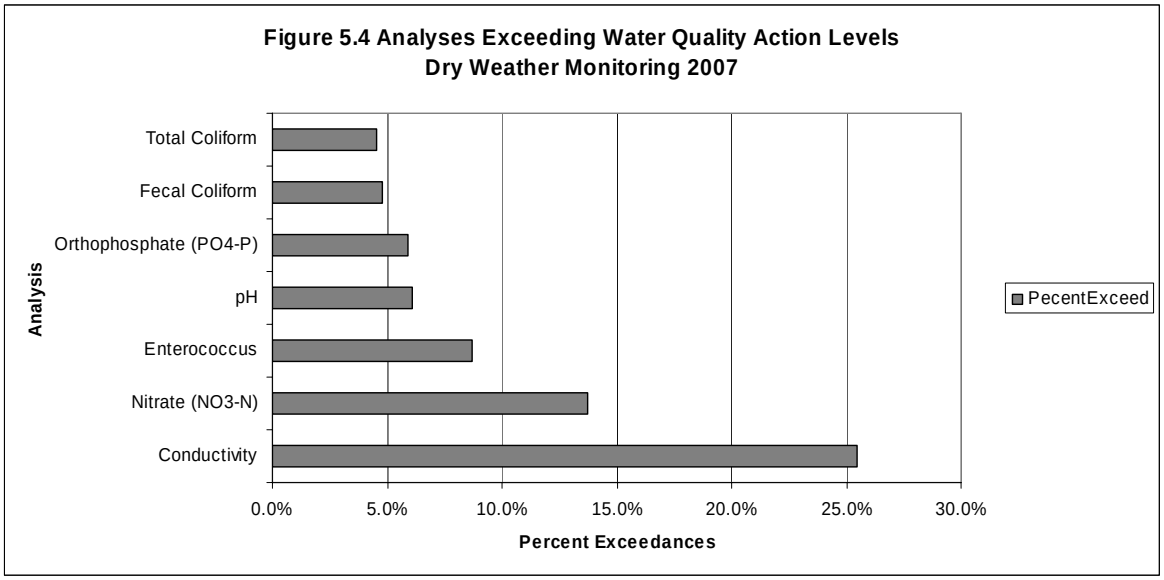
The COCs are divided into three priority categories based on criteria established as part of the 2003 Dry Weather Program. The criteria were modified in 2004 to better address COCs and their frequency of occurrence. Table 5.0 is a matrix of criteria for selecting COC priorities.

Table 5.0 Constituents of Concern Prioritization Criteria

	Criteria	Priority	Resulting Action*
I	Exceedance Ratio <10% and trends are not increasing	Low	Continue routine monitoring and place COC on watch list.
II	Exceedance Ratio greater than 10%, less than 50%	Medium	Increase Monitoring Frequency in Following Dry Weather Program
III	Persistent Exceedances	Medium	Increase Monitoring Frequency in Following Dry Weather Program
IV	Impacting Receiving Waters, 303d listed	High	Special Study, ICID Investigations, BMP implementation
V	Exceedance Ratio >50%	High	Special Study/Investigations
VI	II and III	High	Special Study/Investigations

*unless best professional judgment indicates otherwise

In order to lower the priority for a constituent from one year to the next, the COC must qualify for the lower category according to the criteria listed above and not show an increasing trend over the data collected. A constituent may only decrease one step per year and may be removed from the list if the constituent was ranked low last year and had no exceedances in monitoring for the current year. Figure 5.4 below illustrates the exceedance ratios per COC in the 2007 monitoring period. The exceedance ratio is calculated by x/y*100 where x=total number of exceedances for selected COC and y=total number of analyses for the COC. This method allows for a comparison of the exceedance rates for each indicator. For 2007, exceedance ratios for conductivity were higher than ratio of the other constituents, with ratios for nitrate-nitrogen and bacterial indicators ranking second and third. The indicator exceedance ratios support the ranks assigned to each constituent.



The COCs for the City are presented below in Table 5.1. These COCs were selected and prioritized according to criteria in Table 5.0.

Table 5.1 Constituents of Concern Prioritization, 2007

COC	Priority	Action Plan
Bacteria •Total Coliform •Fecal Coliform •Enterococcus	High	• Continuing encampment removals • BMP implementation (grease removal equipment, coverage/containment for grease bins, kelp removal) • Urban Runoff Treatment Facility (UV) and follow-up studies • Assessment of bacteria data by land use and by conveyance type
Nitrate-nitrogen	High	• Number of nitrate-nitrogen exceedances have declined in 2005, however, San Elijo Lagoon is on 303(d) list of impaired water bodies for nutrients • Focus on education targeting irrigation runoff and inspections of nurseries. • Proceed with TMDL Investigation Order examining nutrients in San Elijo Lagoon
Conductivity	Medium	• Continue routine monitoring and groundwater characterizations. Follow-up to identify sources where groundwater is not suspected. • Follow-up research in areas of TDS and loading associated with sedimentary geology in area.
Turbidity	Low	• Increased priority partially due to illicit discharge of grease at LCS-1, which was located and abated. • Sources likely commercial related, not sediment. • Continue routine monitoring.
Oil and Grease	Low	• Investigate where detected in monitoring. • Continue to focus on grease storage and removal at restaurants and increase enforcement of BMPs.

The justification for 2007 prioritization and the reasons supporting any changes are listed in Table 5.2 below.

Table 5.2 Annual Prioritization of Constituents of Concern, 2003-2007

Constituent	2003 Priority	2004 Priority	2005 Priority	2006 Priority	2007 Priority	Reason for Change
Conductivity	None	Low	Medium	Medium	Medium	Conductivity exceedances >10% and the exceedances are persistent from year to year at the same locations. However, criteria in evaluating conductivity exceedances are based on best professional judgment and elevated values of conductivity where groundwater is confirmed are not considered problematic from an IC/ID standpoint. Because this persistence is likely due to a constant source of groundwater flow in many locations, conductivity remains a medium priority (see Figure 4.12).
Oil and Grease	None	None	None	Low	None	Placed on watch list due to exceedance at LCS-1. Due to only 9 total analyses for Oil and Grease (meeting the 25% requirement), one exceedance is >10% and the constituent is placed on the watch list. There were no oil and grease exceedances in 2007 and the constituent has been removed from the list.
Ammonia-nitrogen	High	Medium	Low	None	None	Only exceeded action levels in 2 of 36 samples in 2004 (exceedance ratio = 5.6%), 1 of 43 times in 2005 (exceedance ratio = 2.3%), and there were no exceedances in 2006. No NH3-N exceedances were detected in the San Elijo Lagoon watershed (within Encinitas jurisdiction). A clear downward trend is evident and NH3-N has been removed from the list of Constituents of Concern.
MBAS	Medium	Medium	Low	None	None	Only exceeded action levels in 1 of 43 samples (exceedance ratio = 2.3%) in 2005 monitoring, and there were no exceedances in 2006 monitoring. A downward trend is clear for MBAS over the five year monitoring period and MBAS is no longer listed as a COC.

Table 5.2 Annual Prioritization of Constituents of Concern, 2003-2007 (continued)

Constituent	2003 Priority	2004 Priority	2005 Priority	2006 Priority	2007 Priority	Reason for Change
pH	None	None	Low	None	Low	In 2005 monitoring, 2 exceedances for pH were attributable to concrete channels and increased temperature and the constituent was placed on watch list. There were no exceedances in 2006 and pH has been removed from the list of COCs. In 2007, there were two exceedances for pH, both attributable to concrete channels and increased temperature. The constituent has been placed on watch list.
Temperature	None	None	Low	None	None	Similar to pH, the exceedances in 2005 were due to concrete channels and temperature was placed on watch list. There were no exceedances in 2006 and temperature has been removed from the list of COCs.
Orthophosphate				None	Low	There were no exceedances in 2006 and orthophosphate has been removed from the list of COCs. In 2007, there were two exceedances for orthophosphate and the constituent has been placed on the watch list.

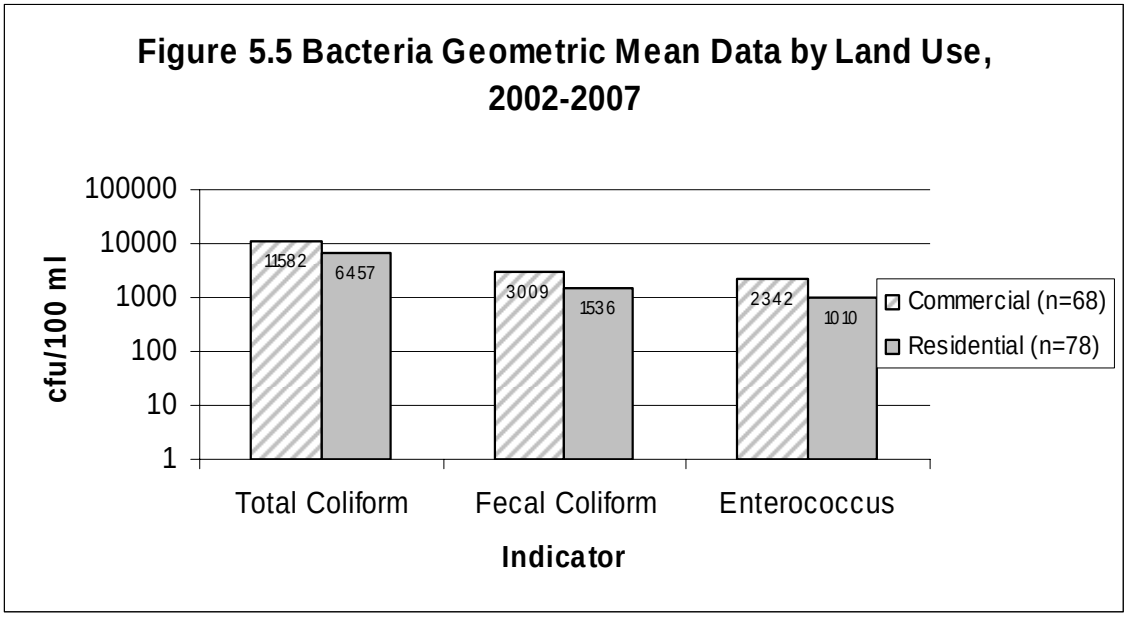
Bacteria and nitrate-nitrogen remain high priority COCs. Conductivity has increased in priority over the preceding monitoring periods. After factoring in all potential sources, groundwater is the most prevalent; therefore, conductivity remains a medium priority. pH and orthophosphates were raised in priority this year, as a result of two exceedances. COCs that have decreased in priority over the monitoring periods include: ammonia-nitrogen, MBAS, diazinon, temperature, and dissolved copper. Oil and Grease was added to the watch list last year; however, with no exceedances in 2007 monitoring, it was lowered in rank and dropped from the watch list this year.

5.3 Bacteria Indicator Exceedances

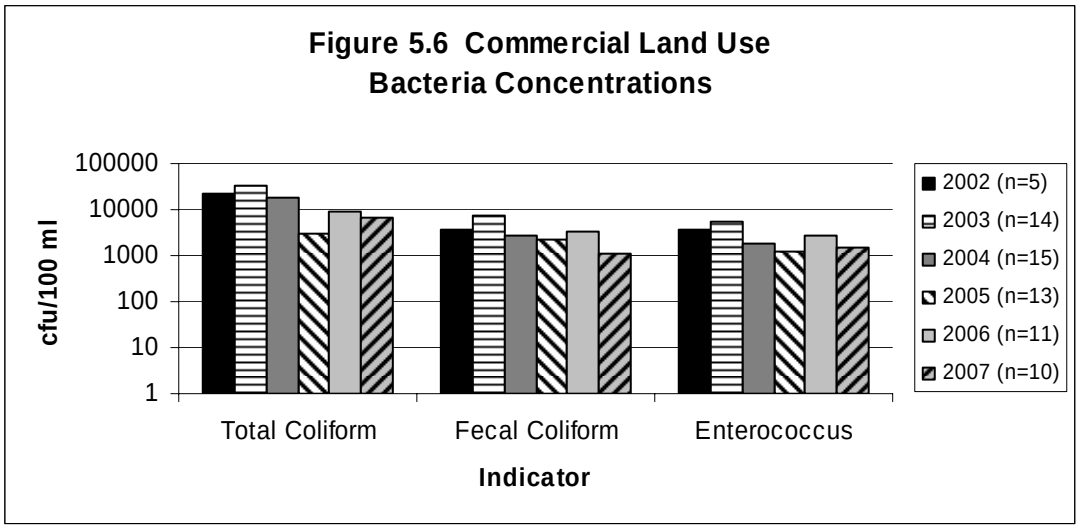
Extensive bacteria data has been collected for the past five dry weather seasons, allowing for a better overall characterization of bacteria sources and loading in the City. Enough data has been collected to attempt to characterize bacteria concentrations based on land use. The additional data collection also allows for long term trend assessments of bacteria concentrations in the City.

The two major land uses in Encinitas are commercial and residential and are often not distinct to a drainage basin but are mixed. The assessment of bacteria loading from these areas is based on primary land use as listed in the data set. Figure 5.5 illustrates the geometric mean concentrations of total and fecal coliform and enterococcus based on land use. According to the data collected from 2002 to 2007, the commercial areas

contribute more bacteria to the receiving waters for all three indicators, as calculated based on concentration only, which is not indicative of overall loading. The total coliform concentrations are approximately 45% higher, fecal coliform are approximately 57% higher, and enterococcus concentrations are approximately 58% higher in commercial areas. The differences between commercial and residential areas are illustrated in Figure 5.5.



The City has focused efforts on inspection of commercial facilities and bacteria concentrations have been trending downward over the five years of data collected from 2003 to 2007. From 2002 to 2007, concentrations of bacteria have decreased in commercial areas; however, concentrations for all three indicators are higher in 2006 monitoring, partially a result of an illicit discharge of grease to the conveyance at LCS-1. This discharge was located and abated, and bacteria concentrations at the location fell. The follow-up data is not included in the analysis; therefore the 2006 data may be skewed as a result of the discharge. The bacteria concentrations decreased in 2007. Figure 5.6 depicts this overall decreasing bacteria trend in commercial areas since 2002.



Similar trends are observed in the residential data. Decreasing trends were evident across all three indicators from 2002 to 2005, however, in 2006, elevated bacteria concentrations were detected in Leucadia, which were attributed to wildlife in the storm drain system. Figure 5.7 shows the bacteria trends in residential areas of Encinitas.

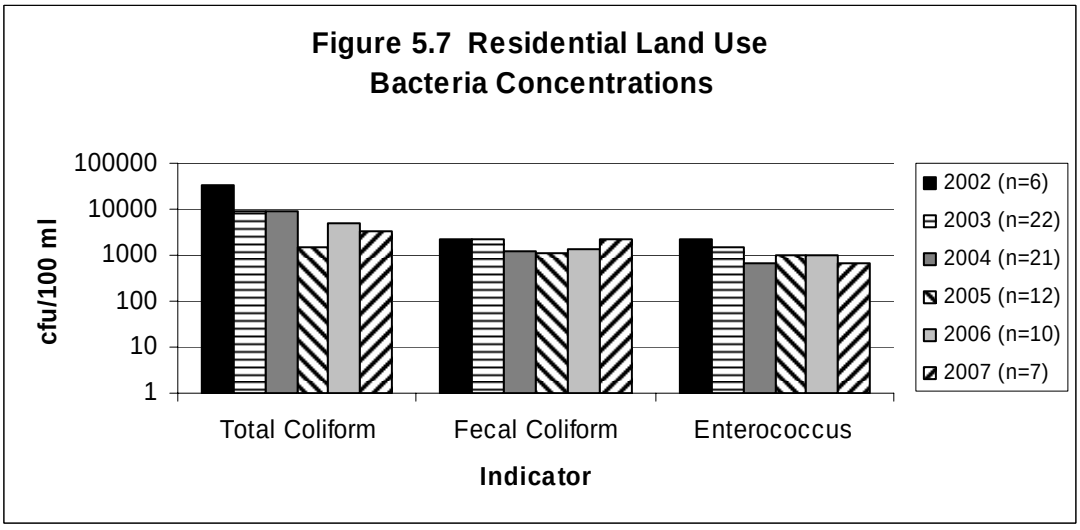
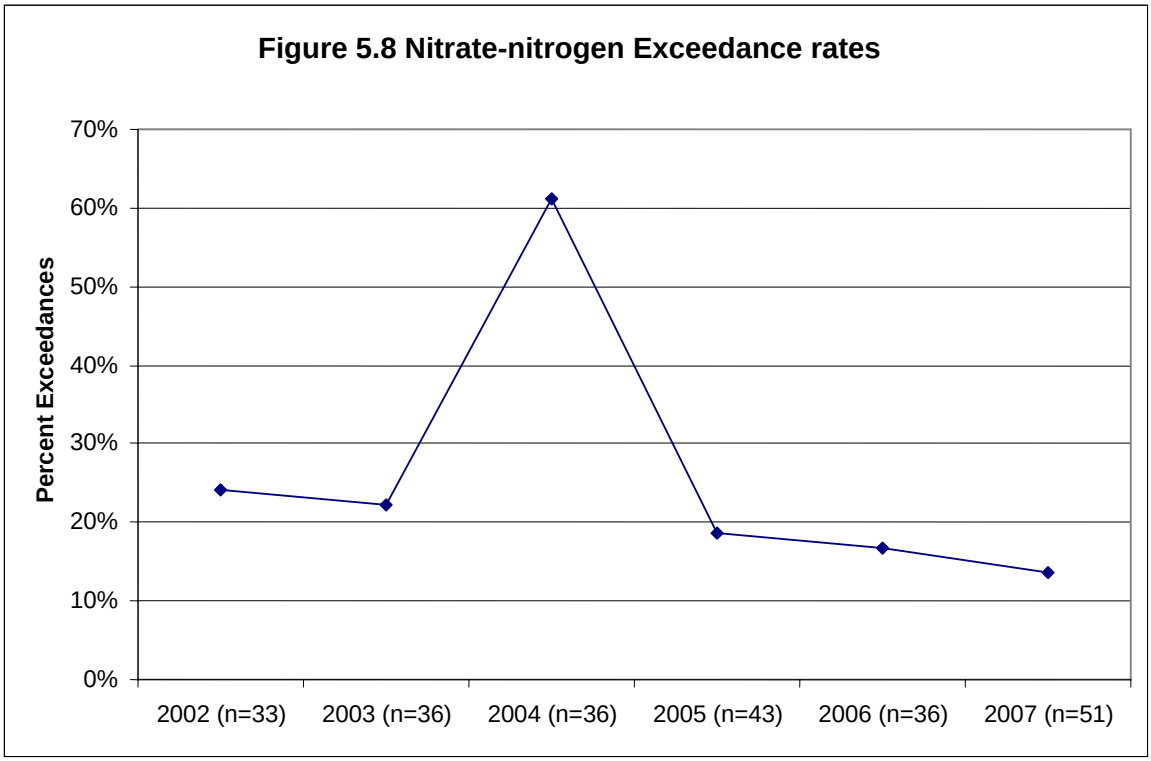


Figure 5.7 depicts an overall decreasing bacteria trend in residential areas since 2002.

5.4 Nitrate-nitrogen Exceedances

The exceedance rates for nitrate-n decreased from 17% in 2006 to 14% in 2007. Overall, exceedances for nitrate-nitrogen have declined from 2004 to 2007 across all sub-basins. Exceedance rates for nitrate-nitrogen for all five years of dry weather monitoring are illustrated in Figure 5.8.

Figure 5.8 Nitrate-nitrogen Exceedance rates



Over the five years of monitoring, groundwater remains a constant source of dry weather flow within two tributaries, ENC-6 and ENC-11 of the Encinitas Sub-basin. There are six monitoring locations within the ENC-6 and ENC-11 reaches. Each year, these locations have exceedances for nitrate-nitrogen, often accompanied by elevated conductivity. These tributaries then contribute to elevated nitrate-nitrogen concentrations downstream in Cottonwood Creek to the mouth of the creek at the Pacific Ocean, at sites ENC-1, 3, and 8. Over the monitoring periods, other nitrate-nitrogen exceedances have been present on occasion, most notably in 2004. Reasons for the increase in nitrate-nitrogen exceedances in 2004 are unknown. Many of these are likely due to residential and nursery runoff affecting nutrient concentrations. Concentrations of pollutants are usually consistent at locations influenced primarily by groundwater, including elevated levels of conductivity. In contrast, irrigation runoff may have higher concentrations of ammonia and orthophosphate, lower conductivity, and higher bacteria levels, and concentrations of these constituents are variable.

Most of the nitrate-nitrogen exceedances in the Encinitas Sub-basin appear to be a result of groundwater in the region. The San Diego region has elevated concentrations of nitrates in the groundwater as documented in the 1997 Groundwater Report by the San Diego County Water Authority and most recently in the 2007 Groundwater Assessment Study by the Metropolitan Water District of Southern California. Also, It is common to find elevated nitrates in groundwater in regions of agriculture and it is likely that the sources of nitrogen in the groundwater in Encinitas are from historical land uses such as nurseries. It should be noted, however, that local water authorities do not consider Encinitas groundwater a viable source of drinking water because it is subject to sea water intrusion therefore, there is little groundwater quality data specific to Encinitas.

Table 5.3 contains all sites with nitrate-nitrogen exceedances in the dry weather monitoring within 2002 through 2007 and suspected source of nitrogen.

Table 5.3 Nitrate-nitrogen Exceedances, 2002-2007

Site	NO3-N Exceedances						Suspected Source
	2002	2003	2004	2005	2006	2007	
CBS-1			X				Groundwater
CBS-2				X			Combination
CBS-3N			X				Irrigation
CBS-3S			X				Irrigation
SEL-2						X	Combination
SEL-5	NS	NS	NS	X	NS		Irrigation
LUC-1	NS	NS	X	X	X	X	Groundwater
LUC-7			X	NS	NS		Groundwater
ENC-1	X	X	X	X	X		Groundwater
ENC-3	X	X	X	X	X		Groundwater
ENC-4			X				Irrigation
ENC-5	X	X	X			X	Combination
ENC-6	X	X	X	X	X	X	Groundwater
ENC-8	X	X	X	X	X		Groundwater
ENC-9			X		NS		Irrigation
ENC-10	X		X				Irrigation
ENC-11	X	X	X	X	X	X	Groundwater
ENC-12		X			NS		Irrigation
ENC-14			X		NS		Irrigation
ENC-15		X	X				Irrigation
ENC-17		X	X				Irrigation
ESC-1			X				Groundwater
ESC-2			X				Irrigation
LUX-2			X		NS	NS	Irrigation
LCS-1			X			X	Irrigation
LCS-2			X				Irrigation
LCS-5						X	Irrigation

1. NS=No sample
2. Combination = Groundwater and Irrigation

The sites with nitrate-nitrogen exceedances attributable to groundwater are typically not causing water quality problem in the receiving waters. These locations do not contribute excessive bacteria, other nutrients, or metals to the waters downstream due to the natural filtration occurring within the sub-surface soils. In 2007, all nitrate-nitrogen exceedances except two locations (LCS-1 and LCS-5) appeared to be attributable to groundwater. A detailed discussion of nitrate and conductivity exceedances is included in Appendix J of this report.

5.5 Receiving Waters

Finally, the sub-basins can be divided by receiving waters. All of Encinitas drains either north to Batiquitos Lagoon, south to San Elijo Lagoon, or west to the Pacific Ocean at Moonlight Beach.

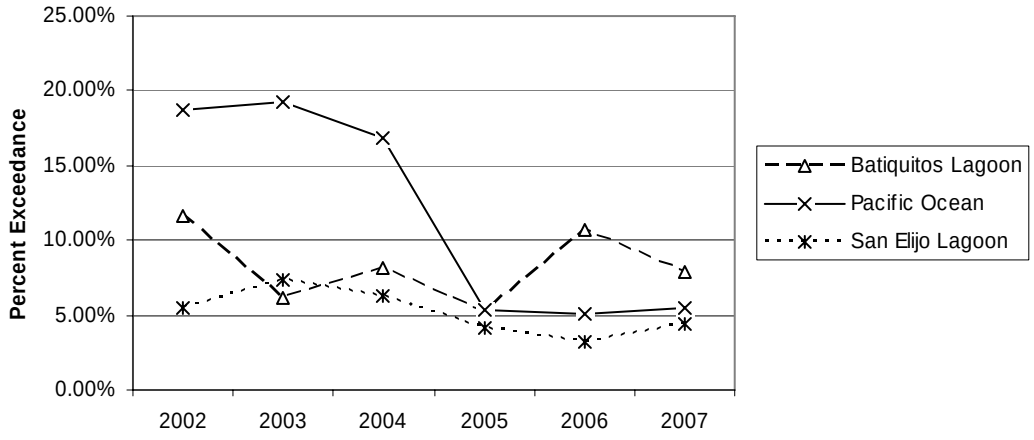
Table 5.4 shows the sub-basins and their associated receiving water.

Table 5.4 Receiving Waters and Associated Sub-basins

Batiquitos Lagoon	Pacific Ocean	San Elijo Lagoon
Leucadia	Encinitas	Cardiff
La Costa South		Lux Canyon
		Lower Escondido Creek
		La Orilla Creek
		Rancho Santa Fe

In dividing the City of Encinitas into receiving water drainage areas, general conclusions as to the water quality entering these waters can be drawn. In order to compare the water quality across these three drainage areas, a ratio of the number of water quality exceedances to analytes tested is calculated. Figure 5.9 presents the ratios calculated for the three drainage areas over the five years of dry weather monitoring.

Figure 5.9 General Trends in Water Quality Exceedances by Receiving Water



According to these ratios, the waters flowing to the Batiquitos Lagoon exceeded action levels greater extent than flows to other receiving waters in Encinitas. The primary COCs in the creek continue to be bacteria and conductivity. The exceedances in the Batiquitos basin were higher in 2006, most likely a result of illicit discharges located (and abated) in the La Costa South Sub-basin. In 2007 the percent exceedances decreased.

The primary COCs draining to the Pacific Ocean continue to be bacteria and nitrogen. The bacteria are mitigated by an Urban Runoff Treatment Facility which utilizes ultra-violet light to reduce bacteria in the creek discharge. The BMP is located near the mouth of Cottonwood Creek and effectively eliminates bacteria in the treated creek water, approximately 85% of the flows in the creek. In 2007, all of the nitrate-nitrogen exceedances in the sub-basin appeared to be attributable to groundwater or irrigation run-off.

The numbers indicate that the sub-basins draining to San Elijo Lagoon continue to exhibit a relatively low exceedance ratio under 5%.

6.0 Conclusions

Through five years of dry weather monitoring under Order 2001-01, the City of Encinitas has succeeded in identifying major water quality COCs. The sources of these COCs have been identified and eliminated where possible. Continued monitoring allows for trend assessments over the dry weather monitoring periods. These trends can be observed in overall exceedance numbers broken down by sub-basin and by land use.

Using the COC prioritization method described in Table 5.0, City staff has evaluated and ranked water quality concerns in the City, which will allow appropriate attention in the upcoming year. The City of Encinitas Clean Water Program intends to focus on illicit discharges and connections as a means to improve water quality. The dry weather monitoring program assists the City in focusing efforts targeting specific pollution problems throughout the City. Efforts, including targeting specific audiences for education, enforcement activity, and BMP implementation, have expanded as result of the water quality characterization gained from the Dry Weather Monitoring Program.

The high priority COCs in Encinitas are bacteria indicators (total and fecal coliform and enterococcus) and nitrate-nitrogen. High bacteria levels occur most often in commercial land use areas. Sources for bacteria have been identified in several instances and have included natural loading from wildlife, regrowth in the MS4, and various illegal connections to the MS4. Commercial washing is also a concern and is addressed aggressively in the City's inspection program. Bacteria indicators in the MS4 have been trending downward since 2003 for residential and commercial areas in Encinitas.

It is not known if the elevated nitrates is human induced. Sources of nitrate-nitrogen have been identified as primarily groundwater and fertilizer-containing nursery and residential irrigation run-off. With the exception of 2004, nitrate-nitrogen exceedances appear to be groundwater and have been relatively consistent. In 2007, 5 out of 7 nitrate exceedances appear to be groundwater. In these locations, the high nitrate concentrations are accompanied by elevated conductivity and no other COC exceedances. Nitrate is a constituent of concern for the groundwater in the San Diego region and historical land uses, such as nurseries are likely sources of nitrogen in the groundwater in Encinitas. The elevated conductivity may be from various minerals entering the groundwater from the

sedimentary soils or seawater intrusion in the region. A detailed discussion of nitrate and conductivity exceedances is included in Appendix J of this report. The program will focus on education targeting irrigation runoff and inspections of nurseries. A study of groundwater in the watershed is needed to identify the quantity and quality of groundwater in the lower reaches of the watershed.

Overall, exceedance rates in the MS4 have been trending downward over the five years of monitoring. In assessing the exceedance trends by the ultimate downstream receiving water (i.e. the Pacific Ocean, Batiquitos Lagoon, and San Elijo Lagoon), consistent improvements in water quality are evident for each drainage area (see Figure 5.9.) Loading of pollutants to these receiving waters has been reduced.

Two recommendations for future dry weather monitoring include:

1. In-depth pollutant source tracking and identification focusing on TMDL-impacted receiving waters.

2. A comprehensive assessment of all dry weather monitoring data within the watershed to compare dry weather constituents of concern across the Carlsbad Hydrologic Unit and develop appropriate BMPs as a watershed group.

3. Re-evaluation of the number and location of dry weather monitoring locations to adjust to possible new requirements in the upcoming new municipal permit. New programs in that permit, including trash and MS4 monitoring, may require adjusting site locations and an evaluation may show that some sites need not be monitored any longer.

With the on-set of TMDLs in the Pacific Ocean at Cottonwood Creek and the pending sediment, nutrient, and bacteria TMDLs for San Elijo Lagoon, it is recommended that resources be shifted to investigations in these areas. New bacteria source tracking methods should be employed to definitively identify and eliminate bacteria sources in the MS4. The City is moving forward with watershed based funding mechanisms to implement Investigative Order No. 2007-076 for the lagoons in the watershed. This monitoring program will be designed in the upcoming year and monitoring is projected to begin in the fall of 2007. Both of these studies will provide detailed information on the pollutants described above and their effects on receiving waters, namely the Pacific Ocean at Cottonwood Creek and San `Elijo Lagoon in Encinitas.

Much time and effort has been expended in identifying COCs in the watershed. Now that these have been identified, it is prudent to allocate efforts to those pollutants in an adaptive monitoring approach. Many of the analysis in the dry weather program have not been productive over the five years of testing. Due to the analytical timeframes necessary for metals, oils and grease, and pesticides, these analytes have not yielded significant results in IC/ID investigations. However, the field screening parameters and bacteria analysis have been productive in source tracking and investigations and must continue to be a part of the program. A comprehensive assessment of all dry weather data in the watershed is recommended. This will result in consistent COC identification and lead to an adaptive monitoring plan for the dry weather program. The adaptive monitoring will focus efforts on high priority COCs with TMDL implementation plans in mind and may reduce monitoring of constituents that have not been identified as problematic.

APPENDIX A

CARDIFF SUB-BASIN 2007 DATA

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	CBS-1	Latitude	33.013611111111	**Watershed**	
Location	SEJPA	Longitude	117.27305555556	Hydrologic Unit	904.61
Date	06/11/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	10:24	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3158 3159

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	20.1	NH3-N (mg/L)	0.4	NO3-N (mg/L)	7.5	Ortho-PO4(mg/L)	0.3
pH	8.0	Turbidity (NTU)	1.18	Cond (mS/cm)	4.82		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	2

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: MBAS 0.75, Bacteria only

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	CBS-2	Latitude	33.016666666667	**Watershed**	
Location	Highway 101 Channel	Longitude	117.28138888889	Hydrologic Unit	904.61
Date	06/12/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	10:45	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☐ N/A ☐ Low ☐ Incoming ☐ High ☑ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3169,3170,3171

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	28	NH3-N (mg/L)	0.4	NO3-N (mg/L)	7.5	Ortho-PO4(mg/L)	0.1
pH	8.3	Turbidity (NTU)	8.08	Cond (mS/cm)	5.81		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	1

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: MBAS 0.5

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	CBS-3N	Latitude	33.018611111111	**Watershed**	
Location	Norfork Dr. @ Glen Park (North Pipe)	Longitude	117.28111111111	Hydrologic Unit	904.61
Date	06/11/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	11:20	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3161

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Filling a Bottle or Known Volume

Volume (mL
Time (sec)
Flow (gpm)

Flowing Pipe

Diamete (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Comments: NO FLOW-DRY

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	CBS-3S	Latitude	33.018611111111	**Watershed**	
Location	Norfolk Dr. @ Glen Park (South Pipe)	Longitude	117.28111111111	Hydrologic Unit	904.61
Date	06/11/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	11:20	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3160

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Filling a Bottle or Known Volume

Volume (mL
Time (sec)
Flow (gpm)

Flowing Pipe

Diamete (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Comments: NO FLOW-DRY

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	CBS-4	Latitude	33.009722222222	**Watershed**	
Location	Cardiff Cove at Cape Sebastian	Longitude	117.26722222222	Hydrologic Unit	904.61
Date	06/11/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	12:20	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3162, 3163, 3164

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	23.2	NH3-N (mg/L)	0.3	NO3-N (mg/L)	7.5	Ortho-PO4(mg/L)	0.1
pH	8.1	Turbidity (NTU)	0.98	Cond (mS/cm)	7.76		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	1.5

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: MBAS 0.5, Bacteria only

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	CBS-5	Latitude	33.014444444444	**Watershed**	
Location	Plastino Building	Longitude	117.27972222222	Hydrologic Unit	904.61
Date	05/29/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	10:30	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Filling a Bottle or Known Volume

Volume (mL
Time (sec)
Flow (gpm)

Flowing Pipe

Diamete (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Comments: No flow-no samples collected.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	CBS-6	Latitude	33.031944444444	**Watershed**	
Location	Hall 2 at Bach Street	Longitude	117.2825	Hydrologic Unit	904.61
Date	06/11/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	13:16	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Filling a Bottle or Known Volume

Volume (mL
Time (sec)
Flow (gpm)

Flowing Pipe

Diamete (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Comments: CHANNEL DRY-NO FLOW - no samples collected

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	CBS-7	Latitude	33.031111111111	**Watershed**	
Location	Woodlake and Evergreen	Longitude	117.2825	Hydrologic Unit	904.61
Date	05/30/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	13:15	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☑ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	24.3	NH3-N (mg/L)	0.1	NO3-N (mg/L)	5	Ortho-PO4(mg/L)	0.6
pH	7.62	Turbidity (NTU)	4.61	Cond (mS/cm)	1.78		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	3.2

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: MBAS 0.5, Bacteria only

APPENDIX B

LOWER ESCONDIDO CREEK SUB-BASIN 2007 DATA

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ESC-1	Latitude	33.053888888889	**Watershed**	
Location	Brookside Lane @ Copper Creek	Longitude	117.21638888889	Hydrologic Unit	904.61
Date	05/25/07	TB Page	1148	Hydrologic Area	Carlsbad
Time	10:32	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☑ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 1, 2, 3

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	18.7	NH3-N (mg/L)	0.2	NO3-N (mg/L)	0.25	Ortho-PO4(mg/L)	1.0
pH	8.0	Turbidity (NTU)	4.01	Cond (mS/cm)	8.02		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	100

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: MBAS 2.5

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ESC-2	Latitude	33.051388888889	**Watershed**	
Location	Lonejack Road @ Stratford Knoll	Longitude	117.22861111111	Hydrologic Unit	904.61
Date	05/25/07	TB Page	1148	Hydrologic Area	Carlsbad
Time	10:00	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	20.4	NH3-N (mg/L)	0.6	NO3-N (mg/L)	2.5	Ortho-PO4(mg/L)	0.2
pH	7.59	Turbidity (NTU)	0.51	Cond (mS/cm)	6.94		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	118

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: MBAS 0.75

APPENDIX C

LA ORILLA CREEK SUB-BASIN 2007 DATA

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LOR	Latitude	33.010555555556	**Watershed**	
Location	La Orilla Creek	Longitude	117.24	Hydrologic Unit	904.61
Date	06/12/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	9:30	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☑ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☑ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	22.3	NH3-N (mg/L)	0.2	NO3-N (mg/L)	5	Ortho-PO4(mg/L)	0.2
pH	7.6	Turbidity (NTU)	2.65	Cond (mS/cm)	8.12		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: MBAS 0.5

APPENDIX D

LA COSTA SOUTH SUB-BASIN 2007 DATA

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LCS-1	Latitude	33.058611111111	**Watershed**	
Location	Garden View @ El Camino Real	Longitude	117.26305555556	Hydrologic Unit	904.51
Date	05/30/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	9:07	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☑ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☑ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	19.9	NH3-N (mg/L)	0.4	NO3-N (mg/L)	20	Ortho-PO4(mg/L)	0.6
pH	7.62	Turbidity (NTU)	5.10	Cond (mS/cm)	1.113		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: MBAS 0.5. Oily sheen, no potential source was observed upstream in the drainage basin. There was evidence of irrigation runoff upstream in drainage basin.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LCS-2	Latitude	33.068055555556	**Watershed**	
Location	Leucadia Boulevard @ El Camino Real	Longitude	117.26222222222	Hydrologic Unit	904.51
Date	05/25/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	10:45	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☑ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	19.8	NH3-N (mg/L)	0.2	NO3-N (mg/L)	2.5	Ortho-PO4(mg/L)	0.3
pH	7.64	Turbidity (NTU)	5.72	Cond (mS/cm)	4.10		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	200

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: 0.50 MBAS

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LCS-3	Latitude	33.061111111111	**Watershed**	
Location	Calle Acervo	Longitude	117.24055555556	Hydrologic Unit	904.51
Date	05/25/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	9:30	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☑ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	17.4	NH3-N (mg/L)	0.4	NO3-N (mg/L)	2.5	Ortho-PO4(mg/L)	2
pH	7.00	Turbidity (NTU)	3.29	Cond (mS/cm)	1.416		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: NO FLOW 0.25 MBAS

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LCS-4	Latitude	33.051944444444	**Watershed**	
Location	Mountain Vista @ El Camino Real	Longitude	117.26055555556	Hydrologic Unit	904.51
Date	05/25/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	13:20	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	22.4	NH3-N (mg/L)	1	NO3-N (mg/L)	2.5	Ortho-PO4(mg/L)	1
pH	7.28	Turbidity (NTU)	8.81	Cond (mS/cm)	1.620		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: NO FLOW MBAS 1.0

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LCS-5	Latitude	33.048888888889	**Watershed**	
Location	Via Molena @ El Camino Real	Longitude	117.26027777778	Hydrologic Unit	904.51
Date	05/30/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	10:14	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	20.3	NH3-N (mg/L)	0.6	NO3-N (mg/L)	25	Ortho-PO4(mg/L)	1.0
pH	7.46	Turbidity (NTU)	7.32	Cond (mS/cm)	1.618		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	No data

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: mbas 0.5. There was evidence of irrigation runoff upstream in drainage basin.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LCS-6	Latitude	33.046944444444	**Watershed**	
Location	Village Square Drive	Longitude	117.25861111111	Hydrologic Unit	904.51
Date	05/30/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	13:50	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	23.1	NH3-N (mg/L)	0.6	NO3-N (mg/L)	2.5	Ortho-PO4(mg/L)	0.4
pH	8.01	Turbidity (NTU)	18.6	Cond (mS/cm)	3.04		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	no data

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: mbas 1.0, Bacteria only, trickle flow - unable to measure flow

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LCS-7	Latitude	33.055833333333	**Watershed**	
Location	Grand Avenue @ El Camino Real	Longitude	117.2625	Hydrologic Unit	904.51
Date	05/25/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	14:20	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☑ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	21.2	NH3-N (mg/L)	0.8	NO3-N (mg/L)	5	Ortho-PO4(mg/L)	0.4
pH	7.81	Turbidity (NTU)	2.19	Cond (mS/cm)	16.49		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	61

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: 0.75 MBAS

APPENDIX E

LEUCADIA SUB-BASIN 2007 DATA

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LUC-1	Latitude	33.082777777778	**Watershed**	
Location	Ponto Detention Basin	Longitude	117.30944444444	Hydrologic Unit	904.51
Date	06/20/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	9:30	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☑ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3222,3223

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	20.1	NH3-N (mg/L)	0.2	NO3-N (mg/L)	16	Ortho-PO4(mg/L)	0.2
pH	7.6	Turbidity (NTU)	3.14	Cond (mS/cm)	1.841		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: NO FLOW -DETENTION POND. MBAS 0.25. Nitrates from groundwater.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LUC-2	Latitude	33.068333333333	**Watershed**	
Location	Saxony @ La Costa	Longitude	117.2925	Hydrologic Unit	904.51
Date	06/21/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	10:15	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☑ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3236,3237

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Filling a Bottle or Known Volume

Volume (mL
Time (sec)
Flow (gpm)

Flowing Pipe

Diamete (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Comments: DRY-NO SAMPLES

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LUC-3	Latitude	33.068611111111	**Watershed**	
Location	Normandy @Pireaus	Longitude	117.29388888889	Hydrologic Unit	904.51
Date	06/20/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	12:20	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	28.9	NH3-N (mg/L)	0.3	NO3-N (mg/L)	6	Ortho-PO4(mg/L)	0.1
pH	9.3	Turbidity (NTU)	9.52	Cond (mS/cm)	0.703		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	0.05

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: MBAS 0.1 FLOW - LOW SLOW TRICKLE. pH and temp. are high because of low flow in concrete channel.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LUC-4	Latitude	33.07	**Watershed**	
Location	Fox Point Detention Basin	Longitude	117.28305555556	Hydrologic Unit	904.51
Date	06/21/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	11:00	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☑ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☐ Yellow ☑ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☐ No ☑ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3240,3241

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	20.3	NH3-N (mg/L)	1	NO3-N (mg/L)	7.5	Ortho-PO4(mg/L)	4
pH	7.8	Turbidity (NTU)	9.20	Cond (mS/cm)	1.360		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	0.05

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: DETENTION BASIN-VERY SLOW TRICKLE FLOW- MBAS0.75. Followed up with an investigation from last years findings of irrigation runoff findings of 1027 and 1028 Albans Pl. Area drain was overflowing in front yard of 1028. Photos taken:

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ Routine Investigation ☑ IC/ID Follow-Up For: Bacteria

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LUC-4	Latitude	33.07	**Watershed**	
Location	Fox Point Detention Basin	Longitude	117.28305555556	Hydrologic Unit	904.51
Date	06/26/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	11:00	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%): ☐ Residential ☐ Commercial ☐ Industrial ☑ Agricultural ☐ Park ☐ Open

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather: ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide: ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height: 0 ft.

Last Rain: ☑ > 72 Hours ☐ < 72 Hours

Rainfall: ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor: ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color: ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity: ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables: ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits: ☐ None ☐ Sediment/Gravel ☑ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation: ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology: ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow: ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water: ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow: ☐ Yes ☐ No ☑ Irrigation Runoff Other:

Photo Taken: ☑ Yes ☐ No Photo #:

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)		NH3-N (mg/L)	.8	NO3-N (mg/L)		Ortho-PO4(mg/L)	
pH		Turbidity (NTU)		Cond (mS/cm)			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: Trickle Flow could not be measured. Bacteria, Chlorine, Ammonia sampled. Chlorine = 1 MBAS = 0.5

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ Routine Investigation ☑ IC/ID Follow-Up For: Bacteria

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LUC-4	Latitude	33.07	**Watershed**	
Location	Fox Point Detention Basin	Longitude	117.28305555556	Hydrologic Unit	904.51
Date	06/26/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	11:45	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%): ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only): ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☑ Curb/Gutter

ATMOSPHERIC CONDITION

Weather: ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide: ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height: 0 ft.

Last Rain: ☑ > 72 Hours ☐ < 72 Hours

Rainfall: ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor: ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color: ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity: ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables: ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits: ☐ None ☐ Sediment/Gravel ☑ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation: ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology: ☐ None ☐ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow: ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water: ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow: ☐ Yes ☐ No ☑ Irrigation Runoff Other:

Photo Taken: ☑ Yes ☐ No Photo #:

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)		NH3-N (mg/L)	0.5	NO3-N (mg/L)		Ortho-PO4(mg/L)	
pH		Turbidity (NTU)		Cond (mS/cm)			

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: Trickle flow. Samples were collected from 1027 and 1028 St. Albans Pl. Bacteria #1028- front Yard area Drain. Bacteria # 1027 - Drain pipe w/release valve. Bacteria #1027 - curb Drain. Chlorine = 1 MBAS = 0.25

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LUC-5	Latitude	33.064166666667	**Watershed**	
Location	Leucadia Boulevard @ Highway 101	Longitude	117.30166666667	Hydrologic Unit	904.51
Date	06/20/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	10:15	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☑ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3224,3225,3226

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Filling a Bottle or Known Volume

Volume (mL
Time (sec)
Flow (gpm)

Flowing Pipe

Diamete (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Comments: DAMP -NO FLOW-NO SAMPLES

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LUC-6	Latitude	33.081666666667	**Watershed**	
Location	Pireaus Detention Basin	Longitude	117.29666666667	Hydrologic Unit	904.51
Date	06/20/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	11:30	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3230,3231

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	31.0	NH3-N (mg/L)	1	NO3-N (mg/L)	7.5	Ortho-PO4(mg/L)	0.1
pH	9.5	Turbidity (NTU)	3.46	Cond (mS/cm)	6.64		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: MBAS 0.75. High temperature and pH is a result of ponded water in concrete channel.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LUC-7	Latitude	33.075555555556	**Watershed**	
Location	Quail Hollow @ Saxony	Longitude	117.28472222222	Hydrologic Unit	904.51
Date	06/21/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	10:30	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☑ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3238

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Filling a Bottle or Known Volume

Volume (mL
Time (sec)
Flow (gpm)

Flowing Pipe

Diamete (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Comments: DRY-NO SAMPLES.

APPENDIX F

ENCINITAS SUB-BASIN 2007 DATA

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-1	Latitude	33.048055555556	**Watershed**	
Location	Moonlight Beach, Cottonwood Creek	Longitude	117.29861111111	Hydrologic Unit	904.51
Date	05/31/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	10:36	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☐ N/A ☑ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☑ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	22.4	NH3-N (mg/L)	0.1	NO3-N (mg/L)	7.5	Ortho-PO4(mg/L)	0.15
pH	8.04	Turbidity (NTU)	1.60	Cond (mS/cm)	5.14		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	30

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: seaweed rack, mbas 0.75

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-10	Latitude	33.047777777778	**Watershed**	
Location	Cottonwood Creek Channel @Del Taco	Longitude	117.28583333333	Hydrologic Unit	904.51
Date	06/13/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	9:20	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☑ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3178,3177,3176,3175,3172,3173

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	19.8	NH3-N (mg/L)	1.0	NO3-N (mg/L)	5	Ortho-PO4(mg/L)	2.5
pH	7.5	Turbidity (NTU)	9.68	Cond (mS/cm)	1.36		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	7.5

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: MBAS 0.75, evidence of encampments.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-11	Latitude	33.047222222222	**Watershed**	
Location	Requeza Channel @ Mossy Chevrolet	Longitude	117.28583333333	Hydrologic Unit	904.51
Date	06/14/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	11:00	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☑ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3193,3194,3197

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	23.5	NH3-N (mg/L)	0.2	NO3-N (mg/L)	20	Ortho-PO4(mg/L)	0.1
pH	7.7	Turbidity (NTU)	6.18	Cond (mS/cm)	8.36		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	2

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: MBAS 0.75, Bacteria only

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-12	Latitude	33.048611111111	**Watershed**	
Location	Cottonwood Creek Channel @ SDUHSD	Longitude	117.27777777778	Hydrologic Unit	904.51
Date	06/14/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	13:00	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3199,3200

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Filling a Bottle or Known Volume

Volume (mL
Time (sec)
Flow (gpm)

Flowing Pipe

Diamete (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Comments: DRY--no samples collected

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-13	Latitude	33.059722222222	**Watershed**	
Location	Guidero Way	Longitude	117.29111111111	Hydrologic Unit	904.51
Date	06/14/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	13:43	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☑ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☑ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3201

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Filling a Bottle or Known Volume

Volume (mL
Time (sec)
Flow (gpm)

Flowing Pipe

Diamete (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Comments: DRY - no samples collected

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-14	Latitude	33.051944444444	**Watershed**	
Location	Via Julita	Longitude	117.29166666667	Hydrologic Unit	904.51
Date	06/19/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	10:40	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3214,3215

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Filling a Bottle or Known Volume

Volume (mL
Time (sec)
Flow (gpm)

Flowing Pipe

Diamete (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Comments: DAMP-NO FLOW TO SAMPLE

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-15	Latitude	33.055	**Watershed**	
Location	Encinitas Ranch Detention Basin 2X60"	Longitude	117.27833333333	Hydrologic Unit	904.51
Date	05/31/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	11:00	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	22.1	NH3-N (mg/L)	0.3	NO3-N (mg/L)	5	Ortho-PO4(mg/L)	2
pH	7.88	Turbidity (NTU)	6.35	Cond (mS/cm)	3.25		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	8.2

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: MBAS 0.5

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-16	Latitude	33.047222222222	**Watershed**	
Location	Westlake	Longitude	117.27916666667	Hydrologic Unit	904.51
Date	06/19/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	10:54	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3216

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Filling a Bottle or Known Volume

Volume (mL
Time (sec)
Flow (gpm)

Flowing Pipe

Diamete (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Comments: DAMP-NO FLOW FOR SAMPLE.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-17	Latitude	33.047777777778	**Watershed**	
Location	Sunshine Nursery (NE corner ENC/QGD)	Longitude	117.27833333333	Hydrologic Unit	904.51
Date	06/19/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	11:30	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3217,3218

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	21.7	NH3-N (mg/L)	0.6	NO3-N (mg/L)	7.5	Ortho-PO4(mg/L)	3.5
pH	8.4	Turbidity (NTU)	6.55	Cond (mS/cm)	1.474		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	NO DATA

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: MBAS 0.25 - TRICKLE FLOW, MAN HOLE 20FT. DEEP,CONFINED SPACE ,UNKNOWN FLOW.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-2	Latitude	33.042777777778	**Watershed**	
Location	Requeza @ Rancho Coastal Humane	Longitude	117.285	Hydrologic Unit	904.51
Date	06/19/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	12:50	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3219

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Filling a Bottle or Known Volume

Volume (mL
Time (sec)
Flow (gpm)

Flowing Pipe

Diamete (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Comments: PIPE DRY- NO SAMPLES

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-3	Latitude	33.048333333333	**Watershed**	
Location	Hwy 101 and B Street	Longitude	117.29416666667	Hydrologic Unit	904.51
Date	05/31/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	11:00	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☑ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	21.7	NH3-N (mg/L)	0.4	NO3-N (mg/L)	7.5	Ortho-PO4(mg/L)	0.2
pH	7.64	Turbidity (NTU)	2.67	Cond (mS/cm)	5.17		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	125

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: mbas 1.0, Bacteria only

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-4	Latitude	33.048055555556	**Watershed**	
Location	Second Street	Longitude	117.295	Hydrologic Unit	904.51
Date	06/13/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	11:00	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☐ Yellow ☑ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☑ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3181,3180,3179

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	21.1	NH3-N (mg/L)	0.8	NO3-N (mg/L)	3	Ortho-PO4(mg/L)	1.0
pH	7.8	Turbidity (NTU)	6.42	Cond (mS/cm)	0.877		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: MBAS 0.5, NO FLOW PONDED

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-5	Latitude	33.048611111111	**Watershed**	
Location	Cottonwood Creek Park South	Longitude	117.29	Hydrologic Unit	904.51
Date	06/14/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	10:15	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☐ No ☑ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3192

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	22.3	NH3-N (mg/L)	0.3	NO3-N (mg/L)	15	Ortho-PO4(mg/L)	0.1
pH	7.6	Turbidity (NTU)	3.28	Cond (mS/cm)	4.86		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	10

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: Bacteria samples were collected from upstream and downstream locations. MBAS 0.5, Fish were also present.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-6	Latitude	33.048888888889	**Watershed**	
Location	Moonlight Creek	Longitude	117.29	Hydrologic Unit	904.51
Date	06/13/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	12:15	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☑ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3188,

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	23.8	NH3-N (mg/L)	0.4	NO3-N (mg/L)	18	Ortho-PO4(mg/L)	0.1
pH	7.8	Turbidity (NTU)	1.29	Cond (mS/cm)	4.76		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	10

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: Bacteria only. MBAS 0.75

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-7	Latitude	33.055277777778	**Watershed**	
Location	Saxony Place	Longitude	117.28888888889	Hydrologic Unit	904.51
Date	06/14/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	12:37	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3198

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Filling a Bottle or Known Volume

Volume (mL
Time (sec)
Flow (gpm)

Flowing Pipe

Diamete (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Comments: NO FLOW-DAMP - No samples collected

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-8	Latitude	33.048333333333	**Watershed**	
Location	Third and B Street	Longitude	117.29611111111	Hydrologic Unit	904.51
Date	06/13/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	11:35	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☑ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo # 3187

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	23.9	NH3-N (mg/L)	0.3	NO3-N (mg/L)	10	Ortho-PO4(mg/L)	0.2
pH	7.6	Turbidity (NTU)	2.19	Cond (mS/cm)	5.05		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	50

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: MBAS 0.75. Bacteria only.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	ENC-9	Latitude	33.048055555556	**Watershed**	
Location	Enc Blvd @ Saxony/Oggi's Pizza	Longitude	117.28583333333	Hydrologic Unit	904.51
Date	06/12/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	14:10	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Filling a Bottle or Known Volume

Volume (mL
Time (sec)
Flow (gpm)

Flowing Pipe

Diamete (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Comments: NO FLOW-DAMP - no samples scollected

APPENDIX G

RANCHO SANTA FE SUB-BASIN 2007 DATA

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	RSF-1	Latitude	33.0375	**Watershed**	
Location	Encinitas Blvd @ Rancho Santa Fe	Longitude	117.23861111111	Hydrologic Unit	904.61
Date	05/24/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	11:25	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height ____ ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☑ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other ____

Photo Taken ☑ Yes ☐ No Photo # ____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	22.0	NH3-N (mg/L)	0.6	NO3-N (mg/L)	5	Ortho-PO4(mg/L)	2
pH	8.25	Turbidity (NTU)	1.96	Cond (mS/cm)	0.810		

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: TRICKLE FLOW, MBAS 0.25

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	RSF-2	Latitude	33.028611111111	**Watershed**	
Location	Trabbert Ranch Road	Longitude	117.24333333333	Hydrologic Unit	904.61
Date	05/24/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	12:30	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☑ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☑ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Filling a Bottle or Known Volume

Volume (mL
Time (sec)
Flow (gpm)

Flowing Pipe

Diamete (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Comments:

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	RSF-3	Latitude	33.048333333333	**Watershed**	
Location	Camino del Norte	Longitude	117.22611111111	Hydrologic Unit	904.61
Date	05/23/07	TB Page	1148	Hydrologic Area	Carlsbad
Time	12:08	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☐ Yellow ☑ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☑ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	19.5	NH3-N (mg/L)	0.2	NO3-N (mg/L)	2.5	Ortho-PO4(mg/L)	0.2
pH	7.83	Turbidity (NTU)	4.41	Cond (mS/cm)	1.777		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	no data

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: MBAS 0.5, rural residential

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	RSF-4	Latitude	33.034444444444	**Watershed**	
Location	La Bajada Dip	Longitude	117.23583333333	Hydrologic Unit	904.61
Date	05/23/07	TB Page	1167	Hydrologic Area	Carlsbad
Time	13:15	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (celsius)	19.2	NH3-N (mg/L)	0.2	NO3-N (mg/L)	5	Ortho-PO4(mg/L)	0.2
pH	7.86	Turbidity (NTU)	5.08	Cond (mS/cm)	6.20		

Analytical Lab Samples Collected? ☑ Yes ☐ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Filling a Bottle or Known Volume

Volume (mL	
Time (sec)	
Flow (gpm)	no data

Flowing Pipe

Diamete (ft.)	
Depth (ft.)	
Velocity (ft/sec)	
Flow (gpm)	

Comments: MBAS 0.25

APPENDIX H

LUX CANYON SUB-BASIN 2007 DATA

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LUX-1	Latitude	33.021666666667	**Watershed**	
Location	East Manchester @ El Camino Real	Longitude	117.25361111111	Hydrologic Unit	904.61
Date	05/24/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	14:30	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Filling a Bottle or Known Volume

Volume (mL
Time (sec)
Flow (gpm)

Flowing Pipe

Diamete (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Comments:

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ Routine Investigation ☐ IC/ID Follow-Up For

GENERAL SITE DESCRIPTION

(NAD83 decimal degrees to 5th place)

Site ID	LUX-2	Latitude	33.028333333333	**Watershed**	
Location	Sage Canyon Drive	Longitude	117.25527777778	Hydrologic Unit	904.61
Date	05/24/07	TB Page	1147	Hydrologic Area	Carlsbad
Time	14:45	Observer	ACJ	Hydrologic Subarea	
				Discharge Area	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Land Use (Secondary (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Park ☐ Open

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITION

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing Tide Height 0 ft.

Last Rain ☑ > 72 Hours ☐ < 72 Hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particles ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussles/ Barnacles ☐ Insects/ Algae ☐ Insects/ Snails ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow ☐ Yes ☑ No ☐ Irrigation Runoff Other

Photo Taken ☑ Yes ☐ No Photo #

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (celsius) NH3-N (mg/L) NO3-N (mg/L) Ortho-PO4(mg/L)

pH Turbidity (NTU) Cond (mS/cm)

Analytical Lab Samples Collected? ☐ Yes ☑ No

FLOW ESTIMATION WORKSHEETS

Flowing Creek of Box Culvert

Width (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Filling a Bottle or Known Volume

Volume (mL
Time (sec)
Flow (gpm)

Flowing Pipe

Diamete (ft.)
Depth (ft.)
Velocity (ft/sec)
Flow (gpm)

Comments:

APPENDIX I

2007 ANALYTICAL EXCEEDANCES

Appendix I
Analytical Exceedances, 2007

StationID	Date	Analyte	Qualifier	Result	Unit	fFieldBenchmark	Year	Comments
CBS-2	12-Jun-07	Conductivity		5.81	mS/cm	5	2007	Since the water was free of other pollutants, an upstream investigation for the elevated conductivity was not warranted and was not performed.
CBS-4	11-Jun-07	Conductivity		7.76	mS/cm	5	2007	Since the water was free of other pollutants, an upstream investigation for the elevated conductivity was not warranted and was not performed.
ENC-1	31-May-07	Conductivity		5.14	mS/cm	5	2007	Groundwater
ENC-10	13-Jun-07	Orthophosphate (PO4-P)		2.5	mg/L	2	2007	The water was free of other pollutants and there was no evidence of overland flow but there was some evidence of encampments. MBAS field analysis was below benchmark. Last year it was 4.0.
ENC-11	14-Jun-07	Conductivity		8.36	mS/cm	5	2007	Groundwater
ENC-11	14-Jun-07	Nitrate (NO3-N)		20	mg/L	10	2007	Groundwater
ENC-17	19-Jun-07	Orthophosphate (PO4-P)		3.5	mg/L	2	2007	The water was free of other pollutants. It was difficult to collect a sample because it was a trickle flow in concrete storm water conveyance,and the manhole was 25' deep. Last year it was 3.0.
ENC-3	31-May-07	Conductivity		5.17	mS/cm	5	2007	Groundwater
ENC-5	14-Jun-07	Nitrate (NO3-N)		15	mg/L	10	2007	Groundwater
ENC-6	13-Jun-07	Nitrate (NO3-N)		18	mg/L	10	2007	Groundwater
ENC-8	13-Jun-07	Conductivity		5.05	mS/cm	5	2007	Groundwater
ESC-1	25-May-07	Conductivity		8.02	mS/cm	5	2007	Since the water was free of other pollutants, an upstream investigation for the elevated conductivity was not warranted and was not performed.
ESC-2	25-May-07	Conductivity		6.94	mS/cm	5	2007	Since the water was free of other pollutants, an upstream investigation for the elevated conductivity was not warranted and was not performed.
LCS-1	30-May-07	Nitrate (NO3-N)		20	mg/L	10	2007	Observed an oily sheen - Conducted a cursory investigation and did not see any sources in the drainage basin -- Lab results for Oil and Grease were below benchmark. Nitrates -- it is a natural creek and irrigation runoff upstream.
LCS-5	30-May-07	Nitrate (NO3-N)		25	mg/L	10	2007	The water was free of other pollutants. There was evidence of irrigation upstream in drainage basin.
LCS-7	25-May-07	Conductivity		16.49	mS/cm	5	2007	Since the water was free of other pollutants, an upstream investigation for the elevated conductivity was not warranted and was not performed.
LOR	12-Jun-07	Conductivity		8.12	mS/cm	5	2007	Since the water was free of other pollutants, an upstream investigation for the elevated conductivity was not warranted and was not performed.

Appendix I
Analytical Exceedances, 2007

LUC-1	20-Jun-07	Nitrate (NO3-N)		16	mg/L	10	2007	groundwater - historical Nitrate exceedances
LUC-3	20-Jun-07	pH		9.3	pH	9	2007	Since the water was free of other pollutants, an upstream
LUC-4	21-Jun-07	Orthophosphate (PO4-P)		4	mg/L	2	2007	Bacteria exceedances as well. IC/ID investigation followed.
LUC-6	20-Jun-07	Conductivity		6.64	mS/cm	5	2007	groundwater
LUC-6	20-Jun-07	pH		9.5	pH	9	2007	ponded - high temperature recorded as well.
RSF-4	23-May-07	Conductivity		6.2	mS/cm	5	2007	Since the water was free of other pollutants, an upstream investigation for the elevated conductivity was not warranted and was not performed.
SEL-2	29-May-07	Nitrate (NO3-N)		15	mg/L	10	2007	Thick vegetation, low flow and suspected irrigation upstream but no overland flow was observed.
SEL-3	24-May-07	Conductivity		5.48	mS/cm	5	2007	Since the water was free of other pollutants, an upstream investigation for the elevated conductivity was not warranted and was not performed.

APPENDIX J
DISCUSSION OF NITRATE-NITROGEN AND CONDUCTIVITY EXCEEDANCES

Discussion of Nitrate-Nitrogen and Conductivity Exceedances

On September 25, 2007 the City of Encinitas received comments on the 2005-2006 Jurisdictional Urban Runoff Management Program Annual Report. This appendix has been prepared as a formal response to the following comment:

The Annual Report states that the above action-level nitrate and conductivity measurements, obtained at several monitoring sites, are attributable to inflow of groundwater. In future Annual Reports please provide data demonstrating that groundwater in the vicinity of the monitoring sites has elevated nitrate and conductivity levels. Also, indicate what the City would consider to be the 'above-groundwater' action level for these constituents, i.e., the levels that would warrant follow-up action in areas with elevated nitrate and conductivity.

This following discussion describes the information and data used by the City of Encinitas to identify the inflow of groundwater as a likely source for the action level exceedances of nitrate and conductivity measurements at six dry weather monitoring stations. The information presented includes background information, data collected throughout the course of the Dry Weather Program, historical land use data, and regional data. Sources of nitrate-nitrogen have been identified as primarily groundwater and fertilizer-laden nursery and residential irrigation run-off.

Background Information

The City of Encinitas has implemented a Dry Weather Monitoring Program for 6 consecutive years. The dry weather program includes field screening and sampling throughout the storm water conveyance system to identify illicit connections and the need for follow-up investigations. Dry weather monitoring is conducted annually at each selected location during the period from May 1 to September 30. The City monitors 52 sites within its jurisdiction. In addition to the dry weather monitoring in 2002, the city conducted an urban runoff water quality assessment of the Cottonwood Creek watershed. This project consisted of three consecutive weeks of sampling at ten sites that coincided with sampling at the dry weather monitoring stations. This assessment was performed to better characterize dry weather flows in the Cottonwood Creek Watershed.

Of the 52 monitoring sites monitored in 2007, 6 locations exceeded nitrate and/or conductivity action levels that were attributed to groundwater (2 other sites with exceedances were attributed to irrigation). Of these six locations, one is located in the Leucadia Sub-basin and the remaining five are located in the Cottonwood Creek watershed of the Encinitas Sub-basin. All monitoring stations are located near the topographic low point (near the coast) within their respective sub-basins.

The monitoring station in the Leucadia Sub-basin is located at the Ponto Beach detention basin. The Ponto Beach detention basin contributes flow to Batiquitos Lagoon. Typically, there is water present at this location throughout the year. For the past 6 dry seasons, water was present and nitrate consistently exceeded the action level at the monitoring station at Ponto Beach detention basin. Field records show water was ponded or flowing at the monitoring station but no overland flow was observed. Based upon follow-up investigations, the flow could not be directly connected with a human-induced source and, considering the hydrology and historical data of this monitoring station, the City determined that groundwater in the region was a most-likely source.

Discussion of Nitrate-Nitrogen and Conductivity Exceedances

Runoff from the Cottonwood Creek watershed enters Cottonwood Creek, which discharges into the Pacific Ocean at Moonlight State Beach. Cottonwood Creek is a perennial stream comprised of groundwater and urban runoff during the dry season. In the Cottonwood Creek Urban Runoff Assessment and Action Plan in 2002, the average dry weather flow was approximated at 100 gallons per minute (gpm) near the mouth of Cottonwood Creek as it passed beneath Third Street (City of Encinitas, 2002). Continual flow monitoring was performed at this location for a one-week period in November of 2001. During the 2001 monitoring, measured dry weather flows averaged approximately 65 gpm. The flow data was generally consistent and did not show diurnal fluctuations. A strong diurnal pattern may be indicative of urban runoff associated with early morning or evening over-irrigation. The absence of a diurnal pattern strongly suggests that groundwater makes up a significant portion of the creek flows. Groundwater extrusion on the slopes above the channel (along Hwy 101) also supports that groundwater is present in the creek (Pacific Southwest Biological Services, 2000).

For the past 6 dry seasons, water was present and nitrate and/or conductivity concentrations consistently exceeded the action levels at the monitoring stations located in the Cottonwood Creek watershed. Field records show water was ponded or flowing at the monitoring stations but no overland flow was observed. The flow could not be directly connected with a human-induced source and, considering the hydrology and historical data of this monitoring station, it was determined that groundwater in the region was a probable source. The Cottonwood Creek Urban Runoff Assessment also reported nitrate and conductivity measurements exceeding the action levels throughout the sampling period. This comprehensive and focused study distinguished groundwater as a likely source of these exceedances.

Summary of Detailed Analysis in 2004 Dry Weather Monitoring Report

In the 2004 Dry Weather Monitoring Report, the City discussed the nitrate-nitrogen and conductivity exceedances in detail. This discussion is summarized in the following paragraphs.

The nitrate-nitrogen exceeded water quality action levels in 22 of the 36 total analyses performed in 2004, 61%, as part of the 2004 monitoring. The majority of the exceedances were in the Encinitas Sub-basin, accounting for 12 of the 22, with other scattered in all other sub-basins except La Orilla Creek and Rancho Santa Fe. Much of the nitrate-nitrogen was attributed to groundwater in the region. This groundwater is typically rich in nitrate-nitrogen and low in other nutrients and metals. Groundwater usually has elevated conductivity levels and low bacteria concentrations. In contrast, irrigation water, often laden with fertilizer, contains elevated concentrations of ammonia and ortho-phosphate, has low conductivity, and typically higher bacteria levels. Using these parameters and knowledge of the conveyances and land uses around monitoring locations, it is possible to characterize the sources of nitrate-nitrogen exceedances in the City. Of the 22 exceedances, 9 appeared to be attributable to irrigation runoff in the drainage areas, 10 associated with groundwater influence, and three sites seemed to be influenced by a combination of both sources. In these three sites, the water quality data was uncharacteristic of pure groundwater or irrigation. The following tables and figures are taken directly from the 2004 Dry Weather Monitoring Report. Table 5.5 lists the sites with data and land use supporting the characterization of the nitrate-nitrogen exceedances.

Discussion of Nitrate-Nitrogen and Conductivity Exceedances

Table 5.5 Suspected Sources of Nitrate-nitrogen at Sites with Nitrate-nitrogen Exceedances	
Groundwater	**Irrigation**
ENC-1	ENC-4
ENC-3	ENC-9
ENC-5	ENC-10
ENC-6	ENC-14
ENC-8	ENC-15
ENC-11	ENC-17
CBS-1	CBS-3 N
LUC-1	CBS-3 S
LUC-7	ESC-2
ESC-1	LUX-2
	LCS-1
	LCS-2

Figures 5.4, 5.5, and 5.6 are scatter plots containing water quality data used to characterize the sources of nitrate-nitrogen exceedances.

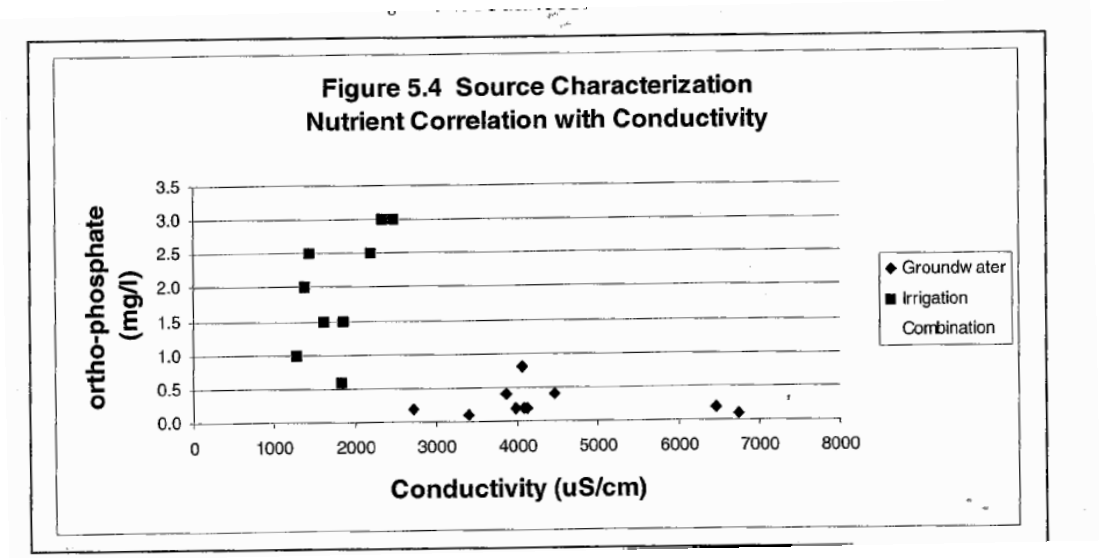
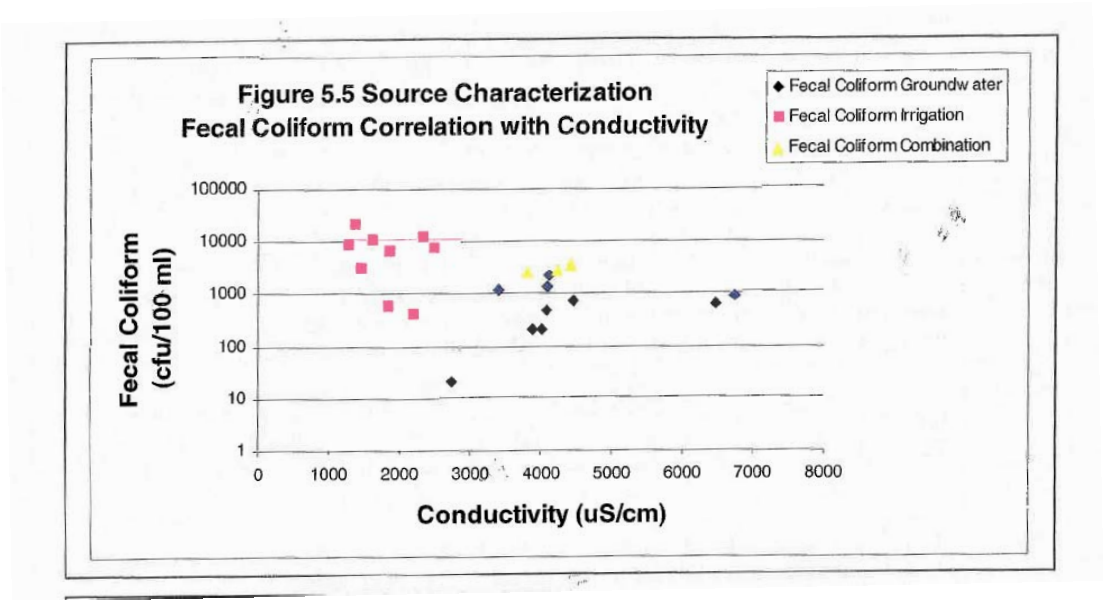
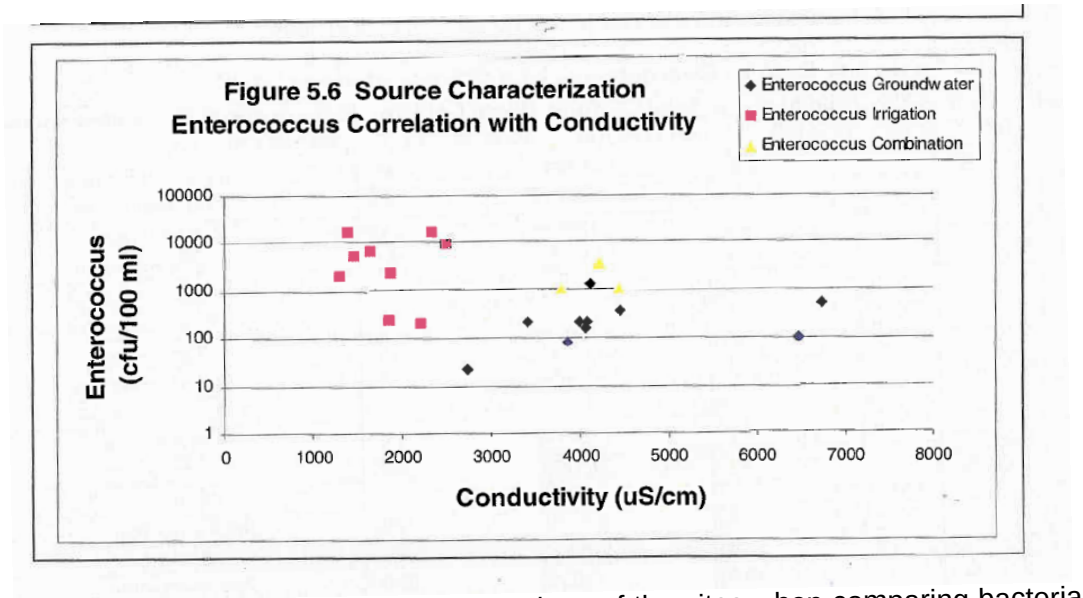


Figure 5.4 illustrates the relationship between ortho-phosphate concentrations and conductivity values. Results of the scatter show two distinct groups where water samples with conductivity measurements greater than 3000 uS/cm have ortho-phosphate concentrations below 1.0 mg/l. This is characteristic of groundwater, having high conductivity and low nutrients. The second grouping of samples shows those with conductivity below 3000 uS/cm containing ortho-phosphate concentrations ranging from 0.6 to 3.0 mg/l. Where higher nutrient levels are coupled with lower conductivity, irrigation is suspected to be a major contributor to water quality concerns.

Discussion of Nitrate-Nitrogen and Conductivity Exceedances





Figures 5.5 and 5.6 reflect similar groupings of the sites when comparing bacteria levels to conductivity measurements. As with the first grouping in Figure 5.4, the first grouping in Figure 5.5 and 5.6 have conductivity measurements greater than 3000 uS/cm and both have low bacteria concentrations, typical of groundwater. Conversely, in group two, the conductivity values are generally less than 3000 uS/cm with bacteria ranging from approximately 200-20, 000 cfu/100ml, indicative of irrigation runoff influencing the water quality at these locations.

Discussion of Nitrate-Nitrogen and Conductivity Exceedances

Table 5.6 lists the locations where nitrate-nitrogen exceeded the action level and depicts the data used to identify the suspected source.

Table 5.6 Data to Characterize NO_3-N Exceedances, 2004

Location	NO_3-N (mg/l)	NH_3-N (mg/l)	o-PO_4 (mg/l)	Conductivity (uS/cm)	Total Coliform (cfu/100 ml)	Fecal Coliform (cfu/100 ml)	Enterococcus (cfu/100 ml)	Suspected Source
ENC-1	25.0	0.1	0.2	4080	15000	1400	200	Groundwater
ENC-3	30.0	0.1	0.2	3990	4000	200	200	Groundwater
ENC-5	15.0	0.1	0.4	3860	18000	200	80	Groundwater
ENC-6	60.0	0.2	0.2	6470	7000	600	100	Groundwater
ENC-8	25.0	0.2	0.2	4120	47000	2200	1200	Groundwater
ENC-11	25.0	0.1	0.1	6740	12000	900	500	Groundwater
CBS-1	10.0	0.2	0.4	4450	2400	700	340	Groundwater
LUC-1	20.0	0.1	0.2	2730	100	20	20	Groundwater
LUC-7	10.0	0.2	0.8	4060	2200	450	150	Groundwater
ESC-1	15.0	0.2	0.1	3400	8000	1200	200	Groundwater
ENC-4	10.0	3.0	1.0	1293	75000	8200	2000	Irrigation
ENC-9	15.0	0.3	2.5	1459	11000	3000	5400	Irrigation
ENC-10	10.0	0.6	3.0	2490	27000	7200	9800	Irrigation
ENC-14	20.0	0.4	2.0	1388	82000	20800	16600	Irrigation
ENC-15	25.0	0.4	1.5	1876	13000	6200	2200	Irrigation
ENC-17	20.0	0.6	3.0	2340	100000	12000	16000	Irrigation
CBS-3N	15.0	0.1	0.2	3790	54000	2575	1100	Irrigation/Groundwater
CBS-3S	10.0	0.4	0.6	1850	2200	550	225	Irrigation
ESC-2	20.0	0.1	0.6	4230	29000	2800	3600	Irrigation/Groundwater
LUX-2	25.0	0.2	2.5	2210	11000	400	200	Irrigation
LCS-1	15.0	1.0	1.5	1633	57000	10400	6600	Irrigation
LCS-2	10.0	0.1	0.6	4430	8400	3400	1100	Irrigation/Groundwater

*shaded areas denote other action levels that were exceeded in the same sample

Regional Groundwater Data Showing Elevated Nitrate and Conductivity Levels

After discussions with the San Diego County Water Authority, Municipal Water District, San Diego County Department of Environmental Health, and Olivenhain Municipal Water District, it was determined that there is little groundwater quality data specific to Encinitas because the local water authorities do not consider Encinitas groundwater a viable source of drinking water. However, several studies and reports indicate elevated concentrations of nitrates and conductivity in groundwater basins throughout the San Diego region.

Elevated Nitrates in the Region

Encinitas has historically been home to growers and continues to support many nurseries throughout the City. The Leucadia sub-basin supports a number of commercial growers. The number of growers has decreased over the years and, although the nitrates continue to exceed the action levels, the concentrations have decreased. In the 2002 Cottonwood Creek Urban Runoff Assessment and Action Plan, agriculture-related land uses were found to comprise 17% of the Encinitas sub-basin. According to the article, “The ABCs of Water Quality Assessment in Georgia” published in the Stormwater Journal in March/April 2002, it is common to find elevated nitrates in groundwater in regions of agriculture and it is likely fertilizers and over irrigation are primary sources of nitrogen in the groundwater. In the publication, Nonpoint Sources of Pollution in Irrigated Agriculture by the University of California in partnership with Natural Resources Conservation Service, the following sources of nutrients were found from agricultural practices: fertilizers, biodegradation of crop residues, agricultural and municipal wastes applied to land, and waste generated directly by animals. This study concluded that irrigated agriculture is a significant source of surface and groundwater

non-point source pollution in California.

The San Diego region has elevated concentrations of nitrates in the groundwater as documented in the 1997 Groundwater Report by the San Diego County Water Authority and most recently in the 2007 Groundwater Assessment Study by the Metropolitan Water District of Southern California. According to the 2007 Groundwater Basin Reports, San Diego County groundwater basins have a range of nitrate levels above and below the drinking water standard of 10 mg/L. The Batiquitos Lagoon Basin and San Elijo Valley Basin were not discussed in detail in the groundwater basin reports because of limited available data. The San Luis Rey River Valley Basin, San Dieguito, and Lower Santa Margarita River Basins are located in the vicinity of the Batiquitos Lagoon and San Elijo Valley basins. The San Luis Rey River Valley Basin did not specifically list concentrations for nitrate, but did list nitrate as a constituent of concern. The San Dieguito River Basin had nitrate concentrations that ranged from 0.2 mg/L to 385 mg/L. The Lower Santa Margarita River Basin had nitrate concentrations within the drinking water standard. The dry weather monitoring stations in exceedance of the action levels had nitrate concentrations that range from 4.4 mg/L to 64 mg/L. This appears consistent with the aforementioned concentrations reported in nearby groundwater basins with agricultural-related land uses within their watersheds.

Additionally, the sites with nitrate-nitrogen exceedances attributable to groundwater have not been found to cause water quality problems in the receiving waters, as they do not contribute excessive bacteria, other nutrients, or metals to the waters downstream due to the natural filtration occurring within the sub-surface soils.

The City will continue to monitor these sample locations as a part of the Dry Weather Program. As standard procedure, the City conducts a cursory investigation to locate the source(s) of any exceedance. The City investigates each exceedance in the attempt to identify a human-induced source of the exceedance. The City's educational and commercial programs target irrigation runoff and include regular inspections of nurseries.

Elevated Conductivity in the Region

The elevated conductivity may be from various minerals entering the groundwater from the sedimentary soils in the region or seawater intrusion as a result of its proximity to the ocean. In the publication, Nonpoint Sources of Pollution in Irrigated Agriculture by the University of California in partnership with Natural Resources Conservation Service, it states that the amount of salt in the water depends on its source and groundwater that leaches through alluvial sediments derived from sedimentary rocks, which often occur along California's coast range, collects many minerals and have a much higher salt content.

The San Diego region has elevated concentrations of dissolved material (as measured by TDS) in the groundwater as documented in the 1997 Groundwater Report by the San Diego County Water Authority and most recently in the 2007 Groundwater Assessment Study by the Metropolitan Water District of Southern California. According to the 2007 Groundwater Basin Reports, San Diego County groundwater basins have TDS above the drinking water standard of 500 mg/L. The Batiquitos Lagoon Basin and San Elijo Valley Basin were not discussed in detail in the groundwater basin reports because of limited available data. The San Luis Rey River Valley Basin, San Dieguito, and Lower Santa Margarita River Basins are located in the vicinity of the Batiquitos Lagoon and

San Elijo Valley basins. The San Luis Rey River Valley Basin had TDS concentrations that ranged from 168 mg/L to 3,400 mg/L. The San Dieguito River Basin had TDS concentrations that ranged from 320 mg/L to 27,000 mg/L. It was reported that the San Dieguito River Basin was subject to seawater intrusion and, therefore, experienced increased salinity levels in the groundwater. The Lower Santa Margarita River Basin had TDS concentrations that ranged from 325 mg/L to 1,260 mg/L.

The amount of dissolved material (as measured by TDS) in a sample correlates to electrical conductivity. The following calculation is derived from the 20th edition of the Standard Methods for the Examination of Water and Wastewater; TDS = SC * 0.65 (TDS in mg/l and SC in um/cm). Based on converting conductivity measurements to TDS concentrations, the City of Encinitas dry weather monitoring stations with exceedances of the action level had TDS values that ranged from 1,523.6 mg/L to 4,628 mg/L. This appears consistent with the aforementioned concentrations reported in nearby groundwater basins subject to seawater intrusion.

Conclusion

In consideration of information summarized above including historic monitoring trends, constituent and geographically focused studies, background information, and literature and report reviews, the City of Encinitas has reasoned various nitrate and conductivity exceedances to groundwater influences. Notably, this deduction has not precluded the City from taking source determination actions to identify the likely contributor to an exceedance of nitrate or conductivity. As such, the City will continue to monitor the various sample locations as part of the ongoing Dry Weather Monitoring Program, and conduct cursory investigations to determine the source(s) of any exceedance, and conduct follow-up actions as warranted. The information presented and considered in this discussion will be used as the premise for determination of follow-up actions in the future if no conclusive source of nitrate or conductivity can be identified.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

Routine Investigation **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID		**Latitude**	(e.g., 33.41174)	**Watershed**	**Hydrologic Unit**	(e.g., 7.00)
Location		**Longitude**	(e.g., -117.35213)		**Hydrologic Area**	(e.g., 7.10)
Date		**TB Page**			**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time		**Observer**			**Discharge Area** (Optional)	

Land Use (Primary) (Check one only)	Residential	Commercial	Industrial	Agricultural	Parks	Open	
Land Use (Secondary) (Optional, greater than 10%)	Residential	Commercial	Industrial	Agricultural	Parks	Open	None
Conveyance (Check one only)	Manhole	Catch Basin	Outlet	Concrete Channel	Natural Creek	Earthen Channel	Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather	Sunny	Partly Cloudy	Overcast	Fog		
Tide	N/A	Low	Incoming	High	Outgoing	**Tide Height:**_____ft.
Last Rain	> 72 hours	< 72 hours				
Rainfall	None	< 0.1"	> 0.1"			

RUNOFF CHARACTERISTICS

Odor	None	Musty	Rotten Eggs	Chemical	Sewage	Other		
Color	None	Yellow	Brown	White	Gray	Other		
Clarity	Clear		Slightly Cloudy	Opaque		Other		
Floatables	None	Trash	Bubbles/Foam	Sheen	Fecal Matter	Other		
Deposits	None	Sediment/Gravel	Fine Particulates	Stains	Oily Deposits	Other		
Vegetation	None	Limited	Normal	Excessive		Other		
Biology	None	Insects	Algae	Fish	Snails	Mussels/ Barnacles	Insect/ Algae	Insect/ Snail	Other

Water Flow Flowing Ponded Dry Tidal

Does the storm drain flow reach the Receiving Water? Yes No N/A

Evidence of Overland Flow? Yes No Irrigation Runoff Other: _____

Photo Taken Yes No **Photo #** _____

Field Screening Samples Collected? Yes No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)			

Analytical Lab Samples Collected? **Yes** **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

Citation No._____

City of Encinitas

Administrative Citation

Date: _____ Time (Violation Observed)): _____

❍ **WARNING** ❍ 1st Citation $100 ❍ 2nd Citation $200 ❍ 3rd Citation $500 (and each subsequent violation within 12 months)

Payment of $_____is due no later than _____ (see reverse side for payment information)

Correction of the violation indicated below must be completed by: Date:_____
If you fail to correct the violation by this date, the next level citation may be issued or other enforcement action may occur.

Person Cited: Last First Middle	❍ **Property Owner**	❍ **Tenant**
	❍ **Business Owner**	❍ **Other**
Mailing Address: City State Zip Code	**Business Name (if applicable)**	
Violation Address:	**Assessor's Parcel Number**	

Code Section Violated	**Description of Violation**

Corrections Required:

Enforcing Officer: (Print Please)	**Phone Number**	**Signature:**	**Date:**
Person Cited: (Print Please)		**Acknowledgement of Receipt-Signature:**	**Date:**

Citation Served By:

❍ **In Person** ❍ **Posted on Property** ❍ **By Mail** ❍ **Other**

White: CODE ENFORCEMENT Canary: FINANCE Pink: FILE Goldenrod: VIOLATOR

Appendix H-5 **FY 2006-2007**

SRID	Incident Date	Category	Substances	Comments	Referred To	Request for Info	Sub Basin
33073	10/31/06	Residential	Over-irrigation runoff		OMWD		Lower Escondido Creek
33617	2/6/07	Commercial	No discharge	Property owner calling about regulations for power washing- Outside Encinitas jurisdiction		Power Washing Regulations	NA
33751	2/22/07	Municipal	No discharge	Part of a boat washed up on shore. Construction materials sitting on rocks by seawall	Encinitas Lifeguards		Leucadia
33752	2/23/07	Residential	Over-irrigation runoff	Possible broken water line	San Dieguito Water District		Leucadia
33782	2/28/07	Residential	No discharge	Mosquitos have inhabited storm channel next to house	County Vector Control Program		Leucadia
34226	5/2/07	Residential	Over-irrigation runoff		San Dieguito Water District		Encinitas
34449	5/29/07	Commercial	Water	Large amounts of water flowing down hill from unknown source	San Dieguito Water District		Encinitas
34483	5/31/07	Municipal	Tar/Oil	Tar noticed while walking beach near Moonlight	US Coast Guard		Encinitas
34495	6/4/07	Residential	Gas smell	First call regarding fuel spill off the coast	US Coast Guard		Leucadia
34535	6/7/07	Commercial	Sewage	Outside Encinitas jurisdiction	County of San Diego		NA

Appendix H-5 **FY 2006 - 2007**

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
31995	7/19/06	Residential	Paint wash water	NO		Discharge of paint - Mike Valles reported grey colored water discharge from s/d		WO#33308 : Origin of discharge is unknown.	None	Leucadia
31998	7/19/06	Residential	Sewer odor, no discharge	NO		Other discharge - sewer odor behind house, along creek; WWC has been on-site, City sewer system OK, met Michelle on-site 15:30, no odor, NH3-N<0.1		WO#33309 7/20/2006 10:55:58 AM Met Michelle on-site 15:30, no odor, NH3-N<0.1	None	Lower Escondido Creek
32010	7/21/06	Commercial	Over irrigation and grey water	NO		Discharge of water - Over Irrigation and Grey Water flooding the alley behind N COAST HWY 101 located near "F" Street Bookstore and La Especial Norte.		WO#33593 : 1/3/2008 8:21:51 AM No illegal discharges observed. Possible over irrigation only.	None	Leucadia
32011	7/19/06	Residential	Sewer odor, no discharge	NO		Odor in Storm Drain - sewer odor reported to Shawn Atherton, investigated with Eddie Foy and Sylvino Ruiz		WO#33320 : No discharge found at site.	None	Lower Escondido Creek
32024	7/21/06	Residential	Acoustic ceiling debris and water	NO		Discharge of construction debris		WO#33336 : Issued NOV 7/21/06 for immediate clean up.	NOV, Education	La Costa South
32044	7/14/06	Residential	White paint	NO		Accidental discharge of paint		WO#33609 : Clean up was completed at 8pm	Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32063	8/1/06	Residential	White powder residue	NO		Other discharge - Caller states that there is some sort of pollution runoff at the top of Foxglove Street and rolling down to Coneflower Street.		WO#33612 : Exact source unknown. Follow up message left with resident on 8/10/06.	None	Encinitas
32071	7/31/06	Commercial	Oil	YES	COTTON-WOOD CREEK	Discharge of oil. - Chevron tanker truck hit a light pole in Albertsons parking lot, crank case oil leaked onto pavement, 11 gallons max, estimated that 5 gallons were discharged to MS4 and Cottonwood Creek, raining lightly at the time, Cottonwood Creek flowing	Y	WO#33482 : 8/2/2006 5:04:55 PM Investigated creek at Third Street and at MLB and observed no evidence of oil, MLB posted as a result of bacteria indicator exceedances on Sat, July 29, 2006, signs up during incident. 8/8/2006 10:49:08 AM Citation Issued for $100, CW-080306 and cost recovery billed for $1868.88. Reported verbally to RWQCB on August 1, 2006 and in writing August 7, 2006.	Citation, NOV, Cost Recovery	Encinitas
32072	7/31/06	Commercial	Gasoline	YES	COTTON-WOOD CREEK	Discharge of liquid fuels. - Ford F150 P/U on freeway, tie down strap wrapped under vehicle and ruptured gas tank, pulled off I-5 at Santa Fe and into 7-11 parking lot, gasoline to storm drain	N	WO#33483 : 8/8/2006 10:51:40 AM Cost recovery billed for $433.38. Reported verbally to RWQCB on August 1 and in writing August 7, 2006.	NOV, Cost Recovery	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32074	8/3/06	Commercial	Concrete	YES	ENCINITAS CREEK	Discharge of concrete waste. - Reported driveway/sidewalk being paved & landscaped. Concrete & landscaping waste being washed into storm drain.	N	WO#33489 : 8/3/2006 1:59:25 PM Set up meeting with owner of company, M&W Landscaping 8/3/2006 2:01:17 PM M&W Landscaping, Naomi and William Stein, 3339 Silver Oak Ln, Vista, CA 92084, (760) 927-0113, (760) 727-0113, (760) 945-3443 8/9/2006 2:47:02 PM Met on-site with Bill (owner) and Brad (project manager) on Monday, Aug 7, 2006. Educational material and citation issued ($100) CW-080706.	Citation, Education	La Costa South
32076	8/1/06	Commercial	Sewage seep	NO		Other discharge - City Staff noticed leakage on their way to lunch at Leucadia Pizzeria. Noticed sewage pipe that connects to another fixture is dripping greywater/sewage into small puddle near storm drain at rear end of NCTD Parking lot and SE end of Moonlight Plaza.		WO#33585 : 8/9/2006 1:36:58 PM Photos taken on 08/01/06. Paul Hartman contacted Rancho Pacific Property Management on 8/03/06. 8/9/2006 1:40:53 PM Photos taken on 8/1/06. Inspector followed-up with Dennis French, Rancho Pacific Management manager for Moonlight Plaza on 8/3/06. 8/9/2006 2:55:26 PM Spoke with Dennis French, property manager, on 8/3/06 and leak has been repaired.	Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32078	8/3/06	Commercial	Tar/asphalt.	NO		Other discharge - Black topping-overlaying the asphalt in the Encinitas Ranch Towne Center without BMP at around 7:00 AM on 8/3/2006. Rain started and sand bags were placed around storm drains		WO#33552 : 8/8/2006 4:11:36 PM Dennis Thompson 619-871-4393 Magnum Sealing & Paving PO BOX 181588 Coronado, CA 93178 Sealing and striping until 8/14/06. Superintendent: Mike Advised Dennis to properly train all employees in storm water management and use appropriate BMPs at all storm drains. Sent Notice to Correct Work letter w/ 2 Construction, only rain educ. brochures to Dennis on 8/9/06. Also discussed BMPs with Sandy at Zelman Development.	NOV, Education	La Costa South
32110	8/9/06	Commercial	Soap & detailing materials for Mobile Car washing	NO		Discharge of vehicle wash water - Mobile Car washer detailing with no BMPs near the Gifted Preschool off Encinitas Blvd. near Rancho Santa Fe Road.		WO#33627 : Spoke to personnel at Century 21; advised that all future car washing required the appropriate implementation of BMPs	NOV, Education	Rancho Santa Fe
32114	8/4/06	Commercial	Cement washout	NO		Discharge of concrete waste. - Caller: Scott Masters, 619-995-5040, San Elijo Ave south of Swami's (overlook area), truck dumping cement onto R/R right of way, 4:00 (?) p.m.		WO#33960 : Rinsing outside of concrete truck. Minimal amount of rinsewater. No evidence of concrete in water. Spoke with homeowner, informed him of regulations.	Education	Encinitas
32126	07/11/06	Commercial	Wash water & oil down drains	NO		Discharge of water – Wash water discharge from equipment rental business located on N. Coast Hwy 101. Rebel Rents @ 1-888-887-3235.		WO#34613 : No discharge observed at time of inspection. Business has designated wash water area where water is recycled.	Education	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32130	6/22/06	Municipal	Odor in Storm Drain	NO		Other discharge - Odor complaint from Storm Drain insert referred from Public Works department. No discharge observed by inspector Padilla. No insert present.		WO#52940 :	None	Encinitas
32131	7/27/06	Commercial	Green liquid	NO		Other discharge - Illegal discharge of wash water		WO#33639 : Biodegradable cleaner being used	Citation Warning	Cardiff
32132	08/13/06	Residential	Unknown	NO		Other discharge - Complainant states that Sunday evening of 8/13/2006 someone dumped "something" in the road/gutter. Mr. McCabe states that there is "stuff" everywhere and also at the end of his driveway- discharge starts @ 147 Camino de Las Flores.		WO#33678 : 9/14/2006 6:01:07 PM Follow-up Inspection on 9/13/06 to make sure debris had been properly cleaned from curb line and gutter and no further discharges taking place.	NOV, Education	La Costa South
32135	7/20/06	Residential	Construction debris	NO		Discharge of construction debris - Mr. & Mrs. McDonald are renovating their driveway and creating a lot of debris and broken concrete. The construction debris has been left out uncovered on a sloped driveway that leads to the storm water conveyance system. Lack of proper BMPs.		WO#33644 : 8/14/06: Follow-up phone call with Ms. McDonald RE: NOV. BMPs were properly implemented and home owner has been verbally educated.	NOV, Education	Encinitas
32136	7/6/06	Residential	Water	YES	SAN ELIJO LAGOON	Discharge of water - Blown water meter. Potable Water.		WO#33948 :	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32152	7/11/06	Commercial		NO		Discharge of other wash water - Shell Car Wash of Encinitas (Mgr. Sonya) @ 1060 N. El Camino Real, Encinitas, CA (760) 943-9797 is power washing into storm drains.		WO#53742 : 12/31/2007 11:27:20 AM Full routine commercial inspection initiated on 7/21/06 due to complaint. 1/2/2008 10:57:06 AM See work orders 33776 and 33777 for routine inspection info.	None	La Costa South
32155	7/19/06	Residential	Construction debris	NO		Discharge of construction debris -		WO#33682 : NOV letter sent 7/21/06	Education, NOV	Encinitas
32156	8/5/06	Commercial	food, debris, wash water	NO		Discharge of food waste. - El Torito Restaurant at 1068 N. El Camino Real in Encinitas was caught discharging food and wash waters directly into the storm drain after they were told not to.		WO#34052 : 10/3/2006 4:31:32 PM Sent NOV on 8/17/06. Restaurant response letter received on 10/02/06.	Citation	La Costa South
32157	8/5/06	Commercial	Trash, ash, & debris.	NO		Other discharge - K.C. Tandoor had left a container of ash near the storm drain.		WO#33762 : Notice to Correct Work requiring a 30 day response letter due by 09/22/06. NTC response letter received via fax on 10/18/06	NOV	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32161	8/18/06	Commercial	Wash water	NO		Discharge of other wash water - Vons Store #2144 hired "Specialized" power washing company to clean the shopping carts and they may have not captured the wash water by the pictures taken. Store manager Steven Ko assured us that they know the codes & hire companies that abide also.		WO#34013 : 9/11/2006 12:17:35 PM Spoke to Specialized Cleaning Services, Office Manager, Jeff Stark at (800)996-2963. 7065 Thomas St., Buena Park, CA 90621. Specialized checked their invoices and stated that they did not clean the carts for Vons on that date and time. 9/11/2006 12:19:53 PM Notice to Correct Work Letter mailed to Vons Store #2144 on 9/11/06.	NOV, Education	La Costa South
32164	8/20/06	Residential	Paint	NO		Discharge of paint - 11:15 am on Sunday 8/20/06 complainant witnessed white paint being washed down the storm drain on Azure Way (private condo development) down to Clear Valley Way.		WO#33763 : Door hangers posted on 27 condos in the Vida Pacific Community Association.	Education	La Costa South
32183	8/24/06	Residential	Wash water?	NO		Discharge of construction debris - Kathy Weldon-City Staff noticed an illegal discharge at Jupiter & Neptune. Masih Maher & Inspector Padilla.		WO#33775 : 8/24/2006 1:20:48 PM Followed up with tenant, sent educational info.	Education	Leucadia
32187	8/24/06	Commercial	Smelly grease pit and trash area.	NO		Other discharge - City Staff was told by the Transit Police Officer at the "D" Street Coaster Station that many have commented on the stench coming from the trash & grease storage area.		WO#52936 : Spoke to Manager, Thomas over the phone on 8/29/06. Advised him to schedule an extra pick up with EDCO.	Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32221	8/29/06	Commercial	Trash	NO		Other discharge - Sandy Garay-Property Manager for Encinitas Ranch Towne Center has called the City Inspector for assistance with two of their tenants; Zibibbo Italian Bistro and KCs Tandoor Restaurant. The Security Guard on site noticed the mess behind trash area.		WO#34044 : 9/12/2006 11:38:41 AM Notice To Correct letter sent with a 30 day notice to clean up outdoor area. Follow up Inspection scheduled for 10/09/06 Follow Up: Parent Work order: 34044 12/6/2006 3:07:44 PM 30 day follow-up inspection to verify compliance regarding NOV sent to business owner on 9/07/06. All corrective actions have been met to clean up back area. 30 day response letter was not received.	NOV, Citation	La Costa South
32223	8/29/06	Commercial	Food & trash.	NO		Other discharge - Trash area needs to be kept clean at all times!		WO#34049 : 9/12/2006 12:17:33 PM Notice To Correct Work Letter sent on 09/05/06. Follow-up inspection to verify compliance scheduled for 10/09/06. 9/12/2006 12:19:37 PM Response letter due from restaurant no later than 10/09/06 9/27/2006 12:20:08 PM 30 day response letter received on September 27, 2006	NOV	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32225	8/29/06	Commercial	WATER	NO		Discharge of water - Investigation of proper BMPs. Excessive water.		WO#34053 : Research of Hansens Boardroom BMPs. (760) 753-6595. Sweeping rain water down street. Rep told to use a wet vac.	Education	Encinitas
32226	8/29/06	Commercial	Concrete discharge	YES	PACIFIC OCEAN	Discharge of concrete waste. - PBC @ 1340 Descanso Avenue, San Marcos, CA 92069 Ph (760) 510-1251 Fax (760) 510-1254 www.PBC-online.com Daniel Cortez Homeowner= Mr. Simpson	N	WO#34055 : 12/6/2006 3:54:10 PM Owner, Jack Saldate asked for an extension regarding response letter on 10/04/06. Extension granted to 10/26/06. Chamomile followed-up with Mr. Saldate on 10/31/06 he again stated he would send the letter. As of 12/06/06 letter has never been received.	Citation Warning, Education	Leucadia
32237	8/29/06	Commercial	White pasty substance.	NO		Other discharge - Jack Shawley phoned @ 5:52 pm on Tuesday evening to report an illegal dumping/discharge from a drainage pipe that drains to his property. He thinks it may be either Paul Ecke Nursery or the City recently relining corrugated pipe for rust prevention.		WO#33928 : 11/2/2006 1:07:40 PM Shading compound discharge located in storm drain conveyance system south of Paul Ecke Poinsettia Ranch. 11/2/2006 1:09:17 PM On-site meeting with home owner to investigate discharge.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32307	9/5/06	Commercial	Anti-freeze/oil	NO		Discharge of antifreeze - Odor reported in alley behind Encinitas Foreign & Domestic at 901 2nd St. (760)632-0830. Drains located outside rollup doors and a large basin drain appears to have oil & antifreeze in it.		WO#53751 : 12/31/2007 12:02:40 PM A drive-by inspection was conducted on 9/5/06. No illegal discharge observed. A full commercial inspection was scheduled for 10/31/06 based on the findings that no antifreeze was observed in the outdoor trench drain located in the alley. 12/31/2007 12:05:30 PM Full routine commercial inspection initiated on 10/31/06 and captured in WO# 34824. -MP	None	Encinitas
32341	9/1/06	Commercial	5-8 gallons of diesel fuel	NO		Discharge of liquid fuels. - 5-8 Gallons of diesel fuel spill in Target parking lot at Encinitas Towne Center from a Sysco semi truck on Friday, September 1, 2006 at approx. 5:25pm.	Y	WO#34041 : 9/11/2006 10:24:43 AM Cost recovery needed by Streets & Fire Departments for absorbent pads and kitty litter spill kits. 9/12/2006 8:39:58 AM Fire Department observed and responded to accidental diesel spill. City Streets Dept and Clean Water Program notified. Spill contained and cleaned up with use of absorbent pads in storm drain box and kitty litter on the pavement. No discharges to the pipe.	None	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32343	9/7/06	Residential	Chemicals; fertilizers & pesticides etc.	NO		Other discharge - Drainage problems from Nursery to homeowner. Irrigation along with chemicals i.e. fertilizers/pesticides flow into a brow ditch behind 1223 Crestview. Possibly Browns Plants @1212 Lake Drive. Complainant states water/chemicals flow off property.		WO#34875 : 2/27/2007 5:22:01 PM NOV Letter sent to Mr. Kovach on 11/13/06 was never received. NOV letter was re-sent on 1/22/07.	NOV, Education	Cardiff
32345	9/5/06	Commercial		NO		Discharge of other wash water - Complainant called @ 5:10 PM on 9/5/2006 to report large amounts of oil being dumped into storm drain; pictures taken. Caller phoned the next morning, 9/6/2006 @ 7:59 AM to retract complaint because it was only soap from a mobile dog groomer.		WO#34095 : 9/14/2006 5:51:10 PM Homeowner called regarding the door hanger this afternoon. Explained the City's storm water codes to him and asked him to call us to report any future discharges or more information on the mobile dog groomer.	Education	Leucadia
32346	9/7/06	Residential	Stucco residue	NO		Discharge of construction debris - Caller states that homeowner hired a contractor to stucco outside of house. Contractor washes stucco residue down the street. Caller also believes that there are several illegal storm drains?/outfall pipes? on Loch Lommond.		WO#34548 : NOV letter sent to resident	NOV, Education	Cardiff
32348	9/11/06	Residential	Rats & Glass.	NO		Other discharge - Caller states that neighbor is putting glass and rats in storm drain. Caller also has video footage of incident.		WO#34549: Upon inspection, nothing out of the ordinary observed in storm drain. Due to past history of mental incompetence, responsible party was not approached. Referred to Code Enforce.	None	Cardiff

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32356	9/7/06	Residential	Pesticides/ Fertilizers = green & white discharge.	NO		Other discharge - Caller states neighbor is applying chemicals to lawn and garden and then watering profusely with significant runoff that is colored green and white. Chemicals have stained street. Continuous over-irrigation observed by caller.		WO#34624 : Over irrigation letter sent via certified mail to homeowner, Mr. Barry Pedler on 10/18/06.	Education	Leucadia
32357	9/12/07	Residential	Liquid/ construction debris	NO		Other discharge - Complainant states that 1055 Eolus has pipes (French Drains?) that pour out into the street. Complainant is not sure exactly what is coming out of the pipes.		WO#34145 : : 32357, 9/19/2006 1:56:28 PM Asked Construction Inspector to inform contractor or home owner that construction stockpiles and materials need to be covered up at the end of the day.	Education	Leucadia
32358	9/12/06	Residential	Dirt, trash, concrete, lumber, etc.	NO		Discharge of construction debris - Complainant states that had been a recent build of a fire pit & a waterfall and the home owners have left large piles of dirt, trash, concrete, and lumber around their property since last April.		WO#34138 : currently remodeling home but there were no discharges evident. She is also in the pre-construction phase of building on an adjacent lot. Construction materials and stockpiles present but they are located within property boundaries	Education	Leucadia
32359	9/12/06	Construction	Sediment	NO		Discharge of construction debris - Problem with a discharge line.		WO#53105: Construction company failed to implement appropriate BMPs at construction site. Issues resolved immed.	Education	Encinitas
32436	9/14/06	Commercial	Wash Water	NO		Discharge of other wash water - VIGILUCCIS TRATTATORIA had a milky substance flowing into their storm drain.		WO#34147 : Full inspection completed 9/15/06. Storm drain was cleaned out.	Citation Warning	Encinitas

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32442	9/15/06	Commercial	Wash water	NO	COTTON-WOOD CREEK	Discharge of vehicle wash water - Complainant refused to leave his name and states that Terry has been performing mobile car detailing at Westlake & Enc. Blvd. all week and not capturing the wastewater.		WO#34107 : Containment and business license required prior to resuming work	Citation Warning, Education	Encinitas
32658	9/25/06	Residential	Groundwater, sub-surface irrigation runoff	NO		No storm water issues. Small amount of water seeping into planter box sub-surface. Likely from irrigation next door or possibly washing machine discharge. County has previously inspected for		WO#34420 : 10/2/2006 11:07:34 AM No storm water issues. Civil matter. County has previously inspected for greywater issues and is aware of possible problem	None	Encinitas
32663	10/2/06	Residential	Water	YES	COPPER CREEK	Discharge of irrigation water - City Staff noticed water in the brow ditch. Olivenhain Municipal Water District to be notified.	N	WO#34629 : 12/7/2006 2:41:00 PM 11/01/06-Irrigation Discharge is not an illegal discharge however, the discharge has ceased.	Education	Lower Escondido Creek
32693	10/9/06	Commercial	Water & mud	NO		Discharge of water - Complainant states that next door neighbor has drainage problem or broken sprinkler or pipe. Large amounts of water and mud in the street and on his property @ 227.		WO#36496 : 3/14/2007 3:31:28 PM 2/9/07: Inspector spoke to complainant, old him over-irrigation was a civil matter, would refer his complaint to property owner next door. 3/9/07: Complainant wants to know if inspector had contacted property owner. 3/13/07: Inspector called properly owner and left message. He called back, gave him complainant's contact info.	None	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
32714	10/11/06	Residential	Unknown; oily, rust colored substance.	YES	ENCINITAS CREEK	Other discharge - Caller states neighbor has strange odorous substance discharging from sidewalk drain into street and subsequently the nearby storm drain. Substance is oily and rust colored.	N	WO#34550 : Discharge ceased. Discharge similar to some groundwater observed in the area on past complaints. Homeowner was home sick, could not talk to inspector. Left doorhanger and business card.	Education	La Costa South
32726	10/12/06	Residential	Concrete/Cement	Unknown	SAN ELIJO LAGOON	Discharge of concrete waste. - Concrete is in the street @ Southeast corner of Mackinnon and Ocean Crest. Someone got carried away with cement on the Southeast corner of Mackinnon and Ocean Crest. It is running down the street. It would appear they are washing off their waste in the street.		WO#34555 : 10/12/2006 8:48:15 AM Concrete discharge observed from backyard drain. Work in backyard area including recent concrete work observed, new patio, fire pit, BBQ, etc. Observed power washing residual in driveway.	NOV, Citation, Education	Cardiff
32777	10/3/06	Commercial	Water and sediment.	NO		Accidental discharge of sediment and water.		WO#34551 : Prompted immediate inspection of construction site	None	Encinitas
32778	10/9/06	Commercial	Sediment	NO		Other discharge - Piles of dirt collected near environmentally sensitive area at Rancho Coastal Humane Society, 389 Requeza Street. #(760) 753-6413 Director= Jim Silveira #(619) 820-0455		WO#53107 : Illegal fill being added to the property. Fill was removed over a two week period. Responsible Party worked with Construction Inspector to make sure that compliance was met.	Education	Encinitas

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32833	10/15/06	Residential	Sewage	NO		Discharge of sewage - Caller noticed sewage leaking from neighbor's sewer cleanout pipe that leads to street. Toilet paper and such is in the middle of the street where water typically drains to.		WO#34631 : 10/16/2006 3:41:28 PM Caller notified neighbor that they had a leak in their sewer pipe and a plumber was called. When the plumber came out to tighten the pipe, the caller believes that the plumber accidentally opened up the pipe more. Issues resolved on 10/17/06.	None	Cardiff
32862	10/16/06	Commercial	Vehicle wash waters	NO		Discharge of vehicle wash water - City Staff noticed soapy vehicle wash waters coming from Valero Gas Station and discharging out into the street and into the storm drain.		WO#34633 : 12/19/2007 5:13:33 PM Valero Citation paid on 10/24/06 and all BMPs have been implemented. Case closed on 10/24/06.	Citation	Cardiff
32996	10/24/06	Municipal	Debris. Wood, rusty nails, etc.	NO		Other discharge - Pedestrian bridge that crosses drainage culvert for NCTD has been destroyed and debris has been left behind; wood pieces, rusty nails, etc.		WO#53108 : 10/25/2006 2:43:31 PM Investigated and referred to Streets Division of PW, for clean-up of debris in channel. Upon inspection on 9/21/06 all debris had been removed and channel was clean.	None	Cardiff

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32997	10/23/06	Construction	No discharge, concerns about perimeter controls	NO		Discharge of construction debris - No discharge occurring but demo in progress and met with superintendent yesterday to get some erosion control measures in place. Need to document.		WO#53138 : 10/25/2006 2:23:01 PM Met with contractor and erosion control specialist 10/ 23. Site needs BMPs during demolition. Re-inspection on 10/24, perimeter controls have been implemented as requested. Check dams (gravel bags) are in drainage ditch along north property line.	Education	Leucadia
33037	10/26/06	Commercial	Vehicle Wash waters	NO		Discharge of vehicle wash water - Caller phoned the Clean Water Program's inspector to notify of Mobile Car washer discharging for a second time.		WO#34827 : No discharge observed at time of inspection	None	Encinitas
33038	10/26/06	Commercial	Vehicle Wash waters	NO		Discharge of vehicle wash water - Mobile Car washer also complained about discharge.		WO#34830 : 10/31/2006 2:49:46 PM No discharges observed at time of inspection.	None	Encinitas
33039	10/26/06	Commercial	Sidewalk & Building wash waters	NO		Discharge of building or sidewalk wash water - Inspector driving by and noticed owner of El Torito Meat Market washing down driveway into street.		WO#34874 : Spoke to owner on site regarding implementation of appropriate BMPs. Administrative Citation # CW-102606 given on 10/26/06. Sent NOV on 11/2/06.	Citation, NOV	Leucadia

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33056	10/30/06	Residential	Yard waste & buckets of "Something"	NO		Discharge of yard waste - Complainant states that her and her husband have witnessed neighbors empty cans and buckets of "stuff" into storm drain.		WO#36257 : 10/30/2006 4:46:04 PM Drain in front of 2038 Bulrush is being used for disposal. Yard waste and buckets of debris etc. 2/20/2007 4:05:38 PM NOV Letter sent certified mail on 02/07/07. NOV Letter received by Ms. Dorothy Fortman on 02/09/07	Education, NOV	Cardiff
33075	11/1/06	Residential	Trash, Debris, Sediment	NO		Discharge of construction debris - Call referred to construction Inspector assigned to the project. Storm water to also drive-by to double check job site.		WO#36083 : 2/7/2007 3:39:16 PM Site has been cleaned up per Construction inspector. Grading Permit # 9283GI.	None	Leucadia
33130	11/3/06	Residential	Septic tank fluid	NO		Discharge of sewage - Anonymous caller phoned on the Friday off, November 3, 2006 at 7:48 AM. No name or number left to verify report or location. Report of someone dumping septic tank into street.		WO#34920 : 11/9/2006 9:27:56 AM No discharge observed along the 700 block of Requeza. 10/16/2007 9:11:17 AM ENC sub basin	None	Encinitas

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33140	11/8/06	Commercial	Sewage overflow	NO		Discharge of sewage - Sewer overflow in Vons parking lot at 453 Santa Fe Drive. Grease trap blockage -most probable cause.		WO#34943 : 11/9/2006 9:33:21 AM 9:10 AM Vactor Truck-Shut Down Water 11/13/2006 11:31:53 AM Public Works Dept on site to clean overflow. Vons contractor, CSC Construction Services serviced the clogged drain on-site.	Citation Warning	Encinitas
33141	11/9/06	Commercial	Vehicle Wash Waters	NO		Discharge of vehicle wash water - Call came in Thursday, November 9, 2006 at approx. 11:45 PM reporting of mobile car washer not capturing water & soap. Runoff is running down street to storm drain.		WO#34950 : Mobile Detailer had BMPs deployed but they were not properly implemented.	NOV, Education	Encinitas
33170	11/16/06	Commercial	Antifreeze	NO		Discharge of antifreeze - Inspector drive-by caught Moonlight Motors discharging antifreeze into storm water conveyance system.		WO#35191 : $100 Citation issued 11/16/06. Routine commercial inspection scheduled for 11/28/06.	Citation, Education	Leucadia
33174	11/16/06	Residential	Construction waste/debris	NO		Discharge of construction debris Storm water inspector drove by during Lagoon Monitoring and saw large pile of construction debris near lagoon waters.		WO#53139 : Follow-up on 12/08/06 revealed that all corrective actions have been implemented.	Education, NOV	Cardiff

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33177	11/20/06	Commercial	Sidewalk wash waters & automotive wash water	NO		Discharge of other wash water - Caller states that neighborhood business is polluting. Others in her neighborhood have also noticed and have not called. Inspector to phone caller for more information.		WO#35195 : 4/18/2007 11:25:03 AM $300.00 Check received on 11-27-06	Citation, NOV, Education	Leucadia
33201	11/22/06	Residential	Water	NO		Discharge of water - Caller informed the City that large amounts of water are running down the street @ Hillcrest Drive in Leucadia. Cross street is Vulcan.		WO#52934 : De-chlorinated pool water. No illegal discharge.	None	Leucadia
33222	11/28/06	Construction	Sediment	NO		Discharge of construction debris - Inspector drive-by noticed lack of proper BMPs on construction site. Engineering Construction inspector was directed to site and conducted an inspection.		WO#35188 : Lack of BMPs was corrected.	None	Leucadia
33224	12/7/06	Commercial	Sewage	NO		Discharge of sewage - Private sewer lateral has broken. Public Works has cleaned up mess.		WO#53140 : Jaime Fernandez (760) 482-5024 from AMERICAN PLUMBING phoned in at 10:10 am to explain that a floor in office building at 580 Second Street flooded w/sewage. They are waiting there with cameras to televise line. Indoor discharge only.	None	Encinitas

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33242	11/28/06	Construction	Construction debris	NO		Discharge of construction debris - Caller phoned to report a construction site problem. Storm water referred to Construction Inspector in Engineering		WO#53149 : 11/30/2006 4:19:01 PM Eng. Inspector contacted owner of sire and required cleaning on ll/28/06 @ 2:00 pm. Re-inspection construction inspector. on 11/29/06, cleanup complete.	None	Encinitas
33291	12/5/06	Commercial	Pressure Washing	YES	COTTON-WOOD CREEK	Discharge of other wash water - Call from SDWD, 12/5/06 at 1530. NE Corner of 101 and B Street/Enc Blvd, pressure washing.	N	WO#35190 :12/7/2006 4:32:34 PM Power washing parking lot with no BMPs. Issued NOV and warning on 12/7/06 and 12/5/06.	Citation Warning, Education, NOV	Encinitas
33294	12/5/06	Residential	Vehicle wash water	NO		Discharge of vehicle wash water - Water District (SDWD) phoned to inform us of discharger at Third and "J" Street who is washing out large RV with soap and bleach.		WO#35169 : Determined to be residential car washing. No violation.	Education	Encinitas
33315	11/21/06	Commercial	Wash water with car grease & fluids	NO		Discharge of other wash water - Caller phoned on 11/21/2006 regarding business washing grease/sludge down street and it is coagulating in front of her house and driveway. Caller requested special street clean.		WO#35942 : 1/31/2007 9:30:36 AM Special sweep request sent to Streets on 11/28/06 at 13:12pm. 1/31/2007 9:47:07 AM No new complaint inspection was initiated because complaint had been dealt with on SR# 33170 & SR# 33177.	None	Leucadia

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33318	12/8/06	Commercial	Water	NO		Discharge of water – Caller phoned to alert us that many gallons of water are running down Saxony Road from Saxony and Seacrest Lane at a fire vent.		WO#52933 : Potable water; SDG&E on site to address discharge immediately	None	Encinitas
33336	12/13/06	Commercial	Sewage	NO		Discharge of sewage - At approximately 11:30 am on Wednesday Morning, the Clean Water Hotline received a call from a Construction Inspector that a private sewer lateral on El Camino Real & Mtn. Vista had busted and sewage leaked onto street.		WO#53435 : 12/14/2006 9:13:06 AM Contacted Leucadia Wastewater District and they were already on the scene. 12/18/2007 11:28:23 AM 12/13/06 Leucadia Wastewater cleaned sewage with Vac-con. Encinitas Wastewater cleaned out the 6" and 24" storm drains on the east side of N. El Camino Real. 12/14/06 Pacific Drain Services jetted the sewer lines. Shopping Center placed on quarterly sewer maintenance schedule. RWQCB notified of spill and cleanup in writing on 12/13/06.	Citation Warning, NOV	La Costa South
33337	12/14/06	Residential	Paint	NO		Discharge of paint - Caller left insufficient message with the Code Enforcement Department regarding his neighbor that dumped paint on driveway and into the street. 12/28/06 caller finally gave address of incident.		WO#36975 : Resident failed to implement BMPs. Sent NOV letter with educational info.	Education, NOV	Leucadia

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33338	11/22/06	Residential	Pool Water	NO		Discharge of water - Caller, wanted to notify the Clean Water Program that large amounts of water are running down the street.		WO#52934 : De-chlorinated pool water. No illegal discharge. See SR 33201.	None	Leucadia
33356	12/10/06	Residential	Sediment	NO		Other discharge - Caller, Pat, states that neighbors have been discharging landscape materials and dirt/sediment into storm drain near Piraeus. Caller & other neighbors have been shoveling the dirt away from drain. Pat also thinks storm drain goes to canyon.		WO#53170 : Resident failed to implement erosion control BMPs. Follow up investigation 1/30/07. All corrective actions have been implemented.	Citation Warning, NOV, Education	Leucadia
33441	1/3/07	Commercial	Soapy vehicle wash water	NO		Discharge of vehicle wash water - Mobile Car washer, was caught washing cars without containing soapy wash water		WO#52931 : Verbal warning given on phone; references provided via email on 1/23/07.	Education	Encinitas
33452	1/5/07	Residential	Sump Pump Water	NO		Other discharge - Caller stated that the 2nd house on the left on Lower Lake Court was under construction and has been ongoing for a while. SUMP Pump discharging large amounts of water and sediment directly into the street drain.		WO#52929 : Left door hanger. Resident was pumping out groundwater.	Education	Cardiff

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33499	1/15/07	Commercial	Paint	NO		Discharge of paint - Complainant contacted the after hours storm water hotline to notify City of discharge.		WO#35762 : 1/17/2007 9:50:44 AM Public Works responded and supplied sandbags to restaurant employees. Spill was contained and cleaned up by 1:30 p.m. 2/20/2007 11:55:23 AM Spoke to Beach City Burrito Owner at 9:42 am. she inquired about cost recovery fees and agreed to send a check postmarked on 2/20/07 to the City of Encinitas. 2/20/2007 3:54:19 PM Storm Water training log received via fax on 2/20/07. 12/26/2007 10:52:10 AM Pmt received 2/22/07.	Citation, Cost Recovery, Education	Cardiff
33538	1/17/07	Commercial	Irrigation Runoff	NO		Discharge of other wash water - Caller states that the nursery next door is discharging runoff into the brow ditch adjacent to their property. They are also concerned that they have seen individuals in haz mat suits near the brow ditch.		WO#35854 : Annual commercial inspection performed 1/23/07. No illegal discharges found.	None	Leucadia
33543	1/15/07	Residential	Sediment	NO		Discharge of yard waste -		WO#35873 : Sediment from landscaping activities in the curb line.	Education	La Costa South

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33626	1/30/07	Residential	Swimming pool water	NO		Discharge of water - Failure to implement BMPs. discharged swimming pool into neighbor's yard.		WO#52906 : 11/28/2007 11:22:34 AM Swimming Pool Discharge Letter mailed to residents on 2/12/07.	NOV, Education	Lower Escondido Creek
33627	1/30/07	Commercial	Mobile car detailers	Unknown	COTTON-WOOD CREEK	Discharge of vehicle wash water - Failure to implement appropriate BMPs.		WO#53188 : Spoke to property manager at Colliers Int'l	Education	Encinitas
33628	1/30/07	Commercial	Possible antifreeze or propylene glycol	NO		Other discharge - Leaking into street and gutter		WO#53007 : 12/5/2007 11:26:24 AM NOV letter sent 2/7/07.	NOV, Education	Encinitas
33670	2/5/07	Commercial	Grease	YES	SAN ELIJO LAGOON	Other discharge – Plumber contacted us regarding grease being dumped into drain in trash enclosure.	N	WO#52910 : Immediate mitigation required. Follow up cleanup completed 2/14/07. Nortified RWQCB.	Citation, Education, NOV	Cardiff
33685	2/15/07	Commercial	Water	NO		Discharge of water - Broken pipe- water draining into the street		WO#53244 : No illegal discharges observed, potable water discharge from broken water pipe. Pipe was fixed same day.	None	Cardiff
33726	2/17/07	Residential	Silt/Sediment	NO		Discharge of construction debris - Silt barrier failed during rain at home construction site- silt leaking onto street.		WO#36491 : 3/14/2007 11:30:32 AM Complaint referred to Construction Inspector. Silt fence re-established 3/2/07. Silt removed from pavement and drainage way.	None	Rancho Santa Fe
33728	2/20/07	Commercial	Oil/water mixture	NO		Discharge of oil. - Resident is pumping oil/water mixture into street.		WO#36375 : Failure to implement BMPs. Discharge stopped/cleaned up immediatelv.	Citation, NOV, Education	Encinitas

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33760	2/26/07	Commercial	Water/Dirt	NO		Discharge of water - Men working on Ki's sprinkler system, dirt falling into street.		WO#52905 : Ki's called to say it has been taken care of and the men cleaned it up.	None	San Elijo Lagoon
33761	2/26/07	Residential	Tile slurry	NO		Other discharge - Home construction- tile slurry discharging near SE Lagoon.		WO#36362 : Resident called to say it is now cleaned up.	Education	Cardiff
33809	3/5/07	Commercial	No discharge-Request for grease rendering info	NO		Other discharge - Temple Solel events coordinator called to get grease rendering info.		WO#36490 : 3/14/2007 11:03:53 AM Sent Events Coordinator a fax with references to grease renderers and spill containment vendors on 03/05/07. 03/06/07: Message received stating that Atlas pumping will provide grease bin. 03/14/07: follow-up phone call received, stating Events Coordinator obtained spill palette from Home Depot.	Education	Lux Canyon
33810	3/5/07	Commercial	Water	NO		Discharge of water – Complainant lives at 800 Leucadia Blvd. Water runoff coming into her yard from grower's property, eroding ground. Manager said he'd connect directly to culvert, but never did.		WO#53506 : 12/19/2007 3:04:23 PM Met with complainant at 800 Leucadia Blvd to investigate complaint on 3/5/07. Responsible Party at 834 Leucadia Blvd. was not available. Complaint was resolved on 12/19/07 (FY 07-08). A Follow-up service request to be completed for FY 07-08.	None	Encinitas
33813	3/5/07	Residential	Paint	NO		Discharge of paint wash water		WO#39376 :	Citation Warning, NOV, Education	La Costa South

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33821	3/7/07	Residential	Concrete/granite dust mixed with water	NO		Discharge of construction debris - construction waste, concrete-like dust mixing with water, running down Fourth St. into Moonlight.		WO#52705 : 11/8/2007 9:53:01 AM Called Construction Inspector to investigate. He spoke to workers, discharge cleaned up. Verbal warning.	Education	Encinitas
33846	3/13/07	Commercial	Grayish-greenish and smelly	NO		Other discharge - Wastewater called in reporting line of discharge coming from Trattoria and foul odor coming from storm drain. grayish liquid visible in storm drain		WO#52904 : : 33846, Routine commercial inspection scheduled for 3/15/07. Discharge possibly coming from next door construction project.	None	Cardiff
33850	3/13/07	Residential	Black chunky water	NO		Discharge of water - Swimming pool installation. black chunky water running down street. house is at the top of the horseshoe on Orange Blossom.		WO#52701 : Discharge stopped, homeowner notified of regulations.	Education	La Costa South
33875	3/16/07	Residential	pool water	YES	BATIQUITOS LAGOON	Discharge of water - draining pool water into the street.	N	WO#36536 : No illegal discharge.	Education	Leucadia

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33900	3/20/07	Residential	Diatomaceous Earth	NO		Discharge of water - Pool construction/maintenance. Water/diatomaceous earth running into Park Place Property, down Evergreen Drive.		WO#36846 : 4/5/2007 10:53:24 AM Sent NOV letter on 3/22/07 to Resident. Letter returned undelivered. 8/17/2007 2:45:40 PM NOV Letter dated on 5/14/07 was hand delivered to home on 5/29/07.	NOV, Education	Cardiff
33908	3/20/07 3pm	Commercial	Sediment	NO		Other discharge – Complaint about discharge of sediment into storm drain. Construction Inspector for the site will investigate.		WO#53008 : 12/5/2007 11:54:50 AM Construction inspector spoke with owner on 3/20/07. He graded the land between curb and sidewalk. Turned on sprinklers to wet soil before planting sod. Timer ended up being set for 4 hours, instead of 4 minutes like he thought, so dirt began running down street. he will have it cleaned up by the end of the day.	None	Encinitas
33951	3/22/07	Residential	Motor oil	NO		Discharge of oil. - Resident changed oil and dumped it down private drain in his backyard. It discharged into street and ran down Sprucewood, down Willowspring. Water may have been poured down drain as well, which helped oil travel so far.		WO#36848 : 4/5/2007 11:28:52 AM Discharge stopped. Vactor truck responded, discharge cleaned up. Received $100.00 citation payment on 3/22/07.	Citation, NOV, Education	Lux Canyon

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
33972	3/29/07	Commercial	Water	NO		Discharge of water - Power washing in front of Yogi's complex early AM. Drive by showed nothing, but there was water in the street.		WO#52908 : 11/28/2007 2:37:32 PM 3/29/07- Called property manager to alert him about the situation. He said they hire a company (GMI) to do the pressure washing correctly. There was no cleaning scheduled for today, and they usually do it at night. Asked him to let us know how the situation is handled. 11/28/2007 2:39:12 PM 3/29/07 email from Property Manager states that GMI was doing the pressure washing, but they were correctly capturing the water via wet vac. Yogi's was not affiliated, so no follow up action was taken with them. No proof of illegal discharge.	Education	Cardiff
33973	3/29/07	Commercial	Soapy water	NO		Discharge of water –Received call from City Employee saying Jack in the Box is washing out kitchen area and pushing it out to the curb. Complainant took a picture with his cell phone. Drive by showed water in the street, but the washing was over.		WO#36847 : 4/5/2007 11:13:48 AM Sent NOV letter on 3/29/07, received receipt confirmation.	Education, NOV	Cardiff
33974	3/29/07	Commercial	Wash water	NO		Discharge of water – Complainant called in that power washers are washing cars w/out containment. called back to say they were getting hostile. Our inspector was out on another call, and the power washers left.		WO#53239 : NOV sent to property manager. Storm water regs sent to all tenants from property manager on 4/2/07.	NOV, Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34003	3/30/07	Residential	Unknown solid and liquid items	NO		Other discharge - Neighbor put debris in front of house in the street. Not the first time.		WO#36843 : 4/5/2007 9:12:01 AM 3/30: Inspector went to investigate and found nothing wrong. Some construction debris may enter street, but it was clear when she was there.	None	Leucadia
34057	3/29/07	Commercial	Dirty water, concrete saw cuttings	NO		Discharge of construction debris –Discharge noticed during routine inspections of surrounding restaurants.		WO#53009 : 12/5/2007 12:05:45 PM Inspector talked to worker, he cleaned up liquid using wet vac and swept up saw cuttings. Contractor was alerted, and was told to be more careful. Sent NOV letter to owner on 4/13/07.	Education, NOV	San Elijo Lagoon
34087	4/11/07	Commercial	Soapy water from car washing	NO		Discharge of other wash water - Mobile car washers		WO#50163 : Went to investigate and found no car washers. Some water in street, cone and hose in driveway. No citations were issued. Phone contact made w/ owner of mobile detailer to discuss storm water regs.	Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34154	4/18/07	Commercial	Oil	NO		Discharge of oil - Dept of Agriculture reported Nursery with large containers of oil, leaking onto ground. It is out of his jurisdiction so he called us.		WO#37323 : 7 3:14:28 PM Routine inspection done at same time of complaint inspection. 6/8/2007 12:14:44 PM Follow up completed on 6/7/08. business will be moving within a few months. 12/27/2007 1:36:33 PM See routine commercial inspection work order 53715 and follow up 37994.	Education	La Costa South
34186	4/24/07	Construction	Muddy water from construction project	NO		Discharge of other wash water - Construction project next door to complainant pumping muddy water into storm drain. Has called about this before. Construction inspector will investigate.		WO#50164 : Basement filled with water, and it was being pumped into street. Construction inspector spoke with superintendant on site. Discharge stopped immediately.	Education	Cardiff
34228	5/3/07	Commercial	Soapy water	NO		Discharge of vehicle wash water – Mobile detailer		WO#50162 : Inspector went to site and saw Vacuum BMP in place. Told them to get sandbags as well. No citation issued. Sprinklers on property causing runoff. Tell property manager.	Education	Encinitas
34328	5/9/07	Commercial	Soapy wash water	NO		Discharge of other wash water - Inspector saw sidewalk washing w/o containment. Spoke with man doing the washing, told him it was illegal, need BMPs. man said he'd take care of it, but later that day the discharge was still occurring.		WO#53010 : 12/5/2007 12:39:42 PM NOV and Admin Citation warning issued on 5/14/07. Received letter from Manager saying how the restaurant will correct this issue.	Citation Warning, NOV	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34336	1/31/07	Residential	Irrigation run off	NO		Discharge of water - over irrigation causing water to leave the property and enter the street. Sent letter via certified mail with educational info.		WO#53057 :	Education	La Costa South
34337	5/11/07	Commercial	No discharge-request for info on mobile car washing	NO		Discharge of water – Email asking for clarification on our ordinance regarding car washing in her work's parking lot. Boss used to have his car washed there; they've been informed that it is against their property manager's rules.		WO#50160 : Spoke to caller Re: Commercial Car Washing regulations in the City of Encinitas. Explained that all discharges had to be captured or contained and disposed of properly.	Education	Encinitas
34405	5/21/07	Residential	Sewage	NO		Discharge of sewage - estimated 30 gallon private lateral spill. Overflow on did not reach storm drain.		WO#38640 : Received follow up letter from Property Manager on 5/31/07.	Citation Warning, NOV, Education	Leucadia
34419	5/22/07	Residential	Dust from construction site	NO		Discharge of construction debris - A lot of dust being produced at construction site. Notified inspector.		WO#38678 : He said they are grading for a driveway and he would drive over to check out the complaint and make sure they are cleaning up the mess. Home owner cleaned up mess same day.	Education	Leucadia
34420	5/22/07	Residential	Sewage	NO		Discharge of sewage - sewer line is clogged		WO#50159 : Roto Rooter responded same day to make repairs. Discharge cleared.	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34428	5/24/07	Commercial	Wash water	NO		Discharge of other wash water - Caller reported power washing incident. Passed information on to the construction inspector		WO#50158 : Inspector visited site and saw no illegal discharges.	None	Leucadia
34436	5/25/07	Residential	Pool water	NO		Discharge of water - Caller says pool water from house behind her is being piped onto her property and causing erosion marks on her property down to the brow ditch.		WO#50134 : Spoke to discharger on phone, asked him to re-direct his pipes to existing storm drain infrastructure.	Education	Lux Canyon
34450	4/24/07	Residential	Muddy water	NO		Discharge of other wash water - construction project is (currently) pumping muddy water into the storm drain. Caller has called about this before. Construction Inspector was sent to investigate.		WO#50131 : 10/15/2007 3:39:08 PM Contractor was pumping out the basement after a rain event. Inspector told him if he was to do it again, use a pump truck, don't outlet it into the street.	Education	Cardiff
34484	5/3/07	Commercial	Dirty water	NO		Discharge of water – Inspector saw employee dumping dirty water on driveway next to the Flower Shop in the Taco Bell parking lot.		WO#50132 : Inspector gave verbal warning and education.	Education	La Costa South
34513	6/5/07	Commercial	BBQ wash water	NO		Discharge of other wash water - Resident complained that a business in the building behind him was washing out a BBQ grill in the alleyway behind his house.		WO#50133 : 10/15/2007 3:52:21 PM 6/5/07- Inspector arrived at site after activities were done. Some water puddled in street, small path to storm drain. No further actions can be taken because we don't know who was doing the washing.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34517	6/5/07	Commercial	Grease	NO		Other discharge – A business called in saying next door business is continually dumping grease down the drain. Now drain is clogged and backing up, and caller had to shut down his business for the day.		WO#53011 : Inspector did follow up inspection from original commercial inspection done on 10/12/06. All corrective actions complete. Found no sign of grease discharge. We never received photos from caller, so case closed.	None	La Costa South
34519	5/31/07	Commercial	Vehicle wash water	NO		Discharge of vehicle wash water – Inspector was out on an inspection and saw Enterprise washing their cars.		WO#38728 : Issued a correct work to branch rental manager.	NOV, Education	La Costa South
34520	6/6/07	Residential	Water from RV	NO		Discharge of water - Email from code enforcement saying Sheriffs dept saw major runoff that is possibly coming from RV on property. Officer told resident it's a violation, so he cleaned it up. Inspector sent to investigate.		WO#50108 : Inspector did not see any illegal discharges.	None	Leucadia
34521	6/6/07	Construction	Saw cutting runoff	NO		Discharge of concrete cutting slurry or wash water. - Complainant called to say that saw cutting runoff at corner of Encinitas Blvd and Vulcan is going towards Cottonwood Creek.		WO#38514 : Construction inspector investigated. he said they are using containment measures. At 11:45am another caller said some runoff is still escaping. Contractor laid out straw wattle in gutter to catch any excess runoff.	NOV Stop Work	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34523	5/23/07	Residential	Dirty, gray-blue water	NO		Other discharge - Jim Broyles contacted us again. the drainage ditch in his backyard now has white substance running through. dog is getting sick. Appears to be coming from north of property. Inspector Mike Emerson sent to investigate.		WO#38515 : First investigation 5/29/07. Sample taken and tested for nitrates, came back negative. 2nd investigation 6/6/07. Could not determine source of discharge.	None	Cardiff
34524	6/6/07	Residential	Hot tub water	NO		Discharge of water – Caller says neighbor is draining his hot tub water onto his property and causing his trees and yard to die. Caller is also concerned that neighbor is building a drainage ditch in his backyard that ends right at a tree in caller's yard.		WO#50126 : Inspector went to site. No illegal activities noted. Discharger is in the process of tying in existing rain gutters to new area drain system out falls to public R.O.W.	Education	Leucadia
34527	6/5/07	Commercial	Mop water	NO		Discharge of other wash water - Inspector saw employees discharging mop water into storm drain at back of restaurant. took photo, reminded kitchen staff that its illegal to dump down storm drain.		WO#39335 : 8/16/2007 3:48:33 PM $100.00 citation paid on 06/19/07. Copy of NOV and Citation also sent to property manager.	Citation, NOV, Education	La Costa South
34534	6/8/07 4pm	Commercial	Water- Request for info	NO		Discharge of water - YMCA employee says the Y leaves the hose on all day for children's water slide. water runs off into street all day long.		WO#50107 : sent employee "Save Water Now", "Only Rain in the Storm Drain", and a copy of the Municipal Code Exemptions to share w/ Y.	Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34538	6/12/07	Residential	Concrete waste	NO		Discharge of concrete cutting slurry or wash water. concrete waste on ground, trucks driving thru.		WO#50084 : Construction inspector witnessed Immediate cleanup in progress	Education	Leucadia
34557	6/12/07	Commercial	Wash water	NO		Discharge of water - Email complaint showing pictures of power washing at Seven-Eleven. No containment is seen in pictures. Inspection form from 5/18/07 says wash water is contained.		WO#50165 : 10/16/2007 12:48:29 PM Email sent to owner of 7-11 on 6/18/07. Inspector spoke to pressure washer on 6/18, he assured her a wet vac was being used during power washing. Informational letter was sent to power washer along with an Only Rain brochure and the San Diego BMPs for pressure washing brochure.	Notice to Correct Work, Education	Encinitas
34564	6/14/07	Commercial	Colorless, odorless liquid; sediment	NO		Discharge of water – Construction Inspector saw illegal discharge from tank located on drilling rig on Vulcan just north of RCP. Clean Water inspector went to site, took photos.		WO#50156 : observed an illegal discharge of water from an abandoned drilling rig on Vulcan Ave. north of RCP; however, it was not possible to determine the Responsible Party.	None	Leucadia
34572	6/18/07	Residential	Colored concrete	NO		Discharge of concrete waste. – Complainant called Code Enforcement, they forwarded to Clean Water. Workers washing colored cement down the street. Julian told them it goes straight to ocean, they ignored him and kept dumping. Left msg for inspector to investigate		WO#53505 : 12/19/2007 1:29:01 PM Inspector responded to discharge. No illegal discharge observed. Contractors are no longer on site. Home owners are not home.	None	Rancho Santa Fe

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34589	6/19/07	Commercial	Pool water	NO		Discharge of pool water		WO#50271 : Inspector responded at 2:30pm, spoke with discharger on site and established that the pool discharge was well below the water quality standard (1ppm)	None	Encinitas
34593	6/20/07	Commercial	Wash water	NO		Discharge of other wash water - Cleaning company dumping wash water into street.		WO#38834 : Restaurant manager was contacted, will relay to cleaning crew to dump in sink.	Citation Warning, Education, NOV	Encinitas
34623	5/2007	Residential	Grey water/wash water	NO		Discharge of other wash water - washing machine water going into street for a month now. Inspector spoke to homeowner on 6/22 @ 5:15pm, sump pump is pumping excess irrigation into street. Inspector to respond.		WO#38511 : Sump pump verified on 6/26/07. Over irrigation pumped to curb from sump pump. No illegal discharge.	None	Encinitas
34628	6/13/07	Residential	Cement debris	NO		Discharge of concrete waste. - Inspector saw cement debris in street while in the field.		WO#38466 : left card telling workers to clean up the mess. went back on 6/20 and site was cleaned.	Education	Cardiff
34635	6/26/07	Commercial	Power washing discharge	NO		Discharge of building or sidewalk wash water – Clean Water Staff witnessed sidewalks being power washed without containment.		WO#38719 : Spoke with manager, told him water must be contained, not allowed down drain or into street. Water was swept away from drain into landscaped area.	NOV, Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34642	6/28/07	Residential	Heavy flow of water	NO		Discharge of water - Complainant said there is a heavy flow of water going into PBS&J's property on Calle Magdalena. Looks to be coming from the Summerview Court area.		WO#38614 : 7/6/2007 1:30:29 PM Inspector unable to determine source of discharge. 6/28/07 at 4:00p.m. referred to San Dieguito Water District to determine if it is a broken water line. SDWD concluded discharge was due to swimming pool/jacuzzi draining in residential neighborhood.	None	Encinitas
48346	1/31/07	Commercial	Sediment	NO		Other discharge - discharge of sediment to storm drain. from work being done on Lynwood dr.		WO#53013 : 12/5/2007 2:39:55 PM Sent NOV letter and Admin Citation to landscaping company on 2/1/07. Mail was returned. Resent letter and citation 3/13/07. citation was paid 3/23/07. Received letter from owner saying how company is working to correct problem and training employees. Sent copy of first NOV letter and gave Admin citation warning to resident as well. 12/5/2007 2:52:45 PM See also work order 53014	Citation, Education, NOV	Encinitas
48377	11/29/06	Residential	Sewage	NO		Sewage blockage/overflow in alley behind property		WO#53180 : Received fax on 8/20/07 indicating that private sewer lateral had been replaced 6/15/07.	Citation Warning, NOV	Encinitas
48400	1/30/07	Commercial	Sediment	NO		Other discharge – Sediment runoff		WO#53419 : All corrective actions were implemented as of 2/05/07.	Education	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48405	5/3/07	Commercial	Wash water	NO		Discharge of vehicle wash water		WO#53354 : 12/12/2007 4:49:47 PM Inspector went to site. Brand new large Ford truck being washed. BMPs are in place- vacuum, but they need sandbags as secondary. No citation issued. Sprinklers on property are causing runoff and could use maintenance. Referred to property manager	Education	Encinitas
48488	12/18/06	Commercial	Wash water/food and grease debris	NO		Discharge of other wash water - Business washing off hams behind restaurant. no containment of wash water. Inspector to follow up.		WO#39337 : Citation paid 2/8/07. Training log received 3/07.	Citation, Education, NOV	Encinitas

Incident Listing

Saturday July 1, 2006 through Saturday June 30, 2007

411 - Gasoline or other flammable liquid spill

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0002611	000	07/31/2006 08:41:03	411	2	592 Santa Fe Dr	X		X
0002664	000	08/04/2006 07:42:59	411	2	I-5 Sb	X		X
0002953	000	08/25/2006 10:37:45	411	4	3258 Avenida De Sueno	X		X
0003040	000	09/01/2006 15:58:02	411	N	1010 N El Camino Real	X		X
0003178	000	09/11/2006 17:18:58	411	N	On Santa Fe Dr at Regal Rd	X		X
0003581	000	10/14/2006 11:13:16	411	N	224 Village Run East	X		X
0003781	000	10/29/2006 12:56:11	411	N	633 Birmingham Dr	X		X
0001642	000	05/07/2007 12:53:49	411	N	1549 N Vulcan Ave	X		X

End of Report

Incident Listing

Encinitas Fire Department

Saturday July 1, 2006 through Saturday June 30, 2007

412 - Gas leak (natural gas or LPG)

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0002418	000	07/17/2006 11:21:50	412	2	732 Glen Arbor Dr	X	X	
0002633	000	08/01/2006 15:14:06	412	N	1833 Oxford Ave	X	X	
0002868	000	08/19/2006 11:02:53	412	N	764 COLE RANCH Rd	X	X	
0003026	000	08/31/2006 17:46:21	412	N	25 E E street	X	X	
0003057	000	09/02/2006 19:28:19	412	4	7244 Ponto Dr	X	X	
0003170	000	09/11/2006 10:25:58	412	N	800 REGAL Rd	X	X	
0003227	000	09/15/2006 15:25:25	412	N	1243 Calle Christopher	X	X	
0003336	000	09/25/2006 08:24:50	412	4	7104 SAN BARTOLO	X	X	
0003455	000	10/04/2006 10:10:01	412	4	16087 San Dieguito Rd	X	X	
0003631	000	10/18/2006 13:30:06	412	N	2011 Countryhaven Ct	X	X	
0003936	000	11/08/2006 15:23:09	412	N	3428 Camino Largo	X	X	
0004267	000	11/30/2006 01:48:52	412	N	1025 Elmview Dr	X	X	
0004307	000	12/03/2006 09:22:09	412	2	1208 Orchard Glen Cr	X	X	
0004332	000	12/05/2006 08:23:06	412	N	259 Delphinium St	X	X	
0004666	000	12/27/2006 16:02:44	412	N	1245 Lake Dr	X	X	
0004728	000	12/31/2006 10:32:20	412	N	1140 Oakcrest Park	X	X	
0000283	000	01/22/2007 11:41:19	412	N	817 Cole Ranch Rd	X	X	
0001502	000	04/26/2007 08:22:23	412	N	411 Delage Dr	X	X	
0001802	000	05/20/2007 11:29:16	412	N	887 Brittany Rd	X	X	
0001831	000	05/22/2007 17:20:08	412	N	855 Saxony Rd	X	X	

End of Report

Incident Listing

Saturday July 1, 2006 through Saturday June 30, 2007

413 - Oil or other combustible liquid spill

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0002607	000	07/31/2006 05:28:29	413	N	Adjacent to 479 Encinitas Bl	X		X
0004262	000	11/29/2006 16:24:32	413	N	150 yrds, west of El Camino Real	X		X

End of Report

Incident Listing

Encinitas Fire Department

Saturday July 1, 2006 through Saturday June 30, 2007

422 - Chemical spill or leak

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0002288	000	07/08/2006 08:17:14	422	N	400 W C St	X		X

End of Report

Jurisdictional Urban Runoff Management Program Annual Report

FY 2007-08



City of Encinitas



CITY OF ENCINITAS

Jurisdictional Urban Runoff Management Program Annual Report FY 2007-2008

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EXECUTIVE SUMMARY

Section I of Water Quality Order No. 2001-001 and Section J.3 of Water Quality Order No. 2007-0001, adopted January 24, 2007, requires the City of Encinitas to prepare a JURMP Annual Report describing all activities conducted by the City to comply with the provisions of each respective Order. The following report covers the implementation period for Fiscal Year (FY) 2007-2008 with a defined reporting period from July 1, 2007 through June 30, 2008. This reporting period is marked by a shift in compliance standards from the 2001 Permit to the compliance standards established in the 2007 Permit. Unless otherwise noted, reporting for this annual report has been prepared in compliance with standards established in Water Quality Order No. 2007-0001. This report is presented in the standardized annual reporting format developed collectively by the Copermittees and is based upon the most current information available at the time of document preparation.

The defined reporting period of this report is characterized by significant program evaluation, development, and implementation strategies and actions. As noted above, this report captures the activities required of two permits, and reflects ongoing implementation of programs in compliance with existing permit standards established under Order No. 2001-001 in parallel with the development and implementation of new programmatic elements established within Order No. 2007-0001.

Most notably during this reporting period, the City of Encinitas submitted, as required by Order No. 2007-0001, an updated JURMP on March 24, 2008. The updated JURMP serves as the City's foundational program management tool, capturing newly developed process, procedure, and implementation strategies for overall program effectiveness and compliance. As part of the JURMP update process, the following list of objectives was established to set baseline guidance for overall program success:

- Develop programmatic elements to ensure compliance with regulatory standards and provisions mandated in Order No. 2007-001.
- Establish management processes and procedures to ensure accountability for program actions and activities.
- Establish and support a set of effective and efficient strategies to address Encinitas water quality concerns.
- Build program elements around integrated assessment approaches in order to evaluate overall performance and effectiveness of program components.

Programmatic reporting, represented in this document, has been prepared and evaluated in consideration of the objectives established in the updated JURMP document as presented above. Through goal setting, the City of Encinitas can more broadly gauge overall efficiency and effectiveness of program elements. In correlation, more precise outcome measures shall be assessed through formal long term

effectiveness evaluation in this report through the identification of significant program activities, and further refined in successive annual reports.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Phil Cotton, City Manager
City of Encinitas

9-24-08
Date

1.0 INTRODUCTION

The Clean Water Act of 1972 established the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the discharge of pollutants from point sources to the waters of the United States. In 1987, the Clean Water Act was amended to include non-point source pollution such as urban runoff, and established a framework for regulating urban storm water runoff and other non-point source pollutants through establishment of various general and individual permits issued to local governments and other agencies.

In 2002, the City of Encinitas (City) developed a Jurisdictional Urban Runoff Management Program (JURMP) document as required by the San Diego Regional Water Quality Control Board (RWCQB) Order No. 2001-01 (2001 Permit). On January 24, 2007, Order No. 2007-0001 (Order, Permit, 2007 Permit or Municipal Stormwater Permit), was adopted by the RWQCB, regulating the discharge of urban runoff from municipal separate storm sewer systems (MS4) draining the watersheds of the County of San Diego, the San Diego Unified Port District, the San Diego County Regional Airport Authority, and the incorporated Cities of San Diego County, including the City of Encinitas (Copermittees). Under the requirements of Order No. 2007-0001, the City prepared and submitted on March 24, 2008 an updated JURMP document describing enhancements to existing programs, as well as newly developed programmatic elements to meet the provisions of the adopted permit.

Section I of Water Quality Order No. 2001-001 and Section J.3 of Water Quality Order No. 2007-0001, adopted January 24, 2007, requires the City to prepare a JURMP Annual Report describing all activities conducted by the City to comply with the provisions of each respective Order. The following report covers the implementation period for Fiscal Year 2007-2008 with a defined reporting period from July 1, 2007 through June 30, 2008.

1.1 BACKGROUND

The City of Encinitas encompasses an overall area of nearly 20 square miles and is located along six miles of Pacific coastline in northern San Diego County. The City is characterized by coastal beaches, cliffs, flat-topped coastal areas, steep mesa bluffs and rolling hills. Incorporated in 1986, drawing together the communities of New Encinitas, Old Encinitas, Cardiff-by-the-Sea, Olivenhain and Leucadia, the City has an approximate population of 60,000. Encinitas is bordered by the Pacific Ocean to the west, Batiquitos Lagoon to the north, and the San Elijo Lagoon to the south.

The City of Encinitas is situated entirely within the Carlsbad Hydrologic Unit and is split between the San Marcos Watershed to the north and the Escondido Creek Watershed to the south. The City is naturally divided by eight (8) distinct drainage areas (sub-basins): Cardiff, Lower Escondido, La Orilla, La Costa South, Leucadia, Encinitas, Rancho Santa Fe, and Lux Canyon. Encinitas receives an average annual rainfall of approximately ten inches.

The City owns and maintains improved and open storm water channel, underground pipes of varying material, storm water detention basins, catch basins and a variety of other MS4 facilities.

In general, the City drains to three blue-line creeks: Cottonwood Creek, Encinitas Creek and Escondido Creek. Cottonwood Creek drains the heart of Encinitas and discharges to the Pacific Ocean at Moonlight Beach. In 2006, Cottonwood Creek was 303(d) listed for DDT, phosphorous, and sediment toxicity stressors. Further, the Pacific Ocean is listed as a 303(d) impaired water body at Moonlight Beach for bacteria indicators due to urban runoff from Cottonwood Creek. Encinitas Creek drains the north-central portion of the City, and drains into Batiquitos Lagoon, which is designated as a Critical Coastal Area in the State of California 2002 Critical Coastal Areas Strategic Plan. In 2006, Encinitas Creek was 303(d) listed for phosphorous impairments. Escondido Creek, listed in 2006 for DDT, phosphorous, sediment toxicity, manganese, phosphate, selenium, sulfates, and total dissolved solids, drains the southern and northwest (Olivenhain) portion of the City and drains into San Elijo Lagoon. San Elijo Lagoon is 303(d) listed as an impaired water body for sediment/siltation, bacteria indicators, and eutrophic conditions.

1.2 PURPOSE AND OBJECTIVES

The purpose of the FY 2007-2008 JURMP Annual Report is to provide a comprehensive account of programmatic activities conducted by the City of Encinitas to meet the requirements of the Water Quality Order No(s). 2001-001 and 2007-0001. Additionally, the annual reporting process is used to evaluate the overall effectiveness and efficiency of program elements. Notably, a comprehensive program update occurred through the JURMP update process in 2008, therefore, only significant augmentation of program elements or planned changes will be captured in the following annual report. Any program modifications will be for the advancement of the City's program and will comply with all regulations as presented in the Municipal Permit.

2.0 DEVELOPMENT PLANNING

2.1 INTRODUCTION

Being a coastal community, environmental protection and water quality is of utmost importance to the City of Encinitas. As a result, the City has established strong water quality protection policies which are reflected in development planning documents and procedures. Through the implementation of the Development Planning Component of the City's JURMP and other related planning documents, the City aims to reduce the discharge of pollutants from development projects to the Maximum Extent Practicable (MEP) to protect receiving water bodies, and manage increases in runoff and erosion from development projects.

This section will describe the City's actions during FY 2007-08 which contributed to the successful implementation of the City's Development Planning Component. Included in this section is a summary of recent updates made to land use policies and procedures, a description of the ongoing development of the Standard Urban Stormwater Mitigation Plan (SUSMP), the development of the San Diego region Hydromodification Management Plan, a review of the development projects approved in the past fiscal year, and an explanation of the new BMP installation, verification, and inspection programs.

2.2 LAND USE PLANNING

The City's land use planning process facilitates (1) the reduction of development project discharges of pollutants from the MS4 to the MEP, (2) the prevention of development project discharges from the MS4 from causing or contributing to a violation of water quality standards, and (3) management of increases in runoff discharge rates and durations from development projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force.

The City's land use planning process consists of development and implementation of the following documents:

- General Plan
- Jurisdictional Urban Runoff Management Plan
- Watercourse Protection, Storm Water Management and Discharge Control Ordinance (Municipal Code Chapter 20.08)
- Storm Water Best Management Practices Manual II

The utilization and regular update of each of these documents enables the City to successfully conform to the requirements of section D.1 of the Municipal Permit. The following sections will describe the City's land use planning process and the four planning documents in more detail.

2.2.1 BACKGROUND

The City of Encinitas was incorporated in 1986, drawing together the towns of Cardiff-By-The-Sea, Leucadia, Olivenhain, and old and new Encinitas. The City's General Plan was adopted in 1989 and is amended on a limited, as needed basis. The City's JURMP, the Storm Water Ordinance, and the Storm Water BMP Manual II were each originally developed in 2002 as required by Order 2001-01. Each of these documents were reviewed and updated as needed this fiscal year as part of the JUMRP update process and as required by the new Municipal Permit.

2.2.2 SOURCE CHARACTERIZATION

The City addresses seven major land use categories in its General Plan: residential, office professional, commercial, industrial, public/semi-public, transportation, and ecological / open space / parks. Each of these land uses is associated with different combinations of pollutants and activities that have the potential to negatively affect the surrounding environment. A detailed discussion of the potential threats to water quality associated with existing residential, commercial, industrial, and municipal land uses can be found in their designated sections within this document.

Through the implementation of the land use planning policies, procedures, and requirements established in the General Plan, JURMP, Storm Water Ordinance, Grading Ordinance, and BMP Manual II, the City aims to reduce the potential for pollutant discharges from all planned development and redevelopment land use sources.

2.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

During FY 2007-08, the City of Encinitas updated its land use planning BMPs as required by Order 2007-0001. As part of the 2008 JURMP update process, these BMPs were incorporated into Storm Water BMP Manual II (the City's local interim Standard Urban Stormwater Mitigation Plan(SUSMP)). The most current version of the City's BMP Manual can be accessed through the Clean Water Program webpage at: http://cwp.ci.encinitas.ca.us. The City also actively participated in the review and update of the region's Model SUSMP. For more detail regarding the development and adoption of the City's interim SUSMP and the regional Model SUSMP refer to Section 2.2.4.4 and 2.4.4.1.

2.2.4 PROGRAM IMPLEMENTATION

2.2.4.1 GENERAL PLAN

As a component of the 2008 JURMP update (conducted during FY 2007-08, an assessment of the City of Encinitas General Plan was conducted to determine the City's consistency with the watershed protection policies and principles found in the Municipal Permit. The analysis found that the City's General Plan goals and policies are consistent with the Municipal Permit, and no amendments to the General Plan were required as a result of the JURMP update.

The City of Encinitas General Plan addresses multiple water quality and watershed protection principles. Included within the General Plan are a number of proactive policies that pertain to water pollution and land use decisions. Many of the policies directly specify preservation and acquisition of riparian corridors, wetlands, and buffer zones providing important water quality benefits. The policies place limits on disturbances to natural bodies of water and drainage systems caused by developments and strive to avoid developing in areas susceptible to erosion and sediment loss. The General Plan also discourages the use of large amounts of impervious surfaces in new development areas, minimizing the transport of urban runoff and pollutants. The breadth of the City's General Plan polices are such that they cross reference each other and comprehensively comply with the required Municipal Permit.

The City's General Plan document serves as the blueprint for the long-range, orderly, physical development of the City and contains stated community goals and policies designed to protect its environmental, social, cultural and economic resources as the City develops. The General Plan consists of an integrated and internally-consistent set of goals, policies and standards that address a number of issue areas which include land use, circulation, housing, noise, safety, recreation, conservation and open space.

Portions of the General Plan also encompass the City's Local Coastal Program (LCP) Land Use Plan, which guides development in the City's Coastal Zone pursuant to the Coastal Act. As a result, the City's General Plan and LCP are a combined single document.

The General Plan is a legally binding document that has been adopted by the City Council, and the City is required to abide by its policies. The General Plan includes a number of water quality and watershed protection principles and policies which direct land use decisions and require implementation of consistent water quality protection measures for development projects.

The City implements the policies in the General Plan using a variety of resources; including the JURMP, Municipal Code, the Storm Water BMP Manual II, Development Agreements, and other various land use plans and permits. Section 2.4 of this document describes how the water quality and watershed policies are implemented through the City's development planning process.

2.2.4.2 JURMP

In compliance with the new Municipal Permit, the City's JURMP document underwent a major update during FY 2007-08. The JURMP document serves as the City's foundational storm water program management tool, capturing the developed process, procedure, and implementation strategies for described elements. The purpose of this document is to present an integrated approach to reducing the discharge of pollutants from the MS4 to the MEP, and to protect and improve the quality of water bodies in Encinitas.

2.2.4.3 WATERCOURSE PROTECTION, STORM WATER MANAGEMENT AND DISCHARGE CONTROL ORDINANCE (STORM WATER ORDINANCE)

As required by section J.a.(3)(b)iii of the new Municipal Permit, the City's Watercourse Protection, Stormwater Management and Discharge Control Ordinance *(EMC Chapter 20.08)* was updated during FY 2007-08 to comply with the Municipal Permit. The Storm Water Ordinance sets up the legal framework which enables the City to enforce the water quality and watershed protection principles established in the General Plan and the JURMP. The Storm Water Ordinance also references the City's Storm Water BMP Manual II and enables the City to enforce the minimum BMPs and SUSMP requirements that are outlined in the manual. The ordinance is periodically reviewed and updated on an as needed basis to ensure that potential discharges of pollutants may be addressed appropriately.

Notably, as a part of the 2008 JURMP update and Stormwater Ordinance update processes, the City updated the Grading, Erosion and Sediment Control Ordinance *(EMC Chapter 23.24).* The Grading Ordinance update further supports the City's legal authority in meeting the provisions of the Municipal Permit and is described in more detail in Section 3.3.

2.2.4.4 STORM WATER BMP MANUAL II (LOCAL SUSMP)

As part of the 2008 JURMP update, Storm Water BMP Manual II was also updated; the City's revised SUSMP and regionally adopted Interim Hydromodification Criteria were incorporated into the Storm Water BMP Manual II as required by the Municipal Permit, during FY 2007-08. The City has integrated new SUSMP provisions into local land use planning and development process and procedure as outlined in the updated BMP Manual II.

Notably, BMP Manual II updates incorporated during FY 2007-08 were driven by both the Stormwater Ordinance and Grading Ordinance amendments. As such, the City's BMP Manual II, as it relates to the Grading Ordinance, is contained in the City's Local Coastal Program (LCP), and must receive Coastal Commission approval of any changes. As part of this broader update of associated ordinances and manuals, the City is working with the Coastal Commission to ensure adequate inclusions in the LCP.

The City originally created the Storm Water BMP Manual II in 2002 to be used by individuals involved with development projects within the City. The Storm Water BMP Manual II is a compilation of all requirements related to water quality with respect to development projects, including the City's SUSMP requirements, permanent BMP requirements, construction BMP requirements (which are further discussed in Section 3), implementation requirements, and maintenance requirements. The Storm Water BMP Manual II also includes various tables to help identify which requirements are applicable to each unique development project.

Standard Urban Storm Water Mitigation Plan (SUSMP)

As required by the Municipal Permit, the City of Encinitas participated in the collective review and update of the Model SUSMP developed under Order No. 2001-001 and approved by the RWQCB in 2002. The original Model SUSMP was developed to address post-construction urban runoff pollution from development projects and defines the minimum required Low Impact Development (LID), source control and treatment control BMPs. The City of Encinitas has incorporated the updated Model SUSMP into the Storm Water BMP Manual II through formal action taken by City Council.

Additional updates, as required by the Municipal Permit, of the Model SUSMP are planned for the future and were being developed at the end of FY 2007-08. Details about the completed and planned updates can be found in Section 2.4.4.1. Any new updates to the Model SUSMP will be incorporated into the City's Storm Water BMP Manual II.

A complete copy of the Storm Water BMP Manual II is available on the City's website, http://cwp.ci.encinitas.ca.us.

2.3 ENVIRONMENTAL REVIEW PROCESS

As part of the 2008 JURMP update, the City's environmental review staff evaluated the City's environmental review process and confirmed that the current process accurately evaluates water quality and cumulative impacts and identifies appropriate measures to avoid, minimize and mitigate those impacts for all development projects.

The California Environmental Quality Act (CEQA) requires environmental review of discretionary applications for development projects. Environmental initial studies are conducted to determine whether the project may have a significant impact on the environment. This review process evaluates a project's potential for significant impacts on water quality. In compliance with the Municipal Permit, additional questions have been provided in the initial study checklist, a tool utilized to evaluate the environmental effects of a project. To evaluate potential water quality impacts of projects requiring discretionary review, the following questions have been included as part of the initial study checklist:

Would the project:

- *Substantially conflict with city-adopted water quality standards or waste discharge requirements?*
- *Substantially alter the existing drainage pattern* of *the site or area, including the alteration* of a *stream or river course, in* a *manner which would result in substantial erosion or siltation on- or offsite?*
- *Result in* a *substantial degradation of receiving water quality during construction activities?*
- *Propose* a *land use or an on-site activity that would substantially degrade receiving water quality?*
- *Substantially increase any pollutant for which* a *tributary water body is listed on the Clean Water Act Section 303(d) list?*

- *Substantially degrade surface water quality within wetland, fresh, marine, or recreational waters?*
- *Substantially degrade groundwater quality?*

The environmental review process ensures that a project's impact on water quality is addressed early in the planning process. If a project is determined to have a significant environmental effect, mitigation measures are required under CEQA to avoid or reduce the effect to below a level of significance. The mitigation measures will normally take the form of adopted permanent Best Management Practices to be incorporated into project plans prior to discretionary approval.

2.4 DEVELOPMENT PROJECT APPROVAL AND VERIFICATION PROCESS

2.4.1 BACKGROUND

As discussed in the previous sections, the City of Encinitas has an established multi-departmental review process for all new development and redevelopment projects. Through the application of the City's Storm Water Ordinance, Storm Water BMP Manual II and development project review process, the City aims to mitigate the negative impacts of urban runoff from development projects to the MEP.

Each proposed discretionary and ministerial project is subject to the City's Development Project Approval and Verification Process. The following sections describe this process in detail.

2.4.2 SOURCE CHARACTERIZATION

As discussed in Section 2.2.2, development projects have the potential to discharge different types and amounts of pollutants based on the project's size and intended land use. Pollutants such as trash and debris are anticipated from all developments, regardless of land use; however, pollutants like bacteria and viruses are more likely to originate from restaurants and residential developments rather than from parking lots and automotive repair shops. Since the potential for a site to discharge pollutants is unique to each development, the City's design requirements for development projects vary according to size, project characteristics, and anticipated land use.

The City's SUSMP (Storm water BMP Manual II), which was updated as required during FY 2007-08, describes specific categories for Priority Projects and indicates common pollutants associated with each category (see Table 2-1). A Priority Project must identify the potential pollutants anticipated from its development and implement design concepts and other BMPs to address these pollutants.

In the City of Encinitas, all development projects, including standard projects (projects not subject to SUSMP standards), are required to meet the minimum BMP requirements, which are discussed in the following Section 2.4.3.

2.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City's minimum BMP requirements for all development projects are summarized here and are included in the City's Storm Water BMP Manual II. All development projects are required to implement the following principles, where applicable:

- Source control BMPs that reduce storm water pollutants of concern in urban runoff, including storm drain stenciling and signage, properly designed material and trash storage areas, and use of efficient irrigation systems.
- LID BMPs that maximize infiltration, provide retention, slow runoff, minimize impervious footprint, direct runoff from impervious areas into landscaping, and construct impervious surfaces to minimum widths necessary.
- Provide buffer zones or other buffers for natural water bodies.
- Grading and construction activities must implement all requirements outlined in Section 5 (Construction) of the City's 2008 JURMP.
- Submittal of proof of a mechanism for ongoing long-term maintenance of all structural post-construction BMPs.

SUSMP Priority Projects must submit a grading plan, which includes identification of potential pollutants from the projects, proposed LID, source control and treatment control BMPs, calculations for sizing the treatment control BMPs, and an attached maintenance agreement. The grading plan must also address how the project will manage increases in runoff discharge rates and durations associated with the project, where such increases could cause erosion downstream of the project.

Table 2-1
Anticipated and Potential Pollutants Generated by Land Use Type

	General Pollutant Categories								
Priority Project Categories	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P	X
Commercial Development >1 acre	P(1)	P(1)		P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry /Industrial Development	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	
Hillside Development >5,000 ft²	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X		

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site
(2) A potential pollutant if the project includes uncovered parking areas
(3) A potential pollutant if land use involves food or animal waste products
(4) Including petroleum hydrocarbons
(5) Including solvents

2.4.3.1 HYDROMODIFICATION MANAGEMENT PLAN AND INTERIM HYDROMODIFICATION CRITERIA

To reduce the negative impacts to beneficial uses and stream habitats that are attributed to increased runoff rates and in compliance with Order No. 2007-0001 the City is currently collaborating with the other Copermittees to adopt a detailed Hydromodification Management Plan (HMP).

The final HMP is not expected to be complete until the middle of 2009; however, in FY 2007-08 the City established Interim Hydromodification Criteria that will be in effect until the final HMP is approved. The City requires all Priority Projects disturbing 50 or more acres to comply with the Interim Hydromodification Criteria, except for those sites that are considered exempt as described in Section D.1.(g)(6) of the Municipal Permit. The details of the Interim Hydromodification Criteria are presented in the City's Storm Water BMP Manual II, and are consistent with the regionally adopted interim Hydromodification standards. A time table for development of the final HMP can be found in Section 2.4.4.1 and Table 2-2.

The City does not issue permits to development projects until all minimum BMP requirements are met. Any changes made to a development project's proposed storm water BMPs during project construction must be approved by the City before being implemented.

2.4.4 PROGRAM IMPLEMENTATION

As required by the Municipal Permit, the City of Encinitas has implemented a program to ensure that development and redevelopment projects comply with post-construction Best Management Practice (BMP) requirements, including Low Impact Development, source control, and treatment control BMPs. The Municipal Permit further requires that the City ensure proper installation of treatment control BMPs and their maintenance into perpetuity through such procedures as BMP verification, maintenance agreements, and annual inspections.

The following section provides an overview of the City's SUSMP implementation (including project tracking) during FY 2007-08.

2.4.4.1 MODEL AND LOCAL SUSMP UPDATES

As a part of the 2008 JURMP update process, the City updated its current SUSMP document to meet the interim requirements outlined in the new Municipal Permit. The City's update followed the recommended language developed by the regional SUSMP update group. All required interim SUSMP updates were incorporated into Storm Water BMP Manual II (see Section 2.2.4.4). In compliance with the interim SUSMP update standards established in Order No. 2007-0001, the following tasks were performed during the review and interim update of the SUSMP:

- Priority Project categories were updated.
- The document was reviewed to ensure no obsolete or ineffective BMPs were retained.

- LID requirements and additional source control requirements were added to meet or exceed Municipal Permit requirements.
- LID BMPs that can be used as treatment control BMPs were added to appropriate tables and discussions of treatment control options were updated accordingly.
- Pollution removal efficiencies of treatment control BMPs were reviewed and updated where necessary.

In addition to the changes discussed above, a comprehensive Model SUSMP update was completed by a regional workgroup during FY 2007-08. The comprehensive Model SUSMP update includes the following as required by the Municipal Permit:

- Inclusion of LID, source control, and treatment control BMPs that meet or exceed the minimum requirements of the Municipal Permit.
- Establishment of siting, design, and maintenance criteria for each LID and treatment control BMP listed in the Model SUSMP.
- Addition of criteria to help determine conditions where implementation of each LID BMP included in the Model SUSMP is applicable and feasible.
- Addition of a requirement for Priority Projects with low traffic areas and appropriate soil conditions to use permeable surfaces.
- Addition of any necessary restrictions for infiltration BMPs from Priority Projects that generate high levels of pollutants.

Once the Model SUSMP is accepted by the Regional Board as described in Section D.1.d(8)(b) of the Municipal Permit, the City will update its Local SUSMP within one year to include requirements at least as stringent as those in the newly adopted Model SUSMP. Additionally, the City's Local SUSMP will include a review process to verify all proposed BMPs for Priority Projects meet the criteria designated in the updated Local SUSMP.

As required by Order No. 2007-0001 the City will also incorporate a Hydromodification Management Plan (HMP) into the City's Local SUSMP. The HMP is currently being developed by a consultant and regional workgroup and the draft HMP is projected to be completed in January 2009.

All necessary SUSMP updates described above and their projected completion dates are presented in Table 2-2.

Table 2-2
Time Schedule for Model and Local SUSMP Updates

SUSMP Update	Time Schedule	Status
Model SUSMP update	July 2008	Completed
Local SUSMP update	July 2009	In Process
HMP Progress Report	July 2008	Completed
Draft HMP	January 2009	In Process
Final HMP	180 days after receiving	--

SUSMP Update	Time Schedule	Status
	comments on draft the HMP from the RWQCB	
Adoption of HMP into local SUSMP	180 days after RWQCB approval of the final HMP	--

2.4.4.2 DEVELOPMENT PROJECT APPROVAL PROCESS

The following section includes a summary of the City's current development review process.

DISCRETIONARY PROJECTS

Projects requiring a discretionary permit are subject to a three-tier review process that includes an initial predevelopment review prior to submittal to the City, a written self-certification of the BMP requirements for the project, and the application of project conditions of approval to meet storm water pollution control requirements. Those projects requiring an additional, ministerial permit are also subject to engineering plancheck review as described in the Ministerial Project section.

Predevelopment Process

The stormwater element of the predevelopment process is geared toward disseminating information on stormwater pollution control and the City's SUSMP requirements. During this preliminary design phase, engineers and applicants are guided by City staff to provide adequate post-construction BMP facilities in conceptual form and to document those facilities on the site plans upon the initial discretionary permit application submittal. This process results in better designed and integrated post-construction BMPs, since the facilities are included in the project design even in the earliest phases of the project.

Priority Projects, which require more stringent stormwater pollution control methods, are first identified during the predevelopment process. The categories of development falling under the Priority Project classification can be found in the City's Storm Water BMP Manual II and are consistent with the requirements of the Municipal Permit. During the predevelopment meeting, applicants proposing Priority Projects learn that they must implement LID and source control BMPs and must install treatment control BMPs which meet the numeric sizing criteria required by the Municipal Permit. City staff also inform applicants at the predevelopment meeting that installed post-construction BMP facilities must be maintained in good working order into perpetuity. City staff and the applicant and/or engineer discuss options for meeting the numerical post-construction treatment requirements, including volume-based systems such as treatment ponds, wet ponds, detention basins, and flow-based systems such as grassy swales and stepped grass-lined channels. In Encinitas, mechanical treatment systems are discouraged and when accepted may only account for a maximum of 50% of the treatment requirement, with the remainder of the treatment being provided by a natural system.

Stormwater Pollution Control Checklist and Certification

All development project applicants are required to complete a written self-certification of the post-construction BMPs proposed with their project. This certification is required to accompany the initial submittal of each discretionary permit application. The checklist briefly describes the Clean Water Program and the City's storm water regulations. Applicants are required to:

- Classify their projects as Priority, Standard, or Exempt from SUSMP
- Present the LID, source control and treatment control BMPs that will be installed or implemented on site to comply to the SUSMP requirements, and
- Certify that they understand and will implement post-construction BMPs on their site as appropriate for their project's priority.

This checklist must be completed by the party responsible for the development project and submitted with the project's permit applications. A copy of the checklist is provided in the Storm Water BMP Manual II.

The Development Review Process

The Engineering Department has established specific Conditions of Development Approval to assure compliance with the City's stormwater pollution control standards. These conditions include construction requirements as well as post-construction BMP standards for effective stormwater pollution control facilities. Once the predevelopment meetings are conducted and the self-certification checklist has been completed, the Engineering Department reviews the adequacy of the project's proposed facilities shown on the site plan and issues Conditions of Approval to ensure implementation of satisfactory LID, source control and treatment control BMP measures. The Conditions of Approval take into account the nature of each project site and the work proposed. The Conditions of Approval are then recorded in a covenant against the property.

Applicants not showing adequate construction or post-construction BMP measures on their initial development review submittals are asked to revise their plans and resubmit prior to approval. Stormwater pollution control facilities for Standard projects must meet the minimum requirements established in the City's Storm Water BMP Manual II. Priority Projects must additionally show LID, source control and treatment control BMPs on the project plans. In addition, their project plans must show a feasible solution for numerically-sized treatment control BMPs. Projects with treatment areas that appear to be inadequate are asked to resubmit with substantiating calculations for the proposed treatment control BMPs. These numeric treatment requirements are listed in the City's Storm Water BMP Manual II and available to all applicants through the City website.

MINISTERIAL PROJECTS

Projects requiring a ministerial permit such as a grading, improvement, or building permit are also required to include post-construction stormwater pollution control facilities in the project design. These BMP facilities must be considered adequate before the project's

plans are approved by Engineering staff. Often the project has been scrutinized at the discretionary permit level and the project is already conditioned to provide specific treatment facilities. For those projects not requiring a discretionary permit, the review of the storm water pollution control treatment facilities begins at the plancheck stage.

The Plancheck Process

City plancheck engineers are trained in the design of stormwater pollution control facilities and serve as resources to the general public and to design engineers. During the plancheck process, every project is reviewed for stormwater construction and post-construction BMPs. City plancheck engineers emphasize to applicants the variety of solutions that may be used in providing stormwater pollution control. All landscape areas used as post-construction BMPs must be clearly marked on the project plans along with the following associated note, "Landscape area for Best Management Practice to be privately maintained and not to be modified without a permit from City". The permitted drawing will become public record; therefore documentation of the designated treatment areas is maintained. Engineers are also required to provide stormwater pollution control notes on the plans addressing employee stormwater education, materials storage, erosion control, and waste management in order to meet the minimum SUSMP requirements.

Every plan in plancheck is also reviewed to determine if it meets the City's definition of a Priority Project. In addition to meeting standard BMP requirements, Priority Projects must provide LID, source control and numerically-sized treatment control BMPs as required by the Municipal Permit and the City's SUSMP. These requirements are discussed in detail in the City's Storm Water BMP Manual II.

All Priority Projects must comply with the numeric sizing criteria for treatment control BMPs in order to be approved by the City Engineer. Plancheck engineers review the project's hydrology calculations to determine the adequacy of the treatment system proposed. The project applicant is required to assume the maintenance responsibility or to identify the maintenance mechanism for the treatment system prior to project approval. A covenant ensuring adequate maintenance into perpetuity is recorded against the property. Those projects with the potential for substantial erosion are often required to provide an additional plan for permanent landscaping and irrigation and to place bonds with the City to guarantee successful implementation of the measures shown thereon. Such bonds are retained until the landscaping has become fully established.

During the plancheck process, erosion control plans are also carefully reviewed to ensure compliance with construction BMP measures. Gravel bags, silt fences, stabilized construction entrances, and other methods must be provided where appropriate. Inlets to drainage facilities must be protected from sediment. Additionally, all exposed slopes need to be protected by a combination of hydroseed, permanent landscaping, and other erosion control measures. For more information regarding temporary construction BMPs, refer to Section 3 of this document.

Post-Construction BMP Maintenance Agreements

All Priority Projects under review for ministerial permits must execute a stormwater maintenance agreement guaranteeing the maintenance and/or replacement of permanent BMPs as necessary into perpetuity. The covenant includes an attachment depicting the specific project BMPs, so that the required facilities and their location on the project site are easily identified. The maintenance agreement is then recorded against and runs with the property. In a few cases the maintenance requirements are outlined on the plans themselves and a recorded agreement is not required.

CAPITAL IMPROVEMENT PROJECTS

The City's Capital Improvement Projects (CIP) are subject to the same post-construction BMP requirements as private development. Because many projects are redevelopment, linear, or repair projects, often only construction BMPs are necessary. However, SUSMP qualifying projects must also install post-construction BMPs. Priority CIP Projects are designed to incorporate the City's SUSMP requirements and LID, source control and treatment control BMPs will be implemented. The City takes responsibility for long-term maintenance and regular inspection of any installed permanent BMPs. Section 4 of this document provides a description of the City's MS4 maintenance and inspection program.

2.4.4.3 SUSMP PROJECT APPROVAL

During the planning process and prior to project review, the fourteen projects listed in Table 2-3 were identified as Priority SUSMP Projects and approved during FY 2007-08. All applicable SUSMP BMP requirements specified in the City's local SUSMP were applied to each of the projects in Table 2-3. Under no circumstances was any priority project permitted to implement treatment control BMPs with low pollutant removal efficiency ratings. In addition, all of the development projects approved in FY 2007-08 were less than fifty acres in size; therefore none of the projects were required to meet Interim Hydromodification Standards. All treatment control BMPs met the treatment control BMP sizing requirements outlined in the City's local SUSMP; therefore, the City did not initiate a waiver mitigation program and did not issue any waivers of infeasibility during FY 2007-08. Depending on the date in which the project was reviewed and approved, the conditional SUSMP requirements may vary as a result of the migration to the new Municipal Permit requirements and the required adoption of the new local SUSMP.

Table 2-3
SUSMP Priority Projects approved in FY 2007-08

Permit No.	Permit Issue Date	Project Site Address
372 GI	8/15/2007	1657 N Vulcan Ave
437 GI	8/31/2007	200-52 El Camino Real
562 GI	9/6/2007	1302 Encinitas Blvd
483 GI	9/10/2007	540 La Costa Ave
570 GI	11/27/2007	3557 Lone Hill Ln
325 GI	12/10/2007	Lone Jack Rd
9561 GI	12/10/2007	303 Santa Fe Dr
388 GI	12/31/2007	1435 Lake Dr
789 GI	1/15/2008	2011-89 San Elijo Rd
369 GI	1/22/2008	1415 Rainbow Ridge Ln
692 GI	4/2/2008	1435 Rainbow Ridge Ln
704 GI	4/21/2008	230 Quail Gardens Dr
482 GI	5/1/2008	1864 Crest Dr
716 GI	6/20/2008	662 Encinitas Blvd

The four lot subdivision at 1415 Rainbow Ridge Lane provides a good example of the typical Priority SUSMP projects that are permitted by the City of Encinitas. The proposed project consisted of the subdivision of a 3.71 acre parcel into four smaller lots and the construction of four single family homes. The proposed development will add more than 5,000 square feet of impervious area to the Leucadia sub-basin. The majority of the impervious surface to be constructed as a result of the project consists of the grading and paving of an access road for the new homes. As a result, a six foot wide bioswale, constructed over a large infiltration pit was required to be designed into the proposed project. Smaller bioswales will also be installed on each individual lot to treat roof and driveway runoff. In addition, as part of the low impact design, the four lots were clustered on the westerly side of the parcel and a large, eastern portion of the original parcel was preserved as open space.

2.4.4.4 SUSMP PROJECT AND TREATMENT CONTROL BMP TRACKING

Over the past fiscal year, Clean Water Program staff worked assiduously with GIS staff to implement a comprehensive watershed-based SUSMP tracking system. The GIS data management system was designed to track the SUSMP Priority Projects and the long-term maintenance of all approved treatment control BMPs installed at development sites. As required by the Municipal Permit, the database is capable of tracking the following information:

- Type of treatment control BMP

- Location of the BMP
- Watershed within which the BMP is located[1]
- Date of construction of the BMP
- The party responsible for maintenance of the BMP
- Maintenance certifications or verifications
- Inspection findings
- Any corrective actions issued

During FY 2007-08 a beta version of the GIS tracking system was put into use. Since the initial debut, the City has been working to continually refine this database. Database improvements are a result of a thorough review of plans for proposed and built projects, a quality check of the existing data, and coordination with the GIS department. A hardcopy version of the most current inventory of treatment Control BMPs in the City's SUSMP Project and Treatment Control BMP Database is available in Appendix A-1. The inventory includes all operational treatment control BMPs installed at SUSMP priority projects.

With the aid of the City's Treatment Control BMP Inspection Priority flowchart (see Appendix A-2), all development projects with approved treatment control BMPs were prioritized as high, medium, or low Threat to Water Quality (TTWQ) during the 2008 JURMP update, as required by the Permit. The following criteria were used to determine the TTWQ:

- Type of project
- Sensitivity of the receiving water body
- Proximity to ESAs
- Size of the BMP
- Recommended maintenance frequency
- Likelihood of operational and maintenance issues associated with the BMP(s)
- Location of the BMP(s)
- Other pertinent factors

The BMP Inspection Priority flow chart addresses basic site and treatment control BMP characteristics that can influence a site's TTWQ such as receiving water body sensitivity and the removal efficiencies of the installed treatment controls. Note that not all development projects and treatment control BMPs are the same; each may have unique water quality risks associated with it. The City considered additional relevant factors beyond those included in the flow chart as necessary.

[1] The entire City of Encinitas is within the Carlsbad watershed. In order to more accurately define the local hydrology, the City has delineated hydrologic sub-basins within its jurisdiction. The sub-basins divide the Regional Board defined hydrololologic subareas within Encinitas into smaller watersheds. The sub-basins allow City staff to more accurately characterizes the area in which the treatment control BMPs is located. The treatment control BMPs are identifiable by sub-basin in the City's GIS data management system and the treatment control inventory.

2.4.4.5 BMP INSTALLATION VERIFICATION

Beginning in January 2008, the City of Encinitas began tracking the verification of post-construction BMPs that were installed on projects throughout the City. Upon project completion, the engineering inspector now requires that the project engineer submit a grading certification letter to the City verifying that all the Low Impact Development, Source Control and Treatment Control Best Management Practices, as shown on the project plans and required by the Storm Water BMP Manual II, were constructed and are operational, together with the required maintenance covenant(s).

A sample grading certification letter is provided as Appendix A-3. Table 2-4 provides a list of the BMP verifications conducted for development projects completed in FY 2007-08.

Table 2-4
BMP Verifications for Development Projects
Completed in FY 2007-08

Permit No.	Project Name
289 GI	Bonanno
437 G	El Camino Promenade
354 G	Skyloft Homeowners
276 GI	Lewis/Fairchild/Sammis
9419 G	Holland
9486 G	Quatro
7771 G	Lux Art Institute
125 G	Wilson
126 G	Wilson
9212 G	Erlander
1563 G	Samples
183 G	Helmbacher
9580 G	Robinson
65 G	Penwarden
414 GI	Rite-Aid/ Halferty Development
819 I	Omsted

Subsequent to the submittal of the grading certification letter, engineering inspection staff inspect the project site to verify that LID, source control, and treatment control BMPs proposed for the project were constructed in compliance with all approved plans, City permits and ordinances. Inspections of Priority Project sites prior to occupancy allow the City to verify that all BMPs are in place before any anticipated pollutants associated with the occupied site are generated. Engineering inspectors also check to ensure that BMPs have been built according to plans before signing off on each stage of construction. The

inspectors use the project's grading plans to identify any missing or incorrectly installed BMPs and deny approval for sites with observed problems. If the engineering inspector is satisfied that the post-construction BMPs were installed as required, the inspector verifies the project engineer's letter with initials and a date. Hardcopies of these signed and certified verification letters are retained by the Clean Water Program.

2.4.4.6 ANNUAL TREATMENT CONTROL BMP OPERATION AND MAINTENANCE VERIFICATION

As required by the new Municipal Permit, all treatment control BMPs installed at development projects must be inspected annually and maintained in perpetuity by a responsible party. As part of the JURMP update, the City of Encinitas established a Treatment Control BMP Operation and Maintenance Verification Program. Because implementation of the City's JURMP did not begin until January 24, 2008, the first year of operation and maintenance verifications will be required in FY 2008-09, prior to the rainy season commencing on October 1, 2008. Results of these inspections will be reported in the City's 2008-09 JURMP Annual Report.

During FY 2007-08, Clean Water Program staff prepared the essential elements of the Treatment Control BMP Operation and Maintenance Verification Program. First, a comprehensive list of mailing addresses for completed projects with treatment control BMPs was pulled from the newly developed SUSMP Project and Treatment Control BMP GIS Database. Then, a formal letter was developed to notify property owners of their verification responsibility. An informative Treatment Control BMP brochure was also created to help property owners identify the BMPs that were installed as a part of their development project. Finally, a self verification form was developed for responsible parties to use to report annual verification of Operation and Maintenance of their treatment control BMPs. An example of the verification letter, brochure, and form can be found in Appendices A-4, A-5, and A-6.

Beginning in FY 2008-09, the City will initiate its Treatment Control BMP Operation and Maintenance Verification Program and require annual verification of proper maintenance of all treatment control BMPs by the party responsible for maintenance prior to the start of each rainy season. The City will mail annual verification letters to the responsible party for each development site with treatment control BMPs in the City's treatment control BMP inventory. The verification package will include the letter, brochure, and operation and maintenance form, and a self addressed stamped envelope.

In the first year of implementation, the City anticipates a significant amount of information gathering and validation. Through initial contacts with responsible parties, the City will refine its inventories as well as methodologies to effectively assure proper maintenance and management of BMPs.

2.4.4.7 TREATMENT CONTROL BMP OPERATION AND MAINTENANCE INSPECTIONS

As required by the new Municipal Permit, all treatment control BMPs installed at development projects are scheduled to be inspected by the City's Engineering inspection staff prior to the rainy season. Because implementation of the City's JURMP did not begin until January 24, 2008, the first year of inspections will be conducted in FY 2008-09, prior to the rainy season commencing on October 1, 2008. Results of these inspections will be reported in the City's 2008-09 JURMP Annual Report.

During FY 2007-08, Clean Water Program staff developed the City's new Treatment Control BMP Operation and Maintenance Inspection Program. New inspection forms were created and the Treatment Control BMP inventory database was designed and quality checked. For a detailed description of the development of the GIS-based Treatment Control BMP Inventory and Tracking system refer to Section 2.4.4.4. City staff also conducted cursory inspections to assess the new inspection form and get an idea of the general condition of some of the existing BMPs. Notably, unique to the City of Encinitas and the development dynamic of the City, a large number of inventoried BMPs exist on private single-family residential lots. As such, it is anticipated that individual service may be required for identified responsible parties to assure overall effectiveness of this program element. As a result of these preliminary surveys, the inspection form was modified from its original format presented in the 2008 JURMP Update. A copy of the new form is provided as Appendix A-7.

When inspections are conducted in FY 2008-09, inspection frequencies will be based on the project's assigned TTWQ priority as determined by the criteria outlined in Section 2.4.4.4 of this document. Table 2-5 below presents treatment control BMP TTWQ priorities and their corresponding inspection frequencies.

Table 2-5
Treatment Control BMP Inspection Frequencies

Development Project with Treatment Control BMPs TTWQ	Inspection Frequency
High	Annually (prior to start of rainy season)
Medium	Every two years
Low	As needed

As required by the Municipal Permit, a minimum of 20% of the total number of projects with approved treatment controls and a maximum of 200% of the average number of projects with treatment control BMPs approved per year will be inspected annually.

Inspections will include examination of all treatment control BMPs at the site to verify that each treatment control BMP is working, being maintained properly, and is in compliance with all applicable City ordinances and permits. Inspection findings will be documented by the inspector using the Treatment Control BMP Inspection Form (Appendix A-7). If

any deficiencies in operation and maintenance are noted during the inspection, the responsible party will be notified and appropriate enforcement actions will be taken (as described in Section 2.4.4.8 of this document) to achieve compliance.

Inspection findings and follow-up actions for each development site with installed treatment controls will be captured in the City's treatment control BMP tracking GIS data management system.

Treatment control BMPs that are operated and maintained by the City are considered part of the City's MS4 and are maintained and inspected by Public Works staff on an annual basis. For more information regarding the maintenance and inspection of the City's MS4 refer to Section 4 of this document.

2.4.4.8 ENFORCEMENT MEASURES FOR DEVELOPMENT SITES

Since the City's Treatment Control BMP Operation and Maintenance Verification and Inspection Programs did not commence in FY 2007-08, no enforcement action was required. Verifications and inspections will be completed as required prior to the rainy season (October 1, 2008) and any subsequent enforcement action will be tracked and reported in the next Annual Report.

The City will use a variety of escalating enforcement methods to implement storm water requirements for all development projects within the City's jurisdiction. Generally, enforcement methods include verbal and written warnings, notices of violation, monetary penalties, and denial of permits. A more detailed description of the different enforcement measures used by the City to enforce its storm water regulations and their legal basis can be found in Section 2 of the 2008 JURMP update document.

2.4.4.9 NOTABLE ACTIVITIES

Several notable activities were conducted as part of the Development Planning Component during FY 2007-08. Notable activities included:

- Comprehensive review and update of the City's JURMP
- Collaborative review and development of the regional Model SUSMP
- Update of Storm Water BMP Manual II (City's Local SUSMP) to include regional interim Model SUSMP requirements
- Development and implementation of the BMP Installation Verification Program
- Development of the treatment Control BMP Operation and Maintenance Verification and Inspection Program.
- Design of the GIS-based SUSMP Priority Project and Treatment Control BMP Tracking System

For a detailed description of each of these activities please refer to the appropriate sections within the Development Planning Component of this Annual Report.

3.0 CONSTRUCTION COMPONENT

3.1 INTRODUCTION

The purpose of the City's construction component is to maintain an updated inventory of all construction projects, identify pollutant sources from construction projects, educate the construction community, implement construction site BMPs, inspect construction sites, provide proper enforcement of violations, and implement all of the requirements of the Municipal Permit as outlined in Section D.2.

3.2 SOURCE CHARACTERIZATION

3.2.1 SITE INVENTORY

Within the defined reporting period of this report, the City of Encinitas has compiled, maintained, and updated a watershed-based inventory of all construction sites within its jurisdiction. The construction inventory for FY 2007-08 included a total of 149 construction sites. During this period, there were 20 high priority sites, 45 medium priority sites and 63 low priority sites identified. The City utilizes an industry standard Geographic Information System (GIS) to maintain an accurate and up-to-date inventory of all construction projects. The GIS inventory includes details on each construction site, including project name, location, sub-basin, type of construction permit, date of permit issuance, inspection prioritization, and the assigned storm water inspector. Beginning January 24, 2008, the City's Clean Water Program staff in coordination with the City's IT department designed a technical solution in GIS to inventory and prioritize all construction projects as permits are approved. A more detailed description of the prioritization process is provided below in section 3.2.2. A fully prioritized construction inventory can be found in Appendix B-1 in addition to a map of all active construction sites located in Appendix B-2.

3.2.2 INVENTORY UPDATES

As required by Section D.2.a of the Municipal Permit the City's watershed-based inventory of construction sites is updated weekly by the Engineering department as new grading permits are approved. The Engineering department shares all approved permit information with the City's IT Department which also maintains an updated inventory of all active construction projects in a GIS database. As part of the 2008 JURMP update process, and to ensure monthly construction inventory management, a construction specific GIS Script was developed by the City's GIS staff in ESRI's ArcMap for prioritizing approved construction permits. This mechanism is accessible via desktop to Clean Water Program staff to execute the GIS script and review the prioritization on a monthly basis. Regular updates to the inventory include the addition of new construction projects, the removal of completed construction projects, and re-assignment of inspection frequencies of active construction sites as determined by the City's Clean Water Program staff. A flow-chart that outlines the process by which the inspection frequency of construction projects is determined in GIS can be found in Appendix B-3.

3.3 ORDINANCE UPDATES

As required by Section D.2.a of the Municipal Permit, applicable City documents and ordinances were updated on March 12, 2008 by the City of Encinitas City Council to establish adequate legal authority to enforce applicable storm water requirements. As part of the comprehensive JURMP update completed in March 2008, the City also updated Municipal Code Section 20.08, the Watercourse Protection, Stormwater Management and Discharge Control Ordinance, including construction specific provisions. Through a parallel update of the City's grading ordinance, the following provisions for storm water pollution control have been incorporated into the City's grading ordinance:

- All grading permits shall comply with the provisions of the City's Best Management Practices (BMP) Manual Part II which provides design, construction, and operation requirements for minimizing storm water pollution (§ 23.24.071).
- Any removal of BMPs that were required for a priority project will require a grading permit for corrective or other action. A requirement may be imposed to replace the BMP with equivalent water quality protection (§ 23.24.080).
- Priority projects for storm water pollution control cannot be exempted from obtaining a grading permit (§ 23.24.090.I).
- Any project creating over 500 square feet of new impervious area has to obtain a construction permit and adhere to all standards in the City's BMP Manual Part II (§ 23.24.105).
- All grading plans shall contain the location, design, detail, and cross section of all erosion control and post construction BMPs (§ 23.24.140).
- If the approved grading plan does not show post construction BMPs in sufficient detail, a precise grading plan for development projects is required to include and accurately depict post construction BMPs for review and approval of the City Engineer. (§ 23.24.126).
- Both Interim and Final Erosion and Sediment Control Plans are required (§ 23.24.150, 23.24.160).
- A waste management plan is required to be submitted with all interim erosion control plans. The management of the waste on the construction site must be graphically and verbally described on the grading plan (§ 23.24.150F).

3.4 BEST MANAGEMENT PRACTICE REQUIREMENTS

3.4.1 UPDATED BMP REQUIREMENTS

Through the JURMP Update process completed in March 2008, the City reviewed and updated a set of minimum BMPs that must be implemented at all construction sites. Every construction site within the City's jurisdiction is required to implement general site management BMPs and

erosion and sediment control BMPs to reduce, retain, and manage pollutant discharges to the MEP. Construction BMP requirements are presented in the Encinitas Municipal Code Chapter 20.08, the City's Storm water Best Management Practices Manual, Part I and II, and the City of Encinitas' 2008 JURMP Update.

3.4.1.1 SEASONAL SITE MANAGEMENT REQUIREMENTS

Construction sites are required to implement minimum construction BMPs to prevent pollution discharges to the MEP regardless of the season. However, the City also maintains requirements for erosion and sediment control BMPs that are different for the wet season (October 1st – April 30th) than they are for the dry season (May 1st – September 30th). The City's Storm Water Manual Parts I and II provide a detailed list of dry and wet season requirements for all construction sites. Prior to the beginning of the wet season, in September 2007, the City sent 127 Erosion Control letters to all property owners with active and inactive construction sites reminding them of the City's minimum BMP requirements .

3.5 PROGRAM IMPLEMENTATION

3.5.1 CONSTRUCTION AND GRADING APPROVAL PROCESS

The City has an established and thorough interdepartmental review and approval process for local construction and grading permits. When a construction project comes to the City for approval, it is required to obtain a building permit, a grading permit, or both. A grading permit is required prior to any activity where the total volume of material disturbed, stored, disposed, or used as fill exceeds 50 cubic yards, obstructs a waterway, or occurs over an area of 10,000 square feet. All other projects require a building permit. Both permits require that plans be submitted and approved by the City. The City's grading ordinance requires that all projects, whether subject to a grading plan or not, are required to minimize site runoff, erosion, and sedimentation. In addition, all projects requiring a grading permit are required to prepare an erosion and sediment control plan. All permits that go through the City's review and approval process are tracked within a citywide data management system called HTE.

The grading permit outlines the regulatory (Federal, State, and City) conditions for new construction. The grading permit requires that grading plans be prepared, reviewed, approved, and signed by the City Engineer. As a part of this approval process, the City's Clean Water Program staff also review the grading plans to ensure compliance with applicable construction specific regulations.

The grading plan approval process consists of a series of plan checks, revisions, and final approvals. Plans are checked by both the Engineering and Clean Water Program staff. Engineering staff reviews the plans for overall compliance with the grading ordinance. Clean Water Program staff checks the plans for specific compliance with the Storm Water Management Ordinance and Federal and State regulations. If the site falls under jurisdiction of the State's General Construction Permit, staff follows up with the developer

to ensure that a SWPPP is properly prepared and submitted. In addition, the SWPPP is reviewed and approved by the Clean Water Program staff prior to final approval of the project grading plans. The City also requires proof that a Notice of Intent (NOI) has been submitted for sites that are subject to the General Construction Permit.

Prior to issuing construction and grading permits, the City's Engineering Department verifies that the proposed construction project plans to implement all applicable required BMPs to reduce pollutant discharges to the MEP.

3.5.2 BMP IMPLEMENTATION

Clean Water Program staff spends a significant amount of time coordinating storm water management and BMP implementation at construction sites with the help of the City Engineering Inspectors. Construction BMP requirements are presented in the Encinitas Municipal Code Chapter 20.08, the City's Storm Water Best Management Practices Manual, Parts I & II.

Clean Water Program staff constantly monitors weather patterns and storms in the Pacific through the National Weather Service. Weather reports and forecasts are emailed to all Engineering Inspectors to inform them of the possibility of incoming rain. When the forecast exceeds 40% over the coming five-day period, inspectors inform contractors that additional BMP implementation may be necessary, and where necessary, they require developers to have additional BMPs in place at the end of each work-day.

It is notable that the general notes for the building plans have been amended to include erosion control, sediment control, and materials management practices. The Clean Water Program also reviews SWPPPs for all projects greater than five acres and sensitive projects between one and five acres. Staff reviewed and commented on Storm Water Pollution Prevention Plans for nine projects between July 1, 2007 and June 30, 2008. See Table 7-1 below for a summary of SWPPP reviews.

Other project reviews completed by Clean Water Program staff as part of the permitting process are addressed in more detail in Section 2.0, Development Planning.

Table 3-1 Storm Water Pollution Prevention Plan Reviews, 2007-08

Site Name	Address	Size (acres)	NOI?	Review Date
Woods Residence	1864 Crest	1.16	Yes	7/05/07
City of Encinitas Fire Station #3	801 Orpheus Ave.	1.6	Yes	7/25/07
Harloff BMW	1302 Encinitas Blvd	4.58	Yes	08/31/07
Encinitas Beach Resort	2100 N. Coast Highway 101	7.15	Yes	9/12/07
Leucadia Blvd. Street Improvements	Leucadia Blvd. east of I-5 to Pacific Coast Highway	2.27	Yes	9/12/07
Eckstein Horse Ranch	3557 Lone Hill Ln.	5.4	Yes	11/13/2007
Quail Botanical Gardens Center	230 Quail Gardens Dr.	4.5	Yes	12/19/07
Rainbow Ridge	1435 Rainbow Ridge	3.52	Yes	1/24/08
Pacific Station	687 S. Coast Highway 101	2.01	Yes	6/23/08

Through the review and plancheck process, staff may require additional or alternative BMPs to be implemented on individual projects. This allows the Clean Water Program to ensure that the proper sediment control, erosion control, and materials management BMPs are shown on the plans and are to be implemented on-site.

3.5.3 CONSTRUCTION SITES REQUIRING ADVANCED TREATMENT

There were no sites in FY 2007-08 that required advanced treatment. For the majority of the construction sites within the City's jurisdiction, the minimum required BMPs, if correctly installed and maintained, adequately control sediment discharges from the site. If it is determined that a project site possesses characteristics that could result in standard construction BMPs being ineffective in the treatment of sediment, resulting in an exceptional Threat To Water Quality (TTWQ), advanced treatment will be required. Standard criteria for determining projects that pose an exceptional TTWQ and a description of advanced treatment methods are included in the City's Storm Water BMP Manual II.

3.5.4 INSPECTIONS & BMP VERIFICATION

The City has an established inspection program to evaluate compliance with storm water regulations at all construction sites within the City's jurisdiction. The City of Encinitas' Engineering Department employs six Engineering Inspectors who are responsible for inspections at all construction sites in the city. Storm water issues such as compliance with the grading and storm water ordinances in the Municipal Code have become one of their main focuses, especially during the wet season.

On January 24, 2008, the RWQCB adopted the 2007 Municipal permit. Inspection activities for the construction program were updated and implemented at that time to meet the new Municipal permit requirements as outlined in Order No. R9-2007-0001. As a result, all construction inspection frequencies from July 1, 2007 to January 24, 2008 were in conformance with the Municipal permit requirements of 2001, and the construction inspection activities from January 24, 2008 to June 30, 2008 met the Municipal permit requirements for 2007. During the fiscal year, City staff documented a total of 445 storm water inspections. The prioritization of sites from July 1, 2007 through January 24, 2008 included the following: 36 high priority, 19 medium priority, and 90 low priority sites. The prioritization of sites from January 24, 2008 through June 30, 2008 included the following: 24 high priority, 50 medium priority, and 75 low priority sites. Appendix B-1 details the complete Construction Inventory for FY 07-08, the construction site prioritization under both municipal permits, and the number of inspections conducted at each site.

As part of the 2008 JURMP update process, and codified through BMP Manual II, the City of Encinitas established a maximum disturbed area for grading at 50 acres. Additionally, through this process, the City established advanced treatment criteria for construction activities. Within the defined reporting period of this report, no construction projects in the City of Encinitas were subject to maximum disturbed area or advanced treatment requirements.

The Engineering Inspectors captured all construction inspections on a form titled "Construction Site Storm Water Inspection Checklist", included in Appendix B-4. The inspection form contains questions to ensure all the inspection components required by Section D.2.d.6 of the Municipal Permit are addressed. The form lists the minimum construction BMPs required by the City and includes boxes to document if BMPs are adequate or inadequate and require maintenance. If required BMPs are missing or found to be improperly implemented, appropriate enforcement actions, as described in Section 3.5.5 below are taken.

3.5.5 COMPLIANCE AND ENFORCEMENT ACTIONS

3.5.5.1 GENERAL ENFORCEMENT

The City is responsible for enforcement of local ordinances and applicable local permits at all construction sites in its jurisdiction. Enforcement for construction projects is administered by the Engineering Inspectors and other City staff with inspection and enforcement authority.

The City typically employs a tiered, escalating enforcement system which includes verbal warnings and education, written warnings, and administrative citations. However, the City reserves the right to determine the most appropriate enforcement course for a given situation, as dictated by the specifics of each case. For example, a stricter initial enforcement measure may be applied where significant noncompliance is noted or when a potential rain event increases the potential for the violation to have a negative impact on water quality.

Verbal warnings and education will typically be the initial enforcement methods employed, assuming that a) the site or individual does not have a history of non-compliance with storm water regulations, and b) there has not been an observed illegal discharge to the MS4. The inspector will educate the violator on what actions need to be taken to prevent a violation from occurring or to correct the violation and document the violation and verbal warning in the inspection file. A time frame will be given for an identified violation to be corrected, and a follow-up inspection date will be scheduled, which will also be documented.

A written warning is typically issued to violators that are already aware of the City's storm water regulations or to those who have not corrected their actions after being given a verbal warning. Written warnings can be given using a variety of methods, including the issuance of a Notice of Violation (NOV) or Stop / Correct Work Notice. The NOV and Correct Work Notice will provide a description of the violation to be corrected, the time frame for correction, and a follow-up inspection date. All Stop Work Notices issued by the City are reported to the RWQCB per the reporting requirements of the Municipal Permit.

Civil penalties for violations of the Encinitas Municipal Code (EMC) are established in EMC Chapter 1.08, and determined violations of storm water regulations may be subject to administrative citations and associated administrative fines. Administrative citations and fines are used in addition to other legal remedies as described in the paragraphs above.

All inspection personnel have the authority to take immediate enforcement actions when necessary. This facilitates timely correction of inadequate BMP implementation, reducing the risk of pollutants discharging from the site. City inspectors conduct follow-up inspections to determine if corrective actions have been taken to comply with City ordinances and minimum BMP requirements. The time frame for a violator to correct a documented violation is determined on a case-by-case basis at the discretion of the inspector.

3.5.5.2 REPORTING AND NON COMPLIANCE

During the FY 2007-08, 47 construction related complaints were received through the City's hotline. After all complaints were investigated there were 18 instances in which educational information was disseminated, **18 instances in which Notice of Violations** (NOV) were issued, and **7 instances in which citations** were issued. Additionally routine City inspections at construction sites throughout the year revealed that there were 46 individual correct work actions. With immediate oversight from the City's Engineering Inspectors, contractors were quick to address all complaints and implement the appropriate BMPs to achieve compliance and avoid further enforcement. Appendix B-6 features a summary of all violations and enforcement actions in FY 2007-08.

4.0 MUNICIPAL

4.1 INTRODUCTION

The municipal component of the City's Clean Water Program includes proper management of facilities owned and operated by the City of Encinitas to eliminate or reduce the amount of pollutants that enter the storm drain system. The City maintains streets, the storm drain system, and municipally owned facilities, which includes 18 public parks, six beach access areas, four beach parking lots, five fire stations, five public works yards, four administration buildings, one golf course, and four open space areas. The updated municipal facilities inventory is included as Appendix C-1. The City also conducts high Threat to Water Quality (TTWQ) activities, as defined by the Municipal Stormwater Permit, such as power washing and other mobile activities including street and sidewalk repair, building cleaning, painting, graffiti cleaning, and fleet vehicle maintenance. Other prominent water quality related activities include street sweeping, inspections of municipal facilities, educational efforts geared toward municipal personnel and landscaping contractors, annual MS4 maintenance, and regular upkeep of the sanitary sewer system to prevent overflows.

Due to the large expanse of municipal areas, activities, and functions, City staff must carefully manage pollution prevention measures and BMPs to reduce or potentially eliminate the discharge of pollutants into the MS4 from municipal areas and activities. To comply with the Municipal Stormwater Permit, the City has developed a comprehensive program designed to reduce the amount of pollutants that are transported in urban runoff from municipal areas, activities, and functions

4.2 ROADS, STREETS, HIGHWAYS, AND PARKING FACILITIES

4.2.1 BACKGROUND

Roads, streets, highways, and parking facilities can collect a variety of pollutants due to routine vehicle use and have a tendency to collect litter and debris from neighboring areas and activities. Regular maintenance is necessary to control pollutants such as sediment, metals, litter, and debris on roads, streets, highways, and parking facilities.

4.2.2 SOURCE CHARACTERIZATION

The City of Encinitas maintains approximately 145 miles of roads, streets, and highways and four City-owned and operated parking facilities. Roads, streets, highways, and parking facilities are included in the City's municipal inventory, which is included in Appendix C-1.

4.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

Both pollution prevention methods and BMPs are implemented for roads, streets, highways, and parking facilities throughout the City. The City utilizes both the City's BMP Manual Part I and the CASQA Municipal Handbook to choose applicable BMPs to implement for roads, streets, highways, and parking facilities within the City. Street sweeping and cleaning is the main BMP that is implemented for road, street, highway, and parking facilities (both stand-alone and those associated with a municipal facility) maintenance. Treatment control BMPs are used for all road sections which are subject to SUSMP requirements, described in more detail in Section 2.0. The City implements additional controls for roads, streets, highways, and parking facilities adjacent to or tributary to ESAs when determined to be necessary.

4.2.4 PROGRAM IMPLEMENTATION

This section describes the steps that were taken in FY 2007-08 to require and verify the implementation of designated BMPs for all City maintained roads, streets, highways, parking areas, and related activities as outlined in the Municipal Permit Section D.3.a.(5)(a-c).

In compliance with street sweeping standards established in Order 2007-0001, the City implemented an aggressive sweeping schedule for roads, streets, highways, and parking facilities.

The frequency of street sweeping is as follows:

- All arterial roads, streets, highways, and parking facilities identified as consistently generating the highest volumes of trash and/or debris are swept weekly.
- All collector streets and parking facilities identified as consistently generating moderate volumes of trash and/or debris are swept bi-monthly.
- All residential (publicly owned) and parking facilities identified as generating low volumes of trash and/or debris are swept annually.

In FY 2007-08, a total distance of **11,380 curb miles** was swept, and a total of **1,378.5 tons of debris** was collected.

The City also maintains four parking facilities adjacent to four local beaches. During the summer months the parking lots produce a moderate volume of trash, sediment, and debris, and have been assigned a sweeping prioritization of medium priority. These facilities are swept weekly from April through September to address the increased traffic, and monthly from October through March. In FY 2007-08, a total of **22.5 tons** of debris was collected from beach parking lots.

The City's Public Works Department and Partners with Industry (PWI) removed 1,068 30-gallon bags of litter from the City's bus stops. Additionally, the City's Public Works Department in coordination with San Diego County probation crews collected 11,425 30-gallon bags of over-grown vegetation from City Right of Ways based on visual observations and citizen complaints.

4.3 FIXED FACILITIES

4.3.1 BACKGROUND

The City owns and operates a variety of municipal fixed facilities that have been grouped in this section because these facilities receive formal inspections as part of the municipal program. Therefore, the program implementation for these facilities is generally the same. Municipal fixed facilities include the following:

- Parks and Recreational Facilities
- Public Works Facilities
- Potable Water Facilities
- Fire Stations
- Other Fixed Facilities

4.3.2 SOURCE CHARACTERIZATION

The Municipal Permit requires Copermittees to inspect high priority municipal areas and activities annually according to D.3.a.(7)(a). High priority facilities include Parks and recreational facilities and other municipal areas and activities that the Copermittee determines may contribute a significant pollutant load to the MS4.

As part of the JURMP Update process in March 2008, all municipal facilities were assigned an inspection priority based on the Municipal Permit requirements and an evaluation of their threat to water quality. Each site and activity has been evaluated based on a variety of site-specific factors including size, location, type of activity, waste generated, pollutant discharge potential, non-storm water discharges, proximity to receiving water bodies, and any other relevant factors deemed appropriate. Using these criteria, a complete prioritized, watershed based inventory was developed and is included in Appendix C-1.

The City of Encinitas owns, operates, and maintains 50 fixed facilities within the City. Of these facilities, 29 have been designated with a high priority inspection priority and 21 were designated a low inspection priority. All high priority facilities are formally inspected on an annual basis and described further in Section 4.3.4. Both high and low priority facilities are visually inspected on a routine basis. Any illicit discharges or illegal connections are immediately referred to the Clean Water Program. All fixed municipal facilities are included in the City's inventory located in Appendix C-1. Figure 4.1 illustrates the various municipal fixed facilities and their associated activities within the City of Encinitas.

Parks and Recreation Facilities

The City maintains 21 parks, 7 beach access areas, 7 viewpoints, 35.5 acres of trails, and 94.93 acres of open space. All landscape maintenance activities are performed through the use of a private contractor. Parks Division Supervisors are responsible for monitoring contract activities for landscaping; implementing BMPs for pesticide, herbicide, and fertilizer usage; waste removal and control; and maintenance at all municipal parks and recreation facilities.

Public Works Operations Facilities

Public Works operations facilities are important in maintaining the functionality of many publicly offered services. The City of Encinitas maintains a total of five public works facilities, which include three public works yards, one vehicle maintenance facility, and a wastewater collection facility (Appendix C-1).

Potable Water Facilities

The means to provide residents of the City with potable water is an essential activity conducted by the City of Encinitas' San Dieguito Water District. The City maintains several underground fixed facilities which includ pressure regulating stations as well as two water reservoir/water storage facilities. The City also maintains an above ground water recycling reservoir.

Fire Stations

Fire fighting capability is an essential element of municipal activities conducted in the City. The City of Encinitas maintains five fire stations, which are included in the municipal inventory (Appendix C-1). Two fire stations within the City, stations #3 and #4, have fueling stations on site.

Other Fixed Facilities

Other fixed municipal facilities include a community center, an administrative building, a sewage pump station, and a UV treatment facility. All of these facilities are considered a low priority because many of the activities at these facilities are conducted indoors and do not correspond with activities that are considered a high threat to water quality.

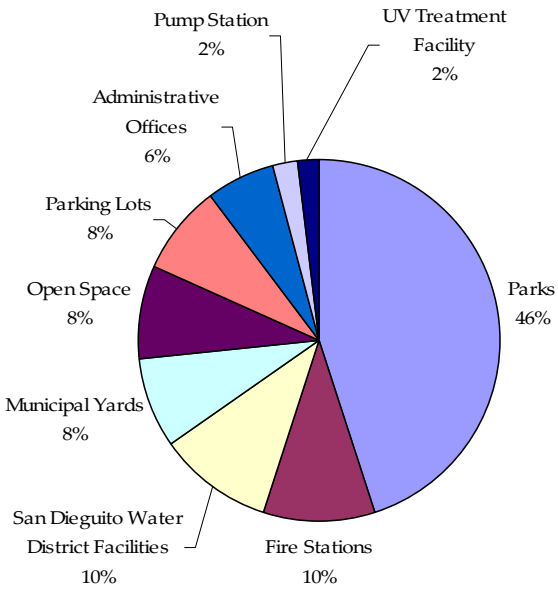


Figure 4.1 City of Encinitas Fixed Facilities

4.3.3 BEST MANAGEMENT PRACTICES

4.3.3.1 UPDATED BMPS

In FY 2007-08, the City established minimum BMPs for various municipal activities at all fixed municipal facilities. The BMPs are outlined in the City's 2008 JURMP Update and the City's BMP Manual Part I. The City also references the CASQA Municipal BMP Handbook when choosing appropriate BMPs for various fixed facility types. More detailed information about BMP implementation at specific facility types is included in the following sub-sections. The City implements additional BMPs as deemed necessary, and implements equivalent BMPs when it is determined that a specific BMP is not feasible at a particular site. In addition to implementing BMPs, the City utilizes pollution prevention measures to reduce or eliminate the amount of pollutants generated from City-owned fixed facilities.

Parks and Recreation Facilities

In FY 2007-08 the City implemented a variety of BMPs to reduce or eliminate the amount of pollutants entering the MS4 from municipal parks and recreation facilities and other open landscaped areas. City personnel implemented general waste management BMPs, and patrons of the facilities were encouraged to recycle and properly dispose of trash and pet waste. Notable activities during the fiscal year included the maintenance of 17 doggie bag dispensers at three public parks and along two trails. The City also posted 12 recycling signs along with trash and recycling bag dispensers at 8 beaches on July 4 and September 3, 2007, and collected 342 30-gallon bags of trash and 180 30-gallon bags of recycling.

City staff continued operation and maintenance of post-construction BMPs at Cottonwood Creek Park. The park is a prime example of low impact development and includes the following post-construction BMPs: 90 feet of day lighting Cottonwood Creek, porous pavement for all parking areas and driveways, pervious walkways, surface drainage through earthen-bottom open channels, and drought tolerant plants in landscaping areas.

Due to their widespread outdoor use, pesticides, herbicides, and fertilizers can be common pollutants discharged to MS4s. Transport of these pollutants is often a result of the following: (1) runoff from improper irrigation after application; (2) application of chemicals during or prior to storm events; (3) use of chemicals that do not properly absorb to soil or plants; and (4) overspray from chemical applications that may eventually enter the MS4. The City of Encinitas Parks and Recreation Department has prepared and adopted a Policy and Procedures Manual for integrated pest management. Implementation of the policy includes:

- educating and training of staff and contractors on the policy,
- implementing a process of identifying pests and/or problems by site,
- monitoring and record keeping,
- establishing thresholds for pest problems,
- selecting a less toxic treatment, and
- evaluating the success of the treatment.

The Federal Pesticide, Fungicide, and Rodenticide Act and California Title 3, Division 6, Pesticides and Pest Control Operations place strict controls over pesticide application and handling. This Act also specifies training, annual refresher, and testing requirements. The regulations generally include: a list of approved pesticides and selected uses, updated regularly; general application information; equipment use and maintenance procedures; and record keeping. The California Department of Pesticide Regulations and the County Agricultural Commission coordinate and maintain the licensing and certification programs.

In FY 2007-08, the following BMPs were implemented at all municipal parks and recreation facilities, public streets, channels, and right of ways to reduce pollutants from pesticides, herbicides, and fertilizers:

- Whenever practicable, integrated pest management techniques that rely on non-chemical solutions are implemented.
- City personnel who participate in the application of pesticides are trained and licensed (Qualified Applicator License) and follow guidelines set by the California Department of Pesticide Regulations and the County Agricultural Commission.
- City staff records the applications of all chemical agents by noting the locations, types, and quantities of chemicals used. Records are reported monthly to the Department of Agriculture.
- Pesticide, fertilizer, and herbicide handling and safety refresher sessions are provided to City personnel involved with application.
- The use of fertilizers is minimized as much as possible; compost and soil amendments are used in place of fertilizer, where applicable.
- Employees are trained to handle pesticides, herbicides, and fertilizers properly.
- All federal, state, and local regulations are followed in the use of pesticides, herbicides, and fertilizers.
- Pesticides, herbicides, and fertilizers are applied only when necessary (typically during growing seasons) and not during or prior to anticipated storm events.
- Pesticides are not sprayed when there is a high possibility of the spray drifting into non-target areas or onto non-target vegetation, insects, or animals.
- The City maintains compliance with federal and state reporting law for pesticide use.
- Weeds, grass, and brush are cleared from building perimeters and fence lines to reduce the need for pesticides and herbicide use, when applicable.
- Native plants are used in landscaping, where applicable.
- Diseased plants are removed, and infected parts of plants are removed to minimize the need for pesticide and herbicide use, where applicable.
- Several weather stations throughout the City are used to monitor microclimates to properly set irrigation systems for different areas of the City and reduce the potential of over-irrigation.
- Flow sensors and master valves prevent water loss in the event of a break in any of the main lines.

- Two bilingual training sessions for private landscaping contractors were conducted by Clean Water Program staff during the fiscal year. There were 31 participants at the training session on November 6, 2007 and 25 participants at the training session on March 11, 2008.

Public Works Operations Facilities

City personnel implement appropriate BMPs for all activities that take place at public works facilities. Storm Water Pollution Prevention Plans (SWPPPs) have been developed for all five of the City's main operations facilities, which include the San Elijo Wastewater Division Collections Facility, Pacific View Public Works Facility, Requeza Street Facility, the "A" Tank Site, and the newly established Calle Magdalena Public Works Facility. The SWPPPs include a site description, a description of potential sources of pollutants, a summary of existing BMPs, a description of BMPs to be implemented, and a monitoring and record keeping plan. The SWPPPs are maintained at each facility, and all of the facilities are inspected by Clean Water Program staff on an annual basis. Additionally, all Public Works employees are annually trained in storm water management by Clean Water Program.

Potable Water Facilities

City personnel implement appropriate BMPs for all activities that take place at potable water facilities when deemed appropriate. All San Dieguito Water District employees are trained in storm water management on an annual basis.

Fire Stations

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by fire fighting activities both at fire stations in the City and locations throughout the City. Two fire stations (#3 and #5) have treatment control BMPs in place to treat any runoff which may be discharged from washing activities. The remaining stations utilize source control BMPs to minimize and control discharges related to washing activities. All fire fighting training activities which include aqueous film forming foam are conducted at a fire station outside of the City of Encinitas. In addition to implementing structural BMPs at the fire stations, all City of Encinitas Fire Department employees are trained in storm water management on an annual basis. More detailed information regarding non-emergency fire fighting flows can be found in Section 13 of this document.

Other Fixed Facilities

The City implements pollution prevention methods and BMPs to reduce or eliminate the amount of pollutants generated by the management of public buildings, other fixed facilities, and surrounding areas. The City implements BMPs to control erosion and sediment, during landscaping maintenance, and for waste management, as discussed in the City's BMP Manual Part I and the CASQA Municipal Handbook.

The City employs a number of pollution prevention practices at City Hall. These practices have been expanded in recent years to include:

- roof replacement and an energy efficiency improvement project which consists of installation of solar photo voltaic panels, a high efficiency air conditioning system, and day lighting the building in certain areas.
- the use of recycled paper (30%) for all copiers and printers,
- installation of an Automated Logic System (ALS) which controls the heating and ventilation
- implementing a 9-80 work week so that City Hall is closed every other Friday,
- installing lighting controls and timers that time lights in specific areas of the building based on specific needs and maximizes the time when lights are out,
- implementing a battery collection and recycling program at City Hall,
- replacing large trash receptacles at each individual desk with mini size trash receptacles and providing large recycling containers for mixed paper and cans/bottles.
- placing recycling centers in conference rooms that include mixed paper, cans/plastic, and trash compartments,
- the use of five hybrid cars for City vehicles.

4.3.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

Fertilizers which are used on landscaped areas in municipal parks and public right of way areas are considered a pollutant of concern for the San Elijo Lagoon and its larger drainage area. To mitigate potential discharges of nutrients to the Lagoon from Municipal activities, the City requires that the City's landscaping contractors implement an extensive fertilizer management program as described earlier in section 4.3.3.1. In FY 2007-08, Clean Water staff conducted annual bilingual storm water management training for all City landscaping contractors. The City will continue to monitor the fertilizer management program, and if the existing measures are found to be deficient, the City will adjust the BMP implementation to achieve a higher level of pollutant reduction.

Similarly, if the City identifies any potential sources of other constituents for which water bodies in the City are 303(d) listed that could be the result of activities at fixed municipal facilities, additional controls will be required to be implemented where applicable. The City will implement additional controls for municipal areas and activities adjacent to or tributary to ESAs when determined to be necessary. Presently, there are no other municipal fixed facilities that have been determined to be a source of pollutants for which water bodies within the City are on the 2006 Clean Water Act 303(d) list.

4.3.4 PROGRAM IMPLEMENTATION

The City implements the municipal program using a variety of different processes, including maintenance, training and education, inspections, and if necessary, enforcement actions. Program implementation also includes the continuous assessment of municipal programs to ensure that they are designed and executed in a manner that is most effective to reducing, and potentially eliminating, the threat of pollution from fixed municipal facilities.

4.3.4.1 MAINTENANCE

In FY 2007-08, the City continued to conduct regular maintenance activities at fixed facilities, which included landscape maintenance, building maintenance, parking lot, and sidewalk repair, when necessary. Sweeping of the parking facilities associated with the municipal facility is conducted at these facilities during regular maintenance activities.

The City maintains a regular maintenance schedule for fixed facilities in the City. As previously discussed, City personnel are trained to implement the proper BMPs when at municipal facilities and when engaging in specific activities at those facilities. City personnel are also trained to dispose of any waste properly, and to report illegal discharges/illicit connections as they may come across them during normal work activities.

4.3.4.2 TRAINING AND EDUCATION

Municipal personnel are trained in implementing appropriate BMPs and preventing non-storm water discharges. In FY 2007-08, Clean Water Program staff conducted training for the following municipal departments: Public Works, Fire, Parks and Recreation, and Engineering. Additionally, the Streets Division of the Public Works Department discussed storm water issues at regular weekly staff meetings throughout the reporting period. A detailed description of the municipal education program can be found in Section 8 of this document.

4.3.4.3 MUNICIPAL INSPECTIONS

City staff performs annual inspections at all of the high priority municipal facilities in the City of Encinitas. As part of the FY 2007-08 program City staff performed a total of 29 high priority inspections. The fixed facility inspection locations and inspection dates are summarized in Table 4-1 below.

Table 4-1
Fixed Facility Inspections

No.	Facility Name	Inspection Date
1.	"A" Tank Site Public Works Yard	6/0508
2.	Calle Magdalena Public Works Yard	6/03/08
3.	City of Encinitas Civic Center	6/26/08
4.	Pacific View Public Works Facility (Temporary)	6/0308
5.	Requeza Street Public Works Yard	6/03/08
6.	San Elijo Wastewater Division Facility	6/06/08
7.	Beacon's Beach	7/02/08
8.	Cardiff Sports Park	6/20/08
9.	Cottonwood Creek Park	6/19/08

No.	Facility Name	Inspection Date
10.	Encinitas Viewpoint Park	6/23/08
11.	Glen Park	6/20/08
12.	Grandview Beach	7/02/08
13.	H St. Viewpoint	7/02/08
14.	Hawkview Park	6/24/08
15.	J St. Viewpoint	7/02/08
16.	Las Verdes Park	6/26/08
17.	Leo Mullen Sports Park	6/26/08
18.	Leucadia Oaks Park	6/25/08
19.	Leucadia Roadside Park	7/02/08
20.	Little Oaks Equestrian	6/19/08
21.	Mildred Macpherson Park	6/20/08
22.	Moonlight Beach	6/23/08
23.	Oakcrest Community Park	6/26/08
24.	Orpheus Park	6/20/08
25.	Paul Ecke Sports Park	6/23/08
26.	Scott Valley Park	6/23/08
27.	Sun Vista Park	6/19/08
28.	Swami's Beach	7/02/08
29.	Wiro Park	6/19/08

The recommended Best Management Practices and corrective actions are summarized in the City's Routine Inspection Summary located in Appendix D-5. Of the 29 sites inspected, a total of 10 facilities required corrective actions and follow-up inspections. All 10 facilities have implemented appropriate BMPs, and the Public Works and Parks and Recreations Departments have verified that the corrective actions have been completed. There were no enforcement actions for any of the Municipal fixed facilities during the FY 2007-08 .

Potable Water Facilities

All of these facilities are considered a low priority and do not receive formal inspections because the activities associated with these facilities are located underground and do not involve any other activities on site.

4.4 MS4

4.4.1 BACKGROUND

The primary functions of municipal separate storm sewer systems are to collect and transport surface runoff to receiving waters during storms in order to prevent flooding. The entire MS4 system is considered a high priority due to its tendency to collect and convey pollutants to receiving waters. The City's MS4 consist of streets, curbs, catch basins, inlets, pipes of varying materials, natural creeks and streams, natural channels, concrete channels, culverts, desilting basins, and detention basins. The City also maintains a number of treatment control BMPs such as filter inserts and a UV treatment facility, which are included in the regular maintenance of the MS4. In order to reduce the transportation of pollutants into receiving water bodies, the City of Encinitas regularly maintains its MS4 to ensure that it remains both fully functional and free of pollutants to the MEP.

4.4.2 SOURCE CHARACTERIZATION

The City maintains a variety of MS4 facilities which includes 2,762 catch basins and inlets, 96 miles of storm drain pipe, 6.32 miles of open channels, 16 desilting basins, and one UV Urban Runoff Treatment Facility located throughout its jurisdiction. The MS4, as one complete entity, is included in the municipal inventory located in Appendix C-1.

4.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.4.3.1 UPDATED BMP REQUIREMENTS

The City has created and maintains a BMP Manual Part I which establishes the City's minimum BMP requirements for the following components: municipal, residential, industrial/commercial, construction, and new development. In FY 2007-08, the City prepared a JURMP Update which directs city staff to utilize the CASQA Municipal Handbook in addition to the BMP Manual to choose applicable BMPs for municipal areas and activities, including MS4 maintenance. All of these BMPs are designed to prevent waste from entering the MS4 system as well as ensuring that waste which is collected during maintenance of the City's MS4 does not re-enter the system.

The 2007 Municipal Permit requires that retrofitting flood management facilities be evaluated to determine the feasibility of providing additional pollutant removal from urban runoff and should only be conducted where determined to be effective. The City of Encinitas does not own or operate any flood management projects or flood control devices that may be retrofitted. However, in FY 2007-08 the City did maintain 16 detention basins throughout the City that serve pollutant removal, particularly for sediment and associated pollutants bound to the sediment. These facilities are inspected on an annual basis and cleaned of debris and sediment as needed. A Municipal BMP map that depicts all of the City's structural BMPs, detention basins and fossil filter locations can be found in Appendix C-3.

4.4.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS/ACTIVITIES

The City will implement additional controls for MS4 facilities adjacent to or tributary to ESAs when determined to be necessary.

4.4.4 PROGRAM IMPLEMENTATION

The City's MS4 management program includes responding to complaints received by the City's Clean Water Hotline {(760) 633-2787}; detecting and ceasing IC/IDs; inspecting and maintaining MS4s by cleaning, removing sediment, debris, and excessive vegetation, and by flushing the pipes; by repairing and/or replacing damaged or failing MS4 structures; and by stenciling signs on storm drain inlets warning of effects of illegal dumping. The City trains field staff on implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance, emergency maintenance, and/or discharge control. The City utilizes a vactor truck during MS4 maintenance to collect both dry and liquid debris from catch basins and inlets. Applicable BMPs are used during routine and emergency maintenance.

On January 24, 2008, the RWQCB adopted the 2007 Municipal permit. Maintenance activities, frequencies, and methodologies were updated and implemented at that time to meet the new Municipal permit requirements as outlined in Order No. R9-2007-0001. As a result, all maintenance activities from July 1, 2007 to January 24, 2008 were in conformance with the Municipal Permit requirements of 2001, and the municipal maintenance activities from January 24, 2008 to June 30, 2008 met the Municipal permit requirements for 2007. Appendix C-2 details all of the 2001 and 2007 Municipal Permit Reporting requirements for municipal activities that occurred during the defined reporting period.

4.4.4.1 MAINTENANCE

A summary of the City's MS4 operation and maintenance activities that occurred throughout the fiscal year is included below:

- Within the defined reporting period of this report, approximately **55.95 tons** and **4, 748 - 30 gallon bags** of waste and litter were removed from the MS4. Waste and litter was removed from these facilities annually/year round as required by the Municipal Permit. Any MS4 facilities observed to be collecting relatively high volumes of trash were cleaned between May 1 and September 30th.

- Within the defined reporting period of this report, **2,374 - 30 gallon bags** of litter and vegetation were removed from open channels by hand. Cleaning the open channels is conducted annually/year round or more often when necessary. The City responds to observations or reports of anthropogenic litter in channels in a timely manner.

- Within the defined reporting period of this report the City cleaned **1,657** catch basins and removed a total of **26.4** tons of waste and litter. Storm drain inlets and catch basins that City personnel have identified as gathering a greater amount trash and debris as compared to other areas of the City are re-inspected throughout the year and cleaned if

necessary. All inlets and catch basins within the City are cleaned on an annual basis, which is sufficient in ensuring the catch basins do not reach one-third of capacity and that self-cleaning facilities remain free of trash and debris. Cleaning/inspection schedules are subject to change based on observations and records of City personnel.

- The City maintains a total of 38 storm drain filter inserts in 38 inlets located throughout its jurisdiction to remove sediment, debris, oil, and grease from the MS4. From July 1, 2007 through June 30, 2008, **3.148 tons** of sediment and litter were removed from all 38 inlets. These inserts were installed in 1999 and are maintained on a quarterly basis by a specialty contractor. Table 4-2 below outlines the complete filter insert inventory and their locations can be found in Appendix C-3 on the "Municipal BMP Map."

- Inspection and removal of silt after sufficient accumulation from creeks, desilting basins, detention basins, and rock lined channels occurred throughout the fiscal year between June 15 to October 15th. In FY 2007-08, **256.4** tons of silt, vegetation, and litter were removed.

- The UV Urban Runoff Treatment Facility underwent considerable maintenance and conditioning. Administratively, the City of Encinitas entered into a formal maintenance agreement with the San Elijo JPA. The scope of the agreement ensures daily monitoring and inspection, startup and shutdown of the facility as dictated by rain events, and preventative and regular maintenance. In FY 2007-08, over $10,000 was spent on the preventative and regular maintenance of the facility including roof repair, pump replacement, control screen and software updates, and other electronic equipment and parts. The UV treatment facility provides the City with a vital treatment function, and ongoing operations and maintenance activities are critical to ensure optimum performance and pollutant removal.

A complete report of all MS4 operation and maintenance activities can be found in Appendix C-2.

Table 4-2
Storm Drain Inserts Inventory

Inlet No.	Size (Inches)	Size (Feet)	Location	Inlet Type
2	24" X 45"		In right driveway apron @ 1470 Neptune Ave.	Grate
4	24" X 40"		AC From 1638 Neptune in grass shoulder	Grate
5		9'	1786 1/2 Highway 101	Curb
6	24" X 41"		1650 Highway 101	Grate

Inlet No.	Size (Inches)	Size (Feet)	Location	Inlet Type
7	23" X 40"		Alley West of Hwy 101, North of Jasper	Grate
8	24" X 41"		Alley West of 101, Behind 918 N. 101	Grate
10	24" X 41"		Leucadia Blvd. North of Park @ Hwy 101	Grate
11	23" X 40"		In Alley behind 828 Hwy 101	Grate
12	23" X 40"		Behind building. @828 Hwy 101	Grate
13	23" X 40"		Alley West of 101 @ Europa	Grate
14	23" X 40"		129 Cadmus	Grate
15	23" X 40"		149 Basil St.	Grate
16		10'	130 Basil St.	Curb
17	23" X 40"		130 Athena	Grate
18		9'	170 Athena	Curb
19	23" X 40"		577 N. Vulcan	Grate
20		4'	Across from208 Cereus	Curb
21	23" X 40"		208 Cereus	Grate
22	23" X 40"		321 Union	Grate
23	23" X 40"		Across from 321 Union	Grate
24		7'	1750 Hwy 101	Curb
25	24" X 40"		Alley West of 2nd St. @ G St.	Grate
26	36" X 64"		364 2nd St.	Grate
27		10'	Encinitas Blvd. NE Corner @ Hwy 101	Curb
28		11'	102 Encinitas Blvd.	Curb
29		7'	Santa Fe South side, 120 yards. West of I-5	Curb
30		8'	Santa Fe, North side, 120 yards. West of I-5	Curb
31	24" X 40"		2560 Manchester	Grate
32	24" X 40"		2582 Manchester	Grate
ECR-1			Intersection of Via Molena & El Camino Real	Curb
ECR-2			Mountain Vista & El Camino Real	Grate

Inlet No.	Size (Inches)	Size (Feet)	Location	Inlet Type
ECR-3			El Camino Real (in front of Circuit City Mall)	Curb
ECR-4			Garden View Rd./El Camino Real (East side)	Combo
ECR-33			El Camino Real/Garden View Rd., SE corner	Curb
ECR-34			El Camino Real/Garden View Rd. SW Corner	Curb
ECR-35			El Camino Real (across from Circuit City mall)	Grate
ECR-8			In front of 294 El Camino Real	Grate
ECR-9			El Camino Real in front of Block Buster Video	Curb

In 2007-2008, the Engineering Department was instrumental in conceptualizing and designing capital improvement projects to reduce future sewage spills by improving both the wastewater collection and the storm drain system. Sewer and emergency repair projects initiated during FY 2007-08 are shown below in Table 4-3.

Table 4-3
Wastewater CIP Projects

Project Title	Budget	Goal	Status
Olivenhain Sewer Pump Station	$ 4.5 M	Reduce sewage spills and increase capacity	In preliminary design

The Engineering Department was also instrumental in designing numerous drainage related capital improvement projects during the fiscal year. These projects are outlined in Table 4-4 below.

Table 4-4
Storm Drain CIP Projects

Project Title	Budget	Goal	Status
Stratford Knoll Drainage Improvements	$1 M	Replace existing storm drain channel and increase capacity.	In design

Urania Ave. and Windsor Dr. Storm Drain Improvements	$ 200,000	Replace old pipe with new reinforced concrete pipe and add new catch basins to eliminate future flooding.	In design
Project Title	**Budget**	**Goal**	**Status**
Cardiff Alley Improvements	$200,000	Build a perforated sub-drain to improve drainage in area.	In design

4.5 SANITARY SEWER SYSTEM

4.5.1 BACKGROUND

Spills and/or leaks caused by a malfunction or failure of a component of the City's sanitary sewer system have the potential to introduce a significant volume of untreated sewage into receiving water bodies. Untreated sewage can contain high concentrations of bacteria, viruses, and parasites, all of which have the potential to negatively impact the environment and pose a significant threat to human health. Untreated sewage also has the potential to contain a variety of hazardous chemicals, which also pose threats to environmental and human health. The City of Encinitas conducts routine inspections and maintenance of the sanitary sewer system to ensure that the system is functioning properly. Routine inspections and maintenance of the sanitary sewer system reduces the potential for an overflow and helps prevent and eliminate infiltration of seepage to the MS4. The City also responds to sanitary sewer overflows to reduce or eliminate the amount of untreated sewage that reaches nearby portals to the MS4 and aids in cleaning up and disposing of overflow residue.

4.5.2 SOURCE CHARACTERIZATION

The City maintains approximately 120 miles of public sanitary sewer collection pipes.

4.5.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.5.3.1 UPDATED BMP REQUIREMENTS

The City has created and maintains a BMP Manual Part I which establishes the City's minimum BMP requirements for the following components: municipal, residential, industrial/commercial, construction and new development. In FY 2007-08, the City prepared a JURMP Update which directs city staff to utilize the CASQA Municipal Handbook in addition to the BMP Manual to choose applicable BMPs for municipal areas and activities, including maintenance of the sanitary sewer system.

Similar to the MS4 maintenance program, the City trains field staff on implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance and

emergency maintenance and/or discharge control. Structural BMPs are used during routine and emergency maintenance, where applicable.

4.5.3.2 Additional Controls for Municipal Areas and Activities

The City implements additional controls for sanitary sewer facilities adjacent to or tributary to ESAs, if applicable and when determined to be necessary. The City has a regular sanitary sewer maintenance program that minimizes sanitary sewer overflows (SSO) and is described in more detail below.

4.5.4 Program Implementation

The City's sanitary sewer management program includes responding to overflows and spills as necessary, identifying spills and leaks, containing and controlling spilled materials, repairing damaged and leaking sewer lines, remediating existing sewer lines as necessary, and proper disposal of hazardous waste.

4.5.4.1 Maintenance

The City maintains a routine maintenance schedule for the sanitary sewer system. In FY 2007-08, the entire sewer system was cleaned, and known trouble spots were cleaned on a more frequent basis. The City seeks to reduce and eliminate the amount of seepage from the sanitary sewer system to the MS4 through routine preventative maintenance of both the sanitary sewer and the MS4 systems. Preventative maintenance of both systems allows City officials to detect and eliminate active seepage points before they become a larger problem, and also to repair areas of the system that have a high possibility of becoming a seepage point.

In FY 2007-08, the City took the following measures to reduce the seepage from the sanitary sewer system to the MS4:

- Flow metering was conducted at specific locations throughout the City's sanitary sewer system to monitor flow depths and potential capacity concerns
- Use of video cameras in sewer lines to check pipe conditions
- Rehabilitation program for aged sewer pipes and use of polyvinyl chloride (PVC) pipes for new construction

Other notable activities include the development of a Sewer System Management Plan (SSMP), which is a program to ensure that the sewer system is functioning properly, and that necessary maintenance is conducted. Full implementation of the SSMP is required by May 2009. The SSMP will include a spill response plan that establishes standard procedures for immediate response to a sanitary sewer system overflow (SSO). City personnel are trained in detecting, reporting, and responding to SSOs.

4.6 Mobile Municipal Activities, Including Power Washing

4.6.1 Background

The City conducts a number of activities, which are not confined to any specific locations. Due to the nature of these mobile activities, temporary structural and source control BMPs are implemented as necessary.

4.6.2 SOURCE CHARACTERIZATION

The City conducts a number of activities that are not designated to a specific location. Such activities include, but are not limited to, the following:

- Power washing, including graffiti removal
- Street and sidewalk repair and maintenance
    - Street striping/painting
    - Pothole repair
- Landscape maintenance

4.6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.6.3.1 UPDATED BMP REQUIREMENTS

The City implements good housekeeping and general pollution prevention measures during municipal maintenance activities, including the mobile activities discussed above. In FY 2007-08, the City established minimum BMPs which were described in the City's 2008 JURMP Update. The JURMP Update directs city staff to utilize the City's BMP Manual Part I and the CASQA Municipal Handbook to choose applicable BMPs to implement for municipal areas and activities, including mobile activities. BMPs similar to those implemented for the management and maintenance of parks and landscaped areas are implemented for landscape maintenance in landscaped City right-of-way areas such as medians.

4.6.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City implements additional controls for municipal mobile activities adjacent to or tributary to ESAs when determined to be necessary. Presently, City related mobile activities have not been determined to be a source of pollutants for which water bodies within the City are on the 2006 CWA 303(d) list. Present BMP implementation activities have been evaluated as effectively reducing pollutant discharge to all receiving waters in the City to the MEP.

4.6.4 PROGRAM IMPLEMENTATION

In FY 2007-08, City field crews were actively trained to implement BMPs during all mobile activities. The Public Works Department received training from the Clean Water staff to discuss storm water BMPs on August 2, 2007 and the Public Works Department also initiated their own spill prevention training on May 8, 2008. City field crews were trained to properly contain, control, and capture any discharge that was generated by a mobile activity. City field crews were also trained to use mobile equipment properly to ensure all wastewater is collected and that the equipment continues to function properly.

4.7 SPECIAL EVENTS

4.7.1 BACKGROUND

The City of Encinitas hosts a variety of special events in the City. These events included festivals, fairs, events for various charitable causes, and special occasions. Special events have the potential to generate significant trash and litter caused by the patrons and activities of the special event. The City utilizes many of the controls listed in the Municipal Permit (D.3(2)(f). These BMPs are described in more detail below and are implemented during and/or after special events, where applicable.

4.7.2 SOURCE CHARACTERIZATION

The City hosts a variety of special events which are located throughout the City at parks, beaches, and along Pacific Coast Highway 101.

4.7.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.7.3.1 UPDATED BMP REQUIREMENTS

In FY 2007-08, the City considered and implemented many of the controls specific to special events as listed in the Municipal Permit (D.3(2)(f). The City has chosen the following BMPs as most effective and efficient for City needs.

Before any special event permits are approved, applicants must fill out the City's "Special Events Permit P2 Questionnaire" (Appendix C-4) to assess the most appropriate BMPs for their event. In addition to the BMPs that are implemented by the applicant, the City of Encinitas implements the following BMPs during and/or after special events, where applicable.

- Proper management of trash and litter, including temporary trash receptacles for trash
- Street sweeping following the special event
- Post clean-up activities, such as catch basin cleaning, when necessary
- Other BMPs, as included in the Municipal Permit, when deemed necessary by City personnel

The City will consider implementing additional BMPs depending on the site location, site conditions, and/or type of special event.

4.7.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City will implement additional controls for municipal special events adjacent to or tributary to ESAs when determined to be necessary. Presently, special events have not been determined to be a significant source of pollutants for which water bodies within the City are on the 2006 CWA 303(d) list.

4.7.4 PROGRAM IMPLEMENTATION

In FY 2007-08, there were 15 special events. For each special event, the event sponsor was required to fill out a City of Encinitas special events permit application to identify the storm water BMPs they were going to implement. At a minimum, these events were required to provide extra trash and recycling containers, proper disposal of grease if food preparation was involved, and proper secondary containment for port-a-potties.

During the events, City personnel were encouraged to ensure that the event remained free of illegal discharges and/or illicit connections to the MS4. City personnel were made available for the duration of the special events for immediate trash removal and to notify the appropriate personnel if a problem was observed.

5.0 INDUSTRIAL AND COMMERCIAL

5.1 INTRODUCTION

Activities associated with industrial and commercial businesses can contribute pollutants to the City's MS4. The City of Encinitas has implemented a program that aims to reduce and prevent industrial and commercial pollution discharges from the MS4 to the MEP, to protect local receiving water bodies, and to comply with the Municipal Permit.

Commercial facilities within the City of Encinitas include a wide range of service oriented businesses from restaurants to nurseries. There are five main commercial areas within the City. The largest areas are downtown Old Encinitas and the Leucadia business district, along Highway 101 from Swami's Beach to La Costa Boulevard. This area contains many different commercial businesses ranging from restaurants to automotive outlets and is the oldest portion of Encinitas. Three industrial facilities are also located in the City: the San Dieguito Union School District school bus terminal, the San Elijo Water Pollution Control Facility, and the inactive Encinitas Landfill.

Throughout the last FY the City's Clean Water staff has worked diligently to fulfill the requirements of Order 2001-01 and the new Order 2007-0001. The City's JURMP was updated and submitted the Regional Board in March 2008 and the City initiated conformance to Order 2007-0001 in January 2008. During the process of updating the City's JURMP the City's GIS-based commercial inventory was updated and prioritized based on the new requirements of Order 2007-0001. The City's FY 07-08 commercial and industrial facility inspections were based on this new prioritization scheme and the new inspection frequencies outlined in Order 2007-0001. Inspections, follow-up, and enforcement actions were tracked using CityWorks, the City's existing GIS-based Work Order tracking system. In addition, the City participated in the regional development of a program to regulate mobile commercial businesses. The following section will demonstrate the City's successful implementation of the requirements of the Industrial and Commercial Section of Order 2007-0001 (Section D.3.b) during FY 2007-08.

5.2 INDUSTRIAL AND COMMERCIAL SITES/SOURCES ELEMENT

5.2.1 BACKGROUND

Each stationary industrial and commercial facility has the potential to discharge pollutants into the MS4 and consequently degrade local water quality. Often, the most cost effective and simple solution to reducing pollution is to implement pollution prevention techniques at the source. The Clean Water Program emphasizes the use of pollution prevention methods as a primary mechanism for reducing commercial discharges of pollutants into the City's MS4. Further, the City requires minimum site and activity specific BMPs to be implemented, and inspections and enforcement procedures will be conducted where necessary, to comply with the Municipal Permit.

For the rest of Section 5.2, "commercial facilities" will be used to refer to stationary commercial facilities that are not mobile. The mobile commercial site/sources component is described in Section 5.3.

5.2.2 SOURCE CHARACTERIZATION

A watershed-based inventory of the industrial and commercial sites/sources within the City's jurisdiction was compiled as part of the 2008 JURMP update. As required by the Municipal Permit, the inventory includes the following information for each site/source: facility name; address; pollutants potentially generated by the site/source (and identification of whether the site/source is tributary to a Clean Water Act section 303(d) water body segment and generates pollutants for which the water body segment is impaired); and a narrative description including SIC codes which best reflects the principal products or services provided by each facility. Inventories of industrial and stationary commercial facilities within the City of Encinitas are included in Appendix D-1. Because mobile commercial businesses do not have a fixed address at which they operate, they are tracked within a separate, non-spatial database (refer to Section 5.3).

The commercial inventory is continually updated as facilities go out of business and new facilities are opened. The GIS department and the Clean Water Program both receive a monthly summary of new and renewed business registrations from the City Clerk's Department. Upon receipt of the monthly summary, a GIS Analyst updates the spatial facility database, and a Clean Water Program staff member updates the storm water inspection information for each business. In addition, the Clean Water Program identifies businesses that are not on the facility inventory when complaints are filed about businesses that are not registered with the City. When this occurs, these facilities are added to the inventory. Additionally, when Clean Water staff conducts annual commercial and industrial inspections, inspectors have the opportunity to identify new or closed businesses and update the inventory with these findings.

FY 2007-08 commercial facility inspection priorities were established in consideration of inspection frequencies and prioritization standards outlined in Order 2007-0001. As part of the JUMRP update and transition to complying with the new Municipal Permit a new process to determine high priority facilities was formalized using GIS and put into effect in January of 2008. Section 5.2.4.1 provides a detailed description of the City's prioritization process for commercial facilities. As a result of this process, there were **92** commercial facilities identified and inspected as high priority. Types of high priority facilities were broken down as follows: (1) animal facility, (8) auto repair shops, (68) eating/drinking facilities, (9) gas stations, and (6) nurseries/greenhouses. Notably, the City of Encinitas' commercial inventory is dominated by eating/drinking facilities as well as a large number of greenhouses and nurseries. As such, it is worth noting that the commercial facilities/businesses in the City are dynamic, with changes happening often. Therefore, the City is constantly working to maintain and prioritize the commercial facilities inventory to dictate effective and efficient commercial inspection actions citywide.

Three industrial facilities are located in the City of Encinitas. All three facilities are covered under the State General Industrial Permit. The industrial inventory is included as Appendix D-

2. The San Elijo JPA Water Reclamation Facility is a wastewater treatment plant located at 2695 Manchester Avenue. The plant treats approximately 5.25 million gallons of raw sewage per day. The second industrial facility in the City of Encinitas is the SDUHSD-Transportation Cooperative. The facility is located at 1142 Bonita Drive and functions as the maintenance shop for the SDUHSD bus fleet as well as the parking area for the buses. The third industrial facility is the Encinitas Landfill, owned and operated by the County of San Diego. This facility is located at 2099 Encinitas Boulevard and is now closed. The JPA and SDUHSD are inspected by the City of Encinitas, and the Encinitas Landfill is inspected by the County. Completed industrial facility inspection forms are available upon request.

As part of the 2008 JURMP update and the development of the interim SUSMP, the City collaborated with copermittees to identify the pollutant loading potentials of industrial and commercial sources. Table 5-1 lists the pollutants that may be generated by each category of business. The pollutants that may be generated by each individual business can be determined by matching the category of business noted for each of the businesses in the commercial inventory in Appendix D-1 with the category in Table 5-1 and its corresponding pollutants. Waste Discharge Identification Number (WDID) is also included for sites that are covered under the State of California Industrial General Permit (General Industrial Permit). The TTWQ prioritization of each facility is also included in the inventories. Prioritization was assigned via the process described in Section 5.2.4.1.

As required by Section D.3.b(1) of the Permit, all industrial and commercial facilities that meet at least one of the following criteria are included in the inventory:

Industrial Facilities

- Industrial Facilities, as defined at 40 CFR § 122.26(b)(14)
- Facilities subject to the statewide General Industrial Permit or other individual NPDES permit
- Operating and closed landfills
- Facilities subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)
- Hazardous waste treatment, disposal, storage, and recovery facilities

Commercial Facilities

- Automobile repair, maintenance, fueling, or cleaning
- Airplane repair, maintenance, fueling, or cleaning
- Boat repair, maintenance, fueling, or cleaning
- Equipment repair, maintenance, fueling, or cleaning
- Automobile and other vehicle body repair, or painting
- Mobile automobile or other vehicle washing[1]
- Automobile (or other vehicle) parking lots and storage facilities
- Retail or wholesale fueling

[1] Mobile commercial businesses are discussed in more detail in Section 5.3.

Table 5-1
Pollutant Loading Potentials of Industrial and Commercial Sources

Site/Source Type	Heavy Metals*	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash
Airplane Repair	L	L	L	PO	UL	UL	PO	UL	PO
Animal Facilities	UL	UL	UL	PO	UL	L	L	L	PO
Auto Body Repair	L	L	PO	PO	UL	UL	PO	UL	PO
Auto Repair/Maintenance	L	L	L	PO	UL	UL	PO	UL	PO
Boat Repair	L	L	L	PO	UL	UL	PO	UL	PO
Botanical Garden	UL	PO	UL	PO	L	L	PO	L	PO
Building Materials	PO	UL	PO	L	PO	PO	PO	UL	L
Mobile Cleaning	UL	PO	UL	PO	UL	UL	PO	UL	PO
Cement Mixing/Cutting	UL	UL	PO	L	UL	UL	PO	UL	PO
Cemeteries	UL	UL	UL	PO	L	L	PO	PO	PO
Eating/Drinking Establishments	UL	UL	L	PO	UL	UL	L	L	L
Equipment Repair	L	L	L	PO	UL	UL	PO	UL	PO
Fueling	L	L	L	PO	UL	UL	PO	UL	PO
Golf Courses/Parks	UL	UL	UL	PO	L	L	PO	PO	PO
Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO
Marinas	L	PO	L	PO	UL	UL	PO	PO	PO
Masonry	UL	UL	PO	L	UL	UL	PO	UL	PO
Nursery/Greenhouses	UL	PO	UL	L	L	L	PO	PO	PO
Painting/Coating	PO	PO	PO	PO	UL	UL	PO	UL	PO
Pest Control	PO	PO	UL	PO	L	UL	PO	UL	PO
Pool/Fountain Cleaning	UL	UL	UL	PO	UL	UL	UL	UL	UL
Portable Sanitation	UL	PO	PO	PO	UL	L	PO	L	PO
Power Washing	PO	PO	PO	PO	UL	UL	UL	UL	UL
Auto Parking/Storage	L	L	L	L	UL	UL	PO	UL	PO
Mobile Auto Washing	PO	L	PO	PO	UL	UL	PO	UL	PO
Contractor (Mobile)	PO	PO	PO	PO	UL	UL	PO	UL	PO
Handyman (Mobile)	UL	PO	PO	UP	UL	UL	PO	UL	PO
Landfill	PO	PO	PO	L	PO	PO	L	L	L
Wastewater Treatment	UL	UL	L	PO	UL	L	L	L	PO

Notes

L = Likely, PO = Possible, UL= Unlikely

* Heavy metals are a possible pollutant for any facility that has a parking lot.

This table is based on the field experience of D-MAX Engineering and on tables in the Copermittees' Baseline LTEA. D-MAX has conducted more than 1,000 industrial and commercial inspections during which it assessed the pollutant discharge potentials of the inspected facilities.

- Pest control services
- Eating or drinking establishments, including food markets
- Mobile carpet, drape, or furniture cleaning[1]
- Cement mixing or cutting[1]
- Masonry[1]
- Painting and coating[1]
- Botanical or zoological gardens and exhibits
- Landscaping[1]
- Nurseries and greenhouses
- Golf courses, parks, and other recreational areas/facilities
- Cemeteries
- Pool and fountain cleaning[1]
- Marinas
- Portable sanitary services
- Building material retailers and storage
- Animal facilities
- Power washing services[1]

Both Industrial and Commercial facilities

- All other commercial or industrial sites/sources tributary to a CWA Section 303(d) impaired water body segment, where the site/source generates pollutants for which the water body segment is impaired
- All other commercial or industrial sites/sources within or directly adjacent to (i.e., within 200 feet of) or discharging directly to coastal lagoons or other receiving waters within an Environmentally Sensitive Area (ESA).
- All other commercial or industrial sites/sources that the City determines may contribute a significant pollutant load to the MS4.

5.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.2.3.1 UPDATED BMP REQUIREMENTS

As required by section D.3.b.(2) of the Permit, during the 2008 JURMP update, the City established a set of minimum BMPs for all industrial and commercial sites and incorporated these into the City's BMP Manual. The list of minimum BMPs includes both structural and non-structural BMPs and is itemized specific to pollutant-generating activity. The City's set of minimum BMPs for industrial and commercial sites/sources also includes pollution prevention methods, where appropriate. A complete list of the City's minimum BMPs for industrial and commercial facilities can be found in the City's BMP Manual. The BMP Manual can be accessed through the Clean Water Program webpage at: http://cwp.ci.encinitas.ca.us.

Industrial Facility Specific BMPs

Industries subject to the General Industrial Permit are required to prepare a SWPPP and

implement the BMPs prescribed therein. At a minimum, the SWPPP should include sections which describe the significant materials present on site, areas and activities that are potential sources of pollutants, and BMPs to address the identified pollutants' sources onsite. In addition, because of the small scale of the City's industrial program, the City is able to require site-specific BMPs at its industrial sites. These BMPs are based on a review of the site's SWPPP and site inspections.

5.2.3.2 ADDITIONAL CONTROLS

As required by section D.3.b.(2)(e), the City of Encinitas requires the implementation of additional controls for industrial and commercial sites and sources that are 1) tributary to CWA Section 303(d) impaired water body segments (where a site/source generates pollutants for which the water body segment is impaired) or 2) directly adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas.

Clean Water Program staff utilizes a geographic information system to maintain the commercial and industrial inventory and has the ability to spatially locate facilities relative to receiving waters and ESAs. Clean Water inspection staff are provided a hard copy map to use as a field reference to make appropriate determinations in consideration of these factors. Clean Water Program staff prescribed additional controls during inspections of commercial and industrial facilities, as needed, depending on the proximity of the facility to the water body and the observed potential of the site to be a significant source of pollutants that may threaten the downstream water body as necessary and appropriate.

5.2.4 PROGRAM IMPLEMENTATION

This section describes the steps employed by Clean Water Program staff to require and verify the implementation of designated BMPs for stationary industrial and commercial sources. During FY 2007-08, the City of Encinitas updated its industrial and commercial program as required by the new Municipal Permit; provided education and outreach through inspection actions so that regulated businesses were aware of the City's storm water requirements; inspected inventoried businesses to evaluate compliance with established minimum BMP requirements and the local stormwater ordinance; and took enforcement action as necessary to bring violators into compliance.

5.2.4.1 INVENTORY PRIORITIZATION

Since the new Municipal Permit no longer requires industrial and commercial facilities to be prioritized as high, medium, or low priority, during the 2008 JURMP update, the City prioritized both industrial and commercial businesses as either high priority or non-priority.

As required by section D.3.b(1)(b), when evaluating threat to water quality, the City of Encinitas considered the following attributes of each industrial and commercial business to determine priority or non-priority status:

i. Type of activity (SIC code);
ii. Materials used at the facility;
iii. Wastes generated;

iv. Pollutant discharge potential;
v. Non-storm water discharges;
vi. Size of facility;
vii. Proximity to receiving water bodies;
viii. Sensitivity of receiving water bodies;
ix. Whether the facility is subject to the General Industrial Permit or an individual NPDES permit;
x. Whether the facility has filed a No Exposure Certification/Notice of Non-Applicability;
xi. Facility design;
xii. Total area of the site, area of the site where industrial or commercial activities occur, and area of the site exposed to rainfall and runoff;
xiii. The facility's compliance history; and
xiv. Any other relevant factors.

Although not specifically required by the new Municipal Permit, the City will continue to classify industrial facilities that have obtained coverage under the General Industrial Permit as high priority. The City's GIS data management system was used to prioritize commercial businesses based upon the following spatially referenced TTWQ criteria:

- proximity to a 303(d) listed water body
- pollutant potential of the facility type
- stormwater violation history

If a facility was identified as having a potential threat based on two or more of these criteria, the facility was determined to be a high priority commercial facility. For example, if the facility is tributary to the San Elijo Lagoon and received a Notice of Violation from the City in the past, the facility would be considered high priority based upon the additional criteria that the City has established in determining TTWQ. In addition, if during the City's commercial inspection process or based on institutional knowledge, it was determined that additional sites that would otherwise have a lower priority should be classified as high priority industrial or commercial facilities based on the Permit criteria, they were noted as such in the inventory and inspected as required.

The City's commercial inventory was updated and prioritized during the 2008 JURMP update and will be prioritized a least once per year prior to conducting annual inspections.

As a result of the City's threat to water quality analysis during the 2008 JURMP update, approximately 23% of the industrial and commercial facilities were identified as high priority. The identified high priority facilities generally included all three industrial facilities and many of the City's restaurants and auto repair shops. For a complete list of prioritized facilities refer to Appendices D-1 and D-2.

5.2.4.2 INSPECTION FREQUENCY

FY 2007-08 commercial facility inspection priorities were established in consideration of inspection frequencies and prioritization standards outlined in Order 2007-0001. As part of the

JURMP update and transition to complying with the new Municipal Permit a new process to determine high priority facilities was formalized using GIS and put into effect in January of 2008. To determine which industrial and commercial sites were inspected in FY 2007-08, the following steps were taken:

1. Confirm that the current industrial and commercial inventories are up-to-date
2. Prioritize each facility based on the prioritization process described in section 5.2.4.1 of this document
3. Review the list of facilities that were inspected the previous year
4. Determine the facilities that will be inspected in the current year based on each site's prioritization and inspection history and other relevant factors, such as TMDLs and 303(d) listings.

In compliance with standards established in section D.3.b.(3)(b) of the Permit, in FY 2007-08, the City inspected over 50 percent of all the stationary industrial and commercial facilities inventoried as high TTWQ and over 20 percent of all stationary inventoried sites. Consistent with the Permit, mobile businesses are not included when determining the inspection requirements based on percentages of the inventory. The City tracked completed inspections throughout the reporting period to ensure that the minimum inspection frequencies required by the Municipal Permit were met.

During the 2008 JURMP update, the City identified the businesses that would be inspected as part of the 2007-08 reporting year. At that time, the City's industrial and stationary commercial inventories included a total of **405** facilities, of which **93** facilities were identified as having a high TTWQ (**91** stationary commercial facilities and **two** industrial facilities[2]). Rounding to the nearest whole number, 20 percent of the stationary industrial/commercial inventory would be 81 sites, and 50 percent of the high TTWQ facilities would be 47 sites.

During the first year of implementation, the City planned to inspect and complete inspections for all high priority facilities identified on the industrial/commercial facility inventory. During FY 2007-08 City of Encinitas stormwater inspectors actually conducted **two** industrial and **167** commercial site inspections, of which **93** were high priority facilities. Therefore, the City of Encinitas went well beyond the minimum inspection requirements and inspected **100 percent** of all the high TTWQ facilities and **41 percent** of all stationary sites in the industrial commercial facility inventory.

5.2.4.3 ROUTINE FACILITY INSPECTIONS

As required by section D.3.b.(3) of the Permit, commercial and industrial facilities in Encinitas are routinely inspected by the City's Clean Water Program staff. Inspections are intended to:

- identify facilities that are not in compliance with the City's Storm Water Management Ordinance and the Municipal Permit;

[2] The Encinitas Landfill is regulated and inspected by San Diego County.

- provide facilities with information regarding the City's Clean Water Program;
- provide guidance in complying with storm water regulations (City's Storm Water Management Ordinance, Municipal Permit, etc.); and
- validate and manage the inventory.

During FY 2007-08 City of Encinitas stormwater inspectors conducted **2** industrial and **167** commercial site inspections for compliance with its ordinances, permits, and this Order. All inspections included, as applicable:

i. Review of BMP implementation plans, if the site uses or is required to use such a plan;
ii. Review of facility monitoring data, if the site monitors its runoff;
iii. Check for coverage under the General Industrial Permit (Notice of Intent (NOI) and/or Waste Discharge Identification No.), if applicable;
iv. Assessment of compliance with Copermittee ordinances and permits related to urban runoff;
v. Assessment of BMP implementation, maintenance and effectiveness;
vi. Visual observations for non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff; and
vii. Education and training on storm water pollution prevention, as conditions warrant.

Based on the results of each site evaluation, the City's inspectors completed a City of Encinitas Storm Water Quality Inspection Form, a blank copy of which is included as Appendix D-3. Since restaurants have such unique pollutant sources, the City of Encinitas also maintains and utilizes a restaurant-specific Storm Water Quantity Inspection Form, a copy of which is included as Appendix D-4. Each of these forms allows the inspectors to document the above listed inspection steps, as applicable, to determine full compliance.

Inspectors generally work with site contacts to provide examples of BMP solutions that could be implemented. Effective, low-cost solutions were sought whenever possible, although in some cases more expensive BMPs were needed to reduce pollutant discharges to the MEP. Each business was also evaluated for staff training procedures and the stormwater quality awareness of the contact person; educational information was provided as appropriate. Whenever possible, the findings of the inspection and related corrective actions were discussed with the responsible party while the inspector is at the site. The responsible party is always provided a copy of the inspection findings after the inspection.

For a complete summary and confirmation that the designated BMPs were implemented (or required to be implemented) for industrial and commercial sites inspected in FY 2007-08 see the routine inspections summary in Appendix D-5. This summary table describes, in detail, actions taken by inspectors to confirm or require that BMPs were implemented at each industrial and commercial site inspected. In addition, this table and the associated inspection forms completed for each routine inspection confirms that all inspections conducted in FY 2007-08 addressed all the required inspection steps.

Inspection Tracking

Complaint and inspection documentation is filed in the City's GIS database and is kept up-to-date on a regular basis. The GIS database is also used to track the number of inspections conducted for the inventoried industrial and commercial sites/sources throughout the reporting period to verify that sites/sources are inspected at least the minimum frequencies listed in section D.3.b.(3)(b) and D.3.b.(3)(c) of the Municipal Permit. Clean Water Program staff also has the ability to reference the inspection data in the GIS to assist in preparing for annual inspections, follow-up inspection, or IDDE investigations.

Third Party Inspections

All commercial inspections conducted in FY 2007-08 were completed by City of Encinitas Clean Water Program staff. The City has one full-time stormwater inspector (and three backup inspectors) dedicated to conducting routine commercial and industrial inspections and following up on stormwater complaint calls. A third party was not employed to conduct inspections during this fiscal year. Therefore, verification of third party inspection effectiveness was not necessary.

City staff responsible for conducting storm water compliance inspections and enforcement of industrial and commercial facilities are trained regularly on inspection and enforcement procedures, BMP implementation, and assessment of monitoring data. City inspectors attend available workshops for inspectors, and the inspectors regularly receive training through staff meetings and direction from the Clean Water Program Manager. Further, Clean Water staff actively collaborate with inspection staff throughout the region to share methodologies and approaches that may be beneficial region wide.

Inspection Follow-up and Enforcement

Clean Water Program staff conducted follow-up inspections at all facilities that were directed to implement corrective actions. Follow-up investigations are conducted to ensure that the required BMPs were implemented and confirm full compliance of the facility. A total of **107** follow-up investigations were conducted as part of the 2007-08 routine inspection program. Depending on the severity of the infraction requiring corrective action, inspectors may elect to issue a Notice of Violation and/or monetary citation. For more information regarding enforcement of industrial and commercial facilities see section 5.2.4.5 of this document.

5.2.4.4 NOTIFICATION

As required by section D.3.b.(2)(c) of the Permit, the City of Encinitas will notify each inventoried industrial or commercial business of the City's updated BMP requirements that are applicable to the site/source. Notification will occur within the first three years of implementation of the updated JURMP. During FY 2007-08, the City initiated notification as part of routine facility inspections. All industrial and commercial facilities inspected in FY 2007-08 were notified of the BMP requirements applicable to their site/source. City of Encinitas stormwater inspectors conduct thorough inspections with the owner/operator of each facility. During each inspection the stormwater inspector discusses the applicable BMP requirements in detail with the owner/operators.

5.2.4.5 COMPLAINT INVESTIGATIONS, VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE

When a complaint is registered with the Clean Water Hotline, NPDES email, or when staff directly observes an illicit discharge, a complaint investigation is conducted. All complaints are investigated by City personnel with enforcement authority within a reasonable timeframe. Investigation typically includes stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

As required by the Municipal Permit, and depending on the severity of the violation, the City enforces its storm water ordinance for all commercial and industrial facilities as necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's GIS work order database (CityWorks).

In FY 2007-08, there were 99 stationary commercial and zero industrial ICID complaint calls. Eight (8) of those calls were either issues that were referred to other departments/agencies or requests for information only (requests for information may include car washing regulations, power washing requirements, etc). Of the **91** stationary commercial complaint investigations conducted, **19** resulted in dissemination of educational information to the homeowner or resident. Materials typically distributed included general storm water education, BMP requirements, pollution prevention tips, as well as specific municipal code and clean water regulations. In FY 2007-08, **24** follow-up investigations, **18** Notices of Violation, **six** citations, and **one** cost recovery bill were issued as a result of complaint investigations. In addition, of the **167** routine inspections performed in FY 2007-08, **107** follow-up investigations were conducted and **eight** Notices of Violation were issued in order to confirm that BMPs were installed and/or verify that compliance was achieved.

A summary of the commercial complaints, violations, and enforcement actions occurring in FY 2007-08 is available for review in Appendix H-1. The routine inspection summary (Appendix D-5) documents details of the eight NOVs issued during routine inspections. The tabular summaries include a brief discussion, which includes the follow-up actions, taken for each violation. Both tables demonstrate that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in each table, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

For more detail regarding complaint investigation procedures, refer to Section 7, Illicit Discharge and Detection Elimination.

Reporting of Industrial Non-Filers

The City of Encinitas did not identify any industrial sites that may require coverage under the General Industrial Permit but which, to the City's knowledge, did not file NOIs.

5.3 MOBILE SOURCES

5.3.1 BACKGROUND

Illegal discharges tend to be the major area of concern with mobile businesses. Mobile businesses can be difficult to inventory because they may not be based in the City of Encinitas and do not maintain a permanent address. Additionally, new mobile businesses are started, and previously existing mobile businesses go out of business on a relatively regular basis. For the reasons listed, and also simply because they are not consistently present at a fixed location, regular inspections of mobile businesses are not a feasible option.

5.3.2 SOURCE CHARACTERIZATION OF MOBILE SOURCES

The mobile businesses known to operate within the City's jurisdiction are listed on an inventory separate from the stationary commercial inventory in Appendix D-6. This inventory was comprehensively reviewed and updated during FY 2007-08 as a part of the update of the City's JURMP. The following business types are addressed by the mobile sources element of the City's industrial and commercial program.

- Mobile automobile or other vehicle washing
- Mobile carpet, drape, or furniture cleaning
- Mobile construction trades
  - Cement mixing or cutting
  - Masonry
  - Painting and coating
- Landscaping
- Pool and fountain cleaning
- Power washing services

In addition to the types of businesses listed above, any other mobile businesses that the City determines to have a significant threat to water quality will be added to the inventory. Because not all mobile businesses have obtained business licenses in the City or have a base of operations outside the City, Clean Water Program staff is continually refining and updating the mobile commercial inventory. Sources for such inventory updates include reported incidents, general observations by City staff, and available business licenses. In addition, the City will participate in the development of a regional inventory and/or tracking system for mobile businesses.

5.3.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.3.3.1 UPDATED BMP REQUIREMENTS FOR MOBILE SOURCES

All BMPs required for stationary sources, described in Section 5.2.3.1 of this document and listed in detail in the City's BMP Manual, are also required for mobile businesses, where

applicable. The most important BMPs for most mobile businesses are typically those that address non-storm water discharge control and spill prevention, control, and cleanup.

5.3.3.2 ADDITIONAL CONTROLS FOR MOBILE SOURCES

Regardless of where the activity occurs, the City categorically prohibits illegal discharges from mobile businesses. If the City finds that the activities of a mobile business are contributing pollutants of concern to a CWA section 303(d) impaired water body segments or are negatively impacting ESAs, additional controls will be required for those activities as applicable. Further, if the City has reason to believe that any mobile business is generating significant illegal discharges in a given area of the City that is tributary to a 303(d) listed water body (and the discharges contain pollutants causing the impairment) or is within, directly adjacent to, or directly discharges to a water body within an ESA, City staff may more regularly visit those areas and/or take other actions to address the illegal discharges.

5.3.4 PROGRAM IMPLEMENTATION

5.3.4.1 EDUCATION/OUTREACH AND NOTIFICATION OF MOBILE SOURCES

The City of Encinitas will provide information and outreach regarding storm water quality to mobile business owners and operators. Businesses will be given educational materials outlining pollution prevention methods and other related BMPs if businesses are found to be in violation of the City's storm water ordinance or Municipal Permit. Clean Water staff will also give recommendations to businesses, where appropriate.

Because the mobile businesses program is a new element of the industrial and commercial program for this revised JURMP, it is anticipated that some mobile businesses are not aware of storm water requirements and that education will be a significant portion of the program. The educational program is described in more detail in Section 8 of this document.

The City of Encinitas will coordinate with the regional Education and Outreach Workgroup to notify the owner/operator of each inventoried mobile business of applicable BMP requirements within the first three (3) years of implementation of the updated JURMP.

5.3.4.2 INTER-JURISDICTIONAL COOPERATION

During FY 2007-08, the City of Encinitas participated with other Copermittees in a Mobile Business Subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the Copermittees have chosen to collaborate on a regional mobile business outreach and education strategy, which addresses the following elements:

- Inventory Development and Maintenance;
- Establishment of Minimum BMP Requirements; and
- Outreach and Education (Including Business Notifications).

A consultant may be hired to assist with the implementation of this Mobile Business Program. Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this

strategy. See Appendix F-1 for the complete Regional Mobile Business Outreach and Education Strategy.

5.3.4.3 INSPECTIONS

The inspections for mobile businesses generally follow the same procedure described in Section 5.2.4.3 of this document. The main focus of most mobile business inspections is on discharge control BMPs. After thorough investigation, enforcement, and follow-up as needed, none of the mobile businesses investigated warranted a formal inspection. Notably, as part of standard response actions, Clean Water staff work directly with mobile business owners and employees to ensure that their business practices meet the City's minimum BMP standards.

5.3.4.4 COMPLAINT INVESTIGATIONS, VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE

Complaint response, follow-up investigation, and compliance of mobile commercial businesses are handled in the same fashion as stationary commercial facilities. For a general description of the City's complaint response procedures, refer to section 5.2.4.5.

In FY 2007-08, there were **15** mobile commercial ICID complaint calls. Of the fifteen mobile complaint investigations conducted, **five** resulted in dissemination of educational information to the homeowner or resident. In FY 2007-08, **eight** Notices of Violation and two citations were also issued as a result of complaint investigations. Refer to Table 5-2 for a summary of the mobile commercial complaints and associated enforcement actions.

A detailed list of the commercial complaints, violations, and enforcement actions occurring in FY 2007-08 is available for review in Appendix H-1. This table includes complaint response to discharges from mobile businesses, and discusses each violation and the follow-up actions taken. The table demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the table, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

For more detail regarding complaint investigation procedures, refer to Section 7.

Table 5-2
Enforcement Actions Taken as a Result of
Mobile Commercial Discharges in FY 2008-09

Work Order	Complaint Location	Mobile Business Type	Enforcement Action(s)
68189	170 Calle Magdalena	Auto Detailing	Education, NOV
41556	172 Neptune Ave	Pressure Washing	NOV
53405	102 Leucadia Blvd	Janitorial Service	Citation, NOV
68040	336 Encinitas Blvd	Auto Detailing	No discharge found
68166	322 Encinitas Blvd	Auto Detailing	Citation, Education
68220	328 Encinitas Blvd	Auto Detailing	No discharge found

45871	1409 San Elijo Ave	Painting	Education, NOV
52932	143 W D St	Janitorial Service	No discharge found
74747	1916 Leucadia Scenic Ct	Landscaping	Education, NOV
52700	200 Saxony Rd	Home Maintenance	No discharge found
53473	3505 Manchester Blvd	Catering	No discharge found
68227	829 Requaza St	Pool Repair	NOV
53400	Calle De Madera and Hygeia Ave	Home Maintenance	No discharge found
53963	125 N El Camino Real	Carpet Cleaning	Education, NOV
54116	946 Woodgrove Dr	Pet Grooming	NOV

6.0 RESIDENTIAL

6.1 INTRODUCTION

Approximately 80 percent of the City's 19.4 square mile area is designated as residential in the City's General Plan map. Residential land use comprises a large area of the City, and residential activities can have a considerable effect on the water quality of receiving waters. The City's residential component of the Clean Water Program aims to reduce pollutant runoff from residential areas and activities to the MEP.

The overall goal of the Program is to minimize the impact of discharges from residential areas on receiving waters in Encinitas and, where possible, to enhance the quality of these resources. The following sections will describe the program activities conducted during FY 07-08 that contributed to the successful implementation of the City's Residential Component.

6.2 SOURCE CHARACTERIZATION

This section identifies the high threat to water quality residential areas and activities that were focused on during FY 2007-08. The new Municipal Permit (Order R9-2007-0001), which went into effect on January 24, 2008, requires each Copermittee to identify and provide a list of the residential areas and activities within its jurisdiction that have been identified as having a high threat to water quality. The high threat to water quality areas and activities within the City of Encinitas were identified during the 2008 JURMP update process and are described in detail in City's 2008 JURMP. The following section will briefly summarize this process.

6.2.1 HIGH THREAT TO WATER QUALITY ACTIVITIES

In consideration of the minimum required *high threat to water quality* residential activities listed in section D.3.c.(1) of Order R9-2007-0001, the following residential activities were identified as residential activities that hold the greatest threat potential to local receiving water quality:

- Automobile Repair and Maintenance
- Automobile Washing
- Automobile Parking
- Home Improvement, Garden Care Activities, and Product Use
- Disposal of Trash, Pet Waste, Green Waste, and Household Hazardous Waste

6.2.2 HIGH THREAT TO WATER QUALITY AREAS

Section D.3.c.(1) of Order R9-2007-001, requires that Copermittees identify all *high threat to water quality* residential areas. During the 2008 JURMP update, the City identified *high threat to water quality* residential areas using the following criteria (as defined in the Municipal Permit):

- Any residential areas tributary to a CWA section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired; and
- Any residential areas within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an environmentally sensitive area (as defined in Attachment C of the Municipal Permit).

The City of Encinitas has several Section 303(d) impaired water bodies and coastal lagoons within or directly adjacent to the City's boundaries. The 303(d) impaired water bodies within the City of Encinitas include Cottonwood Creek, Encinitas Creek, Escondido Creek, San Elijo Lagoon, and the Pacific Ocean at Moonlight State Beach and the San Elijo Lagoon Outlet.

Based on the definition in Attachment C of the Municipal Permit, Environmentally Sensitive Areas within the City of Encinitas include those areas identified as Natural Resource Sensitive areas in the City's General Plan and the City's Wetland buffer layer. The City does not contain any Areas of Special Biological Significance, water bodies designated with the RARE beneficial use, or areas designated as preserves in the Multi Species Conservation Program.

In the process of drafting the Regional Residential Education Program, the Regional Outreach Workgroup identified the major pollutants of concern from residential sources for the San Diego region. The major pollutants of concern for residential areas include: bacteria, nutrients, sediment, pesticides, and trash.

In consideration of identified 303(d) listed water bodies, the City's ESAs, and the primary pollutants of concern, Clean Water Program staff employed GIS analysis to determine the location of *high threat to water quality* residential areas. Based on this analysis the following residential areas within the City of Encinitas were identified as *high threat to water quality* residential areas:

- All residential areas within 500 feet of any 303(d) listed water body or lagoon
- All residential areas within, directly adjacent to, or discharging directly to a coastal lagoon or other receiving waters within an ESA
- The residential area to the west of Interstate 5 within the Cardiff sub-basin (drains to San Elijo Lagoon)
- The residential area south of Sylvia St, west of Second Street, and north of K Street (drains to Cottonwood Creek and Moonlight Beach)

Appendix E-1 includes a map of residential areas. The map that was developed for Clean Water Program staff to utilize in the office and in the field when identifying residential discharges or activities which could pose a threat to water quality due to their proximity to receiving water bodies and ESAs.

6.2.3 EVALUATION OF OVERSIGHT OF RESIDENTIAL AREAS AND ACTIVITIES

The City of Encinitas is planning to conduct a formal evaluation of the methods used for oversight of residential areas and activities during the permit cycle of Order No. 2007-0001. The

evaluation will coincide with the City's effectiveness assessment for the Residential Component. Since the methods used for residential oversight were recently updated within this last fiscal year (as part of the 2008 JURMP update), City staff determined that it would be most appropriate to evaluate the success of these methods in subsequent fiscal years.

6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

This section describes the updates made to the City's minimum BMPs that were implemented during FY 2007-08. The minimum BMPs for residential *high threat to water quality* activities were established in the City's 2002 JURMP. As part of the City's 2008 JURMP update, the minimum BMPs were reviewed and updated based on the requirements in the new Municipal Permit.

6.3.1 POLLUTION PREVENTION

Pollution prevention is the act of reducing or eliminating waste at the source by modifying production processes, promoting the use of non-toxic or less-toxic substances, implementing conservation techniques, and re-using materials rather than putting them into the waste stream. Pollution prevention methods have been integrated into the minimum BMPs established for *high threat to water quality* areas and activities.

6.3.2 LIST OF MINIMUM BMPS

As part of the City's 2008 JURMP update, the City designated the following minimum BMPs for *high threat to water quality* residential activities and activities. The minimum BMPs are primarily nonstructural and are targeted at activities specified in Section 6.2 as having a *high threat to water quality*. Pollution prevention methods were incorporated into this set of BMPs, where appropriate. The list of minimum BMPs can also be found in the City's Storm Water BMP Manual I. The manual can be accessed through the City's Clean Water Program webpage at: http://cwp.ci.encinitas.ca.us.

(a) Automobile Repair and Maintenance

Pollution Prevention

(1) Employ routine preventative maintenance practices
(2) Reduce vehicle use, whenever possible
- Change driving habits
- Carpool
- Increase the use of public transportation
- Bike or walk for short trips

(3) Make timely vehicle repairs

Leaks and Spills

(1) Prevent leaks and spills from contacting stormwater
- Use drip pans, plastic sheeting, or other materials to contain spills
- Work indoors or under shelter

- If working outdoors, don't work in the rain
- Immediately contain and clean up leaks and spills when they occur
- Use absorbent materials to clean up spills
- Establish cleanup standards
- Require that tools and parts be cleaned only in contained areas

Materials and Waste Management

(1) Properly manage and dispose of automotive wastes and materials
- Properly drain fluids from automobiles
- Dispose of wastes properly and lawfully and recycle used oil and antifreeze
- Store materials and wastes indoors or under cover
- Use secure and watertight containers when storing materials and wastes

(b) Automobile Washing

Management / Reduction* of *Wash Water

(1) Whenever possible, use commercial self-serve or full-serve car washes that properly dispose or recycle their wash water
(2) When washing a vehicle at a residence:
- Wash vehicles over porous surfaces (grass, dirt, etc.) whenever possible
- Use dry cleaning methods to avoid the generation of wash and rinse water
- Turn off the water when not in use or use a controllable spray nozzle
- Encourage the establishment of neighborhood wash areas where wash water and contaminants can be properly managed

Materials and Waste Management

(1) Properly dispose of soapy water or bucket rinse water to the sanitary sewer or soak into a landscaped area
(2) Use dry methods to degrease or clean especially dirty parts prior to wet washing and rinsing (e.g., remove grease or brake dust using towels, etc.)
(3) Refrain from degreasing or cleaning of engine parts in areas other than those designated for such purposes

(c) Automobile Parking

(1) Use routine preventative maintenance practices and make timely vehicle repairs to prevent leaks of automotive fluids
(2) Design and construct parking areas to minimize storm water impacts; covered garages should be plumbed to the sewer system

(d) Home and Garden Care Activities and Product Use

GARDEN AND YARD CARE

Pollution Prevention

(1) Use safe substitutes and alternative methods when gardening:
- Use integrated pest management techniques and biological controls
- Use native plants and drought tolerant species to reduce water use and green waste produced
- Implement planting techniques that attract beneficial insects
- Consider composting, vermiculture and yard waste recycling
- Recommend and encourage practical purchasing practices for pesticides and fertilizers
- Identify "pests" before attempting to eliminate them

(2) Always read label instructions and follow the instructions for garden care products
(3) Implement water conservation practices, whenever possible
(4) Consider xeriscape gardening, including: drip irrigation, soaker hoses, and micro-spray systems
(5) Repair and maintain irrigation systems to reduce excessive runoff
(6) Recycle lawn clippings and green waste through local programs
(7) Plant or mulch hillsides and slopes to prevent erosion

Leaks and Spills

(1) Immediately cleanup spills of gardening chemicals, fertilizers and soils
(2) Return spilled materials to the container for future use or proper disposal

Materials and Waste Management

(1) Store lawn care products in closed labeled containers and in covered areas
(2) Refrain from using hazardous materials during windy or rainy days
(3) Cover stockpiles of soil, compost, or fertilizers with plastic tarps to prevent dispersal by wind or rain
(4) Dispose of household chemicals to the household hazardous waste collection facility or scheduled drop-off events
(5) Utilize dry sweeping techniques for clean up

Restrictions on Activities

(1) Do not hose off paved surfaces to the street or gutter
(2) Do not dispose of hazardous waste to the trash, landfill or storm drain

HOME CARE AND MAINTENANCE

Pollution Prevention

(1) Utilize purchasing practices that reduce waste
(2) Use safe substitutes for home cleaning and maintenance
(3) Read and follow product labels
(4) Recycle unused or unwanted products
(5) Use water based paints when possible
(6) Recycle unwanted appliances and household equipment

Leaks and Spills

(1) Clean up hazardous materials spills immediately
(2) Properly dispose of waste from spill cleanup materials

Materials and Waste Management

(1) Store household hazardous materials in closed labeled containers and in a covered area
(2) Recycle latex paint through community programs
(3) Dispose of unwanted household hazardous waste through household hazardous waste collection facilities
(4) Dispose of trash in provided trash cans or shared dumpsters and keep dumpster and trash can lids closed when not in use

Restrictions

(1) Do not dispose of wash waters (carpet cleaning, mop water, paint wash-up, etc.) to the street, gutter or storm drain

(e) **Disposal of Pet Waste**

Pollution Prevention

(1) Spay or neuter pets to reduce feral populations

Waste Management / Disposal

(1) Clean up after pets when walking them in public places
(2) If pets are allowed to defecate outside, clean up feces from yards
(3) Properly dispose of pet feces in the toilet or trash

Pet Management (Dogs and Cats)

(1) Whenever possible, do not allow pets to run free in residential neighborhoods

Manure Management (Horses and Other Large Animals)

(1) Properly manage manure (including the preparation of manure management plans when appropriate)
(2) Compost or properly dispose of manure
(3) Cover manure stockpiles with plastic tarp to prevent contact with rain

6.4 PROGRAM IMPLEMENTATION

This section describes the steps that were taken in FY 2007-08 to require and verify the implementation of designated BMPs for residential areas and activities.

6.4.1 OUTREACH AND TRAINING

The City has a comprehensive Education Program, which is a component of the City's jurisdictional program. A significant element of this program consists of educating residents about ways in which they can minimize their impact on local waterways. Education of the

citizens who reside in the City of Encinitas contributes to the implementation of the Residential Component of the City's Clean Water Program. Outreach messages that are relayed to the public include, but are not limited to:

- Impacts of urban runoff on receiving waters
- Distinction between MS4s and sanitary sewers
- Pollution prevention and safe alternatives
- Household hazardous waste collection and recycling
- BMP implementation and BMP maintenance
- Pet and animal waste disposal
- Equipment and vehicle maintenance and repair
- Spill response, containment, and recovery
- Water conservation

During FY 2007-08, Clean Water program staff conveyed these messages to the public through a variety of mechanisms, including:

- Clean Water Program website
- Production and distribution of brochures and promotional items
- Public participation in community events, workshops, and trainings
- Presentations at local schools
- Media coverage
- Response to residential complaints (Clean Water Hotline or email)

Implementation of these mechanisms by the Clean Water Program helps to make the public aware of the types of activities that have the potential to impact water quality and the BMPs that can be implemented to reduce this impact. Awareness is the first step in the process towards behavioral change. A detailed description of the educational activities implemented by the Clean Water Program can be found in the Section 8.

6.4.2 USED OIL AND HHW COLLECTION SERVICES

The City of Encinitas facilitates the proper management and disposal of used oil, toxic chemicals, and other household hazardous wastes (HHW) through various mechanisms. The City offers its residents door-to-door home collection, two permanent collection facilities, and periodic, temporary collection events for all HHW. In addition, the City requires weekly curbside garbage, recycling, and yard waste pick-up for all residents. The various components of the solid waste and hazardous waste collection services provided by the City are described in detail below.

HHW Home Collection Program **-** Door-to-door home collection service is available to all residents of the City of Encinitas. Qualifying homebound, elderly, and disabled citizens may request pickup at no charge. Residents not qualifying for free pickup service are charged a nominal fee of $10 for home collection. Materials accepted via the HHW Home Collection Program include:

- **Household Cleaners:** Drain openers, oven cleaners, wood and metal polish / cleaners, toilet bowl cleaners, and disinfectants
- **Automotive Products:** Oil and fuel additives, grease and rust solvents, carburetor and fuel injector cleaners, air conditioning refrigerants, starter fluid, lubricating fluids, radiator fluids and additives, waxes, polishes, cleaners, and transmission additives
- **Home Maintenance and Improvement Products:** Paint thinners, paint strippers, adhesives, paints, stains, varnishes, sealants, and wood preservatives
- **Lawn and Garden Products:** Pesticides, herbicides, and fungicides (poisons)
- **Miscellaneous:** Batteries, fingernail polish removers, pool and photo chemicals

Poway and Vista Permanent HHW Collection Facilities - In an agreement with the Cities of Vista and Poway, residents of the City of Encinitas may also drop off household hazardous waste at the Vista or Poway collection centers. The Vista collection center is located at 1145 East Taylor Street, at Laguna Lane. The Poway collection center is located in the South Poway Business Park, at 12325 Crosthwaite Circle off of Stowe Drive. These regional, permanent collection centers are open every Saturday (except holiday weekends) from 9:00am to 3:00pm. No fee is charged to Encinitas residents and no appointments are necessary. Waste collected is separated, packaged, secured, and temporarily stored at the permanent facilities. It is then removed on a regular basis for proper recycling or disposal. Material accepted at the Poway and Vista facilities are the same as those accepted through the Home Collection Program.

Used Oil Recycling Program - The City's used oil recycling program consists of a network of certified automotive waste recycling centers throughout the city. These facilities accept a range of used automobile products including used oil, oil filters, batteries, and antifreeze. A significant part of this program is the dissemination of educational information regarding the benefits of, and opportunities for, pollution prevention. This program is specifically for the residents of Encinitas and is funded through grants from the California Integrated Waste Management Board (CIWMB). A list of the participating oil recycling sites is provided in all oil recycling printed material and on the City's website. Residents may also opt to use the City's door-to-door HHW collection service to recycle their used oil and oil filters. However, most residents are accustomed to taking their used oil and oil filters to the certified centers and the permanent HHW facilities.

Trash and Recycling Services - For public health purposes, the City of Encinitas requires that all residents participate in the City's solid waste collection service. All residents and businesses are liable for payment of fees for the mandatory service (reference 11.20.010, paragraph A of the Municipal Code). Residential service includes curbside green waste collection and recyclable materials collection in addition to regular garbage collection. The City of Encinitas has an exclusive franchise agreement with EDCO Waste Recycling Services to provide solid waste collection services in Encinitas for both residential and commercial customers.

Detailed information regarding used oil, HHW, and solid waste disposal is made available to residents through the City's website, ECDO's website, and other various environmental websites. In addition, brochures about household hazardous waste disposal options are

available at outreach events staffed by the Clean Water Program, the Solana Center, and EDCO Waste Recycling Services. Brochures and information regarding HHW disposal are also available upon request at the City's main office.

Table 6-1 provides a summary of the used oil collected via the City's used oil recycling program. Table 6-2 identifies types and amounts of household hazardous waste collected from residents in Encinitas during this reporting period.

Table 6-1

Used Oil Collected in FY 2007-08

Collection Type	Quantity of Oil (Gallons)	Quantity of Filters (# of Filters)
Certified Centers	13,424	2,485
Permanent HHW Centers	5,228	109
Total	**18,652**	**2,594**

Table 6-2
Household Hazardous Waste Collected in FY 2007-08

Material Type	Description	HHW Collection Facilities*	Door-to-Door Program*
Flammable	Flammable solid/liquid	5,441	10,185
& Poison	Bulked flammable liquids	3,333	0
	Oil-base paint	7,645	15,938
	Poison (excl. aerosols)	2,298	3,926
	Reactive and explosive	2	2
	Subtotal	**18,719**	**30,049**
Acid	Inorganic & Organic acid	738	1,244
Base	Inorganic & Organic base	612	1,127
Oxidizer	Neutral oxidizers, Organic peroxides	238	102
	Subtotal	**1588**	**2,473**
PCB-containing	PCB-containing paint	0	0
	Other PCB waste	0	0
	Subtotal	**0**	**0**
Reclaimable	Antifreeze	1,037	1,672
	Car batteries	0	0
	Latex paint	14,895	24,101
	Motor oil/oil products	4,357	5,947
	Oil filters	91	70
	Subtotal	**20,380**	**31,790**
Asbestos		308	241
Universal Waste (UW)	Mercury containing waste	2	2
	Thermostats/switches/thermometers	0	0
	Lamps	1,215	1,399
	Rechargeable batteries	154	101
	Household batteries	1,414	1,224
	Subtotal	*2,785*	*2,276*
Electronic Waste (UW)	SB20/50 video display devices	9,056	6,824
	Non SB20/50 video display devices	538	0
	Consumer electronic devices	11,310	7,815
	Subtotal	*20,904*	*14,639*
Aerosols (UW)	Non-empty aerosol containers	1,651	8,218
	Other	0	0
	All UW Subtotal	**1,651**	**8,218**
Other HHW	Home-generated sharps	0	0
	Pharmaceutical waste	0	0
	Compressed gas cylinder	402	312
	Non-UW aerosol containers	0	0
	Treated Wood	0	0
	Other	2,500	496
	Subtotal	**2902**	**808**
Grand Total		**45,548**	**73,579**

*Waste measured in pounds.

6.4.3 COMPLAINT INVESTIGATIONS, VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE

When a complaint is registered with the Clean Water Hotline, NPDES email, or when staff directly observes an illicit discharge, a complaint investigation is conducted. All complaints are investigated by City personnel with enforcement authority within a reasonable timeframe. Investigation typically includes stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

As required by section D.3.c.(3) of the Permit, and depending on the severity of the violation, the City enforces its storm water ordinance for all residential areas and activities as necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's GIS work order database (CityWorks).

In FY 2007-08, there were **157** Residential ICID complaint calls in FY 2007-08. Thirty-four of those calls were either issues that were referred to other departments/agencies or requests for information only (requests for information may include car washing regulations, power washing requirements, etc). Of the **123** residential complaint investigations conducted, thirty-two resulted in dissemination of educational information to the homeowner or resident. Materials typically distributed included general storm water education, BMP requirements, pollution prevention tips, as well as specific municipal code and clean water regulations. In addition to education, FY 2007-08 complaint investigations resulted in **23** Notices of Violation, **five** citations, and **one** cost recovery effort.

A summary of the residential violations and enforcement actions occurring in FY 2007-08 is available for review in Appendix H-1. The tabular summary includes a brief discussion, which includes the follow-up actions taken, for each violation. The table demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the table, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

For more detail regarding complaint investigation procedures, refer to Section 7, Illicit Discharge and Detection Elimination.

6.4.4 REGIONAL RESIDENTIAL EDUCATION PROGRAM

The City of Encinitas collaborated with other jurisdictions in the Education and Residential Sources Workgroup to develop the Regional Residential Education Plan. This Plan contains recommended strategies for the development and implementation of the Regional Residential

Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale. The complete Regional Residential Education Plan can be found in Appendix F-7.

The first major collaboration on a regional level was promotion of residential storm water BMPs at the San Diego County Fair. The Copermittees combined funds to pay for a Fair sponsorship, which included a booth display, materials distribution, signage, and advertisements at several locations in the fairgrounds throughout the duration of the fair. Booth staffers promoted the Think Blue message and presented storm water educational materials to all Fair attendees. Details of the educational messages and materials distributed at the Fair can be found in Section 8.3.4 of this annual report.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

In accordance with the September 10, 2008 Regional Water Quality Control Board adoption of Addendum No. 2 to Order No. R9-2007-0001, the City of Encinitas will submit the entire FY 2007-08 Illicit Discharge Detection and Elimination Component and attachments no later than December 15, 2008.

8.0 EDUCATION

8.1 INTRODUCTION

The City's outreach program includes an education component and a public participation component. The education component is focused on disseminating educational information to increase public knowledge of storm water issues, while the public participation component, discussed in Section 9, provides opportunities for the public to become involved in the process of reducing pollutants of concern in storm water and urban runoff. The education component is primarily implemented by the Engineering Services Department, Clean Water Division.

The Municipal Permit establishes the following five target communities which must be addressed by the education program:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The overall goal of the education element is to provide an education program that will:

(1) Measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience.

(2) Measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment.

The City performed a wide variety of storm water education activities during the FY 2007-08 reporting period. Education and outreach was preformed on three levels—Jurisdictional, Watershed, and Regional.

8.2 MUNICIPAL STAFF TRAINING

Public Works, Streets Division. A presentation was given to the Streets Division on August 2, 2007, by Clean Water staff to discuss storm water BMPs and address Clean Water Program regulations. There were nine attendees. Additional FY 2007-08 storm water training was provided to the Streets Division during regular weekly staff meetings on the following dates:

- January 10, 2008, Smart Cover Training (Large pumps & detection), 4 attendees
- May 8, 2008, NPDES Spill Prevention SC-11, 8 attendees
- June 6, 2008, NPDES Storm Water Training SC-43 (Parking/Storage Area Maintenance), 9 attendees

City of Encinitas Fire Department. Storm water training workshops were given to the Fire Department on three separate occasions within the defined reporting period of this report. On

October 1, 2007, 15 fire personnel were in attendance; 16 fire personnel attended the training on October 2; and 17 fire personnel were at the October 3 training. Fire Department personnel from all five Encinitas Fire Stations were invited to attend.

City of Encinitas Landscape Contractors. The City contracts with multiple landscaping companies to maintain our parks, beaches, and other public landscaped areas. In collaboration with the City's Parks and Recreation Department, landscaper training was given in Spanish to 31 City landscape contractors on November 6, 2007, and to 25 landscape contractors on March 11, 2008.

Engineering Department. In addition to regular stormwater related discussion topics, the Clean Water Program staff presented the "Clean Water Challenge" storm water training game during the June 2008, Engineering staff meeting. Topics included Low Impact Development, Priority versus Non-Priority SUSMP projects, proper construction BMPs, impaired water bodies, storm water violations, and potential sources of pollutants. Approximately 30 people were in attendance.

Clean Water Program, Engineering Department. Clean Water Program staff regularly attend trainings and workshops related to stormwater management. This fiscal year staff attended the following trainings/workshops:

- California Non-Point Source Conference
- HAZWOPER Refresher Course
- Confined Space Training

In addition to formal training, Clean Water Program staff are regularly informed of new water resources regulations and storm water science and technology through regional meetings and coordination, subscription to relevant scientific journals, and individual research.

8.3 EDUCATIONAL OUTREACH

This section describes education efforts conducted for each target community during FY 2007-08.

8.3.1 UNDERSERVED TARGET AUDIENCES, HIGH-RISK BEHAVIORS, AND "ALLOWABLE" BEHAVIORS AND DISCHARGES

Underserved Target Audiences - Bilingual Education

For those that work in the City, and for segments of the community that do not speak English as their first language, the City provided bilingual (English/Spanish) brochures at all outreach events. The Clean Water Program utilized the bilingual brochures produced by the City that are targeted at specific trade groups/activities. These brochures include information about Best Management Practices for Yard and Garden Care, Restaurants, Home Improvement, Pesticides, Developers, and Automotive Care. Further, the bilingual Clean Water staff provided training and responded to complaint calls as needed in various community sectors.

High Risk Behaviors - Regional Mobile Business Outreach and Education Plan

During FY 2007-08, the City of Encinitas participated with other copermittees in a Mobile Business Subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the Copermittees chose to collaborate on a regional mobile business outreach and education strategy, which addresses the following elements:

- Inventory development and maintenance;
- Establishment of minimum BMP requirements; and
- Outreach and education (including business notifications).

A consultant may be hired to assist with the implementation of this Mobile Business Program. Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this Strategy. See Appendix F-1 for the complete Regional Mobile Business Outreach and Education Strategy.

8.3.2 NEW DEVELOPMENT AND CONSTRUCTION COMMUNITIES

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to the new development and construction communities.

- "A Pollution Prevention Guide for the Construction Industry" was distributed at public events, to engineering construction inspectors, the building department, and displayed at the City of Encinitas Engineering counter for the public. Three hundred were disseminated during the 2007-08 fiscal year. This brochure was developed as part of the Carlsbad Watershed Urban Runoff Management Plan workgroup (Appendix F-2).
- Announcements at pre-construction meetings. Pre-construction meetings are attended by Engineering Department inspectors. Storm water topics discussed include the required construction site BMPs, post-development BMPs and SUSMP requirements.
- Construction inspector storm water coordination. Staff from the Clean Water Program attended weekly inspector staff meetings to provide support and information to the City's construction inspectors.
- Printed materials were provided to contractors and developers in the form of the City's brochure, "Developers – Simple and Cost Effective Ways to Comply with Storm Water Regulations" (Appendix F-3). The brochure is available in Spanish and English.
- Special mailings of information (i.e., wet season erosion control letter). In September 2007, the City mailed 127 letters to local developers and contractors regarding BMP requirements for the upcoming rainy season (Appendix B-5). "A Pollution Prevention Guide for the Construction Industry" brochure was inserted into the annual Erosion Control letter that went to contractors, developers, and job superintendents.

- The City of Encinitas co-sponsored a three-session training seminar through the Building Industry Association of San Diego County on November 6, November 8, and November 13, 2007. Topics included preparation of a SWPPP and sampling program, SWPPP implementation and compliance techniques, and the new draft preliminary construction storm water permit.

8.3.3 COMMERCIAL/INDUSTRIAL OWNERS AND OPERATORS

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to commercial and industrial sectors of the community:

- A Water Quality Runoff Management & Agricultural Waiver Workshop for Nurseries & Agricultural Businesses was held on March 27, 2008, at the San Diego County Farm Bureau. The event was organized by the City of Oceanside, with invitations sent out to nurseries and growers throughout the County. Three Encinitas businesses were in attendance.
- Commercial inspections were performed at 167 commercial facilities and two industrial facilities during the FY 2007-08 reporting period. During these inspections individual one-on-one education was presented to each facility manager/owner. Information presented included general storm water quality information and BMP requirements.

8.3.4 RESIDENTIAL COMMUNITY, GENERAL PUBLIC, AND SCHOOL CHILDREN

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to various residential, community, and school audiences:

a. Residential Community and General Public

- A four week Home Landscaping Workshop was hosted by the San Dieguito Water District at the Rancho Santa Fe Garden Club each Thursday from October 18 through November 8, 2007. A free Water-Wise Landscaping Workshop was also hosted by SDWD at the Encinitas Community Center on March 8, 2008. There were 31 people in attendance. The two workshops each covered four topics: landscape design basics; California friendly plants; landscape sprinkler systems; and soils, water, and fertilizers. A California Friendly Landscape Training Series was held every Monday, February 4 through February 25, 2008, and addressed irrigation principles and adjustments & repair, irrigation system troubleshooting, controller programming, irrigation scheduling, and plant identification.
- A City of Encinitas Environmental Services Guide was created in FY 2006-07. It continues to be handed out at all public events throughout the City. It is a compilation of information regarding trash and recycling, HHW, electronics disposal and recycling,

storm water management, home composting, and general environmental contacts. The brochure is printed on 100% post-consumer recycled paper (Appendix F-4).

- Three new giveaway items were developed in FY 2007-08, including a Bags on Board pet waste bag dispenser, a Clean Water Program magnet, and a Clean Water Program mood pencil (Appendix F-5). Each item is labeled with the Clean Water Program website and the Clean Water Hotline. They were distributed at all events attended by the Clean Water Program. In addition, the Bags on Board dispensers were distributed by the Parks and Recreation Department at this year's Pet Health Expo at City Hall.
- The Solana Center continued to sell compost bins and worm bins to residents of Encinitas throughout FY 2007-08. All of the bins were subsidized by the City and sold to residents at discounted rates. Bins could be purchased at the Solana Center or at composting events and workshops throughout the City. Bin sales in FY 2007-08 increased by 43% from FY 2006-07.
- Individual Communication. There were 157 Residential ICID complaint calls in FY 2007-08. Thirty-four of those calls were either issues that were referred to other departments/agencies or requests for information only (requests for information may include car washing regulations, power washing requirements, etc). Of the 123 residential complaint investigations conducted, 32 resulted in education. During these inspections educational information was distributed to each homeowner/resident. Materials distributed included general storm water education, BMP requirements, pollution prevention education, as well as specific municipal code and clean water regulations.
- Media Coverage (newspaper articles, press releases, etc.): See Table 8-1 below.

Table 8-1
Summary of Media Coverage in FY 2007-08

No.	Title	Date	Source
1	City survey OK'd sans smoke ban question	July 6, 2007	The Coast News
2	The Composter	August 2007	Solana Center
3	Study shows pollution closes record number of U.S. beaches	August 8, 2007	Environmental News Network
4	State beaches continue on bum record	August 8, 2007	Los Angeles Times
5	City to help pay for study on water pollutants	August 16, 2007	SignonSanDiego.com
6	7 cities in watershed will share study cost	August 19. 2007	SD Union Tribune
7	Environmental Times	Summer 2007	Edco
8	A summer of clean beaches for county	September 27, 2007	SignonSanDiego.com
9	Encinitas takes steps toward ban on smoking	October 5, 2007	The Coast News

No.	Title	Date	Source
10	Encinitas to form environmental panel	October 12, 2007	North County Times
11	Demolition of tanks to bring lagoon into full view	November 8, 2007	SignonSanDiego.com
12	$5.6M nature center to be 'green' building	November 21, 2007	North County Times
13	Encinitas bans smoking on beaches	February 21, 2008	10News.com
14	Olivenhain MWD recognizes water conservation efforts of customer	February 28, 2008	BC Water News
15	Local water district awards savvy conservationists	March 7, 2008	The Coast News
16	Part of beach bluff collapses near duplex	March 13, 2008	SignonSanDiego.com
17	Revised storm drain ordinance on agenda	March 19, 2008	North County Times
18	Cities, county rush to complete stormwater plans	March 20, 2008	North County Times
19	Encinitas levies fines on beach smokers	March 21, 2008	The Coast News
20	Encinitas 'green' committee takes root	April 11, 2008	North County Times
21	Group finds 6 million pounds of trash on world's beaches	April 15, 2008	Yahoo! News
22	6th Annual Creek to Bay Clean Up	April 23, 2008	SignonSanDiego.com
23	Region: Huge waterways cleanup set for Saturday	April 23, 2008	North County Times
24	6th Annual Creek to Bay Clean Up	April 24, 2008	Craigslist.com
25	Encinitas: Wonders of San Elijo Lagoon on display Saturday	May 8, 2008	North County Times
26	Eye on the coast, Clean beach…	May 15, 2008	The Coast News
27	Region: Local beaches score well in report card	May 21, 2008	North County Times
28	San Diego beaches rank high in cleanliness survey	May 21, 2008	SignonSanDiego.com
29	Encinitas: Plastic bag ban gets community support	June 14, 2008	North County Times
30	The Creek Reeks	June 25, 2008	San Diego Reader
31	Encinitas: Sand tax headed for November ballot	June 26, 2008	North County Times

- **Workshops and events attended/hosted by the Solana Center and/or the City of Encinitas in FY 2007-08:**

1. Fall Master Composter Training Course – Mondays, September 10-October 8, 2007
2. Coastal Clean-up Day – September 15, 2007

3. Home Landscaping Workshop at Rancho Santa Fe Garden Club – Thursdays, October 18—November 8, 2007
4. Encinitas Poinsettia Festival - November 18, 2007
5. California Friendly Landscape Training- Mondays, February 4 through 25, 2008, and March 24, 2008
6. Water-Wise Landscape Workshop at Encinitas Community Center – March 8, 2008
7. Creek to Bay Beach Clean-up – April 26, 2008
8. Encinitas Street Fair – April 27, 2008
9. Encinitas Garden Festival – May 3, 2008
10. Encinitas Environment Day VIP Party – June 6, 2008
11. Environmental Film Festival, La Paloma Theater – June 7, 2008
12. Encinitas Environment Day at Cottonwood Creek Park – June 8, 2008
13. San Diego County Fair – June 14 through July 6, 2008
14. North County Storm Water Program Day at the San Diego County Fair – June 21, 2008

b. School Children

- The Splash Lab presentation was given by the San Diego County Office of Education at three Encinitas schools:
  - El Camino Creek Elementary, September 13, 2007, 119 students in attendance
  - La Costa Heights Elementary, November 19, 2007, 94 students in attendance
  - Mission Estancia Elementary, February 12, 2008, 82 students in attendance
- School Worm Bin Composting- The Solana Center monitors large worm bins at Capri Elementary, Paul Ecke Elementary, and Olivenhain Pioneer Elementary, and a small worm bin at Mission Estancia Elementary. Solana Center has trained volunteer master composters to give composting/vermicomposting presentations at schools throughout Encinitas.
- The Solana Center for Environmental Innovation also participated in school based educational programs where storm water awareness was taught. See Table 8-2 for details.

Table 8-2
Watershed Presentations in FY 2007-08

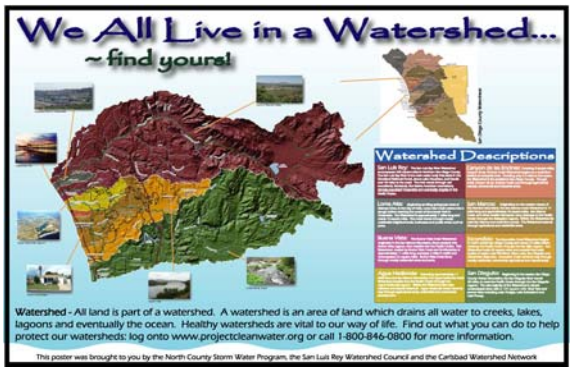
School/Group Name and Address	Date of Presentation	Number of Presentations	# of Students in Attendance
Encinitas Family Enrichment Program	7/30/2007	3	45
Ocean Knoll Elementary- Encinitas	8/22/2007	2	40
Ocean Knoll Elementary- Encinitas	8/23/2007	2	40
Sycamore Ridge Elementary- San Diego	10/1/2007	3	60
Carmel Del Mar Elementary- San Diego	10/30/2007	2	40
Carmel Del Mar Elementary- San Diego	11/2/2007	2	40
Paul Ecke Central- Encinitas	12/12/2007	1	28
Paul Ecke Central- Encinitas	1/16/2008	1	25

School/Group Name and Address	Date of Presentation	Number of Presentations	# of Students in Attendance
Solana Santa Fe Elementary- Rancho Santa Fe	1/30/2008	3	50
Paul Ecke Central-Encinitas	1/30/2008	1	28
Encinitas Family Enrichment Program	3/18/2008	1	40
Gabi Fuad's Brownie Troop- Del Mar	3/26/2008	1	15
Santa Fe Montessori School- Solana Beach	4/16/2008	2	48
Ocean Air School-San Diego	4/17/2008	4	80
Girl Scout Troop- Solana Beach	4/21/2008	1	15
Ada Harris Elementary School- Cardiff	4/23/2008	3	60
Cardiff Elementary School- Cardiff	4/30/2008	4	66
La Colonia Park- Solana Beach	5/5/2008	1	17
Boys and Girls Club- Solana Beach	5/12/2008	1	15
La Colonia Park- Solana Beach	5/19/2008	1	15
Solana Beach Community Ctr Ecology Camp	6/27/2008	1	22
	Total	**40**	**789**

c. Watershed Educational Activities

Important components of the City's education program include activities generated on a watershed basis through the North County Storm Water Program, the educational arm of the Carlsbad Watershed URMP. Materials and activities are developed on a watershed basis to address the high priority water quality problems in the watershed. These materials and activities are then implemented or disseminated on a jurisdictional basis. Below is a description of the educational materials and activities that were performed on a watershed basis and implemented on a jurisdictional basis. A more detailed description of watershed activities will be provided in the FY 2007-08 Carlsbad WURMP Annual Report.

- **Public Opinion Surveys**- The North County Storm Water Program created a pet waste survey to be given out at public events throughout the Carlsbad watershed. The six-question pet waste survey asked those surveyed their view on picking up pet waste. Results of the survey estimate the percentage of people who actually understand what happens to waste that is not disposed of properly. This survey was given out at two events throughout Encinitas during FY 2007-08. Appendix F-6 includes a copy of the survey and a summary of the results.



- **Watershed Map**- A 36"x 24" "We all Live in a Watershed" poster was developed giving information about the San Luis

Rey, Carlsbad, and San Dieguito Watersheds. This educational poster includes a topographic map of the watershed, information on individual watersheds and sub-watersheds, photos of various land-uses, as well as general information about water quality. The City of Encinitas used the poster in presentations and public displays.

- **Watershed Collaboration**- The City of Encinitas collaborated with other outside organizations, including the Carlsbad Watershed Network, Solana Center, and Escondido Creek Watershed Alliance, to enhance public educational efforts and understand watershed issues. The City of Encinitas participated in public outreach events throughout the watershed in an effort to provide watershed support and extend the watershed message beyond jurisdictional boundaries. In FY 2007-08, the City participated in the following watershed outreach events:
    - Coastal Cleanup Day – 9/15/07
    - Kids' Day at the Carlsbad Flower Fields – 3/29/08
    - Creek to Bay Beach Cleanup – 4/26/08
    - North County Storm Water Program Day at the San Diego County Fair – 6/21/08
- **Watershed Educational Materials**- The City continues to distribute materials developed by the North County Storm Water Program in previous reporting periods, including the restaurant posters, automotive posters, "Storm Drains Lead to the Ocean" posters, general storm water brochures, and the door hangers.

d. Regional Residential Education Plan

The City of Encinitas collaborated with other jurisdictions in the Residential Sources and Outreach Workgroup to develop the Regional Residential Education Plan. This plan contains recommended strategies for the development and implementation of the Regional Residential Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale. The complete Regional Residential Education Plan can be found in Appendix F-7.

The first major collaboration on a regional level was the San Diego County Fair. The San Diego Regional Storm Water Copermittees sponsored the San Diego County Fair (Fair) in 2008 as an education and outreach activity. The sponsorship was a joint effort between the City of San Diego's Think Blue program and the regional Copermittees, with each entity contributing a portion of the overall cost. The Fair was selected as a regional event due to its unique ability to potentially reach more than one million San Diegans and convey a strong environmental message. The Residential Sources and Outreach Workgroup (Outreach Workgroup) was responsible for overseeing sponsorship activities and the City of San Diego lead coordination and implementation efforts.

The 2008 Fair was held June 14th through July 6th, 2008, spanning two fiscal years. The attendance for the fair was estimated at 1,235,698 people over the 21 days the event

occurred. Sponsorship for the Fair included staffing an outreach booth for 11 days, in which the majority of the jurisdictions provided staffing support. The outreach booth served as the primary method for educating the public about watershed protection and pollution prevention. The Outreach Workgroup elected to promote Integrated Pest Management (IPM) as the primary theme and collaborated on the distribution of IPM materials in both English and Spanish. Individual jurisdictions were invited to distribute their own materials in addition to the IPM materials. Details about the materials distributed during the event will be detailed in the FY 2008-09 Annual Report. The Copermittees received credit as both a Flower & Garden Show sponsor and an Enviro-Fair sponsor.

Think Blue was used as the branding label for the copermittees during the event and signage demarking the symbol included banners, planter box displays, and recycle bin stickers. Signage was visible at over 500 locations throughout the fairgrounds. Media exposure included TV, radio, and press releases. The sponsorship was printed in both the Fair program and included on the Fair map. Other promotions included newspaper advertisements, electronic messaging over the Jumbo-tron, website logos and links, and PA system announcements in both English and Spanish.

The City of San Diego developed an event survey in order to assess the effectiveness of the copermittees' Fair participation. Over 1,200 survey cards were completed during the 11 days the booth was staffed. The questions focused on understanding the public's general storm water knowledge and awareness. The results are being tabulated and will be reported in FY 2008-09.

Educational Outreach Materials Distributed. In FY 2007-08, a total of 2,904 outreach materials were distributed by the Clean Water Program. This includes BMP brochures for Automotive Facilities (English and Spanish), Developers (English and Spanish), Diazinon (English and Spanish), "Hiring A Handyman" (English and Spanish), Restaurants (English and Spanish), and Yard & Garden (English and Spanish). The Program also distributed watershed pencils, magnets, "Bags on Board" dispensers, construction brochures, posters, door hangers, eating establishment guides ("What's Cooking"), automotive guides ("Green Wrench"), and other informational guides. These guides related to Integrated Pest Management (UCSD Cooperative Extension), water conservation brochures from local water districts and the County Water Authority, invasive species brochures ("Don't Plant A Pest" and "NIMBY-No Invasives In My Back Yard"), "How to Hire A Landscaper"-UCSD Cooperative Extension/Scott Parker, County of San Diego Household Hazardous Waste Guides, miscellaneous storm water educational worksheets for children, and lastly, "10 Simple Ways You Can Help Protect the Ocean" from the Encina Wastewater Authority.

9.0 PUBLIC PARTICIPATION

9.1 INTRODUCTION

Public participation is one of the components of the City's outreach program. The goal of the education component, discussed in Section 8, is geared primarily towards disseminating educational material to increase public knowledge of storm water issues. The goal of the public participation component is to provide opportunities for the public to become involved in the process of education and reducing pollutants in storm water and urban runoff.

Public participation activities provide opportunities for the public to interact and become involved with water pollution issues. When the public has the opportunity to become involved there are several positive outcomes. First, those involved become more knowledgeable about storm water issues. Second, they become educators and stewards for the Clean Water Program. Finally, they provide important feedback to the Clean Water Program regarding the concerns of the public and issues that may be overlooked. Ultimately, public participation help makes the education process more effective.

The constituency of Encinitas has a generally high level of awareness of water pollution issues and is actively involved in protecting the quality of our waterways. This is evident by the attendance and participation at community events and workshops and the number of complaints reported to the storm water hotline (discussed in more detail in Section 9.3.5 below and also in Section 8.3.4(a)). Following is a description of the City's public participation approach and the opportunities that were made available in Encinitas in the FY 2007-08 reporting period.

9.2 PUBLIC PARTICIPATION APPROACH

The City's approach for the outreach program is to develop an understanding among its residents and businesses of some fundamental storm water concepts. These include:

- The difference between the sanitary sewer and the storm drain system (sanitary waste gets treated, but discharges into the storm drain system flow directly to our waterways and beaches, untreated).
- The economic value of our beaches and the importance of protecting them.
- An understanding illegal discharges, i.e. sidewalk and street wash water runoff, vehicle fluid (antifreeze and oil), landscape debris, sediment, etc.
- How to report a storm water violation (Clean Water Hotline or website).
- The fact that we all live in a watershed and that the watershed is integral to wildlife, public health, and to the water quality of the rivers, streams, and ocean.
- Reducing pollutants of concern.
- Responsibility of citizens to participate in the cleaning and maintaining of the community (i.e. beaches and parks) and not be part of the pollution problem (littering, illegal dumping of toxic chemicals, etc.).

The tools that are used by the City to implement the public participation activities include:

- Workshops/Training Sessions
- City of Encinitas Environmental Advisory Committee
- Public Outreach Events
- Public Opinion Survey
- Public Reporting Methods
- Pet Waste Dispensers
- Household Hazardous Waste Collection and Used Oil Recycling
- Public Participation in JURMP Update

9.3 PROGRAM IMPLEMENTATION

This section describes the specific public participation tools used during the FY 2007-08 reporting period.

9.3.1 WORKSHOPS/TRAINING SESSIONS

Workshops and training sessions are effective tools for providing specific information to targeted audiences and obtaining direct feedback. These workshops/training sessions consisted of storm water education and/or water conservation and provided an opportunity for the Clean Water Program to explain the complex issues of each target audience related to compliance with the storm water regulations. Table 9-1 provides a summary of the FY 2007-08 workshops/training sessions conducted.

Table 9-1 City of Encinitas Workshops/Training Sessions FY 2007-08

Workshop/Training Session	Target Audience	Date	Attendance
Public Works- Streets Division	City Staff	8/2/07, 1/10/08, 5/8/08, 6/6/08	30
Fire Department	City Staff	10/1/07-10/3/07	48
Home Landscaping Workshop	Homeowners	10/18/07-11/8/07	20
Spanish-speaking Landscapers	City Staff and Contractors	11/6/07 & 3/11/08	55
CA-Friendly Landscape Training	Public	2/4/08-2/25/08 & 3/24/08	20
Water-wise Landscape Workshop	Public	3/8/07	31
Water Quality Ag Workshop for Nurseries and Growers	Commercial Owners/Operators	3/27/08	3

Workshop/Training Session	Target Audience	Date	Attendance
Engineering Department Meeting	City Staff	6/4/08	30
		Total	**237**

9.3.2 CITY OF ENCINITAS ENVIRONMENTAL ADVISORY COMMITTEE

The City of Encinitas' City Council created an Environmental Advisory Committee (EAC) that provides policy advice and recommendations to the City Council on issues related to environmental stewardship and sustainability. The Committee assesses the City's current environmental efforts in relation to specified areas of interest and creates and recommends strategies to enhance City activities that promote conservation and sustainable practices.

During the defined reporting period of this report, the Committee worked toward finalizing the initial draft of a city-wide Environmental Policy to serve as a guide for operational, programmatic, and development planning as it pertains to sustainability, resource management, and care for the environment in the City of Encinitas. On May 8, 2008, the Clean Water Program Manager provided a formal presentation to the EAC describing the core functions and activities of the Clean Water Program. Current program review for City Council consideration is a recommendation on options for reducing the impact of single-use plastic bags in our environment.

9.3.3 PUBLIC OUTREACH EVENTS

The Clean Water Program participated in many outreach events during FY 2007-08:

1. Coastal Clean-up Day – September 15, 2007, 111 volunteers
2. Kids' Day at the Carlsbad Flower Fields – March 29, 2008, 100 booth visitors
3. Creek to Bay Beach Clean-up – April 26, 2008, 101 volunteers
4. Encinitas Garden Festival – May 3, 2008, 58 booth visitors
5. Encinitas Environment Day @ Cottonwood Creek Park – June 8, 2008, 1000 attendees
6. North County Day at the San Diego County Fair – June 21, 2008, Attendance not yet available

Solana Center for Environmental Innovation. Outreach to the general public and school children is also provided through the Solana Center for Environmental Innovation via workshops and presentations involving storm water, household hazardous waste, composting, and recycling. The Solana Center works closely with the City for many of these workshops and presentations. See the tables below for a description of all of Solana Center's attended events and workshops.

Table 9-2 Composting Workshops FY 2007-08

Workshop schedule	Location	Attendance
July 11, 6 – 8pm	Solana Center	13
Master Composter Training Course, Mondays, September 10 - October 8, 2007	Quail Botanical Gardens	21
September 22, 10am – 12pm	Quail Botanical Gardens	23
October 13, 10am – 12pm	Quail Botanical Gardens	11
October 27, 1 – 3pm	Yoga Swami Studio & Garden (San Diego county wild fires occurred week prior to workshop, explaining low attendance; workshop rescheduled for spring)	4
November 3, 1 – 3pm	Quail Botanical Gardens	11
February 16, 1 – 3pm	Quail Botanical Gardens (vermicomposting)	55
March 1, 1 – 3pm	Quail Botanical Gardens	38
April 26, 10am – 12pm	Quail Botanical Gardens	40
May 3, 12 – 2pm	Yoga Swami Studio & Garden	19
	Total	**235**

Table 9-3 Household Hazardous Waste Presentations FY 2007-08

School/Group Name and Address	Date of Presentation	Number of Presentations	Total number of students reached
Encinitas YMCA Studio 3	1/14/2008	1	22
Encinitas Senior Center	2/20/2008	1	4
	Totals	**2**	**26**

Table 9-4 Used Oil Collection Events FY 2007-08

Encinitas Used Oil Events	Date	Total Attendance
Encinitas Poinsettia Festival	11/18/2007	500
Encinitas Street Fair	4/27/2008	1000

Used Oil Filter Event, Kragen Auto Parts Encinitas	01/12/08	38
	Total	**1538**

Table 9-5 Watershed Presentations FY 2007-08

School/Group Name and Address	Date of Presentation	Number of Presentations	# of students reached
Encinitas Family Enrichment Program	7/30/2007	3	45
Ocean Knoll Elementary- Encinitas	8/22/2007	2	40
Ocean Knoll Elementary- Encinitas	8/23/2007	2	40
Sycamore Ridge Elementary- San Diego	10/1/2007	3	60
Carmel Del Mar Elementary- San Diego	10/30/2007	2	40
Carmel Del Mar Elementary- San Diego	11/2/2007	2	40
Paul Ecke Central- Encinitas	12/12/2007	1	28
Paul Ecke Central- Encinitas	1/16/2008	1	25
Solana Santa Fe Elementary- Rancho Santa Fe	1/30/2008	3	50
Paul Ecke Central-Encinitas	1/30/2008	1	28
Encinitas Family Enrichment Program	3/18/2008	1	40
Gabi Fuad's Brownie Troop- Del Mar	3/26/2008	1	15
Santa Fe Montessori School- Solana Beach	4/16/2008	2	48
Ocean Air School-San Diego	4/17/2008	4	80
Emily Gilmore's Girl Scout Troop- Solana Beach	4/21/2008	1	15
Ada Harris Elementary School- Cardiff	4/23/2008	3	60
Cardiff Elementary School- Cardiff	4/30/2008	4	66
La Colonia Park- Solana Beach	5/5/2008	1	17
Boys and Girls Club- Solana Beach	5/12/2008	1	15
La Colonia Park- Solana Beach	5/19/2008	1	15
Solana Beach Community Center Ecology Camp	6/27/2008	1	22
	Totals	**40**	**789**

Table 9-6 Other Outreach Events FY 2007-08

Event	Date	Attendance
Encinitas Environment Day - VIP Party	6/6/2008	75
Enviro Film Festival - La Paloma Theatre	6/7/2008	75
Encinitas Environment Day - Cottonwood Creek Park	6/8/2008	1000
	Total	**1150**

9.3.4 PUBLIC OPINION SURVEY

The North County Storm Water Program created a pet waste survey in FY 2006-07 to be given out at public events throughout the Carlsbad watershed. The six question pet waste survey asks about the public's view on picking up pet waste and shows us how many people actually know what happens to waste that is not picked up. This survey was given out at multiple events throughout Encinitas in FY 2007-08. See Appendix F-6 for the pet waste survey and results.

9.3.5 PUBLIC REPORTING METHODS

The City has a local hotline that connects the caller directly to the staff in the Clean Water Program. The number is (760) 633-2787. An after-hours hotline [(760) 633-2922] is available for after-hours emergencies and connects the caller with the City's answering service. The appropriate City Staff person will then be dispatched. There are also currently two regional storm water hotline numbers promoted within San Diego County: a toll-free Regional Storm Water Hotline, 1-888-846-0800, and the Think Blue Hotline, 1-888-THINK BLUE (1-888-844-6525). Both of these hotlines are staffed by the County of San Diego Monday through Friday, 8:00 a.m. - 5:00 p.m. In addition to personal service at these hotlines during regular business hours, the hotlines provide a voice mail message for 24-hour public access.

The Clean Water Hotline has been heavily advertised for some time. In FY 2007-08 the Clean Water Hotline received **329** calls, which is two times the volume of calls received in the last fiscal year. The hotline is advertised in newsletters and on the City's website, in brochures, on product giveaways, and at all Clean Water Program presentations. A summary of the types of calls, follow-ups, and enforcement procedures related to the hotline are presented in Appendix H-1.

The Clean Water Program has a specific webpage (http://cwp.ci.encinitas.ca.us) that provides information, as well as the general NPDES email address which can also be used to report storm water violations. Each method of contact can also be used for general questions relating to storm water.

9.3.6 PET WASTE DISPENSERS

Residents are encouraged to protect our creeks, lagoons, and ocean by cleaning up after their pets. To make this easier, 17 doggie bag dispensers are located at parks and trails throughout

the City. Trash cans are also available in these areas. Both the trash cans and bag dispensers are maintained by the City's Parks and Recreation Department. In addition, individual Bags on Board pet waste bag dispensers were developed and distributed in FY 2007-08 at all jurisdictional events (Appendix F-5).

9.3.7 HOUSEHOLD HAZARDOUS WASTE COLLECTION AND USED OIL RECYCLING

City of Encinitas residents can bring their HHW and Electronic Waste to drop off facilities in Vista and Poway, free of charge. There is also a home pick up available for a small fee; however, the fee is waived for elderly and disabled residents. Used oil collection events were organized through the Solana Center at local automotive supply stores, and free used oil containers were available for pick up from the Center to encourage oil recycling. Please refer to Section 6.4 and Tables 9-3 and 9-4 in Section 9.3.3 for a detailed description of HHW and Used Oil events and collection totals.

9.3.8 PUBLIC PARTICIPATION IN JURMP UPDATE

The Clean Water Program welcomed comments and suggestions during FY 2007-08 from residents to improve the quality of the Program. The following paragraph was posted on the home page of the City's website to encourage residents to submit input during our JURMP Update process:

"The City is updating its storm water pollution prevention program and requires your help. Pollutants that flow into our storm water drainage system may negatively impact the quality of water in our local creeks, lagoons, and beaches. Our staff is soliciting public input as we revise and shape a new program document. To find out more information, please visit http://www.ci.encinitas.ca.us/Resident/Environment/CleanWP/. To submit your suggestions, please contact npdesmail@cityofencinitas.org."

In further support of public participation in the JURMP Update, the City actively engaged the public in the update process of the Stormwater Ordinance, Grading Ordinance, and BMP Manual. Through a series of public announcements, community participation meetings, and required council actions, the City received valuable input and feedback on the development of these critical elements.

10.0 FISCAL ANALYSIS

The Clean Water Program and associated functions and activities in the City of Encinitas are split between two departments: Engineering Services and Public Works. Engineering Services administers plans, monitors, implements, enforces, inspects, and provides education related to stormwater and water quality. Public Works performs the operations and maintenance of the municipal separate storm sewer system (MS4) including channel maintenance, street sweeping, facility inventories, and facility inspection. This section outlines the expenditures for the defined reporting period and associated fiscal year, FY 07-08, and the FY 08-09 budgets for these two departments to support Clean Water functions.

10.1 ENGINEERING SERVICES DEPARTMENT

The City of Encinitas Clean Water Program FY 2007-2008 expenditure and 2008-2009 budget summaries are presented below in Table 10.1. In FY 2007-2008 the City's Clean Water Program Coastal Storm Drain Monitoring, Dry Weather Monitoring, IDDE, Construction, Residential and Commercial program elements were accomplished with a mix of internal staff and contract services. FY 2007-2008 expenditures include 5 full time staff and a number of consultant services needed to support the development of new programmatic elements including data management strategies, inspection actions, and JURMP document preparation. These one-time costs were incurred in the 2008 fiscal year to meet new provisions mandated by Order No. 2007-0001.

The 2008-2009 Clean Water Program Budget has been prepared in consideration of Water Quality Order No. 2007-0001 as well as other regulatory mandates placed upon the City of Encinitas. Further, the 2009 budget supports the level of service provided by the Clean Water Program in addressing water quality concerns specific to Encinitas through response to citizen complaints, education, enforcement, monitoring and testing.

Table 10-1
Engineering / Clean Water Program FY 07-08 Expenditure and FY 08-09 Budget Summary

OUTLAY CATEGORY	FY 07-08 EXPENDITURES	FY 08-09 BUDGET
Saff Costs		
Staff Salary	$ 360,988	$ 353,410
Permits & Shared Costs		
State Water Resources Discharge Permit Fee	$ 11,109	$ 11,109
San Diego Regional Stormwater Shared Costs	$ 56,461	$ 60,051
Carlsbad Watershed Cost Share	$ 2,774	$ 3,000
Contract Services		
IDDE Program (Dry Weather Monitoring)	$ 12,968	*Programmatic Cost (See Below)*
Carlsbad WURMP GIS Application Development (Quartic)*	$ 18,200	*Contract Complete*
Post-Construction BMP Inspection (Geopacifica)**	$ 73,173	$ 116,312
Stormwater Program Support (Ashford Engineering)	$ 8,010	*Staff Cost*
Encinitas GIS Mapping & Data Management Systems (Quartic)**	$ 19,335	*Contract Complete*
Lagoon TMDL Monitoring Order - QAPP & Implementation (MACTEC)**	$ 65,801	$ 80,000
JURMP Update Support (D-Max Engineering)	$ 9,917	$ 17,000
Programmatic Costs		
Education (Jurisdictional Only)	$ 836	$ 1,000
Legal Fees	$ -	$ 5,000
Construction Inspection (Geopacifica)	$ 150,000	$ 150,000
Dry Weather Monitoring (Equipment & Analysis Cost)	$ 2,028	
Coastal Monitoring Program (Equipment & Analysis Cost)	$ 8,904	$ 25,000
Lagoon TMDL Monitoring Order (Storm Drain Sampling & Analysis)	$ 625	
Vehicle Purchase - Clean Water Program (Ford Escape Hybrid)	$ 26,000	$ -
TOTAL FY 07- 08 EXPENDITURE & BUDGET DATA	$ 827,129	$ 821,882

10.2 PUBLIC WORKS DEPARTMENT

The City of Encinitas Public Works Department FY 2007-2008 expenditures and FY 2008-2009 budget are presented above in Table 10-2. As previously mentioned, the Public Works Department performs essential operations and maintenance functions of the City's municipal separate stormwater conveyance system, drainage facilities, and channels. Additionally, recycling, solid waste, and hazardous waste disposal programs are all managed by the Public Works Department.

In response to program enhancements required by Order No. 2007-0001, expenditures for associated Public Works functions experienced an increase in FY 07-08. Increased channel maintenance and inspection activities and associated staffing and equipment resource expenses all contributed to the increase in FY 07-08 expenditures. In FY 07-08, the Public Works Department formally took responsibility for the ongoing maintenance and operation of the City's UV Urban Runoff Treatment Facility located along Cottonwood Creek near Moonlight Beach. Lastly, the City's street sweeping contracts were augmented to support compliance as well as to assure consistent data tracking of debris collection.

The FY08-09 budget was prepared in consideration of the requirements of Order No. 2007-0001, and in anticipation of additional resources needed to meet minimum standards established in the Order.

Table 10-2
Public Works / Clean Water Program FY 07-08 Expenditure
and FY 08-09 Budget Summary

OUTLAY CATEGORY - PUBLIC WORKS	FY07-08 Expenditures	FY08-09 Budget
Staff Salary	$ 274,205	$ 355,996
Materials & Supplies	$ 55,901	$ 45,076
Contracts & Services	$ 201,813	$ 212,638
Fleet Maintenance	$ 15,742	$ 13,600
Capital Outlay	$ -	$ -
Lease Payments	$ 40,000	$ 40,000
Recycling/Solid Waste & Household Hazardous Waste Fund	$ 498,409	$ 498,409
Flood Control	$ 138,562	$ 194,863
TOTAL COST	$ 1,224,632	$ 1,360,582

10.3 CLEAN WATER PROGRAM SUMMARY

The total FY 2007-2008 expenditures for the Clean Water Program (Engineering & Public Works Departments) was **$2,052,671**. The FY 2008-2009 budget for the Clean Water Program (Engineering & Public Works) is **$2,182,464**.

10.4 PROGRAM FUNDING

In FY 2003-2004, the City Council attempted to pass a Clean Water Fee, which charged $5.00 per month per water meter to the residents and businesses in the City of Encinitas. The Howard Jarvis Taxpayers Associated challenged the fee based upon

Proposition 218 requirements. The City was required to add this item to the ballot in March 2006 which was defeated. As a result, the City of Encinitas must completely subsidize the Clean Water Program through the General Fund.

11.0 EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

The City of Encinitas began applying baseline program effectiveness assessment methodologies soon after they were developed by the San Diego region stormwater Copermittees during the last permit cycle as described in the document titled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" dated October 16, 2003. The City has also actively participated in regional efforts to develop a standardized assessment approach and associated metrics from summer 2007 through winter 2008. The original goal of that group was to produce assessment work products that all Copermittees could use in their JURMPs to evaluate program effectiveness. Due to a variety of complications on a regional level, that standardization process could not be completed prior to the submittal of the City's JURMP, so the City prepared its own effectiveness assessment approach and measures modeled after conventionalized strategies and calibrated to evaluate "significant" program activities as required in Order No. 2007-0001.

Since the submittal of the JURMP in March 2008, no additional progress has been made on regionally standardized approaches to program effectiveness assessment. It is anticipated that the Copermittees' Fiscal, Reporting, and Assessment Workgroup will undertake the issue of standardized assessment metrics and procedures in the near future. The City is committed to engaging in the process of developing such regional standards and incorporating resulting work products into its own local program effectiveness assessment system. It is in consideration of the evolving and ongoing regional standardization process that the City has endeavored upon fine tuning its local effectiveness assessment approach as presented in the subsequent paragraphs and tables. Further, it is recognized that these methodologies and strategies must be adaptable as regionally developed procedures are solidified in the future.

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The core structure of the City's storm water program is composed of three primary drivers:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The programmatic process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next the program elements developed during the planning step are implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

As part of the JURMP update process, the City has identified a variety of significant activities unique to each program element and metrics (numeric and/or narrative) to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP. The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The new Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the storm water program as a whole. Level 1, Level 5, and Level 6 outcomes are discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 OUTCOME LEVEL ASSESSMENTS

Level 1

A requirements checklist, which includes a directory of permit compliance elements and where each is described within the JURMP Annual Report, can be found in Appendix G-1.

Levels 2 and 3

Tables 11-3 through 11-10 at the end of this section include discussions of Level 2 and Level 3 outcomes for activities identified as significant by the City of Encinitas within each program component. Note that only a Level 1 assessment applies to fiscal analysis, so a table for fiscal analysis is not included.

Level 4

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs, reliable load reduction estimation methods have not yet been or cannot be developed.

Level 5

On September 10, 2008, the San Diego Regional Water Quality Control Board adopted Addendum 2 to Order No. 2007-0001, effectively extending the annual due date of the Illicit Discharge Detection and Elimination reporting requirements to December 15. It is anticipated, consistent with previous Dry Weather Monitoring reports prepared by the City of Encinitas that baseline trend analysis will be provided for a number of constituents evaluated through the Dry Weather Monitoring Program. This information is further spatially correlated with sub-basins or drainage areas within the City of Encinitas, and evaluated against land-use areas and potential source areas.

Level 6

It has been determined, through ongoing development and discourse over long-term effectiveness assessment methodologies that relationships between programmatic activities and changes in receiving water quality are difficult to establish on an annual basis or a jurisdictional scale. As such, the City will point to future regionally coordinated efforts including Report of Waste Discharge (ROWD) and Long Term Effectiveness Assessment (LTEA) development to more holistically evaluate changes in receiving water quality. It is anticipated that such efforts will be further refined and supported by ongoing data gathering efforts both locally and regionally.

11.2.2 OVERALL COMPONENT ASSESSMENTS

Development Planning

The City's review process for development projects is effectively requiring higher removal efficiency treatment control BMPs. Further, two new significant program elements were in production and in early stages of implementation within the defined reporting period of this report; both new programs are demonstrating positive trends. BMP installation verification and BMP operation and maintenance verification efforts, while not wholly implemented at the time of report production, have resulted in the establishment of programs that will support long term effectiveness assessment measures for development planning. *(See Table 11-3)*

Construction

The City's review and approval process for construction related plans and documents is effectively verifying proposed construction specific BMPs. BMP implementation and maintenance is being effectively managed through construction site inspection activities, and validated through associated assessment measures *(See Table 11-4).* It is anticipated that in response to increased inspection frequencies and refined data gathering practices that this trend will continue.

Municipal

The defined reporting period of this report is marked by significant expansion of municipal operations and maintenance activities to meet the standards established in Order No. 2007-0001. Enhanced stormwater conveyance, drainage facility, channel maintenance and inspection and street sweeping activities, were developed and implemented, equating to the removal of salient volumes of debris. Effective operations and maintenance activities are demonstrated in the

Table 11-5 below, and it is anticipated that this continued level of service as well as enhancements in data gathering methods will support the efficacy of municipal activities.

Industrial and Commercial

Clean Water Program activities and actions related to industrial and commercial entities have exhibited positive trends within the defined reporting period. The City of Encinitas has identified inspection activities coupled with complaint response and enforcement as the significant activities by which to evaluate program effectiveness. During the defined reporting period, the City has been able to evaluate effectiveness on a number of levels (*See Table 11-6)* through the gathering of critical statistics, including a knowledge and BMP assessment scoring system presented in Tables 11-1 and 11-2. Data gathered and evaluated during the defined reporting period indicate that identified significant program activities targeting industrial and commercial sources have been effective.

Residential

Residential BMP implementation has been identified as the significant activity by which effectiveness has been assessed. Residential complaint response and enforcement constitute the core of residential BMP implementation assurance actions. Based upon an evaluation of data associated with these elements, including the number of incidents responded to and the ultimate resolution of these events, the City has demonstrated a notably effective program and level of service to the community of Encinitas.

Education

Education effectiveness is assessed for a variety of program elements as presented in the Table 11-9 below. In terms of education opportunities provided to the various community sectors and City staff and contractors, identified as the significant metric by which to evaluate education activities, the City has achieved a high level of success.

Public Participation

The City of Encinitas provides a variety of venues and outlets in support of public participation. The City has identified a number of measures to evaluate the effective implementation of this program element. As with education, public participation translates across a number of program areas; however the assessment measures identified in Table 11-10 are focused on success of the venues and outlets supported by the City. From the measures identified and quantified, community partnerships, event attendance, Clean Water Hotline calls, and volumes of debris and hazardous materials collected through public participation, the City has established exceptional trends.

11.3 PROGRAM REVIEW AND MODIFICATION

No significant changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document.

Table 11-3
Development Planning Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Verify High Efficiency Treatment BMPs are Approved	Internal The City's Engineering Department staff is well versed in treatment BMPs and pollutant removal efficiencies.	Percent of approved projects implementing BMPs with high or medium removal efficiencies for key pollutants of concern	100%	N/A, addressed through other significant activities for this component
Verify Proposed BMPs are Implemented	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal The City contracts with a qualified consultant to perform treatment control BMP inspections.	Percent of projects installing / implementing proposed BMPs	100%	BMP implementation is likely to have reduced pollutant loads.
		Resolution status of enforcement actions (program element to be fully implemented in FY 2008-09)	See Section 2	
Verify BMPs are Properly Maintained	External N/A, verification letters were not sent out until 2008/2009. Internal N/A, verification letters were prepared by the City's consultant.	Percent of sites properly maintaining BMPs	To Be Determined	Additional load reduction could be achieved through improved BMP maintenance.
		Resolution status of enforcement actions (program element to be fully implemented in FY 2008-09)	See Section 2	
		Percent of sites submitting proper verification forms	N/A	
		Percent of sites certifying proper maintenance	N/A	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-4
Construction Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Verify Planned BMP Implementation - Review Proposed Plans and BMPs	External Projects submit plans for construction BMP implementation for their projects; the level of awareness of construction BMP requirements is fairly high. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs.	BMPs proposed for construction projects must meet minimum requirements; no significant problems have been noted.		Proper pre-project planning is likely to have reduced pollutant loading.
Verify Proposed BMPs are Implemented	External Grading projects implement BMPs as required by their permits, and contractors are familiar with the City's requirements. Internal Training for City staff is described in Section 8. City inspectors are familiar with relevant construction BMPs.	Percent of projects implementing required BMPs	100%	Proper BMP implementation is likely to have reduced pollutant loading.
		Percent of inspection actions resulting in Corrective Action	10%	
		Percent of inspection actions resulting in a Notice of Violation (NOV)	> 1%	
		Number of dry weather monitoring exceedances traced to construction sources	0	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-5
Municipal Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Verify Proposed BMPs are Implemented at Facilities	City staff is regularly trained on BMP implementation; see sections 4 and 8.	Percent of inspected facilities/activities in compliance with BMP requirements	100%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of sites requiring follow-up inspections	See Section 4		
		Number of dry weather monitoring exceedances traced to municipal sites	0		
Sweep Streets and Parking Facilities		N/A, streets and parking facilities are swept as determined necessary and in compliance with Municipal Stormwater Permit standards.		Amount of sediment and debris removed per length of street swept (weight or vol per curb mi)	1,378.5 tons/ 11380 curb mi (0.12 tons/mi)
Maintain and Clean MS4		N/A, MS4 structures are maintained as often as directed by management.		Amount of sediment and debris removed (weight or volume)	56 tons and 4,748 30-gal bags of debris
Maintain Sanitary Sewer System		N/A, the sanitary sewer system is maintained as often as directed by management.		Total volume of SSO discharge to MS4 (gallons)	480 gal
Maintain Municipal Treatment Control BMPs		N/A, treatment control BMPs are maintained as often as directed by management.		Amount of sediment and debris removed from treatment BMPs	3.148 tons
				BMP effectiveness studies	N/A
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-6
Industrial and Commercial Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Require BMP Implementation	External Knowledge assessment scores indicated a slightly low level of understanding of relevant storm water concepts. See Figure 11-1 on the following page for a score distribution. See Section 8 for more detail on educational materials and other outreach efforts. Internal City inspectors are well versed in Stormwater compliance and minimum BMP standards.	Percent of inspected sites in compliance with BMP requirements (inspections that did NOT require follow-up actions)	36%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of inspection related enforcement actions	98%		
		Number of dry weather monitoring exceedances traced to industrial or commercial sources	To Be Determined	Number of IC/IDs eliminated through enforcement actions taken as a result of routine inspection OR complaint investigations. (NOVs & Citations)	42
		Based on the results of individual facility assessment surveys, most facilities inspected have a good general understanding of BMPs and implement BMPs as required. See Figure 11-1 and 11-2.			
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-1
Knowledge Assessment Scores, FY 2007-2008 Inspections

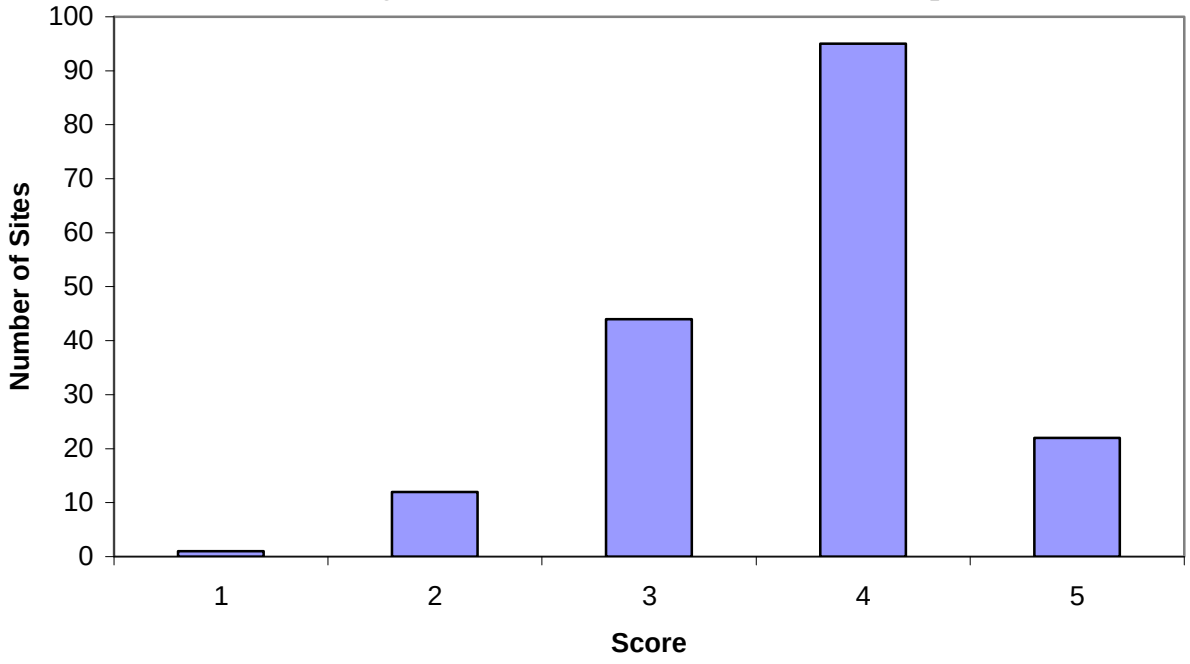


Figure 11-2
BMP Assessment Scores, FY 2007-2008 Inspections

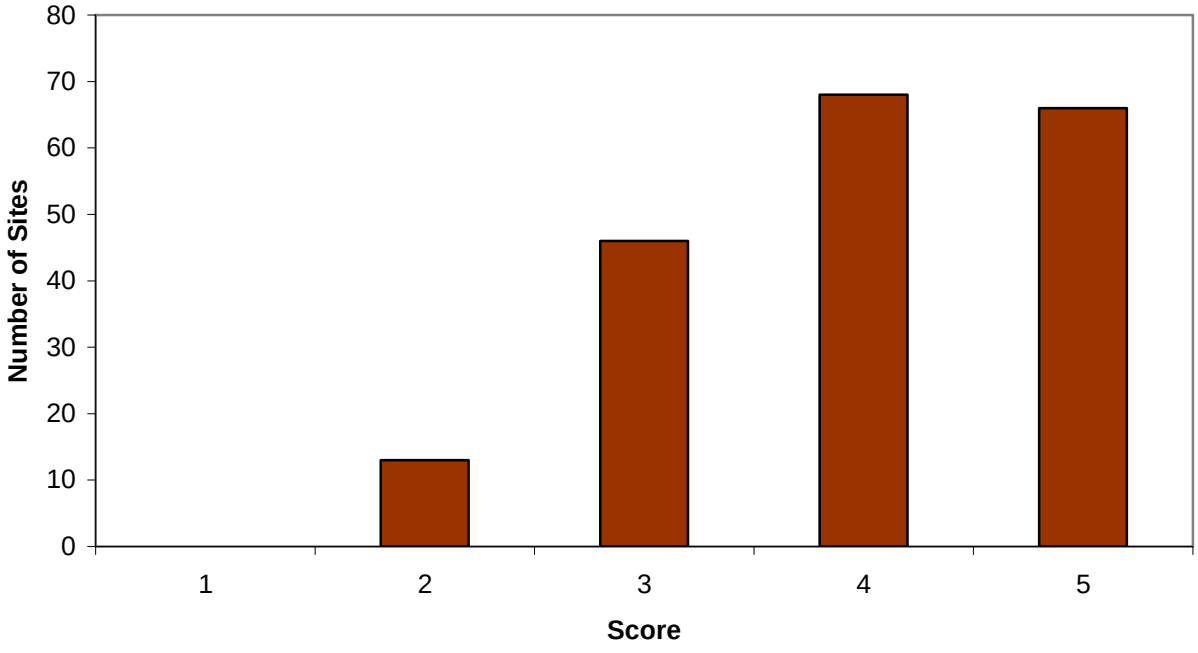


Table 11-7
Residential Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Require BMP Implementation	External Residents were educated in variety of ways in 2007/2008; see sections 6 and 8 for details. Internal City inspectors are well versed in Stormwater compliance and minimum BMP standards.	Number of residential incidents reported to storm water hotline	157	Resolution of residential incidents reported to the hotline likely resulted in a decrease in pollutant loading through improved BMP implementation.
		Resolution status of residential related enforcement actions	98%	
		Number of dry weather monitoring exceedances traced to residential sources	0	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-8
Illicit Discharge Detection and Elimination Component Assessment Measures

Significant Activity	Level 2	Level 3	Level 4
Conduct Dry Weather Monitoring Program	Clean Water Program staff executes the City's Dry Weather Monitoring Program.	N/A, personnel conduct monitoring as directed by management.	No significant, long term IC/IDs were eliminated, so a reliable estimate of load reduction cannot be made.
Respond to Incidents Reported to Clean Water Hotline	Dedicated Engineering and Public Works staffs are trained to respond to reported incidents.	N/A, personnel respond to incidents as directed by management.	Resolution of the incidents reported to the hotline and listed in Section 7 are likely to have resulted a pollutant loading reduction.
Respond To and Clean up SSOs	Dedicated Public Works staffs are trained to respond to reported SSO incidents.	The City conducts additional preventative inspections and maintenance in areas with a higher history of problems.	The City responded to two SSO events in 2007-2008, and was able to recover discharge prior to reaching the MS4.

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-9
Education Component Assessment Measures

Significant Activity	Level 2		Level 3	Level 4
Provide storm water education to the public	External The City actively educates the various audiences in its jurisdiction. See Sections 8 and 9 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for FY 2007-08.
	Estimated number of impressions made*	4,100		
	Estimated number of educational materials distributed to various community sectors	2,904		
Provide storm water education to City staff & contractors	Internal The City provides staff and contractors w/ regular stormwater training. See Sections 8 and 9 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for FY 2007-08.
	Number of Staff and Contractors trained	163		

Notes:
Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
*Impressions are based upon the number of interactions with public at education events.

Table 11-10
Public Participation Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Involve the public in activities that relate to storm water protection	External The City and City partners put on a number of opportunities for the public to participate. See section 9 for details.	Number of attendees at events	3,058	Amount of trash and debris collected at cleanup events	508.7 lbs
		Number of calls received to the Clean Water Hotline*	329	Amount of HHW collected	119,127 lbs of HHW 2,594 oil filters 18,652 gal of oil

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
* The sum total of calls to the Clean Water Hotline related to all Community Sectors.

12.0 SPECIAL INVESTIGATIONS

The City of Encinitas is currently engaged in a number of ongoing and long-term investigations to support reasoned and informed management actions to address local water quality concerns and threats.

12.1 MOONLIGHT BEACH URBAN RUNOFF TREATMENT FACILITY

The City of Encinitas has been operating the Moonlight Beach Ultraviolet Treatment Facility since August 29th, 2002. The overall project has been a true success; the City has reduced the bacteria levels entering the Pacific Ocean at Moonlight State Beach and bacteria levels through the facility are consistently reduced by 99%. Beach postings have been reduced by an average of 90% per year for the six years that facility has been in operation.

The Moonlight Beach Urban Runoff Treatment Facility draws water from Cottonwood Creek inside an existing concrete double-box culvert. It is diverted to a wet well and pumped via two, alternating 7.5 HP, float-controlled submersible pumps to the UV treatment facility. After pre-screening at the wet well intake, a second stage of screening is provided by two basket strainers. Water is then filtered through two dual media (sand and anthracite) pressure filters. The disinfection unit consists of two UV disinfection chambers approximately 48 inches in length and 8 inches in diameter. Each chamber has four low-pressure, high intensity UV lamps.



The system is operated from a programmable logic controller (PLC). System controls are set to shut the entire system down on three operating conditions: high level in the wet well, high pump discharge pressure, and high effluent turbidity. Treated flow is returned to Cottonwood Creek inside a second portal of the concrete box culvert. The entire treatment facility is housed in a 24 feet long, 10 x 10 foot prefabricated steel enclosure.

In February 2006, the City of Encinitas completed the final report to the State Water Resource Control Board, Clean Beaches Initiative Grant. In order to monitor the effectiveness of the UV Facility two assessment methods were used: water quality monitoring and beach posting data. The City routinely monitored the concentrations of bacteria at three locations in Cottonwood Creek and in the mixing zone at the creek mouth. Samples were collected above and below the facility, and before and after project implementation. Monitoring locations include influent, effluent, the mouth of Cottonwood Creek, and the Moonlight Beach mixing zone. Approximately 160 routine sampling events occurred during the monitoring period.

Bacteria removal efficiencies through the UV Facility were calculated at >99% based on 153 pairs of influent and effluent samples. Through weekly bacteria monitoring and a special study, the City determine that additional sources of bacteria and regrowth contributed to the degradation of water quality downstream of the facility. However, the overall removal

efficiency from the facility influent to the creek mouth was measured at approximately 50%. Monitoring also showed an improvement of water quality in the mixing zone as measured by changes in exceedances of AB411 standards. AB411 exceedances were reduced from 9.4% prior to the project to 4.8% after the project representing nearly a 50% reduction in exceedances in the mixing zone.

In fiscal year 2007-08, the City of Encinitas continued random sampling of influent and effluent from the UV facility to gauge the ongoing effectiveness and proper function of the system. A number of samples were taken at sporadic intervals and varying conditions to monitor the bacteria concentrations, affirming long term effectiveness and efficiency of the Moonlight Beach UV Treatment Facility. While the facility has been in operation for a number of years, the City of Encinitas has recognized the importance of ongoing investigations to ensure the long-term success of this project and to provide valuable data both locally and throughout the state to evaluate the efficacy of such a device.

12.2 SAN ELIJO LAGOON RESTORATION

The City of Encinitas along with the City of Solana Beach, the Army Corps of Engineers, and various other stakeholders has been analyzing possible enhancement opportunities for the San Elijo Lagoon. Artificial constrictions have hindered the natural ability of the estuary to open to the ocean. The Interstate 5 (1-5) North Coast Freeway widening project will further impact the lagoon. A study was completed by the Army Corps of Engineers to investigate potential mitigation opportunities for the I-5 North Coast Project.

The goal of the study is to optimize the openings at the three major transportation passageways across the San Elijo Lagoon. This study looked specifically into the effects of varying channel widths at each opening: inlet and Pacific Coast Highway bridge, the San Diego Northern Railway system, and the I-5 freeway. Results from each simulation would be judged on its ability to reduce muting, increase circulation, improve water quality in the lagoon, and ultimately on whether or not any improvements to the habitat distribution in the lagoon would be likely to occur. Work on this process continued throughout the defined reporting period of this report, most significantly with efforts conducting a data gap analysis to support necessary simulations and the evaluation of a variety of design options. In fiscal year 2007-08 this project continued to move forward marked by large-scale data gathering and coordination among diverse public, private, and non-governmental agencies.

12.3 RESTAURANT BINDER ASSESSMENT

In fiscal year 2006-2007, the City of Encinitas distributed a Stormwater Pollution Prevention Manual to restaurant facilities throughout the City. Approximately 180 binders were distributed during routine restaurant inspection activities. Each binder included a site map, BMP information specific to restaurant operations, and sections to record training, inspection, maintenance activities. The intent of the binder is to support restaurant owners and staff to ensure that proper BMPs are utilized to eliminate non-stormwater discharges.

Within the defined reporting period of this report, City inspection staff endeavored upon an evaluation of the overall success and effectiveness of the restaurant binder program. Commercial facility inspection forms were augmented to capture answers to questions aimed at evaluating the utility and use of the information provided the previous year. While the data gathered during the reporting period have not been fully evaluated at the time of report production, it is anticipated that this investigation will provide the City with valuable information to drive future education and support tools to restaurants and other community sectors.

13.0 NON-EMERGENCY FIRE FIGHTING

13.1 INTRODUCTION

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by fire fighting activities both at fire stations in the City and locations throughout the City. Two fire stations (No. 3 and No. 5) have treatment control BMPs in place to treat any runoff which may be discharged from washing activities. The remaining stations utilize source control BMPs to minimize and control discharges related to washing activities. All fire fighting training activities which include aqueous film forming foam are conducted at a fire station outside of the City of Encinitas. In addition to implementing structural BMPs at the fire stations, all City of Encinitas Fire Department employees are trained in storm water management on an annual basis. Following is a detailed description of the program developed by the City to reduce pollutants from non-emergency fire fighting flows.

13.2 PROGRAM FOR NON-EMERGENCY FIRE FIGHTING FLOWS

In consideration of BMPs associated with non-emergency fire fighting activities, the City of Encinitas has identified a number of potential discharge sources including maintenance of fire and emergency vehicles and equipment, training exercises, and facility maintenance. It is important to recognize, and make provision for the post-emergency rehabilitation of response equipment including tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency, as this equipment must be restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for subsequent response actions. As such, the use of water that could contribute to storm water discharges may be used unless another practical and immediately available method is identified, and will be performed in a manner that minimizes discharges to the MEP. In consideration of the non-emergency activities listed above, the City's fire personnel utilized the following BMPs to address discharge generated from such activities during fiscal year 2007-08:

- Whenever possible, practice drills were performed in areas where runoff was contained. When practice drills were performed in an area where runoff could potentially leave the site, the site was surveyed by the officer-in-charge prior to training activities to ensure that debris would not enter the storm drain system as a result of the drill.
- As determined feasible, runoff from training drills or other non-emergency activities, was directed to landscaped areas.
- Areas that have debris that could potentially enter the storm drain system as a result of the drill activities were not used for training until the debris had been removed.
- Live fire training activities were pre-planned to allow integration of structural BMP barriers to control runoff as deemed necessary.
- Runoff from live fire training activities was contained and recovered with the City's Vac-con truck so that runoff did not discharge to the storm drain system or receiving waters.
- Good housekeeping and dry cleanup practices were utilized as part of standard facility maintenance procedures.

13.2.1 EDUCATIONAL METHODS

Details of the City's educational programs, including fire fighting personnel education, are provided in Section 8 of this document.

14.0 JURMP REVISIONS

The City's JURMP was rewritten in the spring of 2008 in response to new Municipal Permit requirements. Section 14 of the updated JURMP document includes a list of the changes made to the JURMP at that time. Any other changes to the JURMP made since the overall JURMP update in the spring of 2008 would be discussed in the individual "Program Review and Modification" subsections in the preceding sections in this JURMP Annual Report.

15.0 CONCLUSIONS & RECOMMENDATIONS

During the FY 2007-2008 reporting period, the City of Encinitas updated its JURMP, which was finalized and submitted to the RWQCB on March 24, 2008. As captured in this first JURMP Annual Report under Order No. 2007-0001, the City has begun implementing the new and revised programs presented in its updated JURMP. The Copermittees have created several new regional workgroups to facilitate sharing of information and to provide regional guidance on standardized implementation where applicable. The City will work collaboratively with the other Copermittees in this process and continue to refine its program implementation as needed to improve its ability to reduce or eliminate pollutant discharges and meet regulatory requirements.

Appendix A

Development Planning

A-1 **Treatment Control BMP Inventory**

A-2 **Treatment Control BMP Inspection Priority Flowchart**

A-3 **Sample Grading Certification / BMP Verification Letter**

A-4 **Treatment Control BMP Operation and Maintenance Verification Letter**

A-5 **Treatment Control BMP Operation and Maintenance Verification Brochure**

A-6 **Treatment Control BMP Operation and Maintenance Verification Form**

A-7 **Treatment Control BMP Operation and Maintenance Inspection Form**

TREATMENT CONTROL BEST MANAGEMENT PRACTICES INVENTORY

All sites are in the Carlsbad Watershed

Treatment Control BMP Type	Location	Date of Construction
TC-40/MP-40 Media Filter	1302 Encinitas Blvd	unk
TC-40/MP-40 Media Filter	200 to 52 El Camino Real	unk
TC-40/MP-40 Media Filter	Encinitas Country Day School	9/17/2004
TC-40/MP-40 Media Filter	Encinitas Country Day School	9/17/2004
TC-40/MP-40 Media Filter	Encinitas Country Day School	9/17/2004
TC-32 Bioretention	1396 Rubenstein Ave	11/2/2005
TC-30 Vegetated Swale	Requeza St	unk
TC-30 Vegetated Swale	Sheridan Ln	unk
TC-30 Vegetated Swale	1302 Encinitas Blvd	unk
TC-30 Vegetated Swale	131 Princehouse Ln	unk
TC-30 Vegetated Swale	133 Rosebay Dr	unk
TC-30 Vegetated Swale	175 La Costa Ave	unk
TC-30 Vegetated Swale	2112 Oxford Ave	unk
TC-30 Vegetated Swale	290 Andrew Ave	unk
TC-30 Vegetated Swale	3275 Poppy Hills Ln	unk
TC-30 Vegetated Swale	Lake Dr	unk
TC-30 Vegetated Swale	1926 Oxford Avenue	3/1/2004
TC-30 Vegetated Swale	429 Fulvia Street	6/11/2004
TC-30 Vegetated Swale	740 Cornish Drive	11/30/2004
TC-30 Vegetated Swale	1371 San Elijo Avenue	12/8/2004
TC-30 Vegetated Swale	2455 San Elijo Avenue	12/8/2004
TC-30 Vegetated Swale	700 Garden View Court	12/8/2004
TC-30 Vegetated Swale	1032 Orpheus	12/20/2004
TC-30 Vegetated Swale	1032 Orpheus Avenue	12/20/2004
TC-30 Vegetated Swale	1032 Orpheus Avenue	12/20/2004

TREATMENT CONTROL BEST MANAGEMENT PRACTICES INVENTORY

All sites are in the Carlsbad Watershed

Treatment Control BMP Type	Location	Date of Construction
TC-30 Vegetated Swale	115 Verdi	12/20/2004
TC-30 Vegetated Swale	1470 Summit Avenue	12/21/2004
TC-30 Vegetated Swale	Oxford & Kilkenny	1/19/2005
TC-30 Vegetated Swale	360 Dollimore Drive	3/8/2005
TC-30 Vegetated Swale	3695 Lone Dove Lane	3/15/2005
TC-30 Vegetated Swale	Camino Del Rancho	3/24/2005
TC-30 Vegetated Swale	East F Street	4/19/2005
TC-30 Vegetated Swale	701 S Vulcan Ave	4/19/2005
TC-30 Vegetated Swale	721 N Vulcan Ave	4/19/2005
TC-30 Vegetated Swale	268 Sunset Drive	5/10/2005
TC-30 Vegetated Swale	1616 Neptune Avenue	5/13/2005
TC-30 Vegetated Swale	1270 Rubenstein Ave	6/22/2005
TC-30 Vegetated Swale	1972 Lake Drive	6/22/2005
TC-30 Vegetated Swale	290 Andrew Avenue	6/22/2005
TC-30 Vegetated Swale	477 N El Camino Real	6/22/2005
TC-30 Vegetated Swale	1174 Hymettus Ave	7/6/2005
TC-30 Vegetated Swale	1423 Rainbow Ridge Ln	7/6/2005
TC-30 Vegetated Swale	1653 Burgandy	7/6/2005
TC-30 Vegetated Swale	2009 and 2011 Manchester	7/6/2005
TC-30 Vegetated Swale	2600 Montgomery Avenue	7/6/2005
TC-30 Vegetated Swale	3364 Calle Margarita	7/6/2005
TC-30 Vegetated Swale	651 Quail Gardens Dr	7/6/2005
TC-30 Vegetated Swale	742 and 744 Dewitt Ave	7/6/2005
TC-30 Vegetated Swale	946 and 950 Woodgrove Dr	7/6/2005
TC-30 Vegetated Swale	754 Hymettus Ave	9/19/2005

TREATMENT CONTROL BEST MANAGEMENT PRACTICES INVENTORY

All sites are in the Carlsbad Watershed

Treatment Control BMP Type	Location	Date of Construction
TC-30 Vegetated Swale	3430 Via Monte Verde	9/25/2005
TC-30 Vegetated Swale	3373 Calle Margarita	9/26/2005
TC-30 Vegetated Swale	1332 1332-1338 Rubenstein Ave	11/2/2005
TC-30 Vegetated Swale	1396 Rubenstein Ave	11/2/2005
TC-30 Vegetated Swale	3230 Bella Colina	11/2/2005
TC-30 Vegetated Swale	454 Bristol Road	11/2/2005
TC-30 Vegetated Swale	754 Hymettus Avenue	11/2/2005
TC-30 Vegetated Swale	1403 Neptune Ave	11/22/2005
TC-30 Vegetated Swale	1416 Summit Avenue	12/1/2005
TC-30 Vegetated Swale	477 N. El Camino Real	12/7/2005
TC-30 Vegetated Swale	942 Stratford Drive	12/12/2005
TC-30 Vegetated Swale	3515 Jasmine Crest	1/10/2006
TC-30 Vegetated Swale	267 Sanford Street	1/17/2006
TC-30 Vegetated Swale	1319 Lux Canyon Drive	1/26/2006
TC-30 Vegetated Swale	3065 Wildflower Drive	1/26/2006
TC-30 Vegetated Swale	3351 Lilac Summit	1/26/2006
TC-30 Vegetated Swale	406 La Costa Ave	1/30/2006
TC-30 Vegetated Swale	1055 Eolus Ave	2/23/2006
TC-30 Vegetated Swale	293 Hillcrest Dr	4/12/2006
TC-30 Vegetated Swale	122 Basil St	4/20/2006
TC-30 Vegetated Swale	Dove Hollow Lane	5/26/2006
TC-30 Vegetated Swale	1219 Neptune Ave.	8/16/2006
TC-30 Vegetated Swale	1635 Gascony Road	8/17/2006
TC-30 Vegetated Swale	1019 Oldham Way	9/1/2006
TC-30 Vegetated Swale	354 Santa Fe Dr	9/28/2006

TREATMENT CONTROL BEST MANAGEMENT PRACTICES INVENTORY

All sites are in the Carlsbad Watershed

Treatment Control BMP Type	Location	Date of Construction
TC-30 Vegetated Swale	422 Andrew Ave.	10/11/2006
TC-30 Vegetated Swale	1552 Summit ave.	10/18/2006
TC-30 Vegetated Swale	3234 Olivenhain Road.	11/1/2006
TC-30 Vegetated Swale	175 Vulcan Ave.	11/7/2006
TC-30 Vegetated Swale	403 Sheffield Ave.	11/9/2006
TC-30 Vegetated Swale	311 Princehouse Lane	12/8/2006
TC-30 Vegetated Swale	311 Princehouse ln	12/8/2006
TC-30 Vegetated Swale	728 Dewitt Avenue	12/15/2006
TC-30 Vegetated Swale	1521 Summit Ave	12/21/2006
TC-30 Vegetated Swale	1739 Freda Ln	12/21/2006
TC-30 Vegetated Swale	2477 and 2483 Oxford Ave	12/21/2006
TC-30 Vegetated Swale	301 Cantle Ln	12/21/2006
TC-30 Vegetated Swale	4036 Manchester Ave	12/21/2006
TC-30 Vegetated Swale	843 San Dieguito Dr	12/21/2006
TC-30 Vegetated Swale	1133 Hermes Ave.	1/24/2007
TC-30 Vegetated Swale	Evergreen Dr	2/16/2007
TC-30 Vegetated Swale	Evergreen Dr	2/16/2007
TC-30 Vegetated Swale	140 Range Street	2/28/2007
TC-30 Vegetated Swale	887 Brittany Avenue	3/8/2007
TC-30 Vegetated Swale	Ocean Bluff Way	4/30/2007
TC-30 Vegetated Swale	Ocean Bluff Way	4/30/2007
TC-30 Vegetated Swale	Ocean Bluff Way	4/30/2007
TC-30 Vegetated Swale	Ocean Bluff Way	4/30/2007
TC-30 Vegetated Swale	Ocean Bluff Way	4/30/2007
TC-30 Vegetated Swale	Ocean Bluff Way	4/30/2007

TREATMENT CONTROL BEST MANAGEMENT PRACTICES INVENTORY

All sites are in the Carlsbad Watershed

Treatment Control BMP Type	Location	Date of Construction
TC-30 Vegetated Swale	368 E. Glaucus St	5/10/2007
TC-30 Vegetated Swale	1408 Summit Ave	5/29/2007
TC-22 Extended Detention Basin	1302 Encinitas Blvd	unk
TC-22 Extended Detention Basin	1588 Leucadia Blvd.	unk
TC-22 Extended Detention Basin	175 La Costa Ave	unk
TC-22 Extended Detention Basin	3275 Poppy Hills Ln	unk
TC-22 Extended Detention Basin	Requeza & Beach St	unk
TC-22 Extended Detention Basin	3616 Manchester	9/17/2004
TC-22 Extended Detention Basin	1868 Crest Drive	9/24/2004
TC-22 Extended Detention Basin	3213 Bella Collina	2/4/2005
TC-22 Extended Detention Basin	268 Sunset Drive	5/10/2005
TC-22 Extended Detention Basin	1150 Quail Gardens Dr	6/22/2005
TC-22 Extended Detention Basin	1348 Hymettus Avenue	6/22/2005
TC-22 Extended Detention Basin	477 El Camino Real	7/6/2005
TC-22 Extended Detention Basin	3230 Bella Colina	11/2/2005
TC-22 Extended Detention Basin	Dove Hollow Lane	5/26/2006
TC-22 Extended Detention Basin	354 Santa Fe Dr	9/28/2006
TC-22 Extended Detention Basin	887 Brittany Ave	3/8/2007
TC-22 Extended Detention Basin	1408 Summit Ave	5/29/2007
TC-21/MP20 Constructed Wetland	San Elijo Lagoon Conservancy	unk
TC-21/MP20 Constructed Wetland	Requeza St	unk
TC-11 Infiltration Basin	1270 Rubenstein Ave	6/22/2005
TC-11 Infiltration Basin	267 Sanford Street	1/17/2006
TC-11 Infiltration Basin	271 Delfinium	12/13/2006
TC-11 Infiltration Basin	2477 and 2483 Oxford Ave	12/21/2006

TREATMENT CONTROL BEST MANAGEMENT PRACTICES INVENTORY

All sites are in the Carlsbad Watershed

Treatment Control BMP Type	Location	Date of Construction
TC-11 Infiltration Basin	368 E. Glaucus St	5/10/2007
TC-10 Infiltration Trench	Sheridan Ln	unk
TC-10 Infiltration Trench	131 Princehouse Ln	unk
TC-10 Infiltration Trench	133 Rosebay Dr	unk
TC-10 Infiltration Trench	195 La Mesa	unk
TC-10 Infiltration Trench	3275 Poppy Hills Ln	unk
TC-10 Infiltration Trench	Lake Dr	unk
TC-10 Infiltration Trench	1174 Hymettus Ave	7/6/2005
TC-10 Infiltration Trench	1521 Summit Ave	12/21/2006
TC-10 Infiltration Trench	843 San Dieguito Dr	12/21/2006
TC-10 Infiltration Trench	368 E. Glaucus St	5/10/2007
SD-32 Trash Storage Areas	4455 Manchester Ave	5/10/2007
SD-20 Pervious Pavement	290 Andrew Ave	unk
SD-20 Pervious Pavement	93 Sunset Drive	6/22/2005
SD-20 Pervious Pavement	2009 and 2011 Manchester	7/6/2005
SD-20 Pervious Pavement	742 and 744 Dewitt Ave	7/6/2005
SD-20 Pervious Pavement	290 Andrew Avenue	11/2/2005
SD-20 Pervious Pavement	1350 S. Coast Hwy, 101	12/21/2006
SD-20 Pervious Pavement	1455 San Elijo Ave	12/21/2006
SD-20 Pervious Pavement	4036 Manchester Ave	12/21/2006
SD-20 Pervious Pavement	2271 Montgomery Ave	3/22/2007
SD-20 Pervious Pavement	1408 Summit Ave	5/29/2007
SD-11 Roof Runoff Controls	Mackinnon Ave	7/6/2005
SD-11 Roof Runoff Controls	175 Florita	7/6/2005
SD-11 Roof Runoff Controls	2009 and 2011 Manchester	7/6/2005

TREATMENT CONTROL BEST MANAGEMENT PRACTICES INVENTORY

All sites are in the Carlsbad Watershed

Treatment Control BMP Type	Location	Date of Construction
SD-11 Roof Runoff Controls	1350 S. Coast Hwy, 101	12/21/2006
SD-11 Roof Runoff Controls	1455 San Elijo Ave	12/21/2006
SD-11 Roof Runoff Controls	1521 Summit Ave	12/21/2006
SD-11 Roof Runoff Controls	2477 and 2483 Oxford Ave	12/21/2006
SD-11 Roof Runoff Controls	2477 and 2483 Oxford Ave	12/21/2006
SD-11 Roof Runoff Controls	301 Cantle Ln	12/21/2006
SD-11 Roof Runoff Controls	1408 Summit Ave	5/29/2007
SD-10 Site Design / Landscape Planning	Phoebe St. & Hwy 101	unk
SD-10 Site Design / Landscape Planning	290 Andrew Ave	unk
SD-10 Site Design / Landscape Planning	762 Sparta Drive	unk
SD-10 Site Design / Landscape Planning	740 Cornish Drive	11/30/2004
SD-10 Site Design / Landscape Planning	1968 Park Crest Drive	12/7/2004
SD-10 Site Design / Landscape Planning	1470 Summit Avenue	12/21/2004
SD-10 Site Design / Landscape Planning	1550 Orange View	6/22/2005
SD-10 Site Design / Landscape Planning	2416 Newport Ave	6/22/2005
SD-10 Site Design / Landscape Planning	3442 Fortuna Ranch Rd	6/22/2005
SD-10 Site Design / Landscape Planning	376 Hillcrest Dr	6/22/2005
SD-10 Site Design / Landscape Planning	Mackinnon Ave	7/6/2005
SD-10 Site Design / Landscape Planning	1174 Hymettus Ave	7/6/2005
SD-10 Site Design / Landscape Planning	2009 and 2011 Manchester	7/6/2005
SD-10 Site Design / Landscape Planning	3364 Calle Margarita	7/6/2005
SD-10 Site Design / Landscape Planning	651 Quail Gardens Dr	7/6/2005
SD-10 Site Design / Landscape Planning	Mackinnon Ave	7/6/2005
SD-10 Site Design / Landscape Planning	364 Liverpool	8/2/2005
SD-10 Site Design / Landscape Planning	2351 Cambridge Ave	8/5/2005

TREATMENT CONTROL BEST MANAGEMENT PRACTICES INVENTORY

All sites are in the Carlsbad Watershed

Treatment Control BMP Type	Location	Date of Construction
SD-10 Site Design / Landscape Planning	871 Neptune	8/30/2005
SD-10 Site Design / Landscape Planning	871 Neptune Avenue	8/30/2005
SD-10 Site Design / Landscape Planning	1638 Edilee Dr	11/2/2005
SD-10 Site Design / Landscape Planning	2150 Cambridge Ave	11/2/2005
SD-10 Site Design / Landscape Planning	454 Bristol Rd	11/2/2005
SD-10 Site Design / Landscape Planning	760 Third Street	11/2/2005
SD-10 Site Design / Landscape Planning	125 Avocado St	12/5/2005
SD-10 Site Design / Landscape Planning	203 213 3rd Street	1/10/2006
SD-10 Site Design / Landscape Planning	1604 Crest Drive	2/17/2006
SD-10 Site Design / Landscape Planning	Mackinnon Ave	2/27/2006
SD-10 Site Design / Landscape Planning	841 859 Second Street	3/6/2006
SD-10 Site Design / Landscape Planning	1441 Hygia Ave.	9/12/2006
SD-10 Site Design / Landscape Planning	354 Santa Fe Dr	9/28/2006
SD-10 Site Design / Landscape Planning	1817 Sheridan Road	10/13/2006
SD-10 Site Design / Landscape Planning	172 Kilkenny Drive	12/6/2006
SD-10 Site Design / Landscape Planning	1455 San Elijo Ave	12/21/2006
SD-10 Site Design / Landscape Planning	2265 Manchester Ave	12/21/2006
SD-10 Site Design / Landscape Planning	2335 Manchester Ave	12/21/2006
SD-10 Site Design / Landscape Planning	2477 and 2483 Oxford Ave	12/21/2006
SD-10 Site Design / Landscape Planning	301 Cantle Ln	12/21/2006
SD-10 Site Design / Landscape Planning	4036 Manchester Ave	12/21/2006
SD-10 Site Design / Landscape Planning	727 Dewitt Ave	12/21/2006
SD-10 Site Design / Landscape Planning	519 Arden Drive	1/17/2007
SD-10 Site Design / Landscape Planning	Evergreen Dr	2/16/2007
SD-10 Site Design / Landscape Planning	2271 Montgomery Ave	3/22/2007

TREATMENT CONTROL BEST MANAGEMENT PRACTICES INVENTORY

All sites are in the Carlsbad Watershed

Treatment Control BMP Type	Location	Date of Construction
SD-10 Site Design / Landscape Planning	3592 Jasmine Crest	4/5/2007
SD-10 Site Design / Landscape Planning	Ocean Bluff Way	4/30/2007
SD-10 Site Design / Landscape Planning	Ocean Bluff Way	4/30/2007
SD-10 Site Design / Landscape Planning	Ocean Bluff Way	4/30/2007
SD-10 Site Design / Landscape Planning	Ocean Bluff Way	4/30/2007
SD-10 Site Design / Landscape Planning	4455 Manchester Ave	5/10/2007
SD-10 Site Design / Landscape Planning	4455 Manchester Ave	unk
Other	290 Andrew Ave	unk
Other	427 Bristol Ave	unk
Other	2476 Oxford	8/26/2004
Other	2455 San Elijo Avenue	12/8/2004
Other	560 Neptune Ave	6/22/2005
Other	566 Neptune Ave	6/22/2005
Other	Cambridge Ave	8/5/2005
Other	406 La Costa Ave	1/30/2006
Other	160 Fourth Street	2/13/2006
Other	950 3rd St	4/13/2006
Other	1552 Summit ave.	10/18/2006
MP-52 Drain Inserts	Phoebe St. & Hwy 101	unk
MP-52 Drain Inserts	Lake Dr	unk
MP-52 Drain Inserts	Phoebe St & Hwy 101	unk
MP-52 Drain Inserts	Cantebria Senior Homes	unk
MP-52 Drain Inserts	Cantebria Senior Homes	unk
MP-52 Drain Inserts	Cantebria Senior Homes	unk
MP-52 Drain Inserts	477 N El Camino Real	6/22/2005

TREATMENT CONTROL BEST MANAGEMENT PRACTICES INVENTORY

All sites are in the Carlsbad Watershed

Treatment Control BMP Type	Location	Date of Construction
MP-52 Drain Inserts	Mackinnon Ave	7/6/2005
MP-52 Drain Inserts	477 N. El Camino Real	12/7/2005
MP-52 Drain Inserts	354 Santa Fe Dr	9/28/2006
MP-52 Drain Inserts	727 Dewitt Ave	12/21/2006
MP-52 Drain Inserts	4455 Manchester Ave	5/10/2007
MP-50 Wet Vault	Phoebe St & Hwy 101	unk

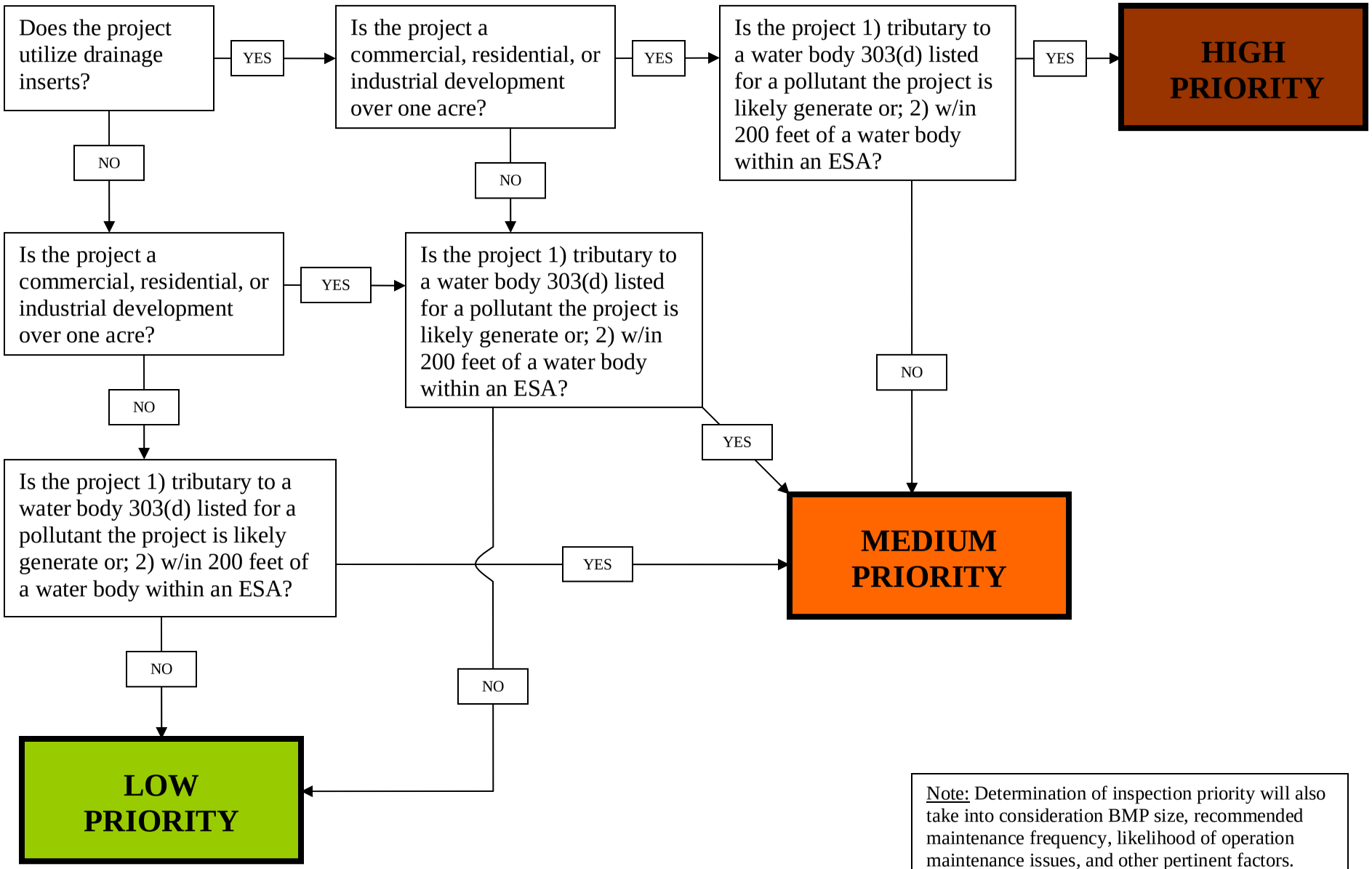
Notes:

Note 1: Responsible party information is maintained within the City's data management systems specific to this program area. In consideration of the sensitivity of private property ownership information, this data is not included in the inventory presented in Appendix A-1.

Note 2: Since the Operation and Maintenance Verification and Inspection Programs are not scheduled to commence until Fiscal year 2008-09 (as required by Order 2007-0001), the following information was not included in the FY 2007-08 inventory:

- Maintenance certifications or verifications
- Inspections
- Inspection findings
- Corrective actions

Treatment Control BMP Inspection Priority



Note: Determination of inspection priority will also take into consideration BMP size, recommended maintenance frequency, likelihood of operation maintenance issues, and other pertinent factors.

SAMPLE

Date: _____

City of Encinitas
Engineering Services Permits
505 South Vulcan Ave.
Encinitas, CA 92024

Re: **Engineer's Final Grading Certification for Project No. 99-001 TM and Grading Permit Number XXXX - G.**

The grading under permit number XXXX has been performed in substantial conformance with the approved grading plan or as shown on the attached 'As Graded' plan.

Final grading inspection has demonstrated that lot drainage conforms with the approved grading plan and that swales drain at a minimum of 1% to the street and/or an appropriate drainage system.

All the Low Impact Development, Source Control and Treatment Control Best Management Practices as shown on the drawing and required by the Best Management Practice Manual Part II were constructed and are operational, together with the required maintenance covenant(s).

Engineer of Record _____ (signed & sealed)

Dated _____

Verification by the Engineering Inspector of this fact is done by the Inspector's signature hereon and will take place only after the above is signed and stamped and will not relieve the Engineer of Record of the ultimate responsibility:

Engineering Inspector: _____

Dated:_____

The above information shall be on the Engineer of Record's letterhead and shall be signed and sealed by the Engineer of Record.

City of Encinitas

TO: City of Encinitas Property Owner

RE: Treatment Control Best Management Practices (BMP) Verification Program

The City of Encinitas, in response to requirements in the San Diego Municipal Stormwater Permit, as regulated by the San Diego Regional Water Quality Control (RWQCB), is undertaking a new program to protect our local waterways and beaches.

The purpose of this program is to verify the operation and maintenance of treatment control best management practices (BMPs) installed as a condition of development on projects constructed since January of 2003.

As you may be aware, specific projects within the City of Encinitas are required to install BMPs to treat and improve the quality of water discharged from a development site. It is important to recognize that the treatment control BMPs at your facility or on your property provide a critical function, and that ongoing maintenance and preservation of treatment control BMPs is necessary for proper operation and to maximize water quality benefit. The proper maintenance and operation of treatment control BMPs is required per City of Encinitas Municipal Code (EMC) Section 20.08 as well as property related legal agreements and/or covenants.

As the treatment control BMP operation and maintenance program is introduced, the City of Encinitas would like your cooperation to verify the following:

- ☑ Responsible Party Information *(HOA, Property Owner, Etc...)*
- ☑ Verification of the Type of Treatment Control BMPs *(See Enclosed Information)*
- ☑ Proper Operation and Maintenance of Treatment Control BMPs.

Enclosed with this letter, you will find information that will aid in gathering, documenting, and providing this information to the City of Encinitas. Please be advised that the City is also required to conduct assessments of a specific number of locations throughout the City to support this program.

Please Provide the Requested Information By: **October 1, 2008**

Your assistance in this effort is greatly appreciated. Please contact the City of Encinitas Clean Water Program at (760) 633-2787 or npdesmail@cityofencinitas.org for any questions or assistance.

Peter Cota-Robles, P.E
Director of Engineering

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

Frequently Asked Questions

1. Why does the City of Encinitas require that Treatment Control BMPs be maintained?

As stated in the Municipal Stormwater Permit (issued by the San Diego Regional Water Quality Control (RWQCB)), the City must verify that treatment control BMPs installed on private property are adequately maintained. Proper operation and regular maintenance of permanent treatment control BMPs ensures that the facility reduces the amount of pollutants which end up in our creeks, lagoons, and beaches. These BMPs help to improve water quality and minimize human and environmental health risks.

2. What should I do if I am unsure how to complete my self-inspection form or cannot locate the treatment control BMPs on my property?

Contact Clean Water Program staff as soon as possible. We can provide assistance in understanding the self-verification form, identifying the location of BMP(s) on your property, and determining operation and maintenance needs of your BMP(s). Staff can be reached via phone: 760-633-2787, or email: npdesmail@cityofencinitas.org

3. What happens during the City's inspection of Treatment Control BMPs on my property?

If requested or as required due to repudiation, a City inspector will visit the property to validate the existence, proper maintenance, and function of treatment control BMPs. Inspection actions will be documented with an inspection report form and photos of specific BMPs. If access is limited or located on private property, the City inspector will call the responsible party to schedule an inspection.

FAQs continued…

4. What happens if I don't certify that my Treatment Control BMP(s) have been maintained?

The Treatment Control BMP Self Verification process has been developed to provide property owners with a simple mechanism to validate the proper maintenance and function of these facilities, and to help the City meet State mandated requirements. The San Diego Regional Water Quality Control Board requires the City to verify the proper function of treatment control BMPs through a Municipal Stormwater Permit. It is the goal of the City to minimize the burden on property owners to fulfill these requirements. The City does maintain the authority to ensure the existence and proper maintenance and function of treatment facilities, and failure to provide adequate information may constitute a violation of the City ordinance as well as property related agreements or covenants.

City of Encinitas
Clean Water Program
505 S. Vulcan Avenue
Encinitas, CA 92024

For questions relating to
Treatment Control BMPs,
please call: 760-633-2787
or e-mail: npdesmail@cityofencinitas.org

Printed on recycled paper

City of Encinitas
Clean Water Program

Operation and Maintenance Guide

for your

Treatment Control Best Management Practices (BMPs)



Thanks for helping us keep our creeks, lagoons, and ocean clean!

What is a Treatment Control BMP?

Treatment Control BMPs are drainage devices, structures, or areas designed to remove pollutants from storm water runoff, or minimize the quantity of runoff ultimately discharged from a development site. These facilities are required to be incorporated into permitted development or redevelopment projects and serve a functional purpose to improve the quality of water that flows to our local creeks, lagoons, and beaches. They are also frequently referred to as Stormwater Best Management Practices or BMPs.

The following BMPs are commonly incorporated into development projects throughout the City of Encinitas:

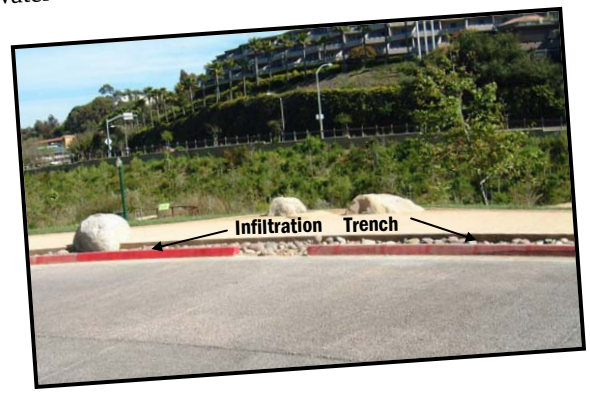
Vegetated Swales / Grassy Swales are open, shallow channels or depressions with vegetation or grass covering the side slopes and bottom that collect, infiltrate, and slowly convey runoff water. Rock lined swales are also commonly used.



Bioretention Areas consist of a planted or vegetated depression area designed to pond during a rain event. It is common to find multiple bioretention areas located throughout a development area.



Infiltration Trenches or **Basins** temporarily store runoff in shallow basins or linear depressions lined with sandy soil or gravel to enhance infiltration of water into the ground.



Storm Drain Filter Inserts are manufactured filters or fabric placed in a storm drain inlet to remove sediment, debris, oil, or other pollutants.



Other BMPs include Rock-Lined Swales, Terraced Swales, Detention Basins, Subsurface Infiltration Systems, Constructed Wetlands, Media Filters, Storm Water Storage Systems, and Vortex Separators.

Please note that each of the BMPs may vary in design size, shape, or materials from the descriptions above. City staff is available to help you determine the location of BMPs located on your property.

For more information on Treatment Control BMPs, refer to the City's Storm Water Best Management Practices Manual, Part II which can be accessed via the Clean Water Program webpage:

http://cwp.ci.encinitas.ca.us

How to locate Treatment Control BMPs on your property:

1. Refer to your approved grading or improvement plans. The plans will show the location of Treatment Control BMPs.
2. Walk your property to look for defined drainage areas such as channels, depressions, or basins.
3. Typical treatment control BMPs may look similar to traditional landscaped areas. Look for areas that have been graded in a concave, swale, or linear shape to capture and infiltrate storm water.
4. Structural treatment control devices such as an inlet filter may be located within a curb inlet or underground. *Please contact the City of Encinitas if you have a structural control located on your property with limited access.

Minimum Operation and Maintenance Requirements:

As stated on approved grading or improvement plans and in the City's Stormwater Management and Discharge Control Ordinance (Municipal Code Chapter 20.08), stormwater treatment control BMPs are required to be maintained in perpetuity by a designated responsible party. The responsible party is most commonly the property owner or a Home Owners' Association (HOA).

Minimum Operation and Maintenance tasks:

- ☑ On an annual basis, or as needed, visually inspect all Treatment Controls for signs of malfunction or disrepair.
- ☑ Maintain/repair any damage to the BMP. Necessary maintenance may include removing accumulated sediment, stabilizing eroded areas, replanting dead vegetation, trimming / mowing overgrown vegetation, cleaning out closed or blocked inlets and outlets, etc.
- ☑ Remove any accumulated trash and debris.
- ☑ Take photos of all BMPs on the property.
- ☑ Complete Operation and Maintenance Self-Verification Form and submit the form to the City's Clean Water Program.

Return this form no later than:
October 1, 2008

CITY OF ENCINITAS
STORM WATER TREATMENT CONTROL BEST MANAGEMENT PRACTICES (BMPS)
OPERATION AND MAINTENANCE SELF-VERIFICATION FORM

Step 1 RECORDS VERIFICATION

Property Address:

Responsible Party and/or Property Owner:

Responsible Party | Company or HOA (if applicable) | Address, City, State, ZIP

Treatment Control BMPs on your property:
(Please Indicate the Quantity of Each BMP in the Applicable Box Below)

- ☐ Grassy / Vegetated Swale
- ☐ Rock Lined Swale
- ☐ Infiltration Trench / Basin
- ☐ Proprietary Treatment Device
- ☐ Bioretention Area
- ☐ Storm Drain Filter Insert(s)
- ☐ Detention Basin
- ☐ Other (*Describe Below)*

*If you require assistance with BMP identification, please contact City Staff at (760) 633-2787

Step 2 SELF-VERIFICATION OF BMPS

Date(s) that the BMP(s) were self-evaluated: _____

Self Evaluation Results (check the box that applies):

☐ A. All BMPs are maintained and in good working order
☐ B. All or some BMP(s) needed maintenance and/or cleaning
☐ C. Other results (explain):_____

If you checked B or C, please describe maintenance that was performed in order to maintain proper function of BMP(s):

_____

_____

Maintenance Date: _____ *(As applicable, include any maintenance records with your submittal)*

Number of photos taken: _____ **Date the photo(s) were taken:** _____
(Include all photos with your submittal)

Step 3 CERTIFICATION

I, _____, hereby certify that the above information is correct to the best of my knowledge.

Signature _____

Date_____

See reverse for Submittal options.

Return this form no later than:
October 1, 2008

OPERATION AND MAINTENANCE SELF-VERIFICATION FORM

Step 4 SUBMITTAL OPTIONS

1. **Mail** completed form, copies of maintenance records, and photos to:

   City of Encinitas
   Clean Water Program
   505 S Vulcan Ave
   Encinitas, CA 92024

2. **Email** electronic copies of completed form, maintenance records, and photos to:

   npdesmail@cityofencinitas.org

3. Any combination of mail and email submission of the necessary documents will also be accepted. For example, you may **mail** the form and maintenance records and **email** photos.

CITY OF ENCINITAS

Treatment Control BMP Inspection Form

Inspection Type: ☐ Annual ☐ Follow-Up ☐ Complaint ☐ Other:_____

Inspector Name:_____ Date: _____ Time: _____

A. PROJECT INFORMATION

Permit No. _____	Permit Type: _____			Property Address(es):_____
Project Type:	☐ Private	☐ City	☐ Other Public	_____
SUSMP Priority:	☐ Priority	☐ Standard		_____
Inspection Priority:	☐ High	☐ Medium	☐ Low ☐ Unknown	_____
Property Access:	☐ Open	☐ Limited	☐ None	_____

B. TREATMENT CONTROL BMP ASSESSMENT

Treatment Control BMP	Observations	Address / BMP Location	Comments
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		

Add additional BMPs on reverse side.

PHOTO(S) TAKEN? ☐ **YES** ☐ **NO**

ADDITIONAL COMMENTS:

_____

_____

C. FOLLOW UP NEEDED? ☐ Yes ☐ No **ACCESS REQUIRED FOR FOLLOW UP?** ☐ Yes ☐ No

Follow Up Actions:_____

_____

D. ENFORCEMENT ACTIONS ☐ None ☐ Warning ☐ Notice of Violation ☐ Citation

Corrective Actions:_____

_____

B. TREATMENT CONTROL BMP ASSESSMENT (CONTINUED)

ADDITIONAL BMPS:

Treatment Control BMP	Observations	Location Description	Comments
	□ good condition □ needs maintenance □ not visible from street □ missing		
	□ good condition □ needs maintenance □ not visible from street □ missing		
	□ good condition □ needs maintenance □ not visible from street □ missing		
	□ good condition □ needs maintenance □ not visible from street □ missing		
	□ good condition □ needs maintenance □ not visible from street □ missing		
	□ good condition □ needs maintenance □ not visible from street □ missing		
	□ good condition □ needs maintenance □ not visible from street □ missing		
	□ good condition □ needs maintenance □ not visible from street □ missing		
	□ good condition □ needs maintenance □ not visible from street □ missing		
	□ good condition □ needs maintenance □ not visible from street □ missing		
	□ good condition □ needs maintenance □ not visible from street □ missing		

ADDITIONAL COMMENTS:

_____

_____

_____

_____

Form Revised: 8/2008

Appendix B

Construction

B-1	**Construction Inventory**
B-2	**Prioritized Construction Sites**
B-3	**Flow Chart for Inspection Frequencies**
B-4	**Construction Inspection Form**
B-5	**Erosion Control Letter**
B-6	**Construction Enforcement Actions**

Appendix B-1

				Requirements of Permit #R9-2001-0001		Requirements of Permit #R9-2007-0001					
Permit #	**Site Address**	**Site Street Name**	**APN**	**Inspection priority from July 1, 2007- January 24, 2008**	**Total Number of Inspections from July 1, 2007 - Jan 24, 2008**	**Inspection priority from January 24- June 30, 2008**	**Total Number of Inspections from January 24- June 30, 2008**	**Total Number of Weeks Active During the Wet Season**	**Total Number of Inspections Conducted During the Wet Season**	**Total Number of Inspections Conducted During the Dry Season**	**Total Number of Inspections Conducted from July 1, 2007 - June 30, 2008**
100 GI	1646	Sommerset	260-304-1000	Low	0	Low	1	28	1	0	1
103 GI	1079	Vulcan Ave	252-324-4600	Low	0	Low	2	30	2	0	2
106 GI	3358	Wildflower Valley Dr.	264-091-8600	Low	0	High	5	12	5	0	5
112 GI	1174	Hymettus	254-262-0600	Low	1	Low	1	30	2	0	2
125 GI	361	Birmingham	260-382-4800	Low	1	Low	0	2	1	0	1
127 GI	2335	Manchester	261-091-0700	Low	2	Low	0	10	2	0	2
138 GI	727	Dewitt	258-211-1100	Low	1	Low	1	30	2	0	2
1438 GR	420	La Veta	256-271-1800	Low	1	Low	0	7	1	0	1
1469 GI	1555	Bella Vista	216-122-4400	High	9	Medium	5	30	14	0	14
1502 GI	3592	Jasmine Crest	264-540-0300	Low	1	Medium	1	30	2	0	2
152 GI	1219	Neptune Ave	254-230-0600	Medium	5	Low	1	30	6	0	6
1533 GI	1098	Hymettus	254-262-2200	Low	1	Low	1	30	2	0	2
1537 GI	2015	Cambridge	260-391-03	Low	0	Low	1	17	1	0	1
169 GI	510	ECR Christian Fellowship	259-560-7900	Medium	4	Medium	3	30	7	0	7
17 GI	859-63	Second St	258-181-0900	Low	0	Low	1	28	1	0	1
178 GI	1330	Bello Mar Dr	216-500-0500	High	9	High	1	18	10	0	10
181 GI	3342	Wildflower Valley Dr.	264-091-7100	Medium	2	Medium	3	30	5	0	5
183 GI	3234	Olivenhain Farms Rd	264-091-2000	High	7	High	8	30	15	0	15
184 SG	2271	Montgomery	261-073-1400	Low	2	Low	1	30	3	0	3
185 GI	1423	Rainbow Ridge	254-181-0300	High	9	Medium	6	30	15	0	15
187 GI	1060	Urania Ave	254-363-0400	Low	0	Medium	3	30	3	0	3
199 GI	403	Sheffield Ave	260-283-1200	Low	1	Low	1	23	2	0	2
202 GI	411	Bristol	260-283-1300	Low	2	Low	0	7	2	0	2
214 GI	301	Cantle Lane	264-390-1100	Medium	4	Medium	2	23	6	0	6
215 GI	424	Brighton Dr.	260-283-0500	Low	0	Low	2	30	2	0	2
218 GI	640	Rancho Santa Fe	265-355-0700	Low	0	Low	2	30	2	0	2
220 GI	430	Andrew	216-063-3300	Low	0	Low	2	30	2	0	2
226 GI	1319	Lux Canyon Dr.	262-160-2500	High	9	Medium	5	30	14	0	14
235 GI	361	Rancho Santa Fe	259-023-3700	Low	1	Low	0	3	1	0	1
245 GI	3351	Lilac Summit	264-091-3500	Low	0	Medium	3	30	3	0	3
246 GI	4036	Manchester	262-061-6900	High	1	High	0	2	1	0	1
250 GI	271	Delphinium St	257-090-4901	Low	0	Low	2	30	2	0	2
266 G	735	Del Rio	256-164-1700	Low	1	Medium	1	30	2	0	2
269 GI	519	Arden Dr.	258-103-0200	Low	0	Low	2	30	2	0	2
275 GI	427	Naiad	256-242-4700	Low	0	Low	2	30	2	0	2
276 GI		Phoebe St @ N. Hwy 101	254-230-1800	Medium	4	Low	2	30	6	0	6
278 GI	3403	Bumann Rd.	264-292-2300	High	8	High	7	30	15	0	15
279 GI	3438	Via Monteverde	Pool	Medium	1	Medium	1	19	2	0	2
280 GI	368	E. Glaucus St	254-261-1400	Low	0	Low	2	30	2	0	2
286 GI	2265	Manchester	261-072-1500	Low	0	Low	2	30	2	0	2
287 GI	140	Range St	254-054-6000	Low	1	Low	0	3	1	0	1
289 GI	216	N. Coast Hwy 101	256-363-0200	Medium	4	Medium	2	30	6	0	6
302 GI	1405	San Elijo Ave	260-620-8500	Low	1	Low	1	30	2	0	2
306 GI	2351	San Elijo Ave	261-051-4100	Low	0	Medium	3	30	3	0	3
331 GI	172	Kilkenny Dr	261-102-1700	Low	0	Medium	1	25	1	0	1
345 GI	943	Arden Dr.	258-233-1800	Low	1	Low	0	8	1	0	1
354 GI	1713	Gascony	216-331-2400	Low	0	Low	2	20	2	0	2
364 GI	115	Princehouse Ln	259-131-2700	Low	0	Medium	1	30	1	0	1
366 GI	742-744	Dewitt	258-214-1500	Low	0	Low	2	30	2	0	2
369 GI	1415	Rainbow Ridge	254-181-0400	High	0	High	8	16	8	0	8
372 GI	1657	N. Vulcan Ave	254-061-01	low	1	Medium	2	30	3	0	3
386 GI	3535	Manchester Belmont Village	261-150-4500	High	7	Medium	5	30	12	0	12
388 GI	1435	Lake Dr.	260-222-1600	Low	0	Medium	3	19	3	0	3
395 GI	520	Fourth St	258-073-4300	High	9	High	0	16	9	0	9
396 GI	1408	Summit Ave	260-620-8600	Low	1	Low	1	30	2	0	2
407 GI	554	Neptune Ave	256-084-0800	High	1	High	0	1	1	0	1
409 GI	3364	Calle Margarita	264-240-2000	Medium	4	Medium	3	30	7	0	7
413 GI	651	Quail Gardens Lane	257-011-2400	High	3	High	0	6	3	0	3
414 GI	4455	Manchester	259-190-4600	Low	1	Low	0	3	1	0	1

Appendix B-1

Permit #	Site Address	Site Street Name	APN	Inspection priority from July 1, 2007- January 24, 2008	Total Number of Inspections from July 1, 2007 - Jan 24, 2008	Inspection priority from January 24- June 30, 2008	Total Number of Inspections from January 24- June 30, 2008	Total Number of Weeks Active During the Wet Season	Total Number of Inspections Conducted During the Wet Season	Total Number of Inspections Conducted During the Dry Season	Total Number of Inspections Conducted from July 1, 2007 - June 30, 2008
419 SG	1972	Crest	262-041-1200	NA	0	Medium	2	13	2	0	2
423 GI	399	Hillcrest Dr.	216-082-6000	Low	0	Low	2	30	2	0	2
437 GI	204/220	ECR- Grading	259-121-1800	Low	2	Medium	3	30	5	0	5
443 GI	1066	Gardena Rd.	258-272-6700	Low	0	Low	2	10	2	0	2
462 GI	70-90	A Street	253-034-0100	High	9	Medium	6	30	15	0	15
465 GI	1045	Via Di Felicita	264-151-2500	Low	1	Medium	2	30	3	0	3
47 GI	1133	Hermes	254-252-5700	Low	0	Low	2	30	2	0	2
474 GI	763	Second ST	258-163-0900	Low	0	Low	2	30	2	0	2
475 GI	986	Hygeia	254-325-1300	Low	1	Low	2	30	3	0	3
483 GI	540	La Costa Ave	216-030-5100	High	4	High	5	18	9	0	9
493 GI	201	N. Vulcan Ave	256-400-6800	Low	0	Low	2	30	2	0	2
501 GI	2159	Glasgow	260-413-32	Low	0	Low	2	30	2	0	2
524 GI	192	Pacific View Lane	256-431-1500	Low	0	Low	1	23	1	0	1
525 SG	1530	Summit Ave	260-630-1100	Low	0	Low	2	14	2	0	2
54 GI		Birmingham & Mackinnon	260-394-0800	Low	0	Low	3	30	3	0	3
55 GI	540	Cornish	258-090-1500	High	9	Medium	3	23	12	0	12
5609 GI	1299	Urania Ave	254-351-2700	Low	0	Medium	1	25	1	0	1
562 GI	1302	Encinitas Blvd	259-121-2900	Medium	4	Medium	2	30	6	0	6
570 GI	3557	Lone Hill Lane	264-450-0360	Medium	1	Medium	3	23	4	0	4
573 GI	408	Chesterfield	260-411-3800	Low		Low	2	15	2	0	2
58 GI	1638	Edilee Dr	260-552-0400	Low	0	Low	2	30	2	0	2
587 GI		101 Sewer Force Main III	258-000-0000	Medium	1	Medium	0	1	1	0	1
61 GI	1552	Summit Ave	260-630-4600	Medium	3	Low	0	30	3	0	3
61 SI	801	Orpheus	256-121-4100	Medium	2	Medium	4	25	6	0	6
624 GI	NA	Lone Hill Lane	264-232-1100	Medium	1	Medium	3	24	4	0	4
635 GI	921	Hymettus	256-242-2600	Low	1	Low	1	22	2	0	2
6391 GI	1365	Trabert Ranch Rd	259-200-3400	High	7	Low	7	30	14	0	14
64 GI	1817	Sheridan	216-071-1600	Low	0	Low	2	30	2	0	2
65 GI	1441	Hygeia	254-112-2800	Low	0	Low	1	30	1	0	1
653 SG	860	Nardo	258-251-0900	Low	0	Low	2	10	2	0	2
669 SG	1033	Monterey Vista Way	259-050-8400	Low	0	Low	1	25	1	0	1
675 GI	1719	San Elijo Ave	260-275-1900	Low	0	Low	2	16	2	0	2
692 GI	1435	Rainbow Ridge	254-181-0200	NA	0	High	3	8	3	0	3
705 GI	3354	Wildflower Valley Dr.	264-091-7300	NA	0	High	5	10	5	0	5
726 GI	1596	Ave de los Lirios	259-920-1200	Low	0	Low	2	17	2	0	2
760 GI	825	Dewitt	258-212-1100	Low	0	Low	2	14	2	0	2
7601 GI	1255	Birmingham	260-430-6700	Low	0	Medium	2	30	2	0	2
7604 GI	125	Chesterfield	261-041-1700	Low	0	Low	2	30	2	0	2
7628 GI	235	La Costa Ave	216-052-2700	High	9	High	7	30	16	0	16
7771 GI	1550	El Camino Real	261-160-1500	Low	1	Low	0	4	1	0	1
7791 GI	1766/9	N. Coast Hwy 101	254-060-0400	Medium	1	Medium	0	4	1	0	1
7800 GI	3542	Jasmine Crest	264-540-0100	Low	0	Medium	3	30	3	0	3
789 GI	2011-89	San Elijo Ave.	260-370-2600	NA	0	Medium	2	16	2	0	2
7893 GI		Piraeus & Plato	254-144-0200	High	8	Medium	6	30	14	0	14
7909 GI	355	Seeman Dr	259-130-7300	Low	0	Medium	1	25	1	0	1
7958 GI	1815	Mackinnon	260-315-0200	Low	3	Low	1	24	4	0	4
7962 GI	200	Seeman Dr	259-131-5400	Low	0	Low	1	18	1	0	1
88 GI	175	Florita	256-391-1300	Medium	1	Medium	0	1	1	0	1
9021 GI	1450	Paseo de las Flores	254-614-03/07	High	4	High	0	6	4	0	4
9048 GI	235	La Costa Ave	216-052-2700	High	9	Medium	6	30	15	0	15
9080 GI	1455	San Elijo Ave	260-620-5400	Low	0	Low	2	30	2	0	2
9102 GI	950	Third St	258-172-0801	Medium	2	Medium	0	19	2	0	2
9103 GI	115	Verdi Ave	260-266-1100	Low	0	Low	2	30	2	0	2
9106 GI	Vacant Lot	N. Vulcan Ave	256-100-3800	Medium	4	Medium	3	30	7	0	7
9117 GI	236-238	Andrew	216-052-0900	High	8	Medium	5	30	13	0	13
9126 GI	3400	Jasmine Crest	264-091-3800	Low	0	Medium	1	25	1	0	1
9128 GI	240	La Veta	256-361-2200	Low	0	Low	1	25	1	0	1
9150 GI	3113	Camino Del Rancho	264-270-0800	High	1	High	0	2	1	0	1
9156 GI	736	Fourth St	258-153-0500	High	9	Medium	5	30	14	0	14
9177 GI	740	Cornish	258-211-1800	Low	0	Low	2	30	2	0	2

Permit #	Site Address	Site Street Name	APN	Inspection priority from July 1, 2007- January 24, 2008	Total Number of Inspections from July 1, 2007 - Jan 24, 2008	Inspection priority from January 24- June 30, 2008	Total Number of Inspections from January 24- June 30, 2008	Total Number of Weeks Active During the Wet Season	Total Number of Inspections Conducted During the Wet Season	Total Number of Inspections Conducted During the Dry Season	Total Number of Inspections Conducted from July 1, 2007 - June 30, 2008
9180 GI	1610	Neptune	264-040-2700	High	7	Low	7	30	14	0	14
9212 GI	376	Hillcrest Dr.	216-081-3700	Low	0	Low	2	30	2	0	2
9262 GI	800	Blk Bracero Rd	258-370-5200	Low	0	Medium	3	30	3	0	3
9263 GI	1653	Burgundy Rd.	254-171-3900	Low	0	Low	2	30	2	0	2
9267 GI	1926	Oxford	260-362-1400	Low	3	Low	1	24	4	0	4
9278 GI	NA	Off Lone Hill Ln	264-450-0500	High	9	Medium	6	30	15	0	15
9285 GI	330	Neptune Ave	256-352-0100	High	2	High	0	2	2	0	2
9286 GI	2477 & 2483	Oxford	261-113-1600	Low	0	Low	2	30	2	0	2
9294 GI	477	N El Camino Real	257-470-0400	High	1	High	0	1	1	0	1
9300 GI	3373	Calle Margarita	264-240-1400	Low	1	Medium	2	30	3	0	3
9301 GI	191	Halcyon	256-301-1300	Low	3	Low	1	20	4	0	4
9303 GI	887	Brittany	254-362-1500	Low	1	Medium	1	30	2	0	2
9336 GP	290	Andrew	216-052-0800	High	8	Medium	5	30	13	0	13
9356 GI	3442	Fortuna Ranch Rd	264-291-0400	High	1	High	0	2	1	0	1
9367 GI	781	Gardenview Ct.	257-470-1100	High	1	High	0	1	1	0	1
9419 GI	871	Neptune	260-012-1700	Low	1	Low	0	13	1	0	1
9481GI		Quail Gardens DR	258-130-8500	High	9	High	6	30	15	0	15
9482 GI	1635	Gascony	254-172-0300	High	8	Low	6	30	14	0	14
9486 GI	560/566	Neptune	256-084-1100	High	5	High	0	10	5	0	5
9488 GI	2416	Newport	261-101-2900	Low	0	Medium	2	30	2	0	2
9489GI	3515	Jasmine Crest	264-540-0700	High	4	High	0	8	4	0	4
9501 GI	1350	S Coast Hwy 101	260-030-0200	High	8	High	0	14	8	0	8
9512 GI	422	Andrew	216-063-1800	Low	1	Low	0	30	1	0	1
9521 CN	201-213	Third St	258-051-1300	Medium	2	Medium	0	5	2	0	2
9529 GI	125	Avocado	254-054-6500	Low	1	Low	0	4	1	0	1
9561 GI	303	Santa Fe Dr	260-072-3500	Low	0	Low	1	21	1	0	1
9576 GI	843	San Dieguito Dr.	258-232-1100	Low	0	Low	2	30	2	0	2
9580 GI	3451	Dove Hollow	264-232-2700	Low	1	Low	0	3	1	0	1
96 GI	2010-2012	Cambridge	260-384-4400	Low	1	Low	0	3	1	0	1
CMS00D CIP/49 SI		Leucadia Roundabouts	NA	High	9	High	5	26	14	0	14

Batiquitos Lagoon

CARLSBAD

Leucadia

Encinitas

La Costa South

La Costa South

Rancho Santa Fe

Lower Escondido Creek

Rancho Santa Fe

Lux Canyon

Cardiff

San Elijo Lagoon

COUNTY OF SAN DIEGO

SOLANA BEACH

Legend

Construction Site Inspection Priority

- BiWeekly
- Monthly
- Biannual
- Drainage SubBasins
- Streams
- Wetland Buffer (ESA)
- Natural Sensitivity (ESA)
- Railroad
- Parcels
- Public ROWs
- Private ROWs
- Private Road Easements

city of encinitas

Construction Sites FY 2007-08

Date of Map Production:
August, 2008

By Encinitas GIS Division

This map was produced by the City of Encinitas GIS and is designed for internal use only. The map is based on the best data available at the time of production and is not guaranteed to survey accuracy. City of Encinitas, SanGIS, SANDAG and other data are represented.

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N

0 500 1,000 2,000 Feet

Coordinate System:
California State Plane Feet, Zone 6
Datum: NAD83

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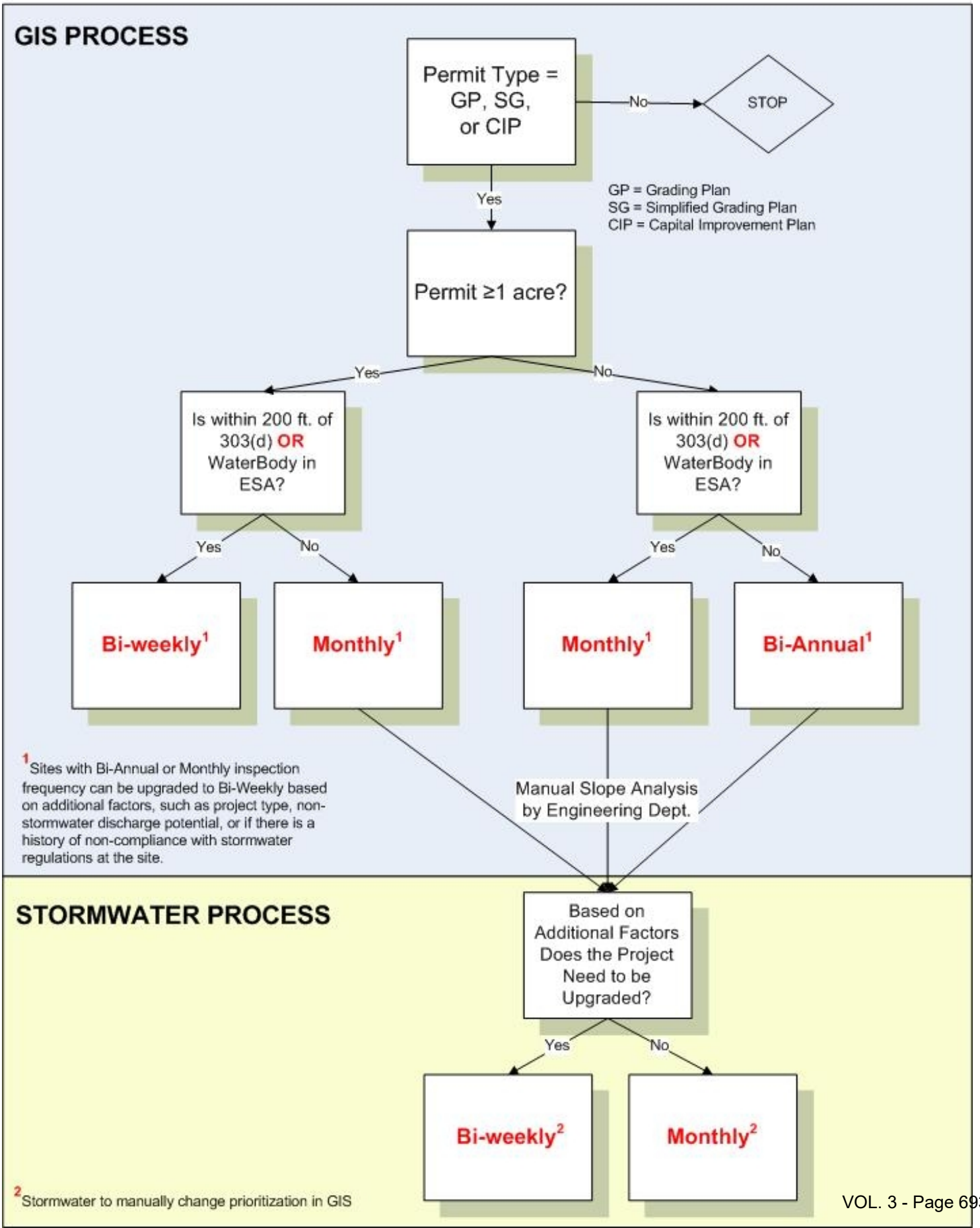
GIS Script Process for Determining Construction Project Inspection Frequencies



City of Encinitas

Construction Site Storm Water Inspection Checklist

Property Address:	**Date Inspected:**
Contact Person:	**Permit No:**
Phone No:	**APN:**
Inspector:	**Size:**

Inspection Priority: ☐ Biweekly ☐ Monthly ☐ Biannual

Covered under State General Construction Permit? ☐ YES ☐ NO If yes, is SWPPP on-site? ☐YES ☐ NO

Erosion Control BMPs: ☐ Adequate ☐ Inadequate ☐ N/A

BMPs Include:
- ☐ Preserving Existing Vegetation
- ☐ Hydroseeding
- ☐ Soil Binders, Hydraulic Mulch, Bonded Fiber Matrix
- ☐ Geotextiles, Plastic Covers, Erosion Control Blankets/Mats
- ☐ Permanent Landscaping
- ☐ Diversion Channel for Run-on
- ☐ Other _____

Sediment Control BMPs: ☐ Adequate ☐ Inadequate ☐ N/A

BMPs Include:
- ☐ Perimeter Protection: ☐ gravel bags, ☐ silt fencing, ☐ fiber rolls, ☐ other _____
- ☐ Slope Protection: ☐ silt fencing, ☐ fiber rolls, ☐ slope drains, ☐ other_____
- ☐ Resource Protection (environmentally sensitive areas and waterways)
- ☐ Sediment Capture: ☐ detention basin, ☐ desilting basin ☐other_____
- ☐ Velocity Reduction: ☐ check dams, ☐ rip rap, ☐ other_____
- ☐ Off Site Sediment Tracking: ☐ gravel entrance, ☐ Temp. Construction road, ☐ other_____
- ☐ Inlet Protection: ☐ gravel bags, ☐ gravel rolls, ☐ other_____
- ☐ Other _____

Materials Management BMPs: ☐ Adequate ☐ Inadequate ☐ N/A

BMPs Include:
- ☐ Spill prevention and control program (employee education and training)
- ☐ Fuel/chemicals stored on Site: ☐ secondary containment, ☐ leak detection, ☐ other____
- ☐ Equipment Related Wastes: ☐ covered, ☐ secondary containment, ☐ other_____
- ☐ Stockpile on Site (Solids): ☐ covered, ☐ secondary containment, ☐ other_____
- ☐ Trash/Litter on Site: ☐ receptacles provided, ☐ covered, ☐ secondary containment, ☐ other _____
- ☐ Concrete Waste: ☐ designated washout area, ☐ secondary containment, ☐ other_____
- ☐ Sanitary Waste: ☐ secondary containment, ☐ located away from inlets, ☐ other_____

Enforcement: ☐ Correct Work (see Comments) ☐ Stop Work/NOV ☐ Citation (#_____)

Comments:

_____

_____

_____

_____

Signatures: City of Encinitas: _____ Date: _____

TEL 760-633-2787 / FAX 760-633-2818 505 S. Vulcan Avenue, Encinitas, California 92024-3633 TDD 760-633-2700

City of Encinitas

September 28, 2007

RE: **EROSION CONTROL**

Dear Permit Holder:

Please be advised that as of October 1, the City will enter into the wet season. The wet season brings with it a responsibility for erosion control pursuant to **23.24.370 - Wet Season Work** of the City Code. This section states the following:

A. No grading permit shall be issued for work occurring between October 1st of any year and April 15th of the following year, unless the plans for such work include details of protective measures, including desilting basins or other temporary drainage or control measures, or both, as may be deemed necessary by the field inspector to protect adjoining public and private property from damage by erosion, flooding, or the deposition of mud or debris which may originate from the site or result from such grading operations.

B. If grading is begun prior to October 1st, all protective measures shall be installed prior to October 1st. If grading is begun on or after October 1st, all protective measures shall be installed before grading is begun. All protective measures shall be maintained in good working order until April 15th of the succeeding year, where grading is done between October 1st and December 31st, or until April 15th of the same year where grading is done between January 1st and April 15th, unless their removal at an earlier date is approved by the City Engineer.

C. Where a grading permit is issued and the work is commenced after April 15th and before September 15th of any year, and the permit was issued without an Interim Erosion and Sediment Control Plan, and it appears that the grading and installation of the permanent drainage devices as authorized by the permit will not be completed prior to October 1, then on or before September 15th, the owner of the site on which the grading is being performed shall file or cause to be filed with the City Engineer an Interim Erosion and Sediment Control Plan as provided for in this Chapter and shall implement the measures contained in the approved plan by October 1. The plan check fee for the Interim Erosion and Sediment Control Plan shall be paid at the time of plan submittal and shall be in the amount provided for in this Chapter.

D. For continuation of grading activities, other than installation, maintenance, or repair of measures on the Erosion Control Plans, during the wet season, Permittee must apply for and receive, every seven days, special permission to proceed.

E. The City Engineer shall grant permission under this section on the basis of weather forecasts, site conditions, experience and other pertinent factors which indicate the activity may commence or continue without excessive erosion occurring.

F. Should the Permittee fail to submit the plans, fail to provide the protective measures or fail to obtain permission for wet season activities as required by this Chapter by the dates specified therein, it shall be deemed that a default has occurred under the conditions of the grading permit security. Thereupon the City Engineer may enter the property for the purpose of installing, by City forces or by other means, the drainage and erosion control devices shown on the approved plans, or if there are not approved plans, as he may deem necessary to protect adjoining

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

property from storm damage, or the City Engineer may cause the owner of the site to be prosecuted as a violator of this code, or he may take both actions.

G. The City Engineer shall have the authority to require implementation of all erosion control systems and requirements at any time of the year.

23.24.380 - Erosion Control System.

A. The faces of cut and fill slopes and project site shall be prepared and maintained to control against erosion in accordance with this Chapter. Where cut slopes are not subject to erosion due to the erosion-resistant character of the materials, such protection may be omitted upon approval by the City Engineer.

B. Paved streets, sidewalks, and other improvements shall be maintained in a neat and clean condition free of loose soil, construction debris and trash. Street sweeping or other equally effective means shall be used on a regular basis to prevent storm flows from carrying sediment and debris outside the project boundaries. Watering shall not be used to clean streets except for fine material not otherwise removed by sweeping or other mechanical means.

C. The registered civil engineer who prepared the grading plan and designed the erosion control devices shall be responsible for modification of the design of devices, as necessary, during the rainy season.

D. Desilting facilities shall be provided at drainage outlets from the graded site.

E. Desilting basins shall be designed in accordance with City standards. Permanent desilting facilities shall be designed and constructed as to be aesthetically compatible with the surrounding development and terrain.

F. Desilting basins constructed of compacted earth shall be compacted to a relative compaction of ninety (90) percent of maximum density. A soil engineering report, prepared by the soil engineer, which includes the type of field testing performed, location and results of testing shall be submitted to the City Engineer for approval upon completion of the desilting basins.

G. Equipment and workers for emergency work shall be made available at all times during the rainy season. Necessary materials shall be available onsite and stockpiled at convenient locations to facilitate rapid construction of temporary device when rain is imminent.

H. Erosion protection shall consist of effective planting of all cut slopes in excess of five (5) feet high and fill slopes more than three (3) feet high unless otherwise approved by the City Engineer. Slopes exceeding five (5) feet high will require an approved sprinkler system, as determined by the City Engineer.

I. Protection for the slopes shall be installed as soon as practicable which may be prior to rough grade approval. Effective planting shall be installed, fully germinated and effectively cover the required slopes prior to final approval unless otherwise approved by the City Engineer.

J. The erosion control provisions shall take into account drainage patterns during the current and future phases of grading throughout the rainy season.

K. All removable protective devices shown shall be in place at the end of each working day when the five (5) day rain probability forecast exceeds forty (40) percent.

L. Unvegetated slopes shall be protected in accordance with the guidelines set forth by the Erosion and Sediment Control Manual or in accordance with other requirements set forth by the City Engineer.

23.24.390 - Erosion Control Maintenance.

City of Encinitas

A. After each rainstorm exceeding 1/4-inch in a 12 hour period, silt and debris shall be removed from all temporary check berms and desilting basins and the basins pumped dry. The requirement to clean and pump permanent desilting basins will be addressed on a case by case basis.

B. After each rainstorm, the performance of the erosion control system shall be evaluated and revised and repaired as necessary.

C. Devices shall not be moved or modified without the approval of the City Engineer.

D. The contractor shall be responsible and shall take necessary precautions to prevent public trespass onto areas where impounded water creates a threat to public health, safety and welfare.

E. The contractor and Permittee or project owner shall be responsible for continual maintenance of the devices during the rainy season. In the event of failure or refusal by the contractor, Permittee, or project owner to properly maintain the devices, the City Engineer may cause emergency maintenance work to be done to protect adjacent private and public property. The cost shall be charged to the owner and shall include an initial mobilization cost plus the cost of doing the work as provided for in this Chapter.

F. In the event the City Engineer must cause emergency maintenance work to be done, he may revoke the grading permit in writing. The permit shall not be renewed until an erosion control system approved by the City Engineer is installed and a fee of one-half the amount required for the original permit paid by the owner. The City Engineer may waive installation of an erosion control system after April 15.

G. If any grading subject to the provisions of this Chapter has commenced on private property without a valid grading permit, the property owner will be required to prepare and implement an erosion control plan which has been approved by the City Engineer. In the event of failure by the property owner to install an approved erosion control system, the City Engineer may cause emergency work to be done to protect adjacent private and public property.

The full text of the Municipal Code can be accessed on the City's website at http://ci.encinitas.ca.us/.

Please address any questions regarding this work to your inspector.

Sincerely,

Greg Shields, P.E.
Sr. Civil Engineer
Field Operations

cc: Inspector
File

FY 2007-08 Construction Enforcement Actions

Date	Site Address	Violation	Correct Work	Stop Work/NOV	Citation-Warning	Citation-Fine	Citation Number	Cost Recovery	Routine Inspection	Complaint Inspection
10/9/2007	1555 Bella Vista	Lack of BMPs	X						X	
10/9/2007	1330 Bello Mar Drive	Lack of BMPs	X						X	
10/10/2007	540 Cornish Dr.	Lack of BMPs	X						X	
10/10/2007	736 Fourth Street	Maintain BMPs	X						X	
10/10/2007	235 La Costa Avenue	Maintain BMPs	X						X	
10/10/2007	235 La Costa Avenue	Maintain BMPs	X						X	
10/10/2007	Leucadia Roundabouts	Lack of BMPs	X						X	
10/10/2007	651 Quail Gardens Lane	Lack of BMPs	X						X	
10/24/2007	1555 Bella Vista	Lack of BMPs	X						X	
10/24/2007	540 Cornish	Lack of BMPs	X						X	
10/24/2007	Leucadia Roundabouts	Lack of BMPs	X						X	
10/24/2007	651 Quail Gardens Lane	Lack of BMPs	X						X	
11/7/2007	540 Cornish	Lack of BMPs	X						X	
11/7/2007	Leucadia Roundabouts	Lack of BMPs	X						X	
11/8/2007	1555 Bella Vista	Lack fo BMPs	X						X	
11/8/2007	1330 Bello Mar Drive	Lack of BMPs	X						X	
11/28/2007	1330 Bello Mar Drive	Maintain BMPs	X						X	
11/29/2007	540 Cornish	Lack of BMPs	X						X	
12/5/2007	422 Andrew Avenue	Lack of BMPs	X						X	
12/5/2007	Leucadia Roundabouts	Lack of BMPs	X						X	

Appendix B-6

FY 2007-08 Construction Enforcement Actions

Date	Site Address	Violation	Correct Work	Stop Work/NOV	Citation-Warning	Citation-Fine	Citation Number	Cost Recovery	Routine Inspection	Complaint Inspection
12/5/2007	801 Orpheus Avenue	Lack of BMPs	X						X	
12/6/2007	1405 San Elijo Avenue	Lack of BMPs	X						X	
12/6/2007	1408 Summit Avenue	Lack of BMPs	X						X	
12/10/2007	2335 Manchester Avenue	Lack of BMPs	X						X	
12/10/2007	2271 Montgomery Avenue	Lack of BMPs	X						X	
12/12/2007	2271 Montgomery Avenue	Illegal Discharge		X		X	CW-121207B			X
12/12/2007	2335 Manchester Avenue	Illegal Discharge		X		X	CW-121207C			X
12/13/2007	887 Brittany	Illegal Discharge		X						X
12/31/2007	3342 Wildflower Valley Drive	Maintain BMPs	X						X	
1/3/2008	1330 Bello Mar Drive	Lack of BMPs	X						X	
1/3/2008	540 Cornish	Lack of BMPs	X						X	
1/3/2008	Leucadia Roundabouts	Lack of BMPs	X						X	
1/22/2008	1330 Bello Mar Drive	Lack of BMPs	X						X	
1/23/2008	540 Cornish	Lack of BMPs	X						X	
1/24/2008	3535 Manchester Avenue	Maintain BMPs	X						X	
1/24/2008	3342 Wildflower Valley Drive	Lack of BMPs	X						X	
2/5/2008	1653 Burgundy Road	Lack of BMPs	X						X	

Appendix B-6

FY 2007-08 Construction Enforcement Actions

Date	Site Address	Violation	Correct Work	Stop Work/NOV	Citation-Warning	Citation-Fine	Citation Number	Cost Recovery	Routine Inspection	Complaint Inspection
2/5/2008	2351 San Elijo Ave	Illegal Discharge		X						X
2/6/2008	2265 Manchester Avenue	Lack of BMPs	X						X	
2/12/2008	3351 Lilac Summit	Lack of BMPs	X						X	
2/12/2008	3358 Wildflower Valley Drive	Lack of BMPs	X						X	
2/13/2008	201 N Vulcan Avenue	Lack of BMPs	X						X	
2/14/2008	1550 Summit	IllegalDischarge		X						X
2/14/2008	2271 Montgomery Avenue	Illegal Discharge		X						X
2/14/2008	1393/1405 San Elijo Ave	Illegal Discharge		X						X
2/15/2008	2351 San Elijo Ave	Illegal Discharge		X		X	CW-021508B			X
2/15/2008	2271 Montgomery Avenue	Illegal Discharge				X	CW-021508A			X
2/20/2008	1405 San Elijo Ave	Illegal Discharge				X	CW-022008			X
2/21/2008	1555 Bella Vista	Maintain BMPs	X						X	
2/21/2008	540 Cornish	Lack of BMPs	X						X	
2/21/2008	Leucadia Roundabouts	Lack of BMPs	X						X	
3/28/2008	2011-89 San Elijo Avenue	Maintain BMPs	X						X	

Appendix B-6

Appendix B-6

FY 2007-08 Construction Enforcement Actions

Date	Site Address	Violation	Correct Work	Stop Work/NOV	Citation-Warning	Citation-Fine	Citation Number	Cost Recovery	Routine Inspection	Complaint Inspection
4/3/2008	3535 Manchester Avenue	Lack of BMPs	X						X	
4/17/2008	3351 Lilac Summit	Lack of BMPs	X						X	
4/30/2008	1415 Rainbow Ridge	Maintain BMPs	X						X	
4/30/2008	1435 Rainbow Ridge	Maintain BMPs	X						X	
FY 2007-2008	**TOTALS**		**46**	**8**	**0**	**5**		**0**	**46**	**10**

Appendix C

Municipal

C-1 Municipal Inventory

C-2 Municipal Activities Report

C-3 Municipal BMP Map

C-4 Special Events Permit P2 Questionnaire

CITY OF ENCINITAS MUNICIPAL FACILITIES INVENTORY AND PRIORITIZATION

Facility Name	Address	Land Use/Activities	Tributary to a 303(d) Impaired Water Body	Inspection Priority	Sub-basin
"A" TANK SITE	355 SANTA FE	Tank storage site/municipal yard	NOT TRIBUTARY	High Priority	Encinitas
BEACON'S BEACH	700 NEPTUNE	Beach access/parking lot	NOT TRIBUTARY	High Priority	Leucadia
CALLE MAGDALENA PUBLIC WORKS FACILITY	160 CALLE MAGDALENA	Administrative offices/municipal yard/vehicle maintenance/materials storage	NOT TRIBUTARY	High Priority	Encinitas
CARDIFF SPORTS PARK	1623 LAKE	Recreational facilities/landscaped areas	NOT TRIBUTARY	High Priority	Cardiff
COTTONWOOD CREEK PARK	95 N. VULCAN	Park/landscaped areas	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
ENCINITAS RANCH GOLF COURSE	1275 QUAIL GARDENS DR	Golf course	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
ENCINITAS VIEWPOINT	CORNISH DRIVE & D STREET	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
GLEN PARK	2149 ORINDA	Park/landscaped areas	NOT TRIBUTARY	High Priority	Cardiff
GRANDVIEW BEACH	1700 NEPTUNE AVE.	Beach access/parking lot	NOT TRIBUTARY	High Priority	Leucadia
H STREET VIEWPOINT	498 H STREET	Vista point	NOT TRIBUTARY	High Priority	Encinitas
HAWK VIEW PARK	1309 BLUE HERON DRIVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
J STREET VIEWPOINT	398 J STREET	Vista point/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
LAS VERDES PARK	PASEO DE LAS VERDES & QUAIL GARDENS DR.	Park/landscaped areas	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
LEO MULLEN SPORTS PARK	951 VIA CANTEBRIA	Park/landscaped areas	NOT TRIBUTARY	High Priority	La Costa South
LEUCADIA OAKS PARK	1511 N. VULCAN	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
LEUCADIA ROADSIDE PARK	860 COAST HIGHWAY 101	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
LITTLE OAKS EQUESTRIAN PARK	2879 LONE JACK	Park/horse corral/landscaped areas	NOT TRIBUTARY	High Priority	Lower Escondido Creek
MILDRED MACPHERSON PARK	1045 VULCAN	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
MOONLIGHT BEACH	400 B STREET	Beach access/park/landscaped area/parking lot	TRIBUTARY TO PACIFIC OCEAN SHORELINE	High Priority	Encinitas
MS4	CITY WIDE	MS4	TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
OAKCREST PARK	555 BALOUR	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
ORPHEUS PARK	482 ORPHEUS	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
PACIFIC VIEW PUBLIC WORKS FACILITY	608 THIRD STREET	Administrative offices/vehicle parking	NOT TRIBUTARY	High Priority	Encinitas
PAUL ECKE SPORTS PARK	278 SAXONY RD.	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
REQUEZA STREET FACILITY	397 REQUEZA	Municipal yard/sediment/materials storage	NOT TRIBUTARY	High Priority	Encinitas
ROADS, STREETS AND HIGHWAYS	CITY WIDE		TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
SAN ELIJO WASTEWATER COLLECTIONS DIVISION FACILITY	2695 MANCHESTER AVE	Municipal yard	NOT TRIBUTARY	High Priority	Cardiff
SCOTTS VALLEY PARK	1602 WILLOWHAVEN	Park/landscaped areas	TRIBUTARY TO ENCINITAS CREEK	High Priority	La Costa South
SPECIAL EVENTS	CITY WIDE	Recreational facilities, parks, landscaped areas, roads, streets and highways	MAY BE TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
SUN VISTA	2011 AVNDA LA POSTA	Park/landscaped areas	NOT TRIBUTARY	High Priority	La Costa South
SWAMI'S BEACH	1298 COAST HIGHWAY 101	Beach access/parking lot	NOT TRIBUTARY	High Priority	Encinitas
WIRO PARK	2232 EL CAM DEL NORTE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Lower Escondido Creek/Ranch Santa Fe
CIVIC CENTER	505 S VULCAN AVE.	Administrative offices/parking lot	NOT TRIBUTARY	Low Priority	Encinitas
COMMUNITY/SENIOR CENTER	1221 ENCINITAS	Administrative offices/parking lot	NOT TRIBUTARY	Low Priority	La Costa South
D STREET VIEWPOINT	450 D STREET	Beach access and vista point	TRIBUTARY TO PACIFIC OCEAN SHORELINE	Low Priority	Encinitas
FIRE STATION #1	415 2ND	Fire station	NOT TRIBUTARY	Low Priority	Encinitas
FIRE STATION #2	1867 MACKINNON	Fire station	NOT TRIBUTARY	Low Priority	Cardiff
FIRE STATION #3	801 ORPHEUS AVE	Fire station	NOT TRIBUTARY	Low Priority	Leucadia
FIRE STATION #4	2011 VILLAGE PARK	Fire station	NOT TRIBUTARY	Low Priority	La Costa South
FIRE STATION #5	540 BALOUR DR	Fire station	NOT TRIBUTARY	Low Priority	Encinitas
HALL PROPERTY	1451 STARLIGHT DR	Undeveloped park site	NOT TRIBUTARY	Low Priority	Cardiff
I STREET VIEWPOINT	4981 I STREET	Vista point	NOT TRIBUTARY	Low Priority	Encinitas
INDIAN HEAD CANYON	0 QUAIL HOLLOW	Undeveloped park site	NOT TRIBUTARY	Low Priority	Leucadia
PUMP STATION	2690 MANCHESTER	Pump station	NOT TRIBUTARY	Low Priority	Cardiff
SAN DIEGUITO WATER DISTRICT*		Water reservoir/water storage	NOT TRIBUTARY	Low Priority	La Costa South/Encinitas
SAN DIEGUITO WATER DISTRICT*		Water reservoir/water storage	NOT TRIBUTARY	Low Priority	Encinitas
SAN DIEGUITO WATER DISTRICT*		Water recycling reservoir	NOT TRIBUTARY	Low Priority	Encinitas
SAN DIEGUITO WATER DISTRICT*		Pressure regulating station/no activities on site	NOT TRIBUTARY	Low Priority	Encinitas
SAN DIEGUITO WATER DISTRICT*		Pressure regulating station/no activities on site	NOT TRIBUTARY	Low Priority	Cardiff
SAN ELIJO BLUFFS PARCELS	1400 COAST HIGHWAY 101	Undeveloped site	NOT TRIBUTARY	Low Priority	Encinitas
STANDARD PACIFIC PARK SITE	OLYMPUS / PIRAEUS	Undeveloped site	NOT TRIBUTARY	Low Priority	Leucadia
STONESTEPS BEACH	350 SOUTH EL PORTAL	Beach access and vista point	NOT TRIBUTARY	Low Priority	Leucadia
UV TREATMENT FACILITY	THIRD ST. AND B ST.	UV Treatment Facility	TRIBUTARY TO COTTONWOOD CREEK	Low Priority	Encinitas

***Note: The San Diegito Water District's facility addresses have been omitted for security purposes.**

Appendix C-2

Item	Is Item a New Requirement of Order No. R9-2007-0001?	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	Annual Result
1.	No	Report on updates to the municipal inventory and prioritization (D.3.(3)(c)i).	July 1, 2007-June 30, 2008		See Appendix C-1
2.	No	Confirmation that the designated BMPs were implemented, or required to be implemented for: municipal areas and activities (D.3.(3)(c)ii).	July 1, 2007-June 30, 2008		See Sections 4.2.3, 4.3.3, 4.4.3, 4.5.3 and 4.6.3
3.	Yes	Confirmation that the designated BMPs were implemented, or required to be implemented for: special events (D.3.(3)(c)ii).	**Jan 24, 2008-June 30, 2008**		See Sction 4.7.3
4.	Yes	A description of inspections and maintenance conducted for municipal treatment controls-Municipal Filter Inserts (D.3.(3)(c)iii).	July 1, 2007-June 30, 2008		See Section 4.4.4.1
5.	Yes	A description of inspections and maintenance conducted for municipal treatment controls-UV Treatment Facility (D.3.(3)(c)iii).	**Jan 24, 2008-June 30, 2008**		See Section 4.4.4.1
6.	Yes	Identification of the total number of catch basins and inlets (D.3.(3)(c)iv).	July 1, 2007-June 30, 2008		2762
7.	Yes	Identification of the number of catch basins and inlets **inspected** (D.3.(3)(c)iv).	**Jan 24, 2008-June 30, 2008**		1657
8.	Yes	Identification of the number of catch basins and inlets found with accumulated waste exceeding 33% of design capacity (D.3.(3)(c)iv).	**Jan 24, 2008-June 30, 2008**	All inlets and catch basins within the City are cleaned on an annual basis, which is sufficient in ensuring that they remain free of trash and debris.	0

Item	Is Item a New Requirement of Order No. R9-2007-0001?	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	Annual Result
9.	Yes	Identification of the number of catch basins and inlets **cleaned** (D.3.(3)(c)iv).	**Jan 24, 2008-June 30, 2008**		1657
10.	Yes	Identification of total distance (miles) of the MS4 (D.3.(3)(c)v).	July 1, 2007-June 30, 2008		96 miles of pipe
11.	Yes	Identification of distance of the MS4 **inspected (D.3.(3)(c)v).**	**Jan 24, 2008-June 30, 2008**		57.6 miles of pipe
12.	Yes	Idenitification of distance of the MS4 found with accumulated waste exceeding cleaning criteria (D.3.(3)(c)v).	**Jan 24, 2008-June 30, 2008**		0
13.	Yes	Identification of distance of the MS4 **cleaned (D.3.(3)(c)v).**	**Jan 24, 2008-June 30, 2008**		4.8 miles of pipe
14.	Yes	Identification of total distance (miles) of open channels (D.3.(3)(c)vi).	July 1, 2007-June 30, 2008		6.32 miles
15.	Yes	Identification of distance of open channels **inspected** (D.3.(3)(c)vi).	**Jan 24, 2008-June 30, 2008**		6.32 miles
16.	Yes	Identification of distance of open channels found with anthropogenic litter (D.3.(3)(c)vi).	**Jan 24, 2008-June 30, 2008**		1.1 miles

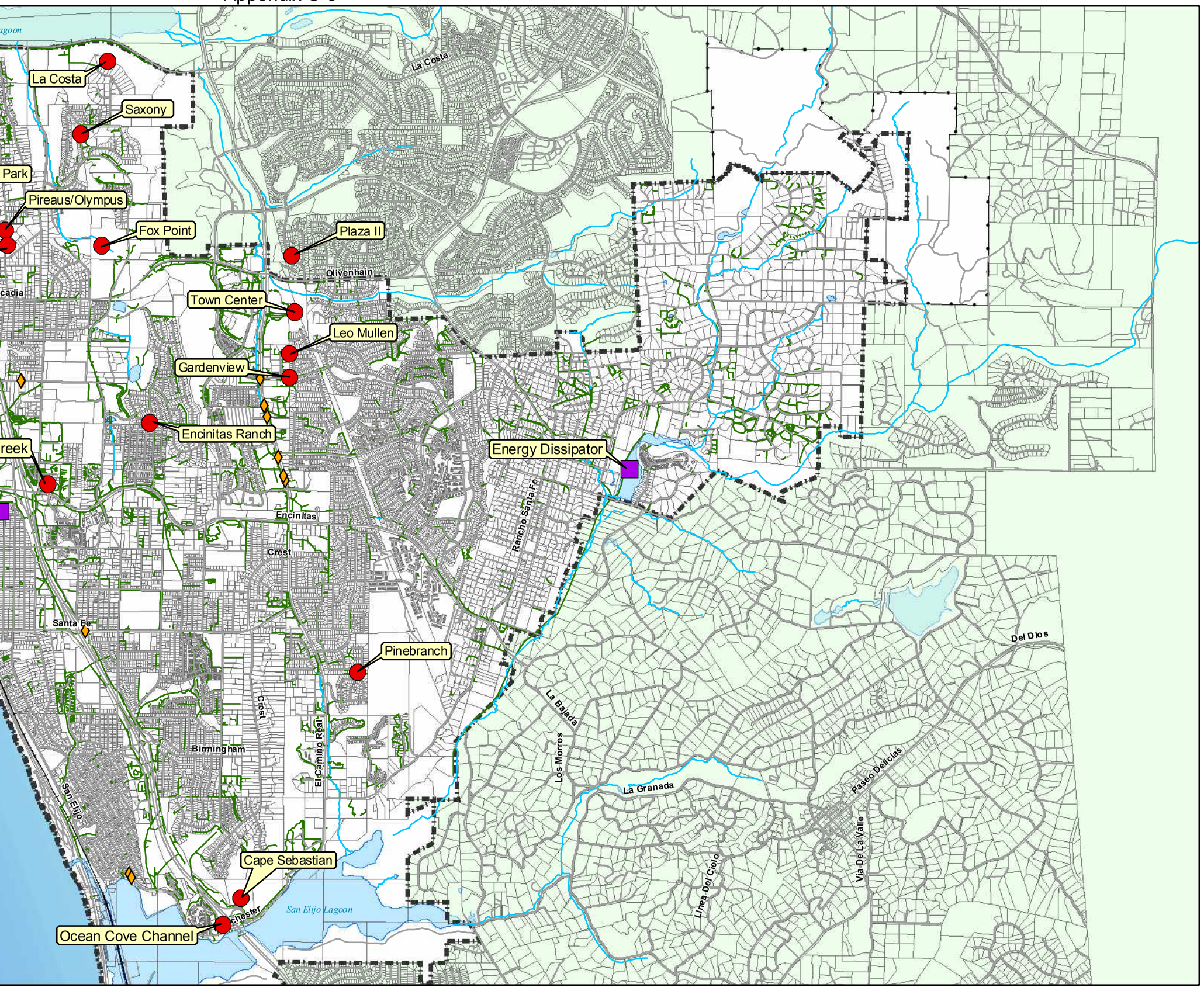
Item	Is Item a New Requirement of Order No. R9-2007-0001?	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	Annual Result
17.	Yes	Identification of distance of open channels **cleaned** (D.3.(3)(c)vi).	**Jan 24, 2008-June 30, 2008**		1.1 miles
18.	Yes	Amount of waste and litter (tons) removed from catch basins (D.3.(3)(c)vii).	**Jan 24, 2008-June 30, 2008**		26.4 tons
19.	Yes	Amount of waste and litter (tons) removed from inlets (D.3.(3)(c)vii).	**Jan 24, 2008-June 30, 2008**		1.574 tons
20.	No	Amount of waste and litter (tons) removed from the MS4 (D.3.(3)(c)vii).	July 1, 2007-June 30, 2008		Approximately 55.95 tons in addition to 4,748- 30 gallon bags
21.	Yes	Amount of waste and litter (tons) removed from the open channels (D.3.(3)(c)vii).	**Jan 24, 2008-June 30, 2008**		2374 -30 gallon bags
22.	Yes	Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification of the finding (D.3.(3)(c)viii).	**Jan 24, 2008-June 30, 2008**		None
23.	No	Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented or required to be implemented for municipal areas and activities (D.3.(3)(c)ix).	July 1, 2007-June 30, 2008		See Section 4.3.3.1
24.	Yes	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating the **highest** volumes of trash and/or debris (D.3.(3)(c)x).	**Jan 24, 2008-June 30, 2008**		41 curb miles

Item	Is Item a New Requirement of Order No. R9-2007-0001?	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	Annual Result
25.	Yes	Identification of frequency of sweeping conducted for such roads, streets and highways (D.3.(3)(c)x).	**Jan 24, 2008-June 30, 2008**	See Section 4.2.4	Weekly
26.	Yes	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating **moderate** volumes of trash and/or debris (D.3.(3)(c)xi).	**Jan 24, 2008-June 30, 2008**		60.8 curb miles
27.	Yes	Identification of frequency of sweeping conducted for such roads, streets and highways (D.3.(3)(c)xi).	**Jan 24, 2008-June 30, 2008**	See Section 4.2.4	Semi-Weekly
28.	Yes	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating **low** volumes of trash and/or debris (D.3.(3)(c)xii).	**Jan 24, 2008-June 30, 2008**		241 curb miles
29.	Yes	Identification of frequency of sweeping conducted for such roads, streets and highways (D.3.(3)(c)xii).	**Jan 24, 2008-June 30, 2008**	See Section 4.2.4	Monthly
30.	No	Identification of the total distance of cub-miles swept (D.3.(3)(c)xiii).	July 1, 2007-June 30, 2008		Approximately 11,380 curb miles
31.	Yes	Identification of the number of municipal parking lots (D.3.(3)(c)xiv).	**Jan 24, 2008-June 30, 2008**		4
32.	Yes	Identification of the number of municipal parking lots swept (D.3.(3)(c)xiv).	**Jan 24, 2008-June 30, 2008**		4

Item	Is Item a New Requirement of Order No. R9-2007-0001?	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	Annual Result
33.	Yes	Identification of the frequency of sweeping (D.3.(3)(c)xiv).	**Jan 24, 2008-June 30, 2008**	All beach parking lots are swept once per week April through September and once per month October through March.	See Section 4.2.4
34.	Yes	Amount of material (tons) collected from street and parking lot sweeping (D.3.(3)(c)xv).	**Jan 24, 2008-June 30, 2008**		1,379 tons
35.	No	A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4 (D.3.(3)(c)xvi)	July 1, 2007-June 30, 2008		See Section 4.5.4.1
36.	No	Identification of the number of fixed municipal sites requiring inspections (D.3.(3)(c)xvii).	July 1, 2007-June 30, 2008		29
37.	No	Identification of the number of sites inspected (D.3.(3)(c)xvii).	July 1, 2007-June 30, 2008		29
38.	No	Identification of the frequency of inspections (D.3.(3)(c)xvii).	July 1, 2007-June 30, 2008		Annual
39.	No	A description of the general results of the inspections (D.3.(3)(c)xviii).	July 1, 2007-June 30, 2008		See Appendix D-5
40.	No	Confirmation that the inspections conducted addressed all the required inspection steps and follow-ups to determine full compliance (D.3.(3)(c)xix).	July 1, 2007-June 30, 2008		See Appendix D-5

Item	Is Item a New Requirement of Order No. R9-2007-0001?	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	Annual Result
41.	No	The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken (D.3.(3)(c)xx).	July 1, 2007-June 30, 2008		0
42.	Yes	A description of notable activities conducted to manage urban runoff from municipal areas and activities (D.3.(3)(c)xxi).	July 1, 2007-June 30, 2008		See Sections 4.2.4, 4.3.4, 4.4.4, 4.5.4, 4.6.4 and 4.7.4

See Appendix D-5



Storm Drains
Streams
Roads

This map was produced by the City of Encinitas GIS and is designed for internal use only. The map is based on the best data available at the time of production and is not guaranteed to survey accuracy. City of Encinitas, SanGIS, SANDAG and other data are represented.

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Coordinate System:
California State Plane Feet, Zone 6
Datum: NAD83

Date of Map Production: September, 2008

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N

0 2,500 5,000 Feet

POLLUTION PREVENTION
(Does not apply to Special Ceremonies)

Storm drains are not connected to the City's sewer system. All pollutants allowed to enter the storm drain system flow directly to our beaches, ocean, lagoons and other waterways without being treated. The City of Encinitas is required by the San Diego Regional Water Quality Control Board to report on pollution prevention measures taken at special events held throughout the City.

In the area provided on the next page or on a separate sheet of paper, please complete the following questions and describe methods of pollution prevention that will be implemented at your proposed event.

1. Describe how trash, recycling, and debris will be managed (i.e. extra bins, temporary fencing, etc.)

2. If your event will include food production/distribution, describe how excess oil and grease will be disposed of. These materials cannot be dumped into the streets or storm drain system

3. Please identify any other pollutant generating activities that may take place.

For questions, please call the City's Clean Water Program at (760) 633-2787.

Appendix D

Industrial and Commercial

D-1 **Stationary Commercial Inventory**

D-2 **Industrial Inventory**

D-3 **Storm Water Quality Inspection Form**

D-4 **Storm Water Quality Inspection Form for Restaurants**

D-5 **Routine Inspections Summary Table**

D-6 **Mobile Commercial Inventory**

COMMERCIAL INVENTORY – STATIONARY FACILITIES

All sites are in the Carlsbad Watershed

Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Deborah Ptashne Grooming	2013 San Elijo Ave	Cardiff	Animal Facility	0753	Pet grooming service	no	low
Dove Hollow Farm	1084 Double Ll Ranch Rd	Lower Escondido Creek	Animal Facility	0752	Horse training, boarding	no	low
Drake Center for Animal Health	195 N El Camino Real	La Costa South	Animal Facility	0742	Veterinary care	no	low
Holiday Pet Hotel	551 Union St	Encinitas	Animal Facility	0752	Pet boarding	no	high
Horses and Moore Pet Care	1060 California St	La Costa South	Animal Facility	0752	Horse boarding	no	low
North Coast Equestrian Park	1877 Olivenhain Rd	La Costa South	Animal Facility	0752	Horse boarding and training	no	low
Rancho Los Amigos Equestrian Center	3049 Camino Del Rancho	Lower Escondido Creek	Animal Facility	752	Horse boarding and training	no	low
Bradley Allen Auto Body	204 N Coast Highway 101	Leucadia	Auto Body Repair	7532	Auto body repair	no	low
Custom Cycle Creations, Inc.	324 N El Camino Real, Unit B	La Costa South	Auto Body Repair	7549	Installation of interior auto parts	no	low
Fender Mender	324 N El Camino Real, Unit A	La Costa South	Auto Body Repair	7532	Auto body repair	no	low
Fender Mender	328 N El Camino Real, Unit B	La Costa South	Auto Body Repair	7532	Auto body repair	no	low
Fender Mender	326 N El Camino Real	La Costa South	Auto Body Repair	7532	Auto body repair	no	low
First Mission Auto Body Repair	339 N El Camino Real, Unit B	La Costa South	Auto Body Repair	7532	Auto body repair	no	low
Rancho Auto Body	591 Westlake St, Unit A-C	Encinitas	Auto Body Repair	7532	Auto body repair	no	low
S & Brothers Inc. Auto Upholstery	322 N El Camino Real, Unit F	La Costa South	Auto Body Repair	7532	Auto upholstery repair	no	low
SoCal Custom	328 N El Camino Real	La Costa South	Auto Body Repair	7532	Auto body repair	no	low
West Coast Wreck Check	1227 Village View Rd	La Costa South	Auto Body Repair	7532	Auto body repair	no	low
World Auto Body	140 N Coast Highway 101	Encinitas	Auto Body Repair	7532	Auto body repair	no	low
A+ Test Only Center	449 Second St	Encinitas	Auto Repair/Maintenance	7549	Auto diagnostic testing center	no	low
Absolute Saab	371 Second St	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Ace Cars & Vans	1244 N Coast Highway 101	Leucadia	Auto Repair/Maintenance	7514	Auto rental, car washing	no	low
All Car CTR	140 N Coast Highway 101, Rear	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Auto Zone	120 Leucadia Blvd	Leucadia	Auto Repair/Maintenance	5103	Auto parts supply used oil and used battery collection	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

All sites are in the Carlsbad Watershed

Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Brad's Foreign & Domestic	565 Westlake St, Unit A-E & 200C	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
California Rover (Rover Repairs, Inc)	386 Encinitas Blvd	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Cardiff Classic	1049 S Coast Highway 101	Encinitas	Auto Repair/Maintenance	7549	Auto sales and cleaning	no	low
Charles Foreign Car Sales	710 Second St	Encinitas	Auto Repair/Maintenance	5511	Auto sales and repair	no	low
Charlie's Foreign Car	751 Second St	Encinitas	Auto Repair/Maintenance	7538	Auto sales and maintenance	no	high
Coast Brake & Wheel	444 S Coast Highway 101	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Coastal Foreign Auto	320 N El Camino Real, Unit A-C	La Costa South	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Dan's Precision Alignment	565 Westlake St, Unit 200F	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Definitive Mobile Audio (DMA)	126 A St	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Discount Auto Service	710 S Coast Highway 101	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Discount Tire	107 N El Camino Real, Unit A	La Costa South	Auto Repair/Maintenance	5103	Auto repair and maintenance	no	low
El Camino Tire & Brake	330 N El Camino Real	La Costa South	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	high
Encinitas Automotive Repair	322 N El Camino Real, Unit A-B	La Costa South	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Encinitas Car Wash	293 N El Camino Real	La Costa South	Auto Repair/Maintenance	7542	Car wash	no	low
Encinitas Ford	1424 Encinitas Blvd	La Costa South	Auto Repair/Maintenance	7538	Auto sales, repair and cleaning	no	low
Encinitas Foreign Auto	901 Second St	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Encinitas Japanese Car Specialists	328 N El Camino Real, Unit A	La Costa South	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	high
Encinitas Smog Test Only Center	682 S Coast Highway 101	Encinitas	Auto Repair/Maintenance	7549	Auto diagnostic testing center	no	low
FIC Smog	322 N El Camino Real, Unit C	La Costa South	Auto Repair/Maintenance	7549	Auto diagnostic testing center	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

All sites are in the Carlsbad Watershed

Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Happy Auto Sales	148 N Coast Highway 101	Encinitas	Auto Repair/Maintenance	5511	Auto sales and cleaning	no	low
Harloff BMW	1302 Encinitas Blvd	La Costa South	Auto Repair/Maintenance	5511	Auto sales, repair and cleaning	no	low
Harris Radiator	274 N Coast Highway 101	Leucadia	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Hugo's European Car	110 N Coast Highway 101	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Instant Oil Change	127 S El Camino Real, Unit A	La Costa South	Auto Repair/Maintenance	7549	Lubrication service	no	low
Jiffy Lube #1764	221 N El Camino Real	La Costa South	Auto Repair/Maintenance	7549	Lubrication service	no	high
K & B Auto Service & Repair	320 N El Camino Real, Unit D	La Costa South	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Keith's Auto Electrical	215 W G St	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Kragen Auto Parts	180 N El Camino Real	La Costa South	Auto Repair/Maintenance	5103	Auto parts	no	low
Midas Mufflers	328 N El Camino Real, Unit C	La Costa South	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Miller Tire	759 Munevar Rd	Cardiff	Auto Repair/Maintenance	5103	Auto parts, minor maintenance	no	low
Moonlight Motors	215 Melrose Ave	Leucadia	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	high
Napa Auto Parts	523 Encinitas Blvd, Unit 100-101	Encinitas	Auto Repair/Maintenance	5103	Auto parts, used battery and used oil collection	no	low
North County Jet Ski	111 C St	Encinitas	Auto Repair/Maintenance	5511	Personal watercraft sales and repair	no	low
Paul's Auto Electric	325 Melrose Ave	Leucadia	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Pep Boys Manny Moe & Jack	256 N El Camino Real	La Costa South	Auto Repair/Maintenance	5103	Auto parts sales and used battery and used oil collection	no	low
Precision Tune	318 N El Camino Real, Unit A	La Costa South	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Ray's Automotive	1051 S Coast Highway 101	Encinitas	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Road One	1205 S Coast Highway 101	Encinitas	Auto Repair/Maintenance	7549	Auto towing and storage of towed cars	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

All sites are in the Carlsbad Watershed

Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Scott's Automotive	1508 N Coast Highway 101	Leucadia	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	high
Softspra Carwash	790 S Coast Highway 101	Encinitas	Auto Repair/Maintenance	7542	Car wash	no	low
Speedy Tune & Brake	225 N El Camino Real	La Costa South	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	high
Suspension Plus	322 N El Camino Real, Unit D-E	La Costa South	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Swami's Automotive Repair	320 N El Camino Real, Unit C-D	La Costa South	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	low
Trans Masters Transmissions	184 N Coast Hwy 101	Leucadia	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	high
Home Depot	1001 N El Camino Real	La Costa South	Building Materials	5211		no	low
Home Expo Design Center	1550 Leucadia Blvd	La Costa South	Building Materials	5211	Retail sales of lumber, brick, paint, and other building supplies	no	low
RCP Block Company	577 N Vulcan Ave	Leucadia	Building Materials	5211	Sales of brick, rock and other masonry supplies.	no	low
100% Natural	918 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
101 Diner, The	552 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
1st Street Bar	656 S Coast Highway 101	Encinitas	Eating/Drinking	5813	Sells prepared drink for consumption on site	no	low
7-Eleven	1446 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
7-Eleven	2240 Encinitas Blvd, Unit A	Rancho Santa Fe	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
7-Eleven (Moonlight)	105 W D St	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
7-Eleven Food Store	592 Santa Fe Dr	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Albertson's	479 Encinitas Blvd	Encinitas	Eating/Drinking	5411	Grocery store	no	high
Albertsons (Redbox Automated Retail, LLC)	134 N El Camino Real	La Costa South	Eating/Drinking	5411	Grocery store	no	low
All American Deli & Ice Cream	130 N El Camino Real, Unit A	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Amici Bakery	564 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Angelo's Burgers	608 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Auggie's House of Crab	1468 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Baja Fresh	194 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Bar Leucadian	1542 N Coast Highway 101	Leucadia	Eating/Drinking	5813	Sells prepared drink for consumption on site	no	low
Baskin Robbins	441 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Beach City Cafe	102 Aberdeen Dr	Cardiff	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Beach House Restaurant	2530 S Coast Highway 101	San Elijo Lagoon	Eating/Drinking	5812	Sells prepared food for consumption on site	yes	high

COMMERCIAL INVENTORY – STATIONARY FACILITIES

All sites are in the Carlsbad Watershed

Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Beach Tea House	1076 N Coast Highway 101, Unit A	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Bella Rosa	806 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Besta Wan (One Sweet World, LLC)	148 Aberdeen Dr	Cardiff	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Bety's Mexican Restaurant	1464 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Bird House Grill	250 N Coast Highway 101, Unit A	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Blue Fin Sushi	257 N El Camino Real, Unit D-E	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Borelli's Restaurant	285 N El Camino Real, Unit 106-108	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Boston's	294 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Burger King (J. S. Foods)	242 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Cabo Grill	1950 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Calypso Cafe	576 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Captain Keno's	158 N Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Carl's Jr. #181	1137 Regal Rd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Champagne Bakery	162 S Rancho Santa Fe Rd, Unit E10	Rancho Santa Fe	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Charlie's By The Sea	2526 S Coast Highway 101	San Elijo Lagoon	Eating/Drinking	5812	Sells prepared food for consumption on site	yes	high
Chart House, The	2588 S Coast Highway 101	San Elijo Lagoon	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Chick's Natural	191 N El Camino Real, Unit 107	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Chili's Bar & Grill	1004 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Chinatown Restaurant	118 Leucadia Blvd	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Chin's Restaurant	625 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Chipotle	268 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Cicciotti's Trattoria Italiana	1933 San Elijo Ave	Cardiff	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Coco's #881	407 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Cookies In Bloom	1277 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
D Street Bar & Grill	485 S Coast Highway 101	Encinitas	Eating/Drinking	5813	Sells prepared drink for consumption on site	no	high
Dairy Queen	1465 Encinitas Blvd, Unit B	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Daley Double Saloon	546 S Coast Highway 101	Encinitas	Eating/Drinking	5813	Sells prepared drink for consumption on site	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

All sites are in the Carlsbad Watershed

Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Daphne's Greek Cafe	130 N El Camino Real, Unit C	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Del Taco	130 Calle Magdalena	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Denny's Restaurant	135 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Dippin Dots	260 N El Camino Real, Unit B	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Domino's Pizza	1458 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Duke's Bar	107 Diana St	Leucadia	Eating/Drinking	5813	Sells prepared drink for consumption on site	no	low
E St Cafe	128 W E St	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
East Coast Pizza (A & M Investment, Inc)	2015 San Elijo Ave	Cardiff	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Einstein Brothers Bagels	1006 N El Camino Real, Unit B	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
El Callejon	345 S Coast Highway 101, Unit C	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
El Cortez	445 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
El Nopalito	560 Santa Fe Dr	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
El Pollo Loco	1002 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
El Torito Meat Market	948 N Coast Highway 101	Leucadia	Eating/Drinking	5813	Sells prepared drink for consumption on site	no	high
El Torito Restaurant	1068 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Encinitas Cafe	531 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Encinitas Donut Shop	580 Santa Fe Dr	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Encinitas Ranch Café	1275 Quail Gardens Drive	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Encinitas Yogurt & Ice Cream	1070 N El Camino Real, Unit C	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Filiberto's Mexican Food	476 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Filippi's Pizza Grotto	1486 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Firefly Grill & Wine Bar	251 N El Camino Real, Unit B	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Firenze Trattoria	162 S Rancho Santa Fe Rd, Unit G10	Rancho Santa Fe	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Flippin Pizza, New York Style	215 S El Camino Real, Unit H	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Fulanos	145 Leucadia Blvd	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Garden State Bagels	191 N El Camino Real, Unit 106	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Giovanni's Sandwich Shop	764 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Golden Baked Hams	114 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

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Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Greek American Family Restaurant	392 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Gusto Trattoria	429 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Harvest Ranch Market	162 S Rancho Santa Fe Rd, Unit E50	Rancho Santa Fe	Eating/Drinking	5411	Grocery store	no	low
Henrys Farmers Market	1327 Encinitas Blvd	La Costa South	Eating/Drinking	5411	Grocery store	no	high
Honey Baked Ham	459 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Honey's Bistro & Bakery	632 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Island Brother's Teriyaki	274 N El Camino Real, Unit A	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Islands	1588 Leucadia Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Its A Grind Coffee House (Pez Del, Inc)	204 N El Camino Real, Unit H	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Jack In The Box	1439 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Jack in the Box (Nfarooqi Enterprises, LLC)	1967 San Elijo Ave	Cardiff	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Jam Roc 101	101 N Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Jam Roc 101 (Hacker, DB and Co)	101 N Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Jamba Juice	272 N El Camino Real, Unit A	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Java Express	325 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Jay's Gourmet Restaurant	218 N El Camino Real, Unit B	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Jorge's Mexicatessen	267 N El Camino Real, Unit E	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Jorge's Mexicatessen	417 Santa Fe Dr, Unit B	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Juanita's Taco Shop	290 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Juice N Java	168 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
K C'S Tandoor	1518 Vivaldi St, Unit A	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Kaito	1476 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Karina's Taco Shop	916 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Kealani's	137 W D St	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Kentucky Fried Chicken	266 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Kim's Vietnamese & Chinese Restaurant	745 S Coast Highway 101, Unit 103	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Ki's Juice Bar	2591 S Coast Highway 101	San Elijo Lagoon	Eating/Drinking	5812	Sells prepared food for consumption on site	yes	high

COMMERCIAL INVENTORY – STATIONARY FACILITIES

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Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Kotija Jr. Taco Shop	852 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Kraken	2531 S Coast Highway 101	San Elijo Lagoon	Eating/Drinking	5812	Sells prepared food for consumption on site	yes	high
La Bonne Bouffe	471 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
La Especial Norte	664 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
La Salsa Fresh Mexican Grill	219 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Las Olas	2655 S Coast Highway 101	San Elijo Lagoon	Eating/Drinking	5812	Sells prepared food for consumption on site	yes	high
Le Moulin Rouge Bakery	828 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Le Petite Calypso	1002 N Coast Highway 101, Unit 2	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Leucadia Donut Shop	1604 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Leucadia Pizzeria	315 S Coast Highway 101, Unit V	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	yes	high
Leucadia Sushi Bar	996 N Coast Highway 101, Unit D-F	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Little Caesars Pizza	118 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Little Moore, A	1030 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Mama Houli and Sister T	423 La Mesa Ave	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Mama Lulu's Pizza and Pasta	191 N El Camino Real, Unit 110	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Mandarin City	815 Birmingham Dr	Cardiff	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Mandarin Oriental	1337 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Manhattan Pizza	143 W D St	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Marie Callendar's	162 S Rancho Santa Fe Rd, Unit C	Rancho Santa Fe	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
McDonald's	1271 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
McDonald's	1064 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Meritage Restaurant & Bar	897 S Coast Highway 101, Unit F104	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Mexico Viejo	1465 Encinitas Blvd, Unit E	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Mira Costa College Cafeteria (Premier Food Services)	3333 Manchester Ave	Lux Canyon	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Mister Sushi	111 N El Camino Real, Unit A-B	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high

COMMERCIAL INVENTORY – STATIONARY FACILITIES

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Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Miyabi's Japanese Restaurant	211 S El Camino Real, Unit C	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Mo Joe's Coffee Company	590 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Moonlight Grille	190 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Moonlight Snack Shack	400 B St	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	yes	high
Mozy	698 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Mr. Peabody's Steakhouse	136 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Noodles & Company	260 N El Camino Real, Unit C	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Nrgize Lifestyle Cafe	201 S El Camino Real, Unit A	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Ogata Japanese Cuisine	615 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Oggis Pizza & Brew	305 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Panda Express	1084 N El Camino Real, Unit E	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Pannikin Coffee & Tea	510 N Coast Highway 101, Unit A-B	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Papa John's Pizza #1596	337 N El Camino Real, Unit B	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Papa Toni's Pizza	554 Santa Fe Dr	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Passage to India	257 N El Camino Real, Unit K	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Pasta Bravo	1042 N El Camino Real, Unit J05 & E	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Pei Wei Asian Diner	1560 Leucadia Blvd, Unit A	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Pick Up Stix	127 N El Camino Real, Unit H	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Pino's	967 S Coast Highway 101, Unit 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Pipes	121 Liverpool Dr	Cardiff	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Pizza Hut	127 N El Camino Real, Unit G	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Pizzicato Gourmet Pizza	252 N El Camino Real, Unit 5	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Potato Shack Cafe	120 W I St	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Quick Fix	552 Santa Fe Dr	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Quizno's Classic Subs	337 N El Camino Real, Unit A	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Ralphs	125 N El Camino Real	La Costa South	Eating/Drinking	5411	Grocery store	no	high
Raul's Taco Shop	490 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Rico's Taco Shop	165 S El Camino Real, Unit L	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Rite Aid (Ice Cream)	439 Santa Fe Dr	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Robbie's Restaurant	100 Athena St	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high

COMMERCIAL INVENTORY – STATIONARY FACILITIES

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Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Roberto's Mexican Food	1900 N Coast Highway 101, Unit D	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Roberto's Taco Shop	274 N El Camino Real, Unit B	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Round Table Pizza	1321 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Roxy Restaurant	517 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Rubio's	252 N El Camino Real, Unit 4	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Russo's Pasta Shop	270 N El Camino Real, Unit I	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Sage Grill	1506 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Sake House	1246 N Coast Highway 101	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Sakura-Bana Sushi Bar	1031 S Coast Highway 101, Unit 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Sandwich Station	218 N El Camino Real, Unit A	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Santa Fe Cafe	445 Santa Fe Dr	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Savory Restaurant	267 N El Camino Real, Unit A-B	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Scripps Memorial Hospital (Food Services)	354 Santa Fe Dr	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Siamese Basil Restaurant	527 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Silk Asian Tapas	288 N El Camino Real, Unit C	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Smart & Final	150 Encinitas Blvd	Encinitas	Eating/Drinking	5411	Grocery store	no	low
St Germain's Cafe	1010 S Coast Highway 101, Unit 112	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
St Tropez Bakery & Bistro	947 S Coast Highway 101, Unit D103	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Stater Brothers	1048 N El Camino Real	La Costa South	Eating/Drinking	5411	Grocery store	no	low
Subman	113 N El Camino Real, Unit E	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
SubMania	1514 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Subway	2105 San Elijo Ave	Cardiff	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Subway #27567	1560 Leucadia Blvd, Unit C	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Subway Sandwiches & Salads	272 N El Camino Real, Unit C	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Super Donut #1	465 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Super Donut #2	252 N El Camino Real, Unit 2	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Surf Dog Records	1126 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Surfside Creamery	2031 San Elijo Ave	Cardiff	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

All sites are in the Carlsbad Watershed

Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Sushi House	214 N El Camino Real, Unit A-B	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Swami's Cafe	1163 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Taco Bell	1502 Encinitas Blvd	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Target	1010 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Tastes Group, LLC	641 S Coast Highway 101	Encinitas	Eating/Drinking	5813	Sells prepared drinks for consumption on site	no	low
Thai Pan Express	138 N El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
The Bullpen	149 S El Camino Real	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
The Greenery Raw Food Cafe	133 Daphne Avenue	Leucadia	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
The Original Pancake House	160 S Rancho Santa Fe Rd, Unit D10	Rancho Santa Fe	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
The Quick Fix	144 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Today's Pizza	481 Santa Fe Dr	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Tok Subs, Inc	138 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Tomiko	87 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Trader Joe's	115 N El Camino Real	La Costa South	Eating/Drinking	5411	Grocery store	no	low
Trattoria	2171 San Elijo Ave	Cardiff	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Trattoria I Trulli	830 S Coast Highway 101, Unit A	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Tuscan Sun Italian Deli	1070 N El Camino Real, Unit B	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
VG Donuts & Bakery	106 Aberdeen Dr	Cardiff	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Via Italia	565 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Vigilucci's	505 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Von's Grocery	453 Santa Fe Dr	Encinitas	Eating/Drinking	5411	Grocery store	no	high
Von's Grocery	262 N El Camino Real	La Costa South	Eating/Drinking	5411	Grocery store	no	high
Wahoo's Fish Tacos	1006 N El Camino Real, Unit C	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Wendy's Hamburgers	102 Encinitas Blvd	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	yes	high
When In Rome	1108 S Coast Highway 101	Encinitas	Eating/Drinking	5812	Sells prepared food for consumption on site	no	low
Yogi's Sports Bar & Restaurant	2633 S Coast Highway 101	San Elijo Lagoon	Eating/Drinking	5812	Sells prepared food for consumption on site	yes	high
Zibibbo	1560 Leucadia Blvd, Unit E	La Costa South	Eating/Drinking	5812	Sells prepared food for consumption on site	no	high
Rebel Rents	1900 N Coast Highway 101, Unit A	Leucadia	Equipment Repair	7359	Equipment rental	no	low
7-Eleven Food Store	2211 San Elijo Ave	Cardiff	Fueling	5541	Gas station, food store	no	high

COMMERCIAL INVENTORY – STATIONARY FACILITIES

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Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
7-Eleven Store, #13627D-2111	102 Leucadia Blvd	Leucadia	Fueling	5541	Gas station, food store	no	high
7-Eleven Store, #24335D-2111	1988 Village Park Way	La Costa South	Fueling	5541	Gas station, food store	no	low
AM/PM Gas Station	1580 Leucadia Blvd	La Costa South	Fueling	5541	Gas station	no	low
ARCO 9598/Dba Senan F. Naoum	633 Birmingham Dr	Cardiff	Fueling	5541	Gas station	no	high
Cardiff 76	3085 Manchester Ave	Cardiff	Fueling	5541	Gas station	no	high
Chevron Encinitas	350 Encinitas Blvd	Encinitas	Fueling	5541	Gas station	no	high
Chevron Food Mart	805 Birmingham Dr	Cardiff	Fueling	5541	Gas station, food store	no	low
Encinitas Exxon	325 Encinitas Blvd	Encinitas	Fueling	5541	Gas station	no	high
Encinitas Gas	310 Encinitas Blvd	Encinitas	Fueling	5541	Gas station	no	low
Leucadia Shell	865 Orpheus Ave	Leucadia	Fueling	5541	Gas station, service station	no	high
Rosano's Unocal 76	236 N El Camino Real	La Costa South	Fueling	5541	Gas station	no	low
Seaside Autohaus (Cardiff Valero)	820 Birmingham Dr	Cardiff	Fueling	5541	Gas station	no	high
Shell Oil	160 Encinitas Blvd	Encinitas	Fueling	5541	Gas station, car wash	no	low
Shell Oil Company	1060 N El Camino Real	La Costa South	Fueling	5541	Gas station	no	low
Shell Station	1355 Encinitas Blvd	La Costa South	Fueling	5541	Gas station	no	high
Encinitas Ranch Golf Course	1275 Quail Gardens Dr	Leucadia	Golf Course	0782	Golf course/landscape maintenance and a variety of lawn and garden services	no	low
Bradley Landscape Development, Inc	607 N Vulcan Ave	Leucadia	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.	no	low
Christian Brothers Landscaping	636 Leucadia Blvd	Leucadia	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting	no	low
Del Mar Landscaping	2016 Bulrush Ln	Cardiff	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting	no	low
Lui Delgado Landscaping Service and Tierra Verde	1545 Lake Dr	Cardiff	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting	no	low
MAC Design and Development	471 Chesterfield Dr	Cardiff	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting	no	low
Mark Lanager Masonry & Landscaping	1310 Summit Ave	Encinitas	Masonry	1741	Special trade contractor primarily engaged in masonry work, stone setting, and garden planting.	no	low
Abels Flowers & Plants	710 Clark Ave	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

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Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Ades & Gish Nurseries - Growers	1492 Hymettus Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Ades & Gish Nurseries - Growers	1150 Melba Rd	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Anderson, H Greenhouse	375 La Costa Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Andy's Orchids	734 Ocean View Ave	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Armstrong Garden Center	701 N El Camino Real	La Costa South	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Barbara J Weber, Trustee - Growers	237 Seeman Dr	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Barrels & Branches	1452 Santa Fe Dr	Lux Canyon	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Basil Tops	1425 Rubenstein Ave	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Batley Enterprises - Growers	1415 Rainbow Ridge Ln	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Bird Rock Tropicals	221 Princehouse Ln	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Browns Plants Inc - Growers	1515 Lake Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	high
Byer, Richard - Growers	1731 Crest Dr	Lux Canyon	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
C M A Growers - Growers	1254 Urania Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Cactus King Nursery	1534 Crest Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Cal Pacific Orchid Farm	1122 Orpheus Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Cardiff Palm Tree 2	333 Liszt Ave	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Cardiff/California Greenhouses	1753 Lake Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Chino Greenhouses Inc - Growers	1168 Urania Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

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Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Chino Greenhouses Inc - Growers	1253 Urania Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Cordova Gardens	902 Encinitas Blvd, Unit A	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Cordova, Joe - Growers	720 Balour Dr	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Cosgrove Cymbidium Co - Growers	1200 Saxony Rd	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
D. Ades Investment Corporation	875 Balour Dr	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Daniel Mojonnier	912 Urania Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Davis, Eric - Growers	752 Bracero Rd	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Divine Orchids	1015 Urania Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Don's Flowers	924 Bracero Rd	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Dramm & Etcher	1150 Quail Gardens Dr	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	high
Ecke, Paul Ranch	441 Saxony Rd	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	high
Ecke, Paul Ranch	1051 Summer Holly Ln	Lower Escondido Creek	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Emerald M. Growers, Inc.	834 Leucadia Blvd	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Encinitas Green Houses - Nursery	351 Union St	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Erhardt's Tropicals (Morales Romero)	805 Bracero Rd	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Erwin Mojonnier Enterprises	2009 Sheridan Rd	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Erwin Mojonnier Enterprises - Growers	679 Camino El Dorado	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Fiesta Flowers, LLC	335 Santa Fe Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

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Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Flowers of La Costa	1911 Saxony Rd	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Franco's Flowers Inc - Growers	842 Leucadia Blvd	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Gill, Padam - Growers	754 Bonita Dr	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Gish Foliage	1255 Lake Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Glover, A T - Growers	571 Union St	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Granite Homes Requeza LLC - Growers	843 Requeza St	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Greens & Things, Inc.	950 Brittany Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Groot, Dana - Growers	603 Union St	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Hydroscape Products, Inc	750 S Coast Highway 101	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Islas Jose L - Growers	235 La Costa Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Ito Kiyoko - Growers	936 Eolus Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
J & S Green Houses	748 Requeza St	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Jose Louis Islas	514 La Costa Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
KG Growers	940 Orpheus Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
L & E Greenhouses/G&J Plants	712 Clark Ave	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
La Costa Farms	1911 Saxony Road	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
La Costa Flower Shop and Nursery (Gish Foliage)	1245 Lake Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Leucadia Orchids	1660 Burgundy Rd	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

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Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Lois Flowers	1195 Cardiff Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Lois' Flowers	1616 Lake Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Lopez Flowers	440 Saxony Rd	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Maldonado Growers	1412 Mackinnon Ave	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
May Greenhouse, Inc	241 Andrew Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
May Greenhouses, Inc - Growers	2021 Sheridan Rd	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Miquel Estevez Flowers	708 Del Rio Ave	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Miraflor Agriproducts	495 Leucadia Blvd	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Mojonnier, Todd - Growers	201 Quail Dr	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Native Sons Nursery	631 Orpheus Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Orchid Barron	804 Cathy Ln	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Orchid Place	829 Bracero Rd	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Owens, Mark N - Growers	1073 Crest Dr	Lux Canyon	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Pacific Verde Nursery	556 Union St	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Pacifica Flowers	510 La Costa Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Payne, Parry - Growers	1231 Birmingham Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Quezada, Teresa A - Growers	1190 Island View Ln	La Costa South	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
R & L Sky Blue Inc - Nursery	598 Park Ln	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

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Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
Seaside Farms - Growers	754 Plato Pl	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	high
Secret Garden	1236 Urania Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Seedling Express	440 Saxony Rd	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Seedling Express	1698 Crest Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Self-Realization Fellowship - Growers	1177 Cornish Dr	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Skopec, Frank - Growers	1381 Summit Ave	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Solana Select Palms / Jim Riley	887 Brittany Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Specimen House	782 Leucadia Blvd	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Speert, Ellen - Growers	1905 Crest Dr	Lux Canyon	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Staver, Dan - Growers	1586 Crest Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Sunshine Gardens	155 Quail Gardens Dr	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Tayama Greenhouse	710 Requeza St	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
The Palm Source - Growers	1329 Lake Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
The Plantri - Nursery	921 Urania Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Tinney, Brooke - Growers	1674 Crest Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Tom, Gim - Growers	3107 Manchester Ave	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Tutuli Floral (O&J Growers)	1313 Lake Dr	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	high
Tverdoch, R - Growers	898 Hymettus Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low

COMMERCIAL INVENTORY – STATIONARY FACILITIES

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Facility Name	Address	Sub-Basin	Type	SIC	Activity Description	Tributary	Priority
W.F. Muhlethaler - Nursery	350 Seeman Dr	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Walt Hoehn	1752 Eolus Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Weidner's Gardens	860 Eolus Ave	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Weidner's Gardens	695 Normandy Rd	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Weidner's Gardens - Growers	850 Normandy Rd	Leucadia	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Wilkens Palm Tree Nursery	1450 Mackinnon Ave	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Williamson's Produce	3111 Manchester Ave	Cardiff	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	high
Wilma Romero - Nursery	870 Devonshire Dr	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Zalinda Farms - Growers	501 Ocean Bluff Way	Encinitas	Nursery/Greenhouse	5193	Primarily engaged in the production of ornamental plants and other nursery products	no	low
Frazee Paint	270 N El Camino Real, Unit B-E	La Costa South	Painting/Coating	5231	Store selling primarily paint and other liquid building products to the general public	no	low
Vista Paint Corporation	133 N El Camino Real	La Costa South	Painting/Coating	5231	Store selling primarily paint and other liquid building products to the general public	no	low

INDUSTRIAL INVENTORY

All sites are in the Carlsbad Watershed

Name	Address	Sub-Basin	Type	SIC	Description	Tributary	Priority
San Dieguito Union High School District Transportation Cooperative	1142 Bonita Dr	Encinitas/Cardiff	Vehicle Storage	4151	Vehicle storage and transportation services for students	no	high
San Elijo Water Pollution Control Facility	2695 Manchester Ave	Cardiff	Wastewater Treatment	9511	Treatment of wastewater for use a recycled water	no	high
Encinitas Landfill*	2099 Encinitas Blvd	Lux Canyon/Rancho Santa Fe	Closed Landfill	4953	Closed solid waste collection facility	no	NA

*The Encinitas Landfill is regulated and inspected by San Diego County.

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

CLEAN WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Inspector Name _____

Date____/____/_____Time_____AM / PM Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Business Name_____

Street Address_____ Mailing Address_____

Email _____ _____

Responsible Person(s)_____ Property Manager_____

Business Phone # **(**_____**)** _____ **-** _____ext._____ Property Manager's #_____

Business Fax # **(**_____**)** _____ **-** _____ APN Number _____

B. FACILITY/SITE INFORMATION

Principal activity:_____

SIC Code(s)_____

Does SIC Code best represent principal activity: ☐ Yes ☐ No

What is recommended SIC Code(s)?_____ New JURMP Classification?_____

Does facility have a current Encinitas business certificate? ☐ Yes ☐ No #_____Exp._____

Is this facility currently listed in the City of Encinitas JURMP Inspection List? ☐ Yes ☐ No ☐ Unknown

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☐ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID #_____

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☐ Yes ☐ No

Has facility conducted previous storm water monitoring programs? ☐ Yes ☐ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: _____

Approximate distance to water bodies: ☐ < 200 ft. ☐ 200 – 1000 ft. ☐ > 1000 ft.

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: _____

_____

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area covered by industrial or commercial activities:_____square feet

Approximate % impervious surface of this area_____%

Exposed areas of intensive outdoor activity: _____

D. BMP ASSESSMENT

D.1 General

BMPs	N/A	Yes	No	Comments
1. Is the site free of litter and debris?				
2. Are discharge locations free of sediment and debris?				
3. Are parking lots, sidewalks and streets free of sediment and debris?				
4. Is pressure washing of parking lots or sidewalks conducted at the facility?				
a. If yes, is wash water captured?				
b. Please provide contact name and phone number info for pressure washing company.				
5. Are roof downspouts directed away from areas of potential pollutants?				
6. How many employees do you have? Are employees trained in storm water management? If so, provide a list of employees who have participated.				

D.2 Landscaping

7. Are adequate erosion prevention measures employed? (vegetation or physical stabilization)				
8. Are irrigation systems programmed to minimize over-watering and runoff?				
9. Is reclaimed water used for irrigation?				
10. Are stockpiles of soil or landscape waste equipped to prevent runoff transport?				

D.3 Materials and Wastes

11. Are adequate trash containers provided?				
12. Are adequate recycling containers provided?				
13. Is the trash/recycling area enclosed and free of litter and debris?				
14. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
15. Are outdoor material storage areas adequate (covered area with secondary containment)?				
16. Are outdoor storage containers properly labeled?				
17. Is there an accessible spill response kit?				
18. Is there a spill response plan? If so, please provide to inspector.				
19. Are storage tanks equipped with secondary containment?				
20. Is secondary containment free of spills and rainwater?				
21. Are loading and unloading areas free of spills and debris?				

D.4 Equipment and Vehicles

22. Are exposed parking areas free of significant spills and leaks?				
23. Are heavy equipment and vehicles stored in garages or under canopies?				
24. Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?				
25. Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?				

BMPs	N/A	Yes	No	Comments
26. Is vehicle washing preformed in a contained area where runoff does not enter the MS4?				
D.5 Food Establishments N/A ☐				
27. Does facility have a grease trap or grease interceptor?				
28. Who maintains the grease trap? Company Name: Phone #				
29. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
30. Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
31. How many grease fryers are at the facility? _____				
32. About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually ☐ Other_____				
33. How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____				
Company Name: Phone #				
34. Do oil-recycling/grease bins have overhead coverage?				
35. Do oil-recycling/grease bins have secondary containment?				
36. Are deep fryer oil-recycling drums stored properly?				
37. At what time is restaurant cleaning performed? _____				
38. Are biodegradable soaps used for cleaning activities?				
39. How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:_____				
40. Where is used cleaning water discharged? _____				
41. Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
42. Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
43. Is the site free of evidence of illicit connections and illegal discharges?				
44. Is the site free of evidence of unauthorized releases to storm drains?				
45. If not, have the appropriate authorities been notified?				
D.7 Commercial Nurseries N/A ☐				
46. Does nursery minimize water use and runoff during irrigation? What type of irrigation is used?				
47. Does nursery use controlled release fertilizers or other conservative fertilizing practices?				
48. Does nursery implement integrated pest management techniques to prevent pesticide pollution?				
D.8 Other				
49. Are there any other potential storm water pollution issues or concerns? If yes, explain below.				
50. Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?				
51. Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.				

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION SUMMARY

FACILITY: _____ DATE: _____

E. VIOLATIONS

- ☐ No violations have been noted at this time
- ☐ No violations have been noted, but required corrective actions are described below.
- ☐ Violation of storm water ordinance or other applicable regulations were found.
  (Attach Copy of NOV or Administrative Citation)

F. CORRECTIVE ACTIONS

Is corrective action needed? ☐ Yes ☐ No

As per Encinitas Municipal Code Section 20.08.110, the following corrective actions must be implemented. Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

1 _____

2 _____

3 _____

4 _____

5 _____

Owner/operator has been notified of corrective actions both verbally and by: ☐ Photocopy ☐ Fax ☐ Mail

G. Describe informational, educational or BMP information distributed: ☐ City of Encinitas Restaurant Brochure English/Spanish, ☐ County of San Diego-What's Cooking Guide English/Spanish, ☐ City of Encinitas Automotive Brochure English/Spanish, ☐ City of Encinitas Yard and Garden, ☐ County of San Diego-Green Wrench Guide English/Spanish.
OTHER: _____

H. FOLLOW UP INSPECTION? YES or NO (CIRCLE ONE) DATE: _____

COMMENTS_____
_____
_____

INSPECTOR NAME_____ **FACILITY CONTACT NAME (PRINT)** _____

INSPECTOR SIGNATURE _____ **FACILITY CONTACT SIGNATURE** _____

DATE _____ **DATE** _____

I. RECOMMENDED CITY ACTIONS

_____
_____

FOR OFFICE USE ONLY

Labor: ____Hours _____Mins
Vehicle#_____
Work Order # _____
Follow-up WO#_____

ASSESSMENT (circle appropriate level - "5" is a high level)
Level of knowledge regarding storm water issues: **1. 2. 3. 4. 5.**
Level of cleanliness, BMP implementation, orderliness of site: **1. 2. 3. 4. 5.**

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM- Restaurant
CLEAN WATER HOTLINE: 760-633-2787
http://cwp.ci.encinitas.ca.us

Revised 5/08

Type of Inspection: ☐ Annual (Date):_____ ☐ Follow-up (Date):_____ ☐ Complaint Investigation

Business Name:	Size: SQ FT SIC Code: 5812
Street Address:	Mailing Address:
Contact Person(s):	Property Manager:
Business Phone/Fax # :	PM Phone/Fax # :
Business Email:	PM Email :

How many employees does restaurant have? _____ Are they trained in storm water mgmt? __Yes __No Log? ____(Y/N)

Does facility have a current Encinitas business certificate? Yes No # :_____ Exp: _____

Does facility have a map/sketch of the site with flow lines and storm drains? ____Yes ____No ____Unknown

Discharge observed? ____Yes ____No If yes, describe: _____

Are downspouts directed away from areas of potential pollutants? ____Yes ____No

A. Grease Management	Yes	No	N/A	Comments
1. Does facility have a grease trap or grease interceptor?				
2. Where is it located? ___Under the sink ___Outside ___Other: _____				
3. Who maintains the grease trap/intcptr?	Contact Info:_____			
4. When was the last time the grease trap/intcptr was maintained? _____(Please provide copy of invoice)				
5. How many grease fryers are at facility?_____				
6. How often is fryer oil replaced? ___Weekly ___Monthly ___Every 6 months ___Annually ___Other_____				
7. How is used oil disposed of? ___Outside rendering service ___Sanitary sewer/sink ___Other:_____				
Company Name: _____Phone #:_____last maintained				
8. Do oil-recycling/grease bins have overhead coverage?				
9. Do oil-recycling/grease bins have secondary containment?				
10. Is oil-recycling bin area clean?				

B. Cleaning	Yes	No	N/A	Comments
11. At what time is the restaurant cleaning performed?_____				
12. How are kitchen floor mats cleaned? ___Hose off outside ___Clean inside (mop sink) ___Cleaning Service ___Other:_____				
13. Where is used cleaning water discharged? _____				
14. Does the facility hose off/pressure wash the site?				
If so, how often? _____				
Is a pressure washing company used? Yes No	Name/Number:_____			
Is wash water captured?				
15. Are storm drain inlets free of grease & other food debris?				

Landscaping (Erosion Control, Over-irrigation Runoff, Reclaimed Water use, Stockpiles)

C. Materials and Wastes	Yes	No	N/A	Comments
16. Is the site free of litter and debris?				
17. Are adequate trash containers provided?				
18. Are adequate recycling containers provided?				
19. Is the trash/recycling area under cover or bin lids closed?				
20. Is timely service and removal provided to prevent				___ Weekly ___Bi-weekly Day:_____
waste containers and sanitary facilities from overflowing?				

Facility:_____ Date:_____	Yes	No	N/A	Comments
21. Are any outdoor material storage areas adequately				
covered and labeled?				
22. Is there an accessible spill response kit?				
23. Is there a spill response plan? (If yes, provide to inspector)				
24. Are loading and unloading areas free of spills and debris?				
D. Other Storm Water Management	**Yes**	**No**	**N/A**	**Comments**
25. Any evidence of illicit connections and illegal discharges?				
26. Any evidence of unauthorized releases to storm drains?				
27. If yes, have the appropriate authorities been notified?				
28. Are there any other potential storm water pollution				
issues or concerns?				
If yes, explain:_____				
29. Are there any structural BMPs on or near the site?				
If so, how often are they maintained? _____ Provide maintenance records.				

F. Violations

___No violations have been noted at this time.	
___No violations have been noted, but required corrective actions are described below.	
___Violation of storm water ordinance or other applicable regulations were found.	
(Attach Copy of NOV or Administrative Citation)	

G. Corrective Actions Is corrective action needed? ☐ Yes ☐ No

As per Encinitas Municipal Code Section 20.08.110, the following corrective actions must be implemented. Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

_____

_____

_____

_____

_____

_____

Owner/operator has been notified of corrective actions both verbally and by: ☐ Photocopy ☐ Fax ☐ Mail ☐ Email

I. Follow Up Inspection? Yes or No (circle one) Date: _____

Comments:

H. Describe informational, educational, or BMP information distributed:

___City of Encinitas Restaurant Brochure Eng/Span, ___County of San Diego-What's Cooking Guide Eng/Span,

___Only Rain Brochure, ___Storm Water Poster, ___Training CD, ___Other:_____

Inspector Name_____	**Facility Contact Name (print)** _____
Inspector Signature _____	**Facility Contact Signature** _____
Date _____	**Date** _____

FOR OFFICE USE ONLY

Binder at facility? ☐ Yes ☐ No	Binder used? ☐ Yes ☐ No	CD used? ☐ Yes ☐ No
Did manager find binder / CD useful? ☐ Yes ☐ No	Mgr Comments: _____	

Binder / CD Assessment Comments:

ASSESSMENT (circle appropriate level - "5" is highest level)

Level of knowledge regarding stormwater issues: 1 2 3 4 5

Level of cleanliness, BMP implementation, orderliness of site: 1 2 3 4 5

Routine Commercial/Municipal/Industrial Inspection Summary **FY 2007 - 2008**

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
38708	07/10/2007	Mac design and development		No violations, no corrective actions.			Commercial
38712	07/06/2007	Encinitas Automotive Inc.	7/11/2007 They received the EPA's auto body and paint shops fact sheets book.	No violations, but corrective actions: 1.label spill kit, create and post response plan. 2. Recommendation to provide secondary containment for oils, antifreeze, and other hazardous fluids.			Commercial
38726	07/05/2007	Encinitas Golf Course Restaurant		No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2. maintain trash area free of litter and debris. 3. store paint and painting supplies indoors			Commercial
38804	07/16/2007	Swami's Automotive Foreign and Domestic		no violations, but corrective actions: 1.train and keep log on SW regulations. 2.provide spill response plan.			Commercial
38838	07/16/2007	Suspension Plus of Encinitas		No violations, no corrective actions.			Commercial
38839	07/16/2007	F.I.C. Smog test only station		No violations or corrective actions.			Commercial
39002	07/06/2007	California Body and Paint	7/18/07 Called LWD, they will check sewer connection and call CWP back. 7/26/07 owner has rags for spills and is training employees.	No violations, but corrective actions: 1.train employees on SW mgmt, keep a log. 2.obtain spill kit, and create spill response plan.	Follow up completed 7/18/07. secondary containment ok.		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
39116	08/03/2007	Seven Eleven		No violations, but corrective actions: 1.keep records of storm water training			Commercial
39122	08/06/2007	Auto Zone #5657		no violations, but corrective actions: 1. close trash container lids. 2.train employees in SW regulations and keep log.			Commercial
39204	08/09/2007	Encinitas Promenade Gas and Oil Change		no violations, but corrective actions: 1.trash pick up on south east side. contact P.M. regarding trash to the north. 2.provide recycle containers.			Commercial
39327	08/14/2007	Brown's Plants		No violations, but corrective actions: 1.continue to clean west curb from dirt. 2.remove neighbor overgrowth on south side of prop. 3.properly store or remove misc auto parts, oils, and other fluids. 4.train employees on SW mgmt, spill response plan.	10/3/07 all corrective actions were taken. Owner said he will disconnect pipe w/in a week (10/10/07). 10/11/07 Owner called, has cut all pipes but one. he asked for another week and will call when pipe is cut. 11/13/07 all pipes cut. no discharge.		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
39328	08/14/2007	S & L Oil Shell Leucadia		no violations, but corrective actions: 1.train and keep log for SW regulations and spill response plan. 2.provide recycling containers. 3.cover outdoor lift when not doing repairs to prevent run-off when it rains.			Commercial
39378	08/15/2007	Encinitas Exxon #1020		no violations, but corrective actions: 1.provide recycle containers. 2.provide name and phone # of power washer. 3.train employees on SW mgmt, keep log. 4. Dry clean, pressure wash trash area, capture all wash water.	Follow up on 9/28/07. Issued NOV for trash clean up, consider power washing. Follow up on 10/15/07 trash area clean. request power washing.	9/28/2007	Commercial
39388	08/15/2007	Chevron Stations Inc #1967		no violations, but corrective actions: 1.provide recycle containers for customers. 2. remove or cover outdoor items. 3. direct roof downspouts away from trash area. 4.train & keep records for SW training and spill response plan.	10/03/07 Follow up completed. All corrective actions complete.		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
39397	08/15/2007	Olson's Hand Car Wash		no violations, but corrective actions: 1.train and keep log regarding storm water regulations and spill response plan.			Commercial
41445	08/21/2007	Scott's Automotive		no violations, but corrective actions: 1.keep records of training in SW mgmt and spill response plan. 2. properly store outdoor materials. 3.perform vehicle maintenance indoors or under cover.	9/28/07 issued NOV for antifreeze, outdoor storage, and outdoor lifts action plan, to comply by 10/23. Follow up on 10/29/07 shows all corrective actions done. Outdoor lifts will be covered by next annual inspection.	9/28/2007	Commercial
41446	08/22/2007	Camino Encinitas Plaza. Kurtin Properties	Inspection with property manager for 318-322 El Camino Real	no violations, but corrective actions: 1.cover or remove outdoor lift behind midas. 2.provide overhead cover or roof for compressor at el camino tire. 3.proivde spill kits for all oil recycle storage. 4.provide label for oil storage units.			Commercial
41476	08/21/2007	Jimmy Mac's	Inspector faxed copy of inspection form to Merle on 8/21 Business cert #20416, exp.7/31/08 per City Hall front desk	no violations but corrective actions: 1.train employees, keep log for SW mgmt and spill response plan. 2.store grease under cover w/ 2nd containment. 3.properly store outdoor materials.			Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
41535	08/29/2007	Seven Eleven Food Store 25766B		no violations but corrective actions: 1.provide recycling containers			Commercial
41536	08/29/2007	Cardiff 76	Business cert # 14679	Violation of storm water ordinance: Antifreeze in parking lot. Corrective actions: 1.train, keep log for employee training. 2. clean up antifreeze- see NOV comply by noon. 3.clean out storm drain inlets. Correction: should be business # 14679	10/08/07 Follow up completed. All corrective actions complete.	8/29/2007	Commercial
41537	08/28/2007	Rosano's Unocal 76		no violations or corrective actions.			Commercial
41538	08/27/2007	Encinitas Gasoline and auto service (Shell)		no violations, but corrective actions: 1.train, keep log for employees on SW mgmt and spill response plan. 2.provide recycle containers. 3.extend overhead coverage to cover all drums and pallets. 4.remove oil from 2nd containment. 5. cover outdoor lift	Follow up completed on 10/4/07. NOV issued for overhead cover and maintaining trash. Follow up 10/15/07 shows all corrective actions complete.	10/14/2007	Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
41552	08/23/2007	Chevron Encinitas/Kihack Management LLC		no violations, but corrective actions: 1.train employees on SW regs, spill response, keep log. 2.provide more recycling containers. 3.clean trash area, use dry methods. if water, capture wash water. 4.remove old car parts and other machinery outdoors	Follow up completed on 10/12/07 showed all corrective actions complete. misc auto parts removed. Signed off on NOV that was issued on 9/27/07.	9/27/2007	Commercial
41574	08/30/2007	CNG Inc (Shell)		No violations, but corrective actions: 1.remove, properly store gas tester in trash area. 2.provide recycle containers. 3.clean SE storm drain. 4.train and keep log required for SW training and spill response plan.			Commercial
43661	08/31/2007	Duru Inc/San Dieguito Towing/DBA Road One	Absorbent was swept up before end of inspection.	No violations, but corrective actions: 1.Sweep up cat litter/absorbent after use. 2. train employees on SW regs and spill response plan, keep log. 3. keep/store fork lift and/or cover and fix leak.			Commercial
43666	09/04/2007	North County Kawasaki/Motorsports		no violations, but corrective actions: 1.train, keep log of employees on SW regulations and spill response plan. 2. properly store batteries with cover and 2nd containment			Commercial
43667	08/29/2007	Rover Repairs LLC DBA California Rover		no violations, but corrective actions: 1.train employees and keep log on SW regs. 2.provide recycle containers. 3.remove outdoor storage material. 4.clean trash dumpster area.	10/8/07 follow up completed. all corrective actions complete.		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
45669	09/04/2007	Hugo's European Car Service		no violations, but corrective actions: 1.train all employees, keep log regarding SW regs and spill response plan. 2.cover, consider removing outdoor left, and remove or cover old engines in NW corner. 3.provide 2nd containment for antifreeze storage.	Follow up completed on 9/28/07. All corrective actions complete.		Commercial
45672	09/04/2007	Rays Automotive Services		no violations, but corrective actions: 1.train employees, keep log regarding SW regs and spill response plan. 2.move oil filter containers away from south downspout. 3.properly store outdoor materials- move inside or cover. 4. provide 2nd containment	All corrective actions completed 9/28/07.		Commercial
45673	09/04/2007	Cardiff Classics, Inc		no violations, but corrective actions: 1.train employees, keep log for SW regs and spill response plan			Commercial
45674	09/04/2007	Keith's Automotive	Great storage of antifreeze, oils, and other liquids.	no violations, but corrective actions: 1.train and keep log on SW regs and spill response plan			Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
45678	09/06/2007	Dan's Precision Alignment Center		no violations, but corrective actions: 1.train, keep log for employees on SW regs and spill response plan. 2.cover or remove outdoor parts on west side.	10/8/07 Follow up completed. Outdoor storage removed. keep green wrench for training and spills response plan. all corrective actions complete.		Commercial
45679	09/11/2007	Rancho Auto Body	Reason for outdoor storage is to recycle scrap metal and cardboard.	no violations, but corrective actions: 1.cover outdoor storage (scrap metal). 2.train employees on SW regs. 3.provide recycle containers.	11/15/07 All corrective action complete.		Commercial
45681	09/06/2007	Brad's Foreign and Domestic		No violations, but corrective actions: 1.train employees, keep log on SW regs and spill response plan. 2.properly store outdoor storage inside or under cover. 3. provide 2nd containment for antifreeze.	10/8/07 Follow up. All corrective actions complete.		Commercial
45682	09/11/2007	Encinitas car wash	Consider using biodegradable soaps.	no violations, but corrective actions: 1.train employees on SW regs and spill response plan. 2.provide recycle containers.			Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
45683	09/10/2007	BMW Encinitas/An Luxury Imports of san diego inc.	NOV Stop work issued on 9/10 for lack of BMPs while spraying/washing vehicles on lot. NOV issued on 9/28/07 to fix irrigation leak	Violation and corrective actions: 1.train,keep log of employees regarding SW regs and spill response plan. 2.dont overload trash containers, keep lids closed. 3.remove/store under cover old gas tanks and other materials. 4.collect wash water 5. fix irrigation leak.	Follow up on 10/12/07. All corrective actions complete. Two NOVs issued on 9/10/07 and 9/28/07. Signed off on 10/12/07. 8/19/08 site inspection contacted employees at Dent masters. I requested that the owner of their business give me a call so that i can explain the storm water regulations. 5/27/08 all corrective actions complete except for the rotors in storage area. The rotors to be covered w/in two weeks or by 6/11/08 8/11/08 rotors stored in a tray See original WO 69617	9/10/2007 & 9/28/07	Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
45844	08/22/2007	Camino encinitas plaza. Kurtin Properties.	Prop manager has been working with her properties to improve the car washing area. The bump to hold water still leaks. They are to complete the work on a Sunday so that they do not interrupt the businesses. She will give me a call when work is complete	No violations, but corrective actions: 1.cover outdoor lift behind midas. 2.provide overhead cover for compressor at el camino tire. 3.provide spill kits for all oil recycle storage. 4.provide label for oil storage units. 5.maintain vehicle wash area	5/9/08 site inspection- overhead coverage in place for Fender Mender. All other corrective actions have been completed. See FU WO 70211. See original WO 45844		Commercial
45845	09/12/2007	Happy Auto Sales		No violations, but corrective actions: 1.train employees and keep log on SW regs and spill response plan. 2.obtain spill kit.			Commercial
45846	09/13/2007	All cars Center		no violations, but corrective actions: 1.train, keep log for employee regarding SW regs. 2.remove or cover all outdoor storage area and misc auto parts. 3.perform vehicle maint inside or under cover. cover outdoor lifts when not in use.	10/3/07 Follow up completed. all corrective actions complete. Require action plan of how to make cover over outdoor lifts by 11/3/07. Action plan was delivered 11/13/07.		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
45847	09/13/2007	World Auto Body		no violations, but corrective actions: 1.train employees on SW regs and spill response plan. 2.do vehicle maint inside, cover outdoor lift. 3.repair cover on wash area, consider using biodegradable soap. 4.sweep sanding dust in SE corner & cat litter	10/3/07 follow up. All corrective actions complete.		Commercial
45848	09/13/2007	Valvoline Instant oil Change		no violations or corrective actions. consider providing recycle containers for patrons.			Commercial
45849	09/12/2007	Ace cars and vans		no violations, but corrective actions: 1.train, keep log for employees on SW regs and spill response plan. 2.obtain spill kit. 3.provide recycle containers. 4.remove or properly store misc auto parts.	10/9/07 follow up. all corrective actions completed. received written spill response plan.		Commercial
45850	09/18/2007	Encinitas Ford		no violations, but corrective actions: 1.train employee on SW regs, keep log. 2. repair sump pump on south east repair bay and fax invoice to city.			Commercial
45851	09/18/2007	Discount Tire Company		no violations, but corrective actions: 1.train employees on SW regs, keep log. 2.create written spill response plan, make it accessible to employees. 3.clean trash and recycle area, keep lids closed.			Commercial
45852	09/14/2007	Noodles and Company		no violations, but corrective actions: 1. train employees on sw regs and spill response plan. 2.provide most recent grease service invoice.			Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
45853	09/17/2007	ARCO 9598/DBA Senan F. Naoum		no violations, but corrective actions: 1.train and keep log for employees regarding SW regs and spill response plan. 2.keep dumpster lids closed.			Commercial
45854	09/17/2007	Charlie's Foreign Car 197		no violations, but corrective actions: 1.train and keep log for employees regarding SW regs and spill response plan.			Commercial
45858	09/19/2007	Kragen Auto Parts#1686		no violations, but corrective actions: 1.train employees on SW regs , keep log. 2.create written spill response plan, make it accessible to employees			Commercial
45859	09/19/2007	Transmasters Transmissions		No violations, but corrective actions: 1.train employees on SW regs, keep log. 2.provide 2nd containment for antifreeze. 3.create spill response plan. 4.provide overhead cover for vehicle maint.	Follow up on 10/29/07. All corrective actions complete. Provided action plan to obtain canopies within a year.		Commercial
45860	09/20/2007	Harris Radiator Works, Inc.		no violations, but corrective actions: 1.cover or remove old radiators on north side of property asap. 2.construct a cover for outdoor lift or cover when not in use.	4/2/08 Received fax stating that outdoor lift will be used for inspections only. See follow up WO 69348		Commercial
45863	09/20/2007	Seven eleven #2111-24335D		no violations, but corrective actions: 1.clean up trash around site and in trash area. 2.train employees on SW regs and keep log. 3. create spill response plan, make it accessible to employees.			Commercial
45864	09/24/2007	Coast Brake and Wheel		no violations or corrective actions.			Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
46023	09/24/2007	Encinitas Smog Test Only Center		No violations, but corrective actions: 1.train employees on sw regs, keep log. 2. create written spill response plan. 3. clean up around trash area.			Commercial
46025	09/25/2007	Discount Auto		no violations, but corrective actions: 1.train employees on sw regs, keep log. 2. create spill response plan, make accessible to employees. 3.provide overhead cover & 2nd containment for liquid storage, batteries, and old radiators.	Follow up completed on 10/29/07. all corrective actions complete.		Commercial
46027	09/26/2007	S & Brothers Upholstry		no violations, but corrective actions: 1.train employees on SW regs, keep log. 2. create spill response plan.			Commercial
46028	09/26/2007	K & B Auto Services and repair		no violations, but corrective actions: 1.train employees on SW regs and create spill response plan.			Commercial
46029	09/26/2007	XATV		no violations, but corrective actions: 1.train employees, keep log regarding sw regs, spill response plan.			Commercial
46032	10/01/2007	Vigilucci's		Violation and corrective actions: 1.immediate maintenance of outdoor storm drain required. 2.sweep up used cat litter around grease storage area. 3.clean grease storage area. 4.obtain spill kit.	10/9/07 follow up. all corrective actions completed.		Commercial
48037	10/09/2007	Pacific Verde Nursery, Inc.		No violations, but corrective actions: 1.train employees on SW mgmt. 2.create spill response plan in writing.			Commercial
50287	10/10/2007	Bradley Landscape Development		No violations, but corrective actions: 1.train employees, keep log.2.create spill response plan.3.properly store or remove outdoor storage of oils, batteries, paints.			Commercial

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50359	10/11/2007	L & E Greenhouses/G & J Plants		no violations, but corrective actions: 1.train employees on SW regs and keep log. 2. create spill response plan and make it accessible.			Commercial
50360	10/15/2007	Chino Greenhouse		no violations, but corrective actions: 1.store batteries inside.			Commercial
50363	10/17/2007	Daniel Mojonnier Enterprises- Growers	site looks really clean. good BMPs!	no violations, but corrective actions: 1.train employees in SW regs, keep log. 2. create spill response plan, make accessible. 3. keep dumpster lids closed.			Commercial
50364	10/17/2007	Divine Orchids		no violations or corrective actions. is used for residential uses only. no commercial use.			Commercial
50365	10/16/2007	Ades and Gish Nurseries		no violations, but corrective actions: 1. clean storm drain north side of greenhouses. 2.clean area around dumpster. 3. remove or cover old colder.	follow up completed 10/29/07. all corrective actions complete. monitor storm drain for erosion problems, weekly or during and after rain event.		Commercial
50366	10/18/2007	Cal Pacific Plant Farm		no violations but corrective actions: 1.train employees on SW regs, keep log. 2.create spill response plan and kit, make accessible to employees.			Commercial
50367	10/18/2007	Flowers of La Costa Farms		no violations, but corrective actions: 1.train employees on SW regs, keep log. 2. create spill kit and response plan, make accessible to employees. 3. store paint cans inside or cover.	Follow up completed on 10/29/07. all corrective actions complete.		Commercial

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50377	10/18/2007	La Costa farms		no violations but corrective actions: 1.train employees on SW regs and keep log. 2.create spill response plan, make accessible to employees.			Commercial
52612	10/29/2007	Emerald M. Growers		no violations, but corrective actions: 1.train employees on SW regs and spill response plan, keep log. 2.create spill response plan. 3. obtain business cert.	12/19/07: Site inspection observed drainage swale on the West side of property. respondent connected dirt drainage to cement swale that connect to storm drain on NW corner of property. Respondent also fixed/connected property to the north to the storm drain. See service request 33810 and original work order 53506.		Commercial
52662	11/01/2007	Cordova Greenhouses (Joe Cordova)		no violations, but corrective actions: 1.train employees on SW regs and keep log. 2. create spill response plan.			Commercial
52723	11/05/2007	Dramm and Echter		corrective actions: 1.clean/remove debris from storm drains. 2.train employees on SW regs. 3.keep trash container lids closed or store in garage. 4.label all storage containers. 5.create spill response plan, make accessible to all employees. 6. properly store heavy equipment in garages or under cover. 7.cover fueling area. 8.keep records of BMP maint. 9.replumb bucket washing area to sewer. 10.label hand washing sinks. 11.cap 2nd containment in Nitro room. 12.cover steam pipes & batteries	See original WO 52723. All corrective actions complete 5/1/08. Follow up WO 69775		Commercial

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52821	09/25/2007	Sofspra carwash	11/15/07 Owner is out of town/country and will sign inspection form when he gets back.	No violations, but corrective actions: 1.train employees on SW regs. 2.create spill response plan and kit, make accessible to employees.	11/15/07 received information from out of town owner via email to complete the inspection form Inspector met with owner to get signature on 12/18/07.		Commercial
52822	11/15/2007	Shell at Santa Fe	Property manager needs to clean up storm drain north of shell and needs to clean north of north building. SR was created	Started inspection on 9/6/07 and completed the inspection on 11/15/07. no violations or corrective actions.			Commercial
52823	11/09/2007	Cosgrove Cymbidium Co Growers		Corrective actions 1 Train employees on Storm Water regulations and keep log. 2 Create a spill response kit and plan and make it accessible to all employees 3 Keep trash area clean			Commercial
52824	11/09/2007	Willow Lane Growers		Corrective actions 1 Train employees on Storm Water regulations and keep log. 2 Create a spill response kit and plan and make it accessible to all employees 3 Keep trash area clean			Commercial
53535	12/04/2007	Fox Point Farm	Routine inspection was done because of a complaint on 11/30/07. Erosion occurring during rain event. See Service Request 48300. Follow up scheduled for 1/5/07.	no violations, but corrective actions: 1.train employees on SW mgmt, keep log. 2.label fertilizers. 3.obtain spill kit and create response plan. 4.cover or store indoors spray machine and tractor equip. 5.clean/remove silt from west and north side.	See original WO 53535 Follow up WO 69774. All corrective actions complete 5/1/08.		Commercial

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53622	12/11/2007	Mojonnier Growers		no violations, but corrective actions: 1.train employees on storm water regulations, keep log. 2.create spill response plan, make accessible to employees. 3.cover old equip and storage tanks and label. 4.pick up/clean trash west side.	12/18/07 all corrective actions complete. See original inspection work order 53622		Commercial
53661	12/18/2007	Mojonnier Enterprises		no violations, but corrective actions: 1.train employees on sw regs, keep log. 2.create spill response kit and plan, make accessible to employees.			Commercial
53664	12/18/2007	Horace Anderson Greenhouses		no violations, but corrective actions: 1.train employees on sw regs, keep log. 2.cover old water heater on NW corner. 3.label fertilizers off la costa. 4.create spill response plan and kit, make accessible to employees.			Commercial
53673	11/20/2007	Lois' Flowers		no violations, but corrective actions: 1.train employees on SW regs, keep log. 2.create spill response plan, make accessible to employees. 3.cover or store sprayer in garage.			Commercial

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53682	11/20/2007	Rancho Verde		no violations, but corrective actions: train employees on SW regs, keep log. 2.create spill response plan and kit. 3.label outdoor storage.			Commercial
53683	11/29/2007	Cardiff Greenhouses	Very clean site, good BMPs.	no violations, but corrective actions: 1.train employees on sw regs, keep log. 2.create spill response kit and plan, make accessible to employees. 3.cover or store sprayer inside.			Commercial
54358	01/31/2008	O & J Growers		no violations, but corrective actions: 1.train employees on SW regs. 2.Clean trash area; consider recycle containers. 3.create spill kit and response plan. 4.cover/remove heavy equipment. 5.remove oil buckets on North side of driveway.	3/3/08 All corrective actions completed except for training log and spill response plan. Emailed copy of red dye letter to Jose.		Commercial
54359	01/29/2008	Tierra Verde Resources Inc.		No violations, but corrective actions: 1.remove paint cans or store inside. 2.create spill response plan for pesticides.			Commercial
54361	01/31/2008	La Costa Flower Shop and Nursery (Gish Foliage)		No violations, but corrective actions: 1.label fertilizer tank 2.cover old equipment.			Commercial
54399	01/31/2008	Brown's Plants		No violations or corrective actions			Commercial
56686	02/01/2008	LLM Landscape Inc.		No violations, but corrective actions: 1.train employees on SW regs. 2.create spill response kit and plan. 3.remove or cover lawn mowers, other equipment. 4.Remove or store all oils under cover w/containment.	See follow up work order 56687 Follow up site inspection. All corrective actions complete. original wo #56686		Commercial

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56688	02/06/2008	Land-Works		No violations, but corrective actions: 1.train employees on SW regs. 2. Create spill kit and response plan.			Commercial
56690	02/11/2008	New Way Landscape and Tree Service		No violations, but corrective actions: 1.train employees on SW regs, keep a log. 2. Create spill kit and response plan.			Commercial
56691	02/01/2008	CM Landscape		No violations, but corrective actions: 1.train employees on SW regs, keep log. 2.create spill kit and plan. 3.pick up litter/trash. 4.lawn mover and other tools.	Original wo #56691 See follow up work order 56692 FU site inspection. corrective actions complete.		Commercial
56693	02/13/2008	Moonlight Motors	Consider power washing w/ containment once or twice a year, as needed.	No violations, but corrective actions: 1.remove or cover chain driven above ground rack. 2.create SOP for lift use and send to City w/in 30 days.			Commercial
68051	03/12/2008	Blue Fin Sushi	This commercial inspection was initiated because of complaints regarding this row of restaurants.	No violations, but corrective actions: 1.train employees on SW regs, keep a log. 2. Create spill response plan.			Commercial
69349	03/13/2008	Passage to India		No violations, but corrective actions: 1.Don't wash or rinse off vehicles unless wash water is collected. 2.Create spill response plan, make accessible to employees. 3.train employees on SW regs, keep log. 4.Dont hose off alley behind restaurant.	All corrective actions complete. See follow up wo 79005. See original WO 69349		Commercial
69350	03/27/2008	Calypso Cafe		No violations, but corrective actions: 1.Obtain spill kit & response plan, make accessible to employees.2.Properly store used wash rags under cover or inside. 3.keep log of employee training.			Commercial
69351	03/11/2008	Rubio's	NOV issued for grease discharge near trash enclosure. Employee was sent to clean the area same day of inspection. NOV signed off on 3/25/08. NOV attached to complaint investigation, not commercial inspection. See SR 53091 and work orders 68096 and 68173	Violation and Corrective actions: 1.train employees on SW regs, keep log. 2.obtain spill kit, spill response plan.3.clean around trash. 4.clean grease from container on outside and in driveway.	3/25/08 Grease cleanup complete. log completed. obtained spill kit. will create spill response plan by 4/1/08. Rubio's inspection was prompted by complaint of grease discharge (SR 53091). They were already on the high priority inspection list though.		Commercial

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69360	02/12/2008	SRF Produce Garden (Self Realization Center)		No violations, but corrective actions: 1.train employees on SW regs, keep log. 2.create spill response kit, plan. 3.install BMPs at drainage locations x2.	All corrective actions complete, except training log and spill response plan- to be done by 4/4/08.		Commercial
69552	03/12/2008	Fire Fly Grill & Wine Bar		Corrective actions are: 1 Keep log of employee training on storm water regulation 2 Create a spill response plan and make it accessible to all employees			Commercial
69554	03/28/2008	7-Eleven #13620		Corrective actions are: 1 Keep log of employee training on storm water regulation 2 Create a spill response plan and make it accessible to all employees			Commercial
69555	04/01/2008	The Chart house		Corrective actions are: 1 Keep log of employee training on storm water regulation 2 Create a spill response plan and make it accessible to all employees 3 clean outside of grease storage area 4 Clean spill in parking lot	4/16/08: all corrective action completed except for the spill response plan requested a sample See original WO 69555		Commercial

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69557	04/16/2008	Beach City Cafe		Corrective actions are: 1 Purchase additional Kitty litter 2 Create a spill response plan and make it accessible to all employees (to be faxed from City)			Commercial
69689	04/23/2008	Chin's Szechwan		No violations, but corrective actions: 1.Train employees on SW regs and keep log. 2.obtain spill response kit and plan. 3.clean grease storage area. 4.contact edco to install lid for trash container.	See Original WO 69689 All corrective actions complete 4/30/08 per Inspector. See FU Work order 69691		Commercial
69694	04/30/2008	Del Taco		No violations or corrective action.			Commercial
69695	04/24/2008	Daphne's Greek Cafe		No violations, but corrective actions: 1. train employees on sw regs and keep log. 2.obtain spill kit.			Commercial
69773	05/07/2008	Paul Ecke Ranch	Follow up to be completed in FY 08-09	No violations, but corrective actions: 1.cover/remove old tractor and misc parts. 2.Replace sand bags @ west entrance/exit. 3.Cover 20yard trash containers. 4.cover/remove gas tanks, provide 2nd containment for vehicles being fueled. 5.erosion NE corner			Commercial

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69776	05/01/2008	Home Depot		No violations, but corrective actions: 1.pick up/clean misc trash around perimeter. 2.train employees on SW regs, keep log. 3.capture wash water while power washing.			Commercial
69777	05/01/2008	Las Olas		No violation or corrective actions.			Commercial
70212	04/24/2008	D street bar and grill		No violations, but corrective actions: 1.train employees on SW regs, keep log. 2.obtain spill kit, response plan. 3.clean trash around trash area. 4.provide overhead coverage and 2nd containment for grease storage.	See original WO 70212. All corrective actions complete on 5/14/08. See FU WO 70213		Commercial
70214	04/30/2008	Oggi's Pizza		No violations, but corrective actions: 1.obtain spill kit. 2.training log. 3.grease service contact info. atlas pumping.	See original WO 70214. All corrective actions complete 5/15/08.		Commercial
70216	04/01/2008	Charlie's by the Sea		No violations, but corrective actions: 1.train employees on SW regs, keep log. 2.clean grease bin and provide 2nd containment. 3.clean trash & debris from trash area, keep lids closed. 4.obtain spill kit and response plan.	See original WO 70216. All corrective actions complete 5/5/08.		Commercial

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70218	04/23/2008	Carl's JR. 181		No violations, but corrective actions: 1. keep log of trained employees (use binder). 2.obtain spill kit and response plan. 3.provide overhead coverage and 2nd containment for grease storage.	6/25/08 Received call from regional manager of M&M Foods stating that they are to construct a grease interceptor on 7/30/08. Gave time extension to 8/15/08 with NOV. See original WO 70218 and follow ups 74832 and 79340 8/25/08 All corrective actions complete.	6/25/2008	Commercial
70219	05/05/2008	Yogi's Sports Bar		No violations, but corrective actions: 1.train employees, keep log. 2.obtain spill kit. 3. Provide overhead cover & 2nd containment for grease. 4.provide maint records for interceptor and grease bin. 5.business license cert.	6/25/08 Site inspection- 2 of 5 corrective actions complete. Issued NOV for others to be completed by 8/1/08. Note- construction of overhead coverage almost complete. See original WO 70219 and follow ups 74835 and 79213 All corrective actions complete.		Commercial
70225	05/06/2008	The Beach House		No violations, but corrective actions: 1.train employees on SW regs, keep log. 2.provide 2nd containment. 3.clean grease from grease storage area. 4.clean trash/recycle area. 5.obtain spill kit. 6.provide grease maint records.	7/28/08 site inspection area cleaned All corrective actions complete 7/28/08. See follow up WO 75496. See original WO 70225.		Commercial
70226	05/08/2008	The Kraken		No violations or corrective actions.			Commercial
70227	05/08/2008	Pipes Cafe		No violations or corrective actions.			Commercial

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70231	05/08/2008	Wendy's #3015		No violations, but corrective actions: 1.obtain spill kit. 2.train employees on SW regs using binder. 3.grease maint information.	All corrective actions complete. See follow up WO 75309 See original WO 70231		Commercial
70233	05/08/2008	Mr. Peabody's	Follow up to be completed in FY 08-09	No violations, but corrective actions: 1.train employees on SW regs, keep log. 2.provide overhead cover for grease. 3.clean grease storage area, capture all wash water. 4.obtain spill kit.			Commercial
70268	05/12/2008	Jack in the Box		No violations, but corrective actions: 1.obtain spill kit. 2.train employees on SW regs, keep log. 3.Clean 2nd tray for grease.	All corrective actions complete. See original WO70268. See follow up WO 75317.		Commercial
70269	05/13/2008	Burger King #3528	Follow up to be completed in FY 08-09. NOV issued in FY 08-09.	No violations, but corrective actions: 1.provide overhead and 2nd containment for grease. 2.clean grease storage area, capture all wash water. 3.train employees on SW regs, keep log.	Business completed corrective actions 3 and 4. Issued NOV to comply by 8/25/08 for 1 and 2, roof and tray for grease storage per ME.		Commercial

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70270	05/13/2008	La Salsa #94		No violations, but corrective actions: 1.obtain spill kit. 2.train employees on SW regs, and keep log.	All corrective actions complete. See follow up WO 75315 See original WO70270		Commercial
70271	05/20/2008	El Nopalito		No violations, but corrective actions: 1.provide overhead and 2nd containment to all grease bins. 2.obtain spill kit. 3.train employees on SW regs, keep log.	All corrective actions complete. See follow up WO 75313 See original WO 70271		Commercial
70416	06/05/2008	Holiday Pet Hotel		No violations, but corrective actions: 1.Train employees on SW regs, keep log. 2. Obtain spill kit, make accessible to employees.			Commercial
70417	06/04/2008	Scripps Memorial Hospital Encinitas		No violations, but corrective actions: 1.Provide overhead cover & 2nd containment for grease. 2.properly store paints & other misc items. 3.provide cover for chemicals for evaporation tower. 4.properly store misc items in gas cage.	All corrective actions complete. See follow up WO 79409 See original WO 70417		Commercial
70418	05/29/2008	Taco Bell		No violations, but corrective actions: 1.train employees, keep log. 2. obtain spill kit.	All corrective actions complete. See FU WO 70419 See original WO 70418		Commercial
70421	06/02/2008	Filiberto's		No violations, but corrective actions: 1.Remove/cover with 2nd containment old grease bins. 2.obtain spill kit.	All corrective actions complete. See follow up WO 79341 See original WO 70421		Commercial
70425	06/02/2008	KC's Tandoor		No violations, but corrective actions: 1.obtain spill response kit. 2. train employees on SW regs.	All corrective actions complete. See follow up WO 75319 See original WO 70425		Commercial
70429	05/05/2008	El Camino Tire		no violations or corrective actions			Commercial
70430	05/06/2008	Ki's Juice Bar and Restaurant		No violations or corrective actions			Commercial

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70431	05/09/2008	Encinitas Japanese Car Specialists		No violations, but corrective actions: 1. use tray for 2nd containment of all liquids.			Commercial
70432	05/12/2008	Cardiff Valero		No violations, but corrective actions: 1. store is under construction/remodel. All construction debris to be removed by 8/6/08.	7/2/08 site inspection area cleaned and BMPs redone All corrective actions complete. See follow up WO 75484 All drainage runs through clarifier. See original WO 70432		Commercial
70433	05/13/2008	Jiffy Lube		No violations, but corrective actions: 1.Obtain spill kit.	All corrective actions complete. See follow up WO 75320 See original WO 70433		Commercial
70434	05/13/2008	Kaito Sushi Restaurant		No violations, but corrective actions: 1.Obtain spill kit. 2. Train employees, keep log.	All corrective actions complete See follow up WO 75314 See original WO 70434		Commercial
70435	05/19/2008	Speedy Tune and Brakes		No violations, but corrective actions: 1. obtain spill kit. 2.train employees, keep log.	All corrective actions complete. See follow up WO 79211 See original WO 70435		Commercial

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70439	05/20/2008	EL Pollo Loco/Fosters Freeze		No violations, but corrective actions: 1. clean trash from dumpster area. 2. train employees on sw regs, keep log.			Commercial
70444	05/21/2008	Panda Express	NOV issued during FY 08-09.	No violations, but corrective actions: 1.obtain spill kit. 2. grease information- last time serviced. 3.address outdoor storage items.	7/14/08 issued NOV for all 3 corrective actions to be completed by 7/20/08. See original wo 70444. See follow up#2 wo 75321 All corrective actions complete. See original WO 70444 and follow up #1 WO 75034		Commercial
70446	05/21/2008	El Torito Market		No violations, but corrective actions: 1.train employees, keep log. 2.obtain spill kit. 3.provide overhead cover and 2nd containment for grease bins. 4.fax most recent grease trap maintenance invoice.	All corrective actions complete. See follow up WO 75312 See original WO 70446		Commercial

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70447	05/21/2008	El Torito		No violations, but corrective actions: 1.Train employees, keep log. 2. fax most recent grease maint info.			Commercial
70448	05/22/2008	Wahoo's fish taco		No violations, but corrective actions: 1. train employees on SW regs, keep log. 2. obtain spill kit.	7/14/08 all corrective actions complete. Manager would like a copy of training CD. See follow up wo 75035 See original wo 70448		Commercial
70449	05/22/2008	Islands Fine Burgers and Drinks		No violations, but corrective actions: 1.train employees, keep log. 2.obtain spill kit.	7/14/08 All corrective actions complete. See follow up work order 75032 See Original WO 70449		Commercial
70450	05/23/2008	Kotija Jr Taco Shop		No violations, but corrective actions: 1.obtain spill kit. 2.train employees, keep log.	6/25/08 All corrective actions complete. use shop vac in drain to clean drive way. all was water collected. See FU WO 74838. See original WO 70450		Commercial
70451	05/28/2008	Sazio Ristorante		No violations or corrective actions.			Commercial
70452	05/29/2008	Pei Wei Asian Diner		No violations, but corrective actions: 1.remove old oil left outside. 2.remove/cover used towel storage. 3.pick up/clean area behind business. 4.obtain spill kit	7/14/08 all corrective actions complete. need to contact property manager to clean storm drain. See follow up wo 75033 See original WO 70452.		Commercial
72489	05/29/2008	Mister Sushi		No violations, but corrective actions: 1.obtain spill kit 2.Provide training log to inspector. 3.provide grease maint info.	All corrective actions complete. See follow up WO 75310 See original WO 72489		Commercial
74495	05/29/2008	Sushi House		No violations, but corrective actions: 1.Obtain spill kit. 2.train employees, keep log. 3.Provide business cert # and exp date.	All corrective actions complete. See follow up WO 75311. See original WO 74495		Commercial

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74496	06/02/2008	Sage Grill		No violations or corrective actions.			Commercial
74837	06/09/2008	Honey Baked Ham		No violations, but corrective actions: 1.Train employees on SW regs and keep log. 2. Keep waste and recycling container lids closed.			Commercial
74839	06/09/2008	Vons # 2351		No violations or corrective actions.			Commercial
74841	06/09/2008	Moonlight Snack Shack		No violations, but corrective actions: 1.train employees on SW regs, keep log. 2. obtain spill kit, make accessible to employees. 3.obtain current bus. cert.	Inspection completed by P&R. All corrective actions complete. See follow up 79036 See original WO 75015.		Commercial
74844	06/10/2008	Flora Bunda Nursery		No violations, but corrective actions: 1.train employees, keep log. 2.obtain spill kit, make accessible to employees. 3.Provide 2nd containment for fertilizer. 4.take steps to address seepage on SE side. 5.keep trash container lids closed.	7/23/08 All corrective actions and recommendations complete, all records kept in water quality notebook. See follow up WO 75307 See original WO 74844		Commercial
74845	06/11/2008	Manhattan Pizza		No violations, but corrective actions: 1.obtain spill kit. 2.train employees, keep log.	All corrective actions complete See follow up WO 79210 See original WO 74845		Commercial
74846	06/16/2008	San Dieguito Transportation		No violations, but corrective actions: 1.Properly store fork lift under cover or indoors. 2.Berm fueling area for unloaded fuel.	7/21/08 Site inspection, all corrective actions complete. See follow up WO75308 See original WO74846		Industrial
74847	06/11/2008	Leucadia Pizzeria		No violations, but corrective actions: 1.train employees. 2.obtain spill kit. 3.clean east storm drain- wood, cig butts. 4.provide 2nd containment and overhead cover for grease bin.	All corrective actions complete. See follow up WO 79344 See original WO 74847		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
74848	06/18/2008	San Elijo JPA (Water reclamation facility)		No violations, but corrective actions: 1.Address possible erosion from pipe construction off of "barn". 2.cover or remove micro turbine. 3.address roof drain on boiler room (east building).	Received email from JPA with photos attached showing that all corrective actions have been completed. See follow up WO 75583 See original WO 74848		Industrial
74849	06/19/2008	Henry's #123	NOV issued in FY 08-09.	No violations, but corrective actions: 1.train employees, keep log. 2.clean storm drain grate in loading area.3.dry clean/wash and capture water in trash compactor area.4.cover outdoor machines, misc parts.5.provide overhead cover for grease bin.	All corrective actions taken except overhead coverage for grease storage. Issued NOV to comply by 8/29/08. See follow up work orders79457 and 79458. See original WO 74849		Commercial
74859	06/19/2008	Little Oaks Equestrian Park	Inspection by P&R	No violations or corrective actions.			Municipal
74860	06/19/2008	Cottonwood Creek Park	Inspection by P&R	No violations or corrective actions.			Municipal
74923	06/19/2008	Sun Vista Park	Inspection by P&R.	No violations or corrective actions.			Municipal
74944	06/19/2008	Wiro Park	Inspection by P&R.	No violations or corrective actions.			Municipal
74945	06/20/2008	Cardiff Sports Park	Inspection by P&R.	No violations or corrective actions.			Municipal
74949	06/20/2008	Cardiff S.P. Expansion	Inspection by P&R.	No violations, or corrective actions.			Municipal
74951	06/23/2008	Lopez Flowers		No violations, but corrective actions: 1.train employees on SW regs, keep log. 2.obtain spill kit. 3.cover or store inside all tractors & machine parts. 4.spread out or cover stock piles of soil.	All corrective actions complete. See follow up WO 75482 See original WO 74951.		Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
74955	06/23/2008	Juanita's Tacos		No violations, but corrective actions:1.don't allow wash water to discharge off site. 2.clean outside of grease bin cover (using dry methods or containing wash water).3.obtain spill kit.4.Train employees.5.fax copy of grease intercept maint. to City.	All corrective actions complete. See follow up WO 79212 See original WO 74955		Commercial
74956	06/23/2008	Seedling express, Inc.		No violations, but corrective actions: 1.train employees.2.obtain spill kit.3.provide 2nd containment for port-a-potty.4.clean storm drain inlets.5.cover or remove machines and machine parts.	All corrective actions complete. See follow up WO 75483 See original WO 74956		Commercial
74958	06/23/2008	Ralph's Supermarket		No violations, but corrective action: 1.keep trash dumpster lids closed.			Commercial
74959	06/23/2008	Via Italia trattoria		No violations, but corrective actions:1. fax most recent grease inter cleaning receipt to city. 2.train employees on SW regs, keep a log. 3. obtain spill kit.	All corrective actions complete. See follow up WO 79343 See original WO 74959		Commercial
74963	06/24/2008	Mira costa college	Follow up to be completed in FY 08-09	No violations, but corrective actions: 1.Provide overhead cover and 2nd containment for grease storage.2.cover/store inside tractors, forklifts, and other misc part and metals. 3.provide 2nd containment for port-a-potty. 4.replace sandbags sw corner.			Commercial
75004	06/03/2008	City of Encinitas Calle Magdalena Yard-Public Works	Inspection by PW- Streets.	No violations, but corrective actions: 1.store heavy equipment & vehicles under cover. 2.label storage containers. 3.replace BMPs around inlets.	All corrective actions complete. See follow up WO 79410 See original WO 75004		Municipal
75005	06/03/2008	City of Encinitas Pacific View Yard- Public Works	Inspection by PW- Streets	No violations or corrective actions. Clean Water to provide training logs/education. City will be moving from yard in 30 days.			Municipal

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
75006	06/03/2008	City of Encinitas Requeza Yard- Public Works	Inspection by PW- Streets.	No violations, but corrective actions: 1.cover metal guard rail. 2.remove/cover hydrants/AC pipe. 3.2nd containment on port-a-potty. 4.remove barrels.	All corrective actions complete. See follow up WO 79411 See original WO 75006		Municipal
75009	06/05/2008	City of Encinitas A Tank Site- Public Works	Inspection by PW- Streets.	No violations, but corrective actions: 1.pick-up trash. 2.cover metal/equipment. 3.obtain spill kit.	All corrective actions complete. See follow up WO 79412 See original WO 75009		Municipal
75010	06/06/2008	City of Encinitas Wastewater Collection Facility	Inspection by PW- Streets.	No violations, but corrective actions: 1.cover all metal.	All corrective actions complete. See follow up WO 79413 See original WO 75010		Municipal
75011	06/20/2008	Orpheus Park	Inspection by P&R.	No violations, but corrective action: Clean sediment out of landscape drains around playground.	All corrective actions complete. See follow up WO 79616. See original WO 75011		Municipal
75012	06/20/2008	Mildred Macpherson Park	Inspection by P&R.	No violation or corrective actions.			Municipal
75014	06/20/2008	Glen Park	Inspection by P&R.	No violations or corrective actions.			Municipal
75015	06/23/2008	Moonlight Beach	Inspection by P&R. No address point for MLB, so inspection is attached to the Snack Shack.	No violations, but corrective actions: 1.make sure litter collected and removed. 2.storm drain cleaning referred to Clean Water/Wastewater.	Inspection completed by P&R. All corrective actions complete. See follow up WO 79615 See original WO 75015.		Municipal

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
75020	06/24/2008	Vons #2144		No violations or corrective actions.			Commercial
75021	06/24/2008	La Especial Norte		No violations, but corrective actions: 1.train employees on SW regs, keep log. 2.Complete spill kit. 3.post spill response plan.			Commercial
75022	06/24/2008	Le Papagayo		No violations, but corrective actions: 1.train employees, keep log. 2.clean grease on ground near bin. 3.obtain spill kit. 4.carry grease to bin in a sealed container. 5.obtain grease interceptor cleaning company.	Some corrective actions complete. Issued NOV to obtain spill kit, empty grease storage bin, and provide grease container information. NOV is attached to complaint work order 79348. See follow ups 79345 and 79346 8/21/2008 All corrective actions complete. See original WO 75022		Commercial
75023	06/25/2008	Williamson Produce		No violations, but corrective actions: 1.obtain spill kit. 2.cover/remove old parts, machines, other metals. 3.label fertilizer containers. 4.train employees, keep log. 5.fix leak on water filter.	All corrective actions complete. See follow up WO 75023 See original WO 75023		Commercial
75024	06/26/2008	Trattoria i Trulli		No violations or corrective actions.			Commercial
75025	06/26/2008	Robbie's Roadhouse		No violations, but corrective actions: 1.provide coverage for ash trays in rear. 2.obtain spill kit.	Site inspection still need spill kit. See follow up WO 79342 See original WO 75025		Commercial
75026	06/26/2008	Nrgize Lifestyle Cafe		No violations or corrective actions.			Commercial
75027	06/26/2008	Miyabi		No violations, but corrective actions: 1.obtain spill kit. 2.train employees on SW regs, keep log.	6/30/08 Received kitty litter receipt.		Commercial
75028	06/26/2008	City of Encinitas City Hall		No violations or corrective actions. Currently under construction, to be completed within 30 days.			Municipal
75029	06/26/2008	Kealani's		No violations or corrective actions.			Commercial

WOID	INSPECTION DATE	Business Name	Comments	Corrective Action	Follow-Up	NOV Date	Type
75036	06/26/2008	Mandarin Oriental		No violations or corrective actions.			Commercial
75298	06/23/2008	Encinitas Viewpoint Park	Inspection by P&R.	No violations or corrective actions.			Municipal
75299	06/23/2008	Scott Valley Park	Inspection by P&R and CWP Inspector. Dripping water fountain.	No violations or corrective actions.			Municipal
75301	06/24/2008	Hawkview Park	Inspection by P&R	No violations or corrective actions.			Municipal
75302	06/25/2008	Leucadia Oaks Park	Inspection done by P&R	No violations or corrective actions.			Municipal
79445	06/23/2008	Paul Ecke Sports Park		No violations, but corrective actions: 1.maintain trash enclosure area free of litter/debris, keep lids closed. 2.obtain spill kit. 3.clean sediment/debris out of storm drains. 4.reduce over-irrigation on north slope behind ball fields.	Follow up inspection completed by P&R 8/28/08. All corrective actions complete. See follow up WO 79454 See original WO 79445.		Municipal
79455	06/26/2008	Oakcrest Park		No violations, but corrective actions: 1.provide appropriate BMPs for sediment stockpile in park. 2.clean up litter and debris in picnic area. 3. obtain spill kit for outdoor storage area.	Follow up inspection completed by P&R on 8/28/08. All corrective actions complete. See follow up WO 79456 See original WO 79455.		Municipal
79621	06/26/2008	Leo Mullen Sports Park		No violations, but corrective actions: 1.Erosion BMPs on hillside located in between soccer field and baseball fields needs to be replaced prior to wet season.	Inspection completed by P&R. Planting is in progress on bank between fields and will be complete before 10/1/08. See follow up WO 79622 See original WO 79621		Municipal
79623	06/26/2008	Las Verdes Park		No violations, but corrective actions: 1.clean out storm drains that have sediment and debris.	Inspection completed by P&R. Storm drains have been cleaned and are cleaned weekly and as needed. See follow up WO 79624 See original WO 79623		Municipal
Total:	**193**						

COMMERCIAL INVENTORY – MOBILE BUSINESSES

Facility Name	Address	Type	SIC	Activity Description
DAWGS	379 Trailview Rd	Animal Facilities	0752	Pet grooming
Deborah Ptashne Grooming	2013 San Elijo Ave	Animal Facilities	0752	Pet grooming
Mobile Pet Grooming	34189 Pacific Coast Hwy, Dana Point, CA	Animal Facilities	0752	Pet grooming
Your Fairy Dogmother	946 Woodgrove Dr	Animal Facilities	0752	Pet grooming
L. Wicks	804 Saxony Rd	Auto Repair/Maintenance	7538	Auto repair and maintenance
Mercedes West Auto Wholesale	2026 Oxford Ave	Auto Repair/Maintenance	5511	Auto sales and maintenance
Reed Motors	1326 Rainbow Ridge Ln	Auto Repair/Maintenance	7538	Auto repair and maintenance
Wallace Courier	523 Samuel Ct	Auto Repair/Maintenance	4215	Transport services and auto maintenance
Whalen Performance	1726 Avenida Melodia	Auto Repair/Maintenance	7538	Auto repair and maintenance
Add Style Designs	607 N Vulcan Ave	Contractor	1521	General contractor primarily engaged in construction single-family houses.
All Cities Construction Services	729 Requeza St	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Beeson Squared Construction	1572 Caudor St	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Brian Building Corporation	1009 Hurstdale Ave	Contractor	1521	General contractor primarily engaged in construction single-family houses.
C.E. Wylie Construction Company	3777 Ruffin Rd, San Diego 92123	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Colt Construction & Development	709 Cathy Ln	Contractor	1521	General contractor primarily engaged in construction single-family houses.
CTM	1553 Avenida De Las Lilas	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Custom Builders	1347 Summit Ave	Contractor	1521	General contractor primarily engaged in construction single-family houses.
D. Bell Construction, Inc.	1539 Caudor St	Contractor	1521	General contractor primarily engaged in construction single-family houses.
D.H. Construction	477 Delage Ct	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Daniels Construction	2105 Montgomery Ave	Contractor	1521	General contractor primarily engaged in construction single-family houses.
De Pascale Construction, Inc.	555 Second St #4	Contractor	1521	General contractor primarily engaged in construction single-family houses.

COMMERCIAL INVENTORY – MOBILE BUSINESSES

Facility Name	Address	Type	SIC	Activity Description
Dry Wall Doctor (Tom Penna Construction)	476 La Mesa Ave	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Eragon Restoration	unknown	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Finishing Touch Molding, Inc.	921 Hymetus Ave	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Peruvian Builders	349 Village Run East	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Red Point Homes, Inc.	609 S. Vulcan Ave #302	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Robert Tessieri Construction	1743 Le Gaye Dr	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Roof Rite	1216 Tower Dr (not in Encinitas)	Contractor	1521	General contractor primarily engaged in construction single-family houses.
The Crest Company	1265 Rubenstein Ave	Contractor	1521	General contractor primarily engaged in construction single-family houses.
Van Veen Team	1145 Aloha Dr	Contractor	1521	General contractor primarily engaged in construction single-family houses.
VCI Telcom	1921 W 11th St, Upland, CA 91786	Contractor	1521	General contractor primarily engaged in construction single-family houses.
West Coast Comfort	4709 Morning Canyon Rd	Contractor	1521	General contractor primarily engaged in construction single-family houses.
William B. Hannon General Construction	1748 Lake Dr	Contractor	1521	General contractor primarily engaged in construction single-family houses.
All Cities Hauling	937 Woodlake Dr	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Bart Forry	404 Encinitas Blvd #203	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Belman Handyman	738 Snapdragon St	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Blade Dufour Handyman Service	905 Woodlake Dr	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
California Maids Home Services	885 Del Rio	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Coast Transportation	1990 Country Grove Ln	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Encinitas Handyman Biz	1555 Bella Vista	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs

COMMERCIAL INVENTORY – MOBILE BUSINESSES

Facility Name	Address	Type	SIC	Activity Description
Fernando J.C.	1168 Arcadia Rd	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
G B Enterprises	1106 Second St	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Gary Wesley Handyman	1813 N Vulcan Ave	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
H.S. Solutions	731 Snapdragon St	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Home Maintenance Services	842 Bonita Dr #A	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Jorge Mendoza	953 Nardo Rd	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
M H S Works	1008 Cottage Way	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
M.G. Handyman Work	2057 Village Pkwy #204	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Maria Zavala	961 Melba Rd	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Maurice's Handyman Services	1190 Encinitas Blvd P167	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Michael E. Greiff	1448 Caminito Septimo	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Mike Hidalgo, Inc.	119 Europa St	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
North County Hauling Service	1117 Woodlake Dr	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Owens Co.	18525 Aliso Canyon Rd	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Pacific Roof Cleaning	1571 Avenida De Las Lilas	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Patra Cruz	351 Countrywood Ln	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Patrice Alexander	2437 Oxford Ave	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Patrick W. Quinlan Handyman	454 Requeza St #320a	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Phil's Handyman Service	1726 Old Mill Rd	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs

COMMERCIAL INVENTORY – MOBILE BUSINESSES

Facility Name	Address	Type	SIC	Activity Description
R. K. Enterprises	658 Santa Fe Dr	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Salo Custom Woodwork	1549 N Vulcan Ave #54	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Scot Enterprises	454 Requeza St #130C	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
Short People Services	116 Quail Gardens #137	Handyman	1799	Contractor primarily engaged in minor construction work and home repairs
10-C'S Landscape Enhancements	1301 Trabert Ranch Rd	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Alfonso Rey Landscape Maintenance	351 Sprucewood Dr	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Arnulfo Medina Landscaping	1408 Hermes Ave, Ste A	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Benny's Gardening	1055 Evergreen Dr	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Carrillo Tree Maintenance	794 Clark Ave	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Coco's Landscape and Maintenance	1939 Playa Riviera Dr	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Dave Steinbis Landscape Maintenance	699 N Vulcan Ave, Ste 127	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Felix Sanchez Gardening Service	880 Del Rio Ave	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
G. K. Landscape	244 Second St, Ste E	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Galapacifica Landscape	253 Mangano Cir	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Greg Stone Landscape Architects	69 Mcneill Ave	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Gresham Gardens & Consulting	1734 Noma Ln	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.

COMMERCIAL INVENTORY – MOBILE BUSINESSES

Facility Name	Address	Type	SIC	Activity Description
Hauling And Landscaping.Com	1133 Gardena Rd	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
J A Landscape	2068 Bulrush Ln	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
L.B. Designs	837 Stratford Dr	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Luis Maldonado	1041 San Andrade Dr, Ste A	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Miguel's Landscaping	1105 Regal Rd	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Mijangos Landscaping	1608 Charro St	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Mike Hirsch	753 Requeza St	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
pacific View Landscapes	2444 Manchester Ave	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Sinclair Grounds Maintenance	454 Requeza St	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
U P E Resources / Tree Elements	1624 Olmeda St	Landscaping	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
Miramontes Masonry	3726 Sage Canyon Dr	Masonry	1741	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
San Diego Stone Care/H.S. Solutions	731 Snapdragon St	Masonry	1741	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
American Auto Detailing	3016 Azahar St, Carlsbad 92009	Mobile Auto Washing	7542	Mobile auto washing and detailing
Herbie Auto Mobile Detailing	141 Grandview St, Apt 13	Mobile Auto Washing	7542	Mobile auto washing and detailing
Mobile Shine Detailers	3320 Calle Sand Blast	Mobile Auto Washing	7542	Mobile auto washing and detailing
Santa Fe Detailing	1280 Santa Fe Dr	Mobile Auto Washing	7542	Mobile auto washing and detailing
A & M Window Cleaning	1125 N Vulcan Ave #26	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
All In Carpet Cleaning	720 Devonshire Dr	Mobile Cleaning	7217	Cleaning of interior retail or residential spaces.
Anonymous Window Cleaning	1727 Le Gaye Dr	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
Aztech Cleaning Services	1627 Valleda Ln	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
Beyond Industrial Cleaning	945 Woodgrove Dr	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.

COMMERCIAL INVENTORY – MOBILE BUSINESSES

Facility Name	Address	Type	SIC	Activity Description
Bob's Carpet Care	336 Sanford St	Mobile Cleaning	7217	Cleaning of interior retail or residential spaces.
Carpet Cleaning	Vista, Ca	Mobile Cleaning	7217	Cleaning of interior retail or residential spaces.
Claudia Nelson's Housekeeping	1338 Mackinnon Ave	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
Clean Sense Carpet Cleaners	328 1/2 La Mesa	Mobile Cleaning	7217	Cleaning of interior retail or residential spaces.
Clear Choice Window Cleaning	138 Diana St	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
Encinitas Janitorial Service	699 N Vulcan Ave	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
Gilbert's Janitorial Service	PO Box 1877, Oceanside 92054	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
Guillermina's Housekeeping	1253 Orkney Ln	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
Montano's House Cleaning	704 Regal Rd #C-12	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
Rug Doctor	9630 Black Mountain Rd, Ste K, San Diego 92126	Mobile Cleaning	7217	Cleaning of interior retail or residential spaces.
Sunny Window Cleaning	404 Encinitas Blvd #345	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
Terry's Cleaning Service	2157 Pleasant Grove Dr	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
Velasquez Maintenance, LLC	1902 Paxton Way	Mobile Cleaning	7349	Cleaning of interior retail or residential spaces.
Beemer Coatings	152 Coop Ct	Painting/Coating	1721	Painting of interior and/or exterior buildings
F & V Painting, Inc. DBA Certapro	1340 Ravean Ct	Painting/Coating	1721	Painting of interior and/or exterior buildings
Kessing Painting	261 Caliban Ct	Painting/Coating	1721	Painting of interior and/or exterior buildings
Mr. Paint	404 Encinitas Blvd, Ste 228	Painting/Coating	1721	Painting of interior and/or exterior buildings
Absolute Perfection Fountain	730 Third St	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance
Aqua Tech Pool Care	233 Delphinium St	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance
Blue Water of La Jolla Pool Service	2008 Wandering Rd	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance
Crown Pool and Landscape	2126 Via Tiempo	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance
Del Rancho Pools	1315 Encinitas Blvd	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance
Jamie's Pool Service	1265 Rubenstein Ave	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance
Kohler Pool Service & Supply	368 N El Camino Real	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance
Leslie's Pool Supply	270 N El Camino Real, Ste G & H	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance
Mayer Pool Service	1553 Plumtree Dr	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance
Pacific Coast Pool Service	1439 Linda Sue Ln	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance

COMMERCIAL INVENTORY – MOBILE BUSINESSES

Facility Name	Address	Type	SIC	Activity Description
Ranch and Sea Pool Care	1686 Falcon Hill Ct	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance
S.S. Pool Service	1125 Woodlake Dr	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance
Wilson Pools Plus	1530 Burgundy Rd	Pool/Fountain Cleaning	7389	Swimming pool and fountain cleaning and maintenance

Appendix E

Residential

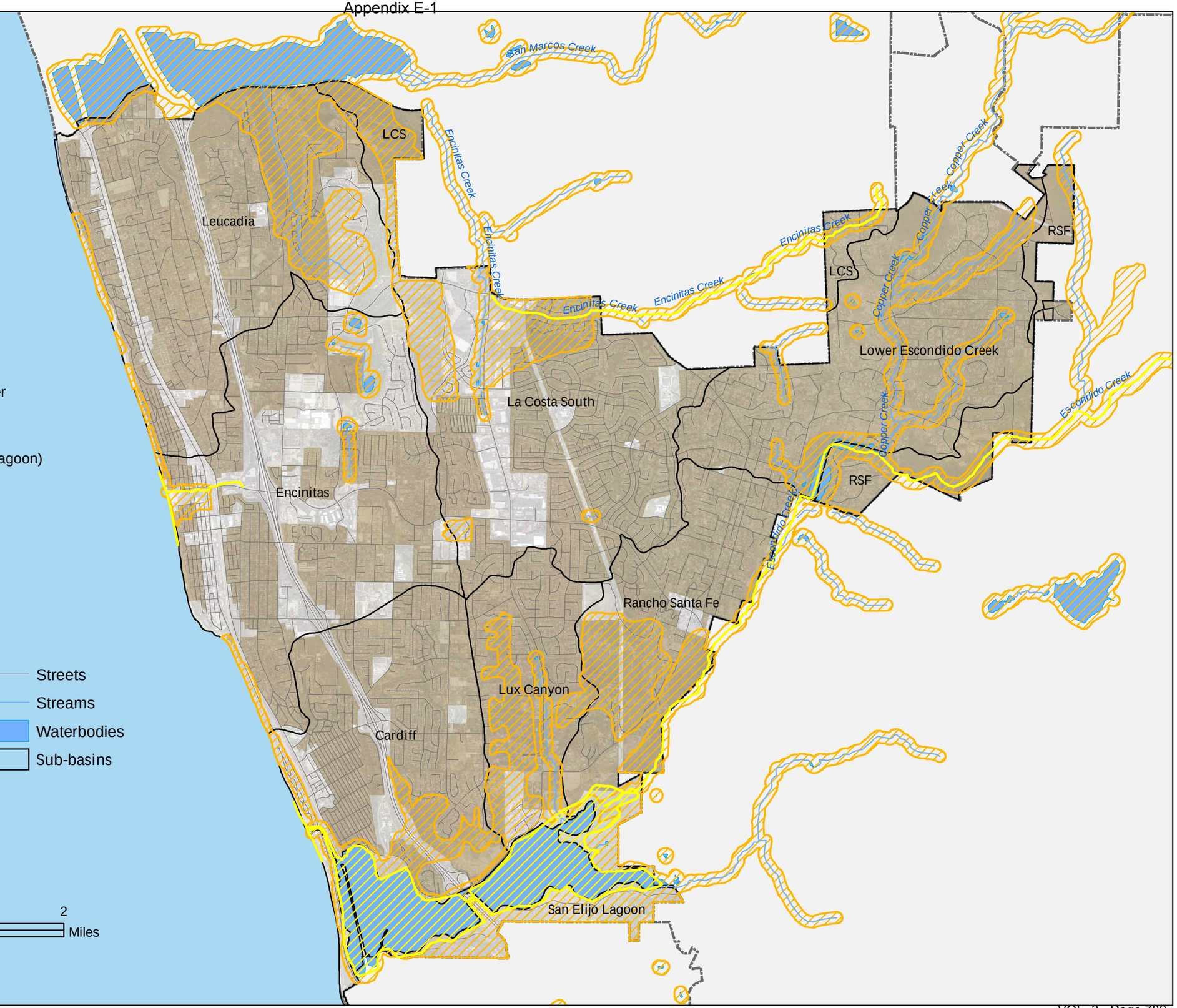
E-1 Map of High Threat to Water Quality Residential Areas

City of Encinitas

High Threat to Water Quality Residential Areas

High Threat to Water Quality Residential Areas in the City of Encinitas include:

- All residential areas within 500ft of any 303(d) listed water body or lagoon
- All residential areas within, directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an ESA
- The residential area to the west of Interstate 5 within the Cardiff sub-basin (drains to San Elijo Lagoon)
- The residential area south of Sylvia St, west of Second Street, and north of K Street (drains to Cottonwood Creek and Moonlight Beach)



Residential Areas
303(d) listed streams
303(d) listed waterbodies
Environmentally Sensitive Areas
Streets
Streams
Waterbodies
Sub-basins

0 0.5 1 2 Miles

Appendix F

Education

F-1 **Regional Mobile Business Outreach and Education Plan**

F-2 **NCSWP Construction Brochure**

F-3 **City of Encinitas Brochures (English/Spanish)**

F-4 **Encinitas Environmental Services Guide**

F-5 **New giveaway items developed for FY 2007-08**

F-6 **NCSWP Pet Waste Survey and Results**

F-7 **Regional Residential Education Plan**

Regional URMP Attachment 5.0

Regional Mobile Business Outreach and Education Strategy

FINAL - March 20, 2008

Submitted by the San Diego Stormwater Copermittees in partial fulfillment of the requirements of San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (the San Diego Municipal Stormwater Permit)

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1.0 INTRODUCTION

This document describes a **Regional Mobile Business Outreach and Education Program** to be collaboratively conducted by the Copermittees of NPDES Order No. R9-2007-0001 (Permit). It was developed by the Mobile Business Subcommittee of the Copermittees' Outreach Workgroup. Permit section D.3.b.(4)(a) requires that each Copermittee develop and implement a program to reduce the discharge of pollutants from mobile businesses to the MEP. Section D.3.b.(4)(b) further states "if they choose to, the Copermittees may cooperate in developing and implementing their programs for mobile businesses, including sharing of mobile business inventories, BMP requirements, enforcement action information, and education." Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the Copermittees have chosen to collaborate on a regional mobile business outreach and education strategy. It addresses the following elements:

- Inventory Development and Maintenance;
- Establishment of Minimum BMP Requirements; and
- Outreach and Education (Including Business Notifications).

Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this Strategy.

2.0 SOURCE CHARACTERIZATION

Mobile businesses provide services at offsite locations rather than from fixed bases of operation. Services may be provided at, but are not limited to, residential, industrial, municipal, and commercial areas. Permit Section D.3.b.(1), identifies 12 categories of mobile business types that will be addressed as part of this regional Strategy. Table 1 identifies these businesses types and the potential pollutants associated with each. Additional characterization and description of these sources will be conducted during the development and implementation of the regional program elements described in Section 2.0

Table 1 – Identification of Mobile Business Types and Associated Pollutants-of-Concern

Source Type	Bacteria	Metals	Pesticides	Sediment	Trash	Nutrients	Organics	Oil/Grease
1. Auto Repair, Maintenance, Fueling, Cleaning		X		X	X		X	X
2. Equipment repair, maintenance, fueling, or cleaning		X		X	X		X	X
3. Mobile automobile or other vehicle washing		X		X	X		X	X
4. Pest control services		X	X				X	
5. Mobile carpet, drape or furniture cleaning							X	
6. Cement mixing or cutting				X		X	X	
7. Masonry				X		X	X	
8. Painting and coating		X			X		X	
9. Landscaping	X	X	X	X		X	X	
10. Pool and fountain cleaning		X		X		X	X	
11. Portable sanitary services	X				X	X	X	
12. Power washing services	X	X	X	X	X	X	X	X

3.0 REGIONAL PROGRAM ELEMENTS

The Regional Mobile Business Outreach and Education Program will consist of several elements to be developed and implemented by June 2010.

3.1 Inventory Development and Maintenance

Permit section D.3.b.(1) requires that each Copermittee keep as part of its commercial sources inventory a listing of mobile businesses known to operate within its jurisdiction, and section D.3.b.(4)(b) encourages Copermittees to share these inventories. In addition to sharing inventory information, the Copermittees have determined that the collaborative development of a shared regional inventory would promote consistency in the regulation of mobile businesses, and would promote cost-efficiency by eliminating redundancy between individual inventories and avoiding duplicative notifications. The Copermittees

intend to utilize a consultant to compile this inventory. It is expected to be completed by June 2009. Prior to the completion of a shared inventory, the Copermittees will continue to meet the requirements of section D.3.b.(4)(b) by individually maintaining and updating as necessary their existing jurisdictional mobile business inventories. These will be used as a starting point for the development of a consolidated inventory. The consultant will also be tasked with researching other information sources such as unlicensed mobile businesses operating within the County, as well as with managing updates to the inventory in subsequent years.

3.2 Establishment of Minimum BMP Requirements

Permit section D.3.b.(4)(a)i requires that Copermittees develop and implement minimum standards and BMPs to be required for each of the various types of mobile businesses. The Copermittees also intend to collaborate in the development of a minimum set of BMP standards for each type of mobile business addressed through the regional effort. Existing resources such as jurisdictional minimum BMPs, the Project Clean Water Clean Water Tool Box (http://www.projectcleanwater.org/bmp/) and the Think Blue website (http://www.sandiego.gov/thinkblue) will be reviewed by the Copermittees in developing these common standards. A consultant may also be utilized for BMP development support. This task is expected to be completed by June 2009.

3.3 Outreach and Education Strategy

Permit section D.3.b.(4)(a)iv requires that Copermittees develop and implement an outreach and education strategy for mobile businesses. A variety of educational methods and approaches will likely be utilized in complying with this requirement. These will be determined by the Copermittees during the development of this task. The centerpiece of the Copermittees' education strategy will be business notifications. This element is described further below.

3.4 Business Notifications

Permit section D.3.b.(4)(a)iii requires that, within the first three years of implementation of the updated JURMP, each Copermittee must notify the owner/operator of each

inventoried mobile business their minimum standards and BMP requirements and local ordinances. The Copermittees will collaboratively develop and implement a regional notification strategy to inform mobile businesses of their obligation to comply with the local ordinances of the jurisdictions where they operate. In addition to assisting in the development of this strategy, the consultant will be tasked with notifying businesses and tracking when and how they were notified. Potential notification options include mailing, emailing, workshops, and website posting. This task will be completed no later than March 24, 2011, but is targeted for completion by March 2010.

3.5 Implementation Schedule

Implementation of the Regional Mobile Business Outreach and Education Program will begin during FY 08/09, with all major tasks targeted for completion by the end of FY 2009/10. The consultant may also be retained for future management of the inventory and other tasks as needed. Major milestones are summarized below.

FY 2008/09

- Consultant selection by Subcommittee
- Completion and maintenance of regional inventory by consultant
- Development of regional minimum BMPs

FY 2009/10

- Notification of businesses by consultant (by January 2010)
- Final report including status of notifications submitted to Copermittees

4.0 INDIVIDUAL COPERMITTEE RESPONSIBILITIES

Although many of the specific requirements of Permit section D.3.b.(4)(a) will be collaboratively addressed through the completion and implementation of the Regional Mobile Business Outreach and Education Program, the responsibility for ensuring individual Permit compliance ultimately remains with each Copermittee. These responsibilities are briefly discussed below.

4.1 Inspections and Enforcement

Permit section D.3.b.(4)(a)ii requires that Copermittees develop and implement an enforcement strategy which specifically addresses the unique characteristics of mobile businesses operating within their jurisdictions. Section D.3.b.(4)(a)v further requires that Copermittees conduct inspections of mobile businesses as needed (e.g., on a complaint basis). The Regional Mobile Business Outreach and Education program will not address inspections or enforcement of mobile businesses; these responsibilities are retained individually by each Copermittee.

4.2 Education and Outreach

Copermittees are expected to participate as requested in the development of the Education and Outreach Strategy described in Section 3.3 above. Individual Copermittees may also have specific needs or requirements not addressed through this effort. Each jurisdiction retains the responsibility for developing additional education programs or strategies in accordance with their own needs, and as necessary to ensure their own Permit compliance.

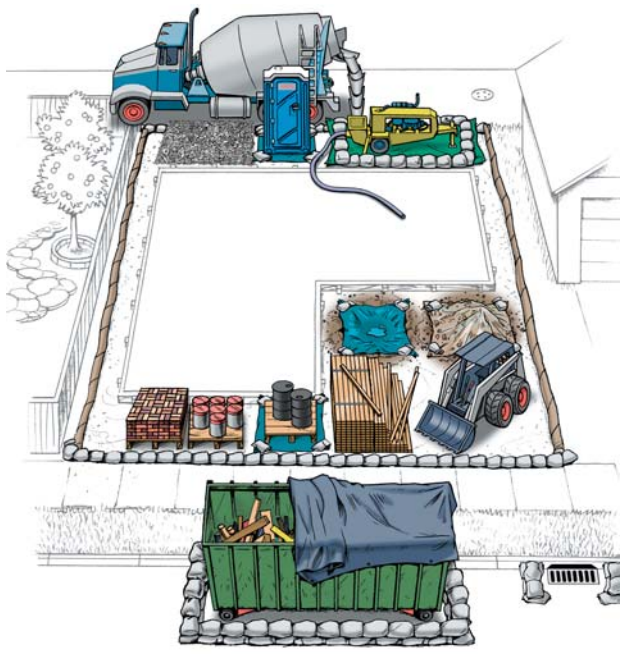
4.3 Inventory Updates

As described in Section 3.1 above, individual Copermittee mobile business inventories will initially be used as a starting point for the development of a consolidated regional inventory. Copermittees are expected to make their inventories available as requested, and to provide updated information as determined necessary for future updates.

4.4 BMP Requirements

Copermittees are expected to make their jurisdictional BMPs and requirements available as requested during the development of regional standards and program content. The Regional Mobile Business Outreach and Education Program will emphasize standardized, common content. In the event that an individual Copermittee determines that their specific requirements are not adequately addressed by the Regional Program, they will be responsible for completing additional notifications or other needed measures.

A Pollution Prevention Guide for the Construction Industry



North County Storm Water Program

Carlsbad • Del Mar • Encinitas • Oceanside
• San Marcos • Solana Beach • Vista

Only Rain in the Storm Drain

Water Quality Regulations for Construction Sites

Dear Contractor,

The North County Storm Water Program (NCSWP) is a collective of jurisdictions in northern San Diego County working together to protect our watersheds. We believe that reducing pollution is critical to maintaining our communities' way of life.

It is our hope that this brochure will help you identify activities that are recognized to cause water pollution and implement appropriate Best Management Practices (BMPs) to minimize their impact. By providing you with these tools, we hope to make your job easier while keeping our waterways clean.

Each jurisdiction will be inspecting their construction sites to ensure the protection of water quality. We look forward to seeing the BMPs presented in this brochure implemented at your sites.

Together we have the ability to preserve and improve the quality of life in our communities.

Sincerely,

The North County Storm Water Program

Contact Phone Numbers:

City of Carlsbad
760-602-2719

City of San Marcos
760-744-1050

City of Encinitas
760-633-2787

City of Del Mar
858-755-9313

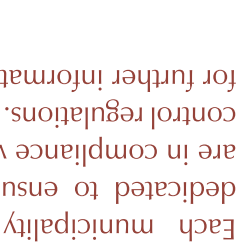
City of Oceanside
760-435-5800

City of Solana Beach
858-720-2470

City of Vista
760-726-1340

Water Quality Regulations for Construction Sites

In 1972, the Environmental Protection Agency developed regulations to control water pollution. As a result, the National Pollutant Discharge Elimination System (NPDES) Permit was created. NPDES permits are issued to municipalities as well as construction sites. In addition to complying with local regulations, which are governed by our municipal NPDES permit, you may be required to obtain a permit through the State of California under the State General Construction Permit (99-08-DWQ). All construction sites over one acre are required to obtain coverage under this permit.



Construction sites can contribute pollutants, such as sediment, metals, and chemicals, to our local creeks, rivers, lakes, lagoons, and ocean. These pollutants make their way down our streets and into storm drains, eventually discharging to the nearest body of water.

All construction sites are required to implement Best Management Practices (BMP) to prevent storm water pollution. This brochure is intended to assist your construction site in understanding BMP requirements.

Each municipality has one or more persons dedicated to ensuring that all construction sites are in compliance with state and local storm water control regulations. Contact your local municipality for further information.

Right-of-Way Permitting

We understand that there are times when space on construction sites is limited. If at any point, you (as a contractor or subcontractor) need to use the public right-of-way in order to work or store materials, you must apply for a special permit. This permit allows you to use the City's right-of-way, and describes what is required to prevent illegal contaminants from entering local storm drains. For more information or to obtain a permit application contact your local jurisdiction.



Inspection and Enforcement Program

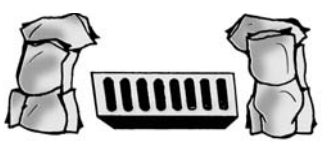
Each jurisdiction has established an enforcement program to ensure that all businesses operate in compliance with all appropriate storm water laws and other City requirements. Contractors, site supervisors and property owners can be held responsible for violations, which may lead to a civil penalty of up to $10,000 per day and/or reimbursing the local jurisdiction for all expenses associated with clean up.



Best Management Practices

Construction materials such as paint, dirt and trash often find their way into our storm drains, polluting the environment and jeopardizing our creeks, rivers, lakes, lagoons, and ocean.

The NCSWP is working with contractors to implement what are known as Best Management Practices (BMPs) on all construction sites. That is, methods used to keep pollution out of our storm drains and off public property, such as sidewalks, streets, parkways and alleys. Carrying out and maintaining these BMPs on the construction site is critical to protecting our ocean and lagoons.





The following is a list of BMPs and pollution prevention measures that shall be implemented at all construction sites:

1. **Conduct daily site cleanings.**
2. **Develop spill response and containment procedures.**
3. **Educate employees and subcontractors about BMPs.**
4. **Develop an erosion control plan for wind and rain.**
5. **Regularly maintain all BMPs at project site.**

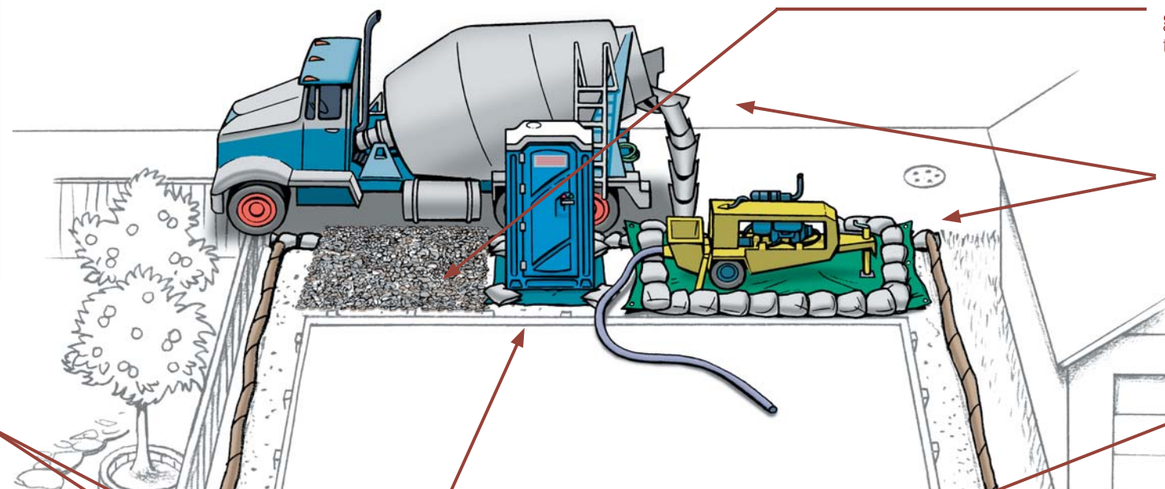
Best Management Practices

Site Overview

Protecting our water resources improves our quality of life and preserves the local environment for our children and future generations.

Untreated storm water and/or unintentional spills at work sites can flow into storm drains and pollute creeks, rivers, lakes, lagoons or the ocean. These discharges are prohibited by law.

The following drawing illustrates Best Management Practices (BMPs) that are recommended for construction sites in North County cities to protect storm drains and minimize pollution. Please check for local requirements.



Materials Storage

All building materials and fuel stored on the site must be contained and covered. It is illegal for contractors to wash out paint brushes in the street or dump any residues in the storm drain. Paint brushes and spray guns must be contained and disposed of properly.

Tracking Controls

All entrances and exits on the site must have coarse gravel or steel shaker plates to limit offsite sediment tracking.

Concrete Trucks/Pumpers

Pumpers must be surrounded by perimeter controls, such as gravel bags. Plastic sheets also must be placed beneath concrete pumpers at all times., and residual materials must be cleaned up as well. Washout areas must be used whenever cleaning trucks.

Washout area

The disposal of "wet" construction materials should be handled in the washout area. This includes paint, stucco and concrete. Use a berm and/or plastic


Mantenimiento
Automotriz
Automotive

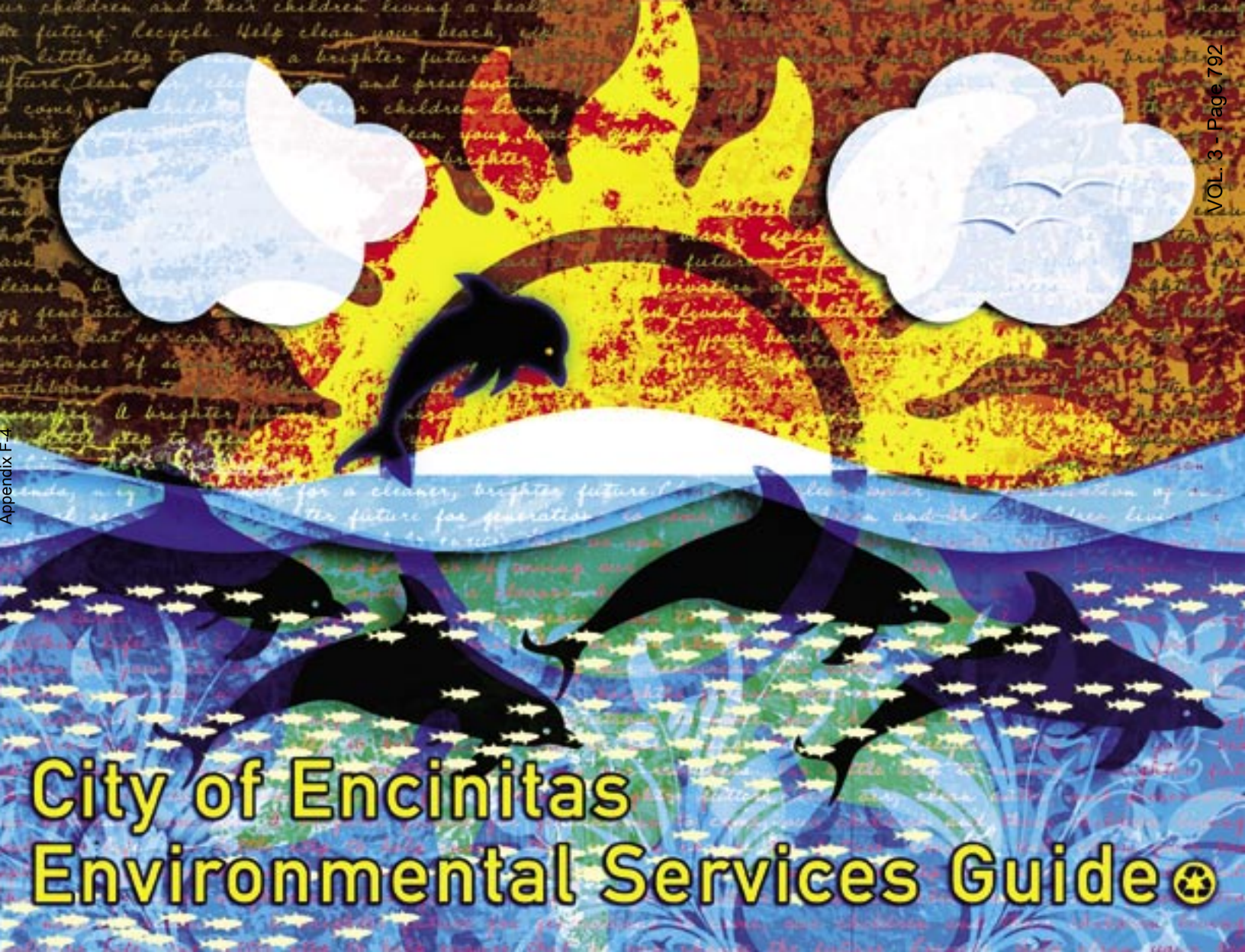

Empresas Constructoras
Developers


Hiring a
Handy Man


Diazinón
Diazinon


Restaurants Can
Help Keep our
Waterways Clean


Cuidado del
Patio y del jardín
Yard & Garden
Care



City of Encinitas Environmental Services Guide

Ocean protection

The ocean begins at your front door.

Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to carry rainwater away from developed areas to prevent flooding. Untreated storm water and the pollutants it carries flow directly into our creeks, rivers, lagoons, and the ocean.

Storm water pollution can have a serious impact on water quality in Encinitas. Pollutants from the storm drain system can harm marine life as well as coastal and wetland habitats. They can also degrade our recreational beach areas and contribute to beach postings.



Storm water pollution comes from a variety of sources, including:

- Sediment from construction, home improvement, and landscaping projects
- Excess pesticides and fertilizer from lawns, gardens, greenhouses, and nurseries
- Trash/litter
- Oil and metals from cars
- Detergents, cleaners, and solvents from car washing and power washing activities
- Bacteria from pet waste

Did you know?

One gallon of oil can pollute about one million gallons of water.

- California Integrated Waste Management Board

We all live in a watershed

A watershed is an area of land which drains all the water into creeks, rivers, lagoons, and eventually the ocean. The City of Encinitas drains into Cottonwood Creek, Moonlight Beach, San Elijo Lagoon, and Batiquitos Lagoon.

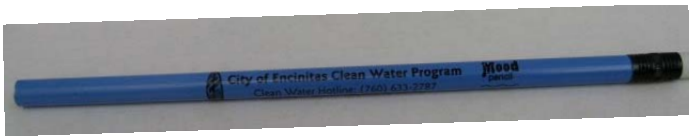
HEALTHY WATERSHEDS = HEALTHY COMMUNITIES

In Encinitas we are surrounded by water and your actions either help or hurt the environment. Healthy watersheds are vital to our quality of life. Here are some tips to help keep our community clean:

- Properly dispose of all trash and debris
- Use fertilizers and pesticides sparingly. For more information visit: www.ipm.ucdavis.edu
- Adjust sprinklers and prevent over-watering. For more information visit: www.bewaterwise.com
- When possible, take your car to a commercial car wash
- Keep your car properly maintained to prevent fluid leaks
- Volunteer at cleanup events in Encinitas
- Pick up after your pets

To report an illegal discharge or for more information, visit us online at:
www.ci.encinitas.ca.us/resident/environment/cleanWP
or call our Clean Water Hotline at (760) 633-2787.





Color Changing Mood Pencil



Bags on Board Pet Waste Bag Dispenser



Clean Water Magnet

NORTH COUNTY
STORM WATER PROGRAM

Carlsbad Vista Encinitas Escondido Oceanside
Solana Beach San Marcos County of San Diego

1. What is your zip code? _____

2. Where do you most often walk your dog?
   __ My neighborhood
   __ At the park
   __ At the beach
   __ I don't walk my dog
   __ Other _____

3. What happens to the pet waste that is not picked up?
   __ I don't know
   __ It disintegrates
   __ It fertilizes the ground
   __ It gets washed to creeks, lagoons, and the ocean
   __ Someone comes later to clean it up
   __ Other _____

4. If you saw people not picking up after their pet, what would be your reaction?
   __ I would not care
   __ I would report them to the City
   __ I would be surprised
   __ I would ask them to pick it up
   __ I don't know what I could or would do
   __ Other _____

5. Why do you think people would not pick up after their pet? (Check all that apply)
   __ They don't care
   __ They don't know they're supposed to
   __ There's no one around to see them
   __ They didn't bring a bag
   __ There was nowhere to throw it away
   __ They think it's gross
   __ Other _____

6. What do you think the City can do or should do about the pet waste problem?
   _____
   _____

Thank you!

Printed on Recycled Paper

Pet Waste Survey Answers
Encinitas Garden Festival
23 5/3/08

1. What is your zip code?

11	92024
1	92672
1	92078
2	92009
2	92075
1	92007
1	90831
1	92027
1	92054
1	92105
1	92008

2. Where do you most often walk your dog?

21	My neighborhood		
2	At the park		
7	At the beach		
0	I don't walk my dog		
4	Other	open space	dog park
		san elijo lagoon	

3. What happens to the pet waste that is not picked up?

2	I don't know
1	It disintegrates
4	It fertilizes the ground
17	It gets washed to creeks, lagoons, and the ocean
2	Someone comes later to clean it up
	Other

4. If you saw people not picking up after their pet, what would be your reaction?

1	I would not care		
0	I would report them to the City		
1	I would be surprised		
17	I would ask them to pick it up		
2	I don't know what I could or would do		
5	Other	I'd pick it up myself	I try to pick it up or suggest to pick up,
		Offer them one of my bags	but honestly tend to avoid confrontation

5. Why do you think people would not pick up after their pet? (Check all that apply)

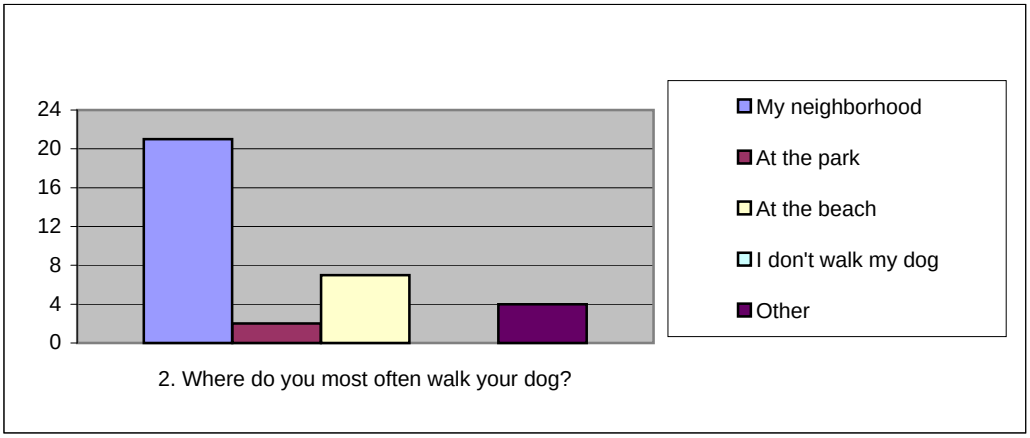
18	They don't care
5	They don't know they're supposed to
15	There's no one around to see them
16	They didn't bring a bag
7	There was nowhere to throw it away
10	They think it's gross
	Other

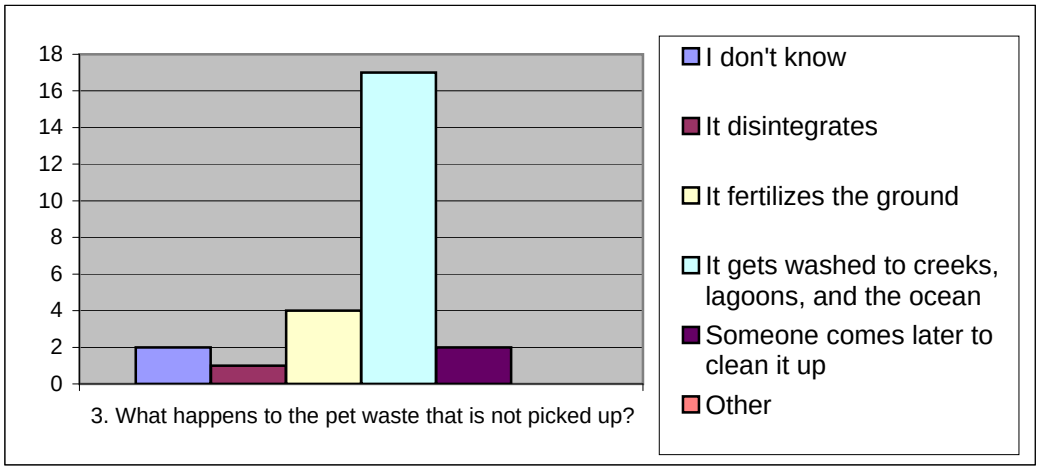
Pet Waste Survey Answers
Encinitas Garden Festival
5/3/08

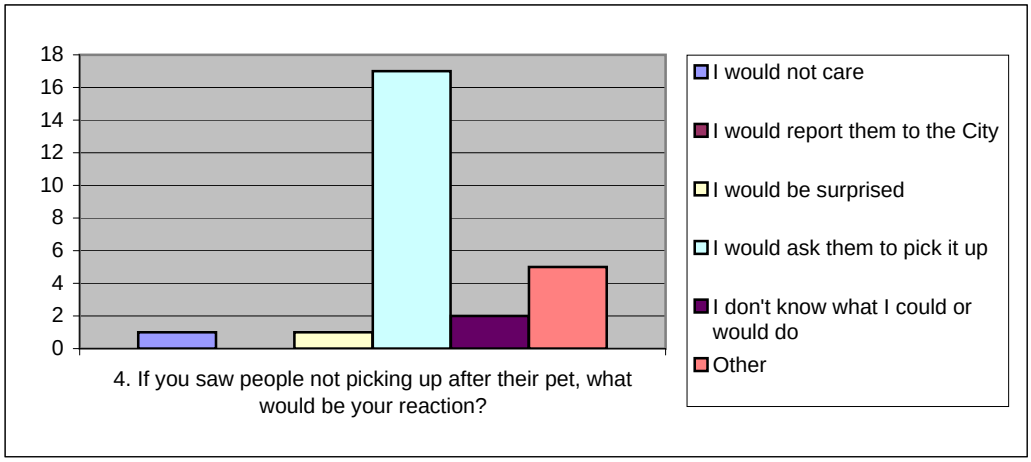
6. What do you think the City can do or should do about the pet waste problem?

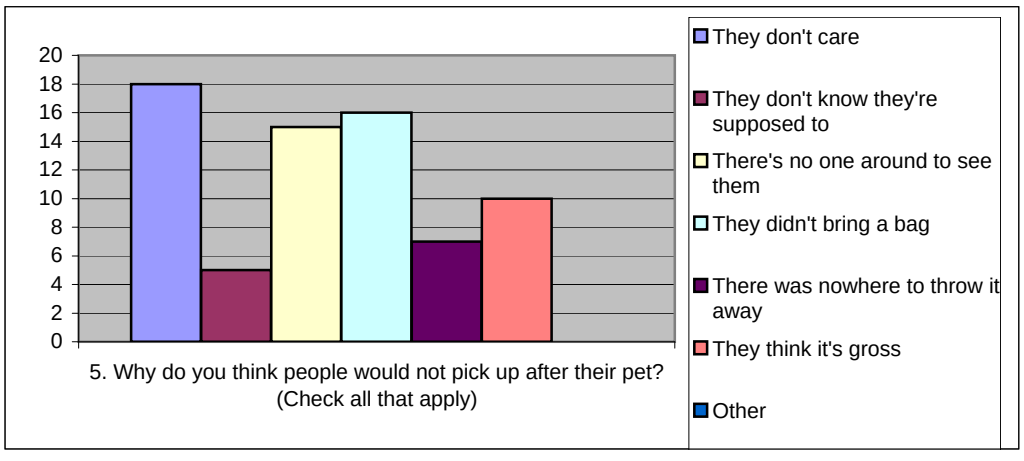
Keep getting people educated and rally the team!
Encourage pet waste pick up thru more education!
Fine people
I don't know
Let people know that it can contaminate the ocean
Educate
More bag dispensers
Create a fine if you do not pick up poo
Put up bag dispensers (ask for $ donation)
More info
Put up garbage cans to put the waste in
Fine neighborhoods- HOAs
Fine people who don't pick up their pet waste
Dispensers w/ bags
Educate and place cans and bags! Post signs with good looking people picking up after their pet. Ha!
Plastic bags
Just education
Provide more containers for waste disposal- place article in papers
More bag stations and waste receptacles
Put out more bag dispensers
Ticket people who don't pick up after their pets!

Pet Waste Survey Answers
Encinitas Garden Festival
5/3/08









Pet Waste Survey Answers
Encinitas Environment Day
06/08/08

1. What is your zip code?

10	92024	15
1	92011	
1	92075	
1	92026	
1	92019	
1	92010	

2. Where do you most often walk your dog?

13	My neighborhood	
2	At the park	
5	At the beach	
0	I don't walk my dog	
1	Other	his litterbox

3. What happens to the pet waste that is not picked up?

2	I don't know		
2	It disintegrates		
2	It fertilizes the ground		
13	It gets washed to creeks, lagoons, and the ocean		
0	Someone comes later to clean it up		
2	Other	Someone steps on it	People step in it- eww

4. If you saw people not picking up after their pet, what would be your reaction?

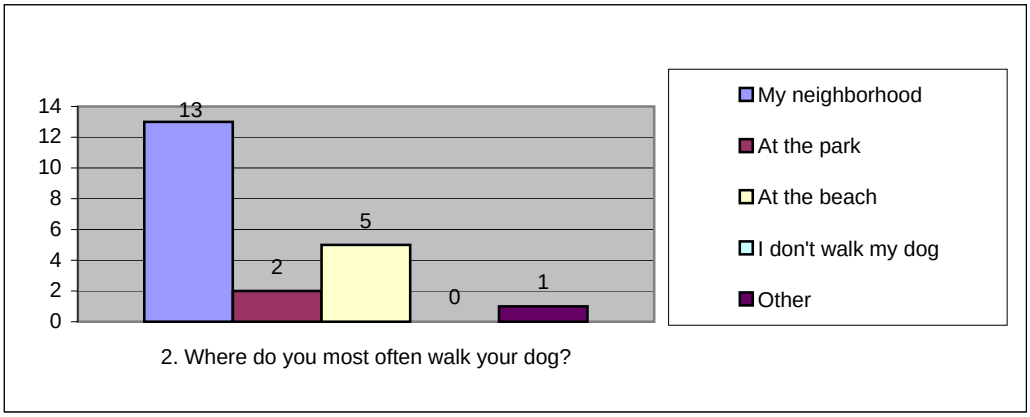
0	I would not care		
1	I would report them to the City		
0	I would be surprised		
13	I would ask them to pick it up		
1	I don't know what I could or would do		
2	Other	I'd pick it up	Sometimes pick up myself

5. Why do you think people would not pick up after their pet? (Check all that apply)

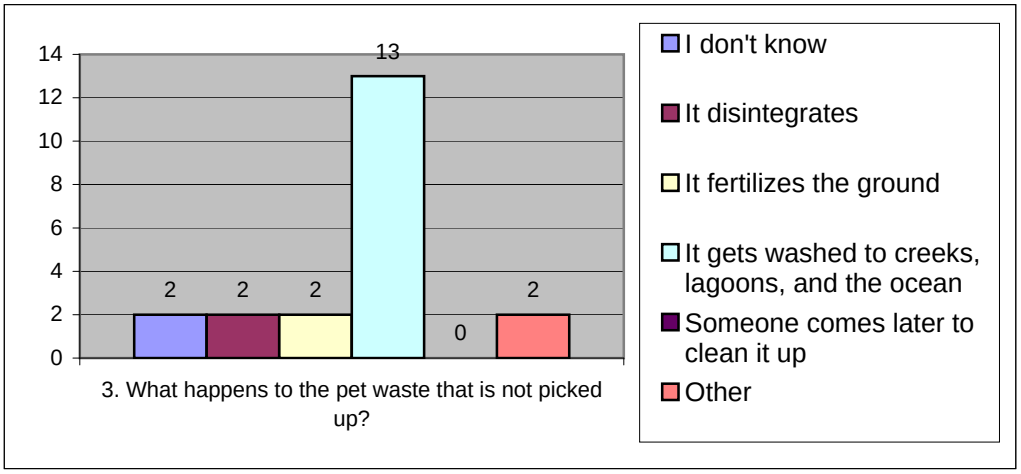
13	They don't care	
3	They don't know they're supposed to	
7	There's no one around to see them	
7	They didn't bring a bag	
3	There was nowhere to throw it away	
8	They think it's gross	
3	Other	They think that everyone else does so no harm with one little duke.
		They are selfish LAZY!

6. What do you think the City can do or should do about the pet waste problem?

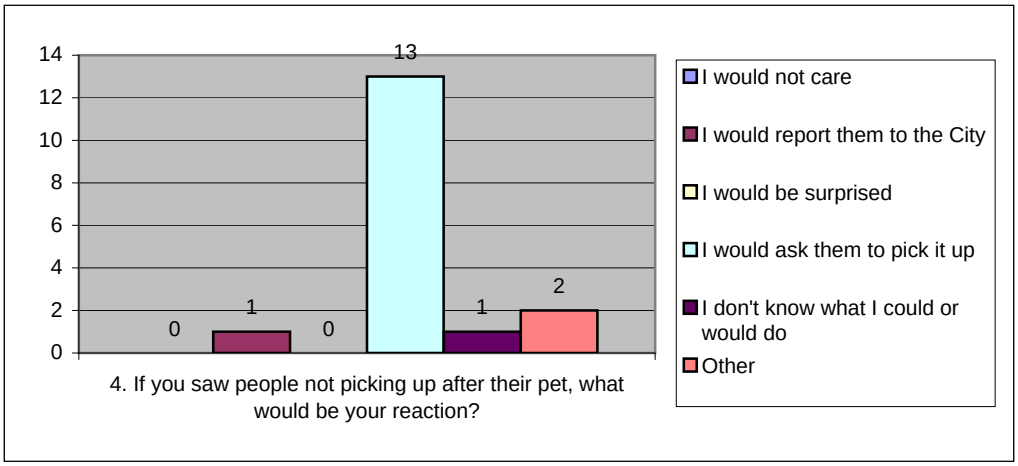
Maybe install trash can w/baggie and sign
Easy way to report violators like traffic littering
Fine people
Bag dispenser and trash bins are very helpful and convenient
Put pet waste bag holders along hwy 101 now that we have sidewalks
Fine people- at minimum post pet bags like Carlsbad
Educate, make bags available at parks and other high traffic areas
Fine, enforce, educate
Add more poop bag dispensers
Education, more bag stations
Fine any pet owner NOT picking up. There are NO excuses!



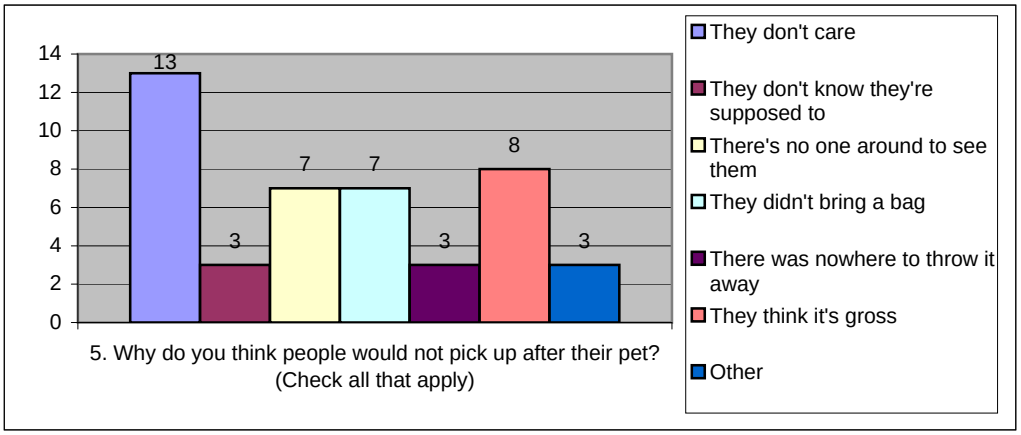
2. Where do you most often walk your dog?



3. What happens to the pet waste that is not picked up?



4. If you saw people not picking up after their pet, what would be your reaction?



5. Why do you think people would not pick up after their pet? (Check all that apply)

Regional URMP Attachment 2.0

Regional Residential Education Plan

FINAL – March 20, 2008

Submitted by the San Diego Stormwater Copermittees in partial fulfillment of the requirements of San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (the San Diego Municipal Stormwater Permit)

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1.0 INTRODUCTION

The Regional Residential Education Program is a joint effort by the Copermittees of the Municipal Stormwater Permit (Order No. R9-2007-0001, NPDES No. CAS0108758). The Regional Residential Education Plan (Plan) contains recommended strategies for the successful development and implementation of the Regional Residential Education Program. Per section F.1 of the Permit, as amended by Addendum No. 1 on December 12, 2007, this program must be collaboratively developed and implemented by March 24, 2008.

In the past, Copermittees have been limited in their ability to pursue strategies which may have a much greater potential to influence knowledge and behavioral change in residential populations. There are several benefits to implementing an enhanced regional program to target residential sources of stormwater pollution. First, it will encourage the development of consistent messages throughout the region. Second, a regional approach will enable Copermittees to better leverage resources and utilize economies of scale. Finally, stormwater and urban runoff pollution frequently cross jurisdictional boundaries, making collaborative approaches a necessity. While the regional program will be coordinated extensively among the Copermittees, it is not meant to supplant the jurisdictional and watershed programs.

The overall goals of the program are to increase awareness and knowledge, improve attitudes toward stormwater pollution and provide a foundation for changing behaviors that contribute to stormwater pollution. Based on extensive input from the Copermittee Regional Stormwater Management Committee (RMC) and the Education & Residential Sources Workgroup, as well as an independent analysis of existing educational efforts, the following objectives were developed to support these goals:

1. Maintain a consistent image, message, and brand
2. Use positive messages to increase knowledge and awareness, and ultimately change behavior
3. Develop community partnerships to leverage resources

4. Develop assessment strategies for program effectiveness

The Regional Education & Residential Sources Workgroup advises the RMC on regional shared outreach activities as necessary to support the requirements of the Permit. The Education & Residential Sources Workgroup plans, develops, and implements the various aspects of the stormwater education program. Education & Residential Sources Workgroup participants have traditionally combined efforts to reach business, industrial, and residential communities across the San Diego region. However, in accordance with the most recent NPDES Permit, this Plan represents a distinct effort to target residential sources of stormwater pollution.

Messages developed by the Education & Residential Sources Workgroup are designed to increase knowledge and awareness of regional stormwater issues and encourage positive changes in behavior. Assessment methods and measures have also been developed to evaluate the effectiveness of these messages and the strategies used to deliver them. Program evaluation methods and strategies will evolve as various program elements are implemented. Regional assessment methods will measure knowledge, awareness, and attitudes of residents. Program elements that are determined to be ineffective or least effective will be replaced by more effective elements or improved upon as needed. The regional program will also facilitate the measurement of changes in pollutant generating behaviors by the jurisdictional and watershed programs.

As a basis for developing this Regional Residential Education Plan, the Copermittees contracted with TRG & Associates to develop *Recommended Options for the San Diego Regional Stormwater Educational Program*. This document contains a number of recommended strategies for the successful development and implementation of a regional residential education program. It includes an extensive literature review, an analysis of existing educational programs in San Diego, and a comprehensive list of public awareness surveys. The literature review outlines other programs in the State that have

successfully implemented regional residential stormwater education programs. The document also summarizes the strengths and weaknesses of existing residential education efforts, provides suggestions for how they can be improved, provides a brief analysis of baseline public awareness surveys that have been implemented locally within the last five years, and offers recommendations for improving assessment methods and survey instruments.

2.0 SOURCE CHARACTERIZATION

The San Diego region occupies 4,261 square miles with a population of approximately 3 million people. Estimates for the year 2007 indicate that the San Diego regional population is 29% Hispanic and 71% non-Hispanic. Non-Hispanic persons include African Americans, American Indians, Native Hawaiians, Asians, and persons of a multitude of races, ethnicities, and cultures. SANDAG currently estimates that the median household income in the San Diego region is $68,388. According to the US Census Bureau in 2004 only 10.9% of San Diego's population was living below the poverty level, compared to 13.2% Statewide. Other estimates indicate that as much as 25% of California's population is living below the poverty level. Much of the region's quality of life revolves around the water resources.

Residential areas have been shown to be a prevalent source of urban runoff in the San Diego region, although less than ten percent of the region is developed as residential land. Most of the urban activity is clustered in the western third of the county, near coastal areas. However; residential land–based activities throughout the entire region contribute to polluted stormwater runoff.

The Regional Residential Education Program will focus efforts on high priority residential pollution sources that are common throughout the San Diego region. Water quality monitoring data and source characterization studies have provided the Copermittees with useful information in determining regional residential sources of stormwater pollution and constituents of concern. Regional threats to water quality were initially outlined in the Report of Waste Discharged and finalized in the Permit. Section

F.1.a of the Permit describes the process for determining which pollutants will be addressed by the program.

2.1. Regional Constituents of Concern

The following constituents of concern were determined to be the primary pollutants from residential sources for the San Diego region:

- Bacteria
- Nutrients
- Sediment
- Pesticides
- Trash

Some jurisdictions may have additional high priority pollutants. Each jurisdiction will be individually responsible for addressing additional pollutants and their sources. The pollutants listed above will remain the focus of the Regional Residential Education Program.

2.2. Pollutant-generating Activities and Constituents of Concern

Table 1 outlines residential pollutant generating activities and associated constituents of concern generated by residential areas in the San Diego region.

Table 1) Pollutant Generating Activities

Pollutant Generating Activities	Priority Constituents				
	Bacteria	Nutrients	Pesticides	Sediments	Trash
• Leaving pet waste in yard, street or sidewalk • Improper disposal of pet waste	X	X			
• Over-irrigation • Improper irrigation and system maintenance	X	X	X	X	
• Fertilizer use • Pesticide use • Landscaping activities	X	X	X	X	
• Cleaning outdoor impervious surfaces (i.e., driveways and patios)	X	X		X	X
• Improper waste disposal	X	X	X	X	X

2.3. Target Audiences

As described above, this program is intended to address the entire residential community of the San Diego region. This residential audience will be further described in terms of two specific target audiences in order to design more effective education and outreach strategies. The target audiences for the Regional Residential Education Program have been identified based on information gathered by the consultant (TRG and Associates), who utilized data from market research conducted by the County and City of San Diego and surveys gathered from other case studies. Although there may be other smaller groups of target audiences, regional outreach must realistically target the highest priority demographics in order to effectively utilize program funds. The following describes the target audiences for the campaign:

1. Primary Target Audience- English speaking residents and homeowners
2. Underserved Target Audience- Spanish speaking communities and Low Socio-Economic Status (SES)

One of the challenges of program implementation will be to develop messages that appeal to these communities. While creating content and developing materials for the primary target audience may be relatively straightforward, methods and approaches will need to be modified in order to engage the Underserved Target Audience. For example; some messages will be more conducive to translation into the Spanish language than others. Once translated, Spanish language media will be used to disseminate these messages.

According to the US Census Bureau, 33% of San Diego County residents speak a language other than English at home (2000). The same data indicates that 26.7 % of the regional population is Hispanic or Latino. Although this number varied within jurisdictions from 49.5% in Chula Vista to 11.7% in Carlsbad, it is clear that every jurisdiction in the region has significant populations of Hispanic or Latino residents. Therefore, although there are many languages spoken in San Diego, Spanish speaking communities are likely the most common throughout the region.

Research indicates that the motivating factors in Spanish speaking communities are 1) health and commitment to family, 2) children, and 3) finances. Similar priorities are found within the low SES communities. Hence, some messages will resonate more strongly with the communities among the Underserved Target Audience. Other messages may need to be modified in order to create a more appealing campaign. Low SES in California is defined as household annual income less than $25,000. Low SES residents tend to obtain information and resources from different sources than the residents within the Primary Target Audience. Again, message delivery becomes a key issue. In order to address all of these issues, specific outreach strategies will need to be developed in order to effectively reach the Underserved Target Audience.

3.0 TARGETED CHANGES TO KNOWLEDGE, AWARENESS AND BEHAVIOR

The overall goals of the Regional Residential Education Program are to raise the levels of knowledge and awareness with regards to stormwater pollution among residents, while encouraging changes to behaviors that are harmful to San Diego's waterways. The program will generally educate residents on 1) The difference between stormwater conveyance systems and sanitary sewer systems 2) the connection of storm drains to local waterways and 3) common residential sources of urban run-off. These are the general knowledge and awareness concepts upon which more specific messages will be built.

Recent research indicates that many residents do not understand that storm drains and sanitary sewer systems are completely separate. While sewage is treated, everything that goes down a storm drain goes directly to a creek, bay, or the ocean. The City of San Diego conducted a public opinion survey in 2007 in which 91% of respondents said they had heard the term "storm drain" before. However, only 46% knew that the water entering storm drains is not treated. This is a fundamental stormwater pollution prevention issue and general awareness concept. Awareness of the stormwater conveyance system is the first step towards understanding pollution prevention. Increasing knowledge and awareness that the system leads directly to local waterways will help residents to understand that urban sources of pollution have a direct effect on water quality. The awareness and knowledge of these issues are precursors to adjustments in attitudes (i.e.: increased concern for preventing this type of pollution).

Ultimately, it is anticipated that the program's targeting increased awareness and knowledge of these concepts will lead to positive changes in attitude. Furthermore, improved attitudes toward the importance of stormwater issues can provide motivation for changing pollutant generating behaviors.

In keeping with the program goals, the Copermittees have agreed on a number of positive behavior outcomes for each stormwater issue presented to the target audience. Pollutant generating activities are listed in Table 2, along with the knowledge required to understand the significance of the stormwater impacts. Also listed are numerous examples of desired behavior outcomes. Since it may not be feasible to craft messages that address each of the desired behavior outcomes listed in Table 2, some behaviors may be considered primary and targeted before others. Secondary behaviors will be targeted only if the initial efforts are determined to be unsuccessful. It is important to recognize that the Copermittees agreed on these issues and the associated behaviors, and some may wish to further utilize the concepts listed in Table 2 in their jurisdictional and/or watershed programs.

Table 2) Pollutant Generating Activities and Examples of Positive Behavior

Pollutant Generating Activities	Knowledge/Awareness	Examples of Desired Behavior Outcomes
• Leaving pet waste in yard, street or sidewalk • Improper disposal of pet waste	Pet waste left in the yard and streets may introduce solids, bacteria, and nutrients to the storm drain and/or receiving water bodies.	• **Pick up pet waste during walks** • Pick up pet waste around home • **Properly dispose of pet waste in trash can or bin**
• Over-irrigation • Improper irrigation and system maintenance	Over-irrigation causes water and pollutants in its path to run into the storm drain and/or receiving water bodies.	• **Reduce over-irrigation** • Use irrigation controller technology to reduce the amount of over-watering • **Inspect and maintain irrigation system regularly** • Adjust irrigation schedule according to seasonal changes
• Fertilizer use • Pesticide use • Landscaping activities	Fertilizers and pesticides become pollutants that can be harmful to natural ecosystems when entering receiving water bodies. Soil, sediment, and yard waste can clog storm drains and/or receiving water bodies.	• Use plants that reduce the need for fertilizers (i.e.: native plants) • Apply chemical fertilizers and pesticides only as needed and at the appropriate time • **Use organic or slow-release fertilizers** • **Use Integrated Pest Management** • Store chemicals inside in a shed or storage cabinet where they are protected from rainfall • **Collect grass clippings and yard waste** • **Dispose of grass clippings and yard waste in the proper containers** • Protect exposed soil from rain with a tarp, vegetation, and/or mulch
• Cleaning outdoor impervious surfaces (i.e.: driveways and patios)	When it rains, trash, dirt, and chemicals that have built up on these surface can run into the street, the storm drain, and eventually local waterways.	• **Clean driveways, walkways, and patios by sweeping instead of hosing** • Direct wash water to soak in to lawn or garden
• Improper waste disposal	Litter and debris dropped on the ground will be washed into storm drains and local water bodies.	• **Put litter and cigarette butts in trash cans or bins** • Keep lids closed on trash cans or bins

Although many positive behaviors have been identified that may be encouraged by the messages developed in this program, the following have been selected as the primary desired behaviors to result from the changes to knowledge, awareness, and attitudes:

- Pick up pet waste and properly dispose of in trash can or bin
- Reduce over-irrigation by regularly inspecting and maintaining irrigation systems
- Reduce fertilizer use by applying chemical fertilizer only as needed and using organic or slow-release fertilizers
- Reduce chemical pesticide use through Integrated Pest Management
- Collect grass clippings and yard waste and place them in the appropriate disposal container in order to prevent them from entering the storm drain systems
- Sweep up outside areas such as driveways, walkways, and patios instead of hosing them down
- Put litter and cigarette butts in trash cans or bins

Specific messages will be designed to increase knowledge and awareness, and therefore encourage the behaviors listed above. Regional messages will be initially developed to address only the primary targeted behaviors. Once a baseline is established and program implementation is underway, Copermittees will have the opportunity to evaluate the knowledge, awareness, and willingness of the residential target audiences to adopt these behaviors. Other positive behaviors from Table 2 may also be substituted, if necessary.
It can reasonably be expected that the regional program will be able to measure success in terms of increasing knowledge and awareness, and improving attitudes, of residents.

Knowledge describes the accuracy of one's beliefs and awareness indicates recognition of the severity of the issues whereas attitude can be described as an individual's evaluation of it (favorable or unfavorable).

As a result of the regional efforts, Copermittees expect to see an increase in the general awareness of storm drain systems and their connection to local waterways, as well the sources of urban run-off. Specifically, residents should understand the difference between the stormwater conveyance system and sanitary sewer systems. They should become aware that water entering storm drains flows untreated to local waterways. Residents should also be able to accurately identify sources of stormwater pollution (i.e.: pet waste). Attitudes toward stormwater pollution should also improve. Ideally, there will be an increase in the numbers of households or individuals engaging in the desired behavior outcomes as a result of their increased knowledge and awareness. These targets will be measured using the assessment methods described in Section 6.0.

The primary assessment tool will be the public opinion surveys. A baseline regional residential telephone survey will be conducted in 2008 and, ideally, at one other point during the current permit cycle. The numeric objectives for survey results are set so that they exceed the statistical margin of error of 2.5 percent (assuming a sample size of 1000) so that if they are achieved, they will be statistically significant. In addition, the objectives are intentionally set high, with the understanding that they are intended as a point of reference rather than a pass/fail measure. With that in mind, Copermittees have set a target of a 10% change in knowledge that storm drains are separate from sanitary sewer systems, a 10% increase in the awareness that all storm drains are connected to local waterways, and a 15% increase in the number of participants who can identify residential sources of stormwater pollution.

4.0 EDUCATIONAL METHODS AND APPROACHES

A variety of methods and approaches will be utilized to implement the program objectives. As described above, the Regional Residential Education Program objectives are 1) to maintain a consistent image and brand 2) use positive messages to change behavior 3) develop community partnerships and 4) develop strategies to assess program effectiveness. The following regional program elements are designed to meet these objectives:

- Standardized Regional Brand (Think Blue)
- Regional Think Blue Website
- Mass Media (Broadcast and Outdoor)
- Regional Outreach Materials (Development and Distribution)
- Regional Outreach Event
- Partnerships
- Regional Stormwater Hotline
- Public Relations

Some of the elements are designed for program management whereas others are outreach methods. Program management elements include standardizing the Think Blue brand, message and material development, and partnership development. The program will have a multi-faceted outreach approach utilizing a regional website, mass media (broadcast and outdoor), public relations, printed materials and promotional items, and regional outreach such as a community event. Implementation of all the recommendations is dependent on funding for each year. Therefore, some activities may be feasible only if sufficient or additional funds are available in a given year.

4.1 Standardized Regional Brand (Think Blue)

The Think Blue campaign has created a locally recognizable brand that has demonstrated effectiveness in stormwater outreach. Expanding the brand to the regional program has obvious benefits for all of the Copermittees. With a consistent look and brand, the Copermittees can continue to conduct their own outreach; however they can use the Think Blue brand in conjunction with their materials for consistency. There will be a Think Blue Graphic Standards Guide that provides the correct fonts, colors and standards to be used for all outreach materials. This will help reinforce the Think Blue brand and provide standards for its use in messages and materials. Messages and materials may need to be continuously revised in order to keep current and effectively reach target audiences.

4.2 Regional Think Blue Website

A regional Think Blue website will help build upon and reinforce the branding strategy. The Internet is a powerful means of communication. Web sites can reach large audiences with relatively minimal effort. The regional website will be developed and maintained by a contractor. It could contain easy to download, user friendly information sheets, links to Copermittees websites, and short surveys or quizzes. The regional web site, along with the new logo and slogan, will increase program visibility.

4.3 Mass Media

Although the website is an important component of the outreach efforts, many residents still get the great bulk of their environmental messages from more traditional venues such as the television and radio (broadcast media). Public Service Announcements (PSA) and advertisements are the most common forms of broadcast media. Some PSAs have already been developed under the Think Blue campaign and through the combined efforts of the Copermittees. The Copermittees can utilize funds to expand or complement the existing Think Blue campaign. The public relations component will involve news coverage such as news stories, interviews, and event coverage. Public relations provide

valuable outreach opportunities that will be sought whenever possible. Outdoor media such as bus placards and billboards can also be utilized for outreach. The location of outdoor media advertisements will need to be carefully placed in order to reach the regional target audience.

4.4 Regional Outreach Materials and Community Events

Print materials and promotional items are critical items for successful outreach. Materials include items like fact sheets, brochures, flyers, booklets, coupon booklets, posters, and doorknob hangers. These materials are easily created and the target audience can refer to them repeatedly. Promotional materials are good for promoting the regional brand, increasing knowledge and awareness, and encouraging simple actions to prevent stormwater pollution. They will be designed to also serve as visual prompts that remind people to choose behaviors that protect and improve water quality.

A regional outreach event can be an energizing and successful venue for distributing outreach messages. Careful attention should be given to participating in a community event so that the effort reaches residents from the entire region. Extensive planning, material or display development, coordination, and marketing will be necessary in order to prepare for one successful regional outreach event. This is an endeavor that will involve identifying events that reach the entire region as well as coordinating, funding, and staffing the selected event. The Copermittees expect to participate in up to two regional events over the duration of this permit cycle. Some examples of regional events that may be considered are the San Diego County Fair, the Miramar Air Show, or a local sports venue.

4.5 Partnerships

Partnerships are both a management and outreach element of the program. A partnership is a voluntary collaboration of agencies, organizations, or other groups or individuals that have joined to work toward a common goal. The Copermittees can maximize resources through the use of partnerships. The potential for partnerships is immense for the

Copermittees. Potential partnerships include local water districts (combine conservation and pollution prevention messages), hardware stores and nurseries, pet stores, and Homeowner's Associations and Property Management Companies. Initial development of partnerships with businesses and business organizations, nonprofits, other government agencies, will be necessary before the full benefits can be realized. Copermittees may then encourage partners to distribute materials or spread messages through signage, advertising and websites. Partnerships will require time to develop and may not be fully recognized until later in the permit cycle.

4.6 Regional Stormwater Hotline

Although a regional stormwater hotline is already in place, successful outreach may lead to an increase in hotline calls. The regional hotline can also help the public gain access to information quickly and easily. The hotline will be promoted through the website, media advertising and other promotional venues. The number of calls to the hotline can be tabulated to help gauge whether some advertising is effective (if the call to action is a hotline call). Since the hotline will also be an important measure of program success, careful consideration will be given to managing the hotline as the program implementation moves forward.

4.7 Behavior Specific Outreach Methods

Table 3 lists the primary target behaviors for the program during this permit cycle. The table indicates which of the outreach methods described above may be utilized to deliver messages designed for each behavior. These were selected as the primary targets because they have current appeal. Primary target behaviors may be updated as program evaluation progresses. If necessary, resources may be reallocated to address the other (secondary) target behaviors previously listed in Table 2.

Table 3) Applicability of Outreach Methods to Primary Target Behaviors

Primary Target Behaviors	Potential Methods of Outreach						
	Website	Mass Media Broadcast	Mass Media Outdoor	Public Relations	Material Distribution	Partnerships	Regional Community Events
Pick up pet waste and dispose of in trash bin	X	X	X	X	X	X	
Reduce over-irrigation by regularly inspecting and maintaining irrigation systems	X			X	X	X	X
Apply chemicals to lawn and garden only as needed	X	X		X	X	X	X
Use organic or slow-release fertilizers	X	X		X	X	X	X
Collect grass clippings and dispose of them in the proper container	X				X		
Employ Integrated Pest Management	X	X	X		X	X	X
Sweep outside areas instead of hosing them down	X		X		X		
Put litter and cigarette butts in trash cans or bins	X			X	X	X	X

Specific messages will be developed to increase knowledge and awareness that will lead to each desired behavior outcome

4.8 Program Implementation

While the overall goals of the program are to educate the general public in order promote knowledge and awareness and decrease pollutant generating behaviors, a successful program will also require coordination among the Copermittees. Program planning and message development are key components of the program that will precede full implementation. Message delivery will be ongoing. Subsequently, as results from assessments are reviewed, messages and delivery methods will need to be revised. Therefore, there are essentially three steps in the program implementation process 1)

development, 2) implementation, and 3) assessment. For the purposes of this report, the development phase includes planning projects as well as developing materials and messages. Implementation includes initiating a program element (such as media outreach) as well as maintaining the ongoing nature of the element once it is in place. Assessment includes all levels of determining the effectiveness of program elements, as well as making revisions that reflect the knowledge gained through assessment.

Table 4 charts the schedule of program implementation over the 5-year permit cycle. Strategies to achieve these objectives will be implemented over the 5-year permit cycle. Because some upfront planning and development is necessary, the first year will focus on standardizing a regional brand, developing messages, and determining the most appropriate methods for disseminating messages on a regional scale (i.e.: a regional website). Copermittees may also begin fostering partnerships in the initial years of the program. Subsequent years will build on this foundation. Copermittees may decide to refine messages and could begin leveraging resources through partnerships.

Table 4) Projected General Implementation Schedule

Program Elements	Year 1: 2007-08	Year 2: 2008-09	Year 3: 2009-10	Year 4: 2010-11	Year 5: 2011-12
Branding	D	D, I, A	I, A	I, A	I,
Regional Website	D	D, I, A	I, A	I, A	I,
Regional Hotline	D	D, I	I, A	I, A	I,
Mass Media	D	D, I	I, A	D, A	I,
Regional Outreach (Marketing and Community Events)	D	D, I	I, A	D, A	I,
Materials Development & Distribution	D	D, I, A	D, I, A	D, A	D, I
Public Relations	D	D, I	I, A	D, A	I,
Market Research & Assessment Tools	D, I, A	D, I, A	D, I, A	D, I, A	D, I,
Partnerships	D, I	D, I,	I, A	I, A	I

Development (D), Implementation (I), Assessment (A)

4.9 Social Marketing Approaches

In all of the aforementioned efforts, a variety of social marketing approaches will be utilized whenever possible. There are so many techniques described as social marketing that it is not possible to utilize them all, especially with limited staff and budgets. Social marketing uses many of the principles of social psychology and marketing techniques to bring about behavior change. Rather than being product oriented, social marketing focuses on people and their behaviors. All social marketing approaches use audience research to learn how to motivate an audience to change one or more recurring actions.

Social marketing consists of several basic components that result in delivering messages that will increase knowledge and awareness, thereby prompting people to change certain behaviors. The challenge is to present the new behavior in a positive way and emphasize the benefits to adopting a new behavior. Forming strategic partnerships with community resources can help to achieve the end goal of behavior change. Social marketing campaigns deliver messages that are strategically created and positioned to give people a compelling reason to adopt a new behavior. In order to overcome the barriers to action it is necessary to understand what the barriers are and why they exist. Researching and understanding the audience is a critical step in developing a social marketing campaign. Messages are conveyed through advertising, websites, materials and other communications. Messages should be simple, memorable and easy to follow. There should be one simple message for each of the targeted areas of knowledge and awareness. Each message needs to be used consistently in communications.

Community Based Social Marketing (CBSM) is a type of social marketing. It has gained popular appeal among the environmental community as an effective alternative to traditional information-based marketing approaches. CBSM packages basic principles of behavior change and social science research in a way that provides a usable framework for practitioners working to promote positive behavior change.

A key element of the CBSM approach is to pilot test the program with a small representative segment of the community, and compare the results to a control group. For example, a small jurisdiction may implement a project that essentially serves as a pilot for the regional program. If the pilot is not successful, the strategy should be refined and then pilot tested again. If the pilot is successful at changing behavior, the strategy can be implemented more broadly throughout the community or on a regional level. Once the successful pilot program has been widely implemented CBSM requires that the program be carefully evaluated at several points to measure continued success.

The Copermittees have agreed that CBSM offers a solid foundation for developing an effective program. However, it may not always be feasible to utilize the CBSM approach on a regional scale, hence the need for a combined approach that uses traditional social marketing techniques as well as CBSM. Some methods will lend themselves more readily to developing CBSM based approaches. When implementing each of the methods, a CBSM approach will be pursued whenever feasible.

5.0 RELATIONSHIP OF REGIONAL, WATERSHED, AND JURISDICTIONAL OUTREACH

The Regional Residential Education Program is designed to meet the Permit requirements for residential education based on regional needs and issues. The first step in meeting these requirements is to establish a regional brand and consistent image. The City of San Diego's regionally recognized Think Blue logo will be utilized as the Regional Residential Education Program's brand. During the implementation phase of the permit cycle the Copermittees will work collaboratively with the City of San Diego to update and standardize the Think Blue brand. A Graphics Standards Manual will be developed by the City of San Diego and adopted by the Copermittees in order to facilitate ease of material development and ensure a consistent regional image. Existing jurisdictional programs may also choose to use the Think Blue brand, maintain individuality, or

combine both programs for maximum impact. In a similar manner, watershed activities may be coordinated under the Think Blue brand, so long as the standards are adhered to.

Copermittees will hire a contractor to build and maintain a regional Think Blue website. The website may include links to jurisdictional program, watershed program websites, and other regional websites such as Project Clean Water. The regional Think Blue website will provide user friendly information for the public in a single location, thereby promoting consistency and coordination among the regional, jurisdictional, and watershed programs.

In addition, the Education & Residential Sources Workgroup provides a platform for integration of regional, jurisdictional, and watershed messages. The Education & Residential Sources Workgroup also coordinates activities between non-profit organizations, private institutions, and governmental agencies providing environmental and water quality education. Regular meetings will continue to provide a forum for educators, trainers, and public information officers to collaborate, share methods and materials, and seek policy level support and direction.

Watershed and jurisdictional programs should look to the Regional Residential Education Program when designing residential educational activities. The Regional Residential Education Program can thereby serve as a basis for developing these other programs. Some specific watershed or jurisdictional issues may not be covered by the Regional Residential Education Program, and must still be met by the individual or Watershed Copermittees as required by the Permit. These issues will be addressed in the watershed or jurisdictional programs. In this manner, the watershed and jurisdictional programs can supplement the Regional Residential Education Program in order to ensure that all requirements are met. As a result, each jurisdictional program may be unique in some respects and elements of the watershed programs may go beyond those in the regional program.

While the regional program may play a role in encouraging behavior changes, it is more feasible for jurisdictional programs to be able to measure actual behavioral changes resulting from increased knowledge and awareness because of their ability to implement pilots on a small scale. The broad based regional program will be implementing methods and utilizing assessment tools that most accurately gauge attitudes, knowledge, and awareness. Positive changes in attitudes and awareness are generally accepted as precursors to behavior change. Therefore, due to the difficulty of assessing behavior change on a regional level, demonstrating behavior change will therefore reside with the jurisdictional and watershed programs. In order to facilitate the assessment of jurisdictional and watershed programs, the Plan outlines assessment tools for measuring changes in knowledge and awareness through the regional program. These measures can also be tailored to meet the needs of the jurisdictional and watershed programs that implement CBSM pilots or focused outreach efforts, which provide excellent opportunities to assess behavior change. Section 6.0 describes assessment tools in further detail.

6.0 ASSESSMENT OF REGIONAL EDUCATION ACTIVITIES

In order to evaluate whether the various components of the program are resulting in the targeted knowledge and awareness outcomes, a number of assessment methods may be utilized. A random digit dial telephone survey will be the primary tool for measuring changes resulting from implementation of the regional program. Different types of assessment methods will be employed in order to gauge the outcomes of each activity and thereby determine effectiveness. Copermittees will review and assess existing survey data while developing the new regional baseline survey. Public opinion surveys will be alternated with other assessment methods to adequately assess the overall effectiveness of the Regional Residential Education Program. Copermittees have agreed to work cooperatively on funding and conducting market research and surveys. Measurement tools outlined in the Plan may be modified somewhat to correspond with different program elements. The Plan basically provides a model for program effectiveness

assessment. Specific assessment methods will depend on the type of outreach or education activity conducted and other constraints.

Copermittees will work with the City of San Diego to conduct a county-wide random digit dial telephone survey in order to obtain baseline information on knowledge, awareness, attitudes, and behaviors pertaining to stormwater. Results of the survey will guide further adaptation of the program objectives. Ideally, another public opinion survey will be conducted later in the permit cycle to assess any changes resulting from program implementation. Once the baseline is established, future permit cycles may involve one or more public opinion surveys. Additional evaluation methods may be utilized once specific media, promotions, and outreach activities are implemented. Results will enable Copermittees to determine the most effective outreach methods and make modifications to the programs as needed.

Outcome levels used in this program are based on the Hierarchy of Targeted Outcomes Pyramid referred to in the NPDES Permit, which includes outcome levels 1-6. Outcome levels 1-3 will be most applicable to educational and outreach activities. Table 5 illustrates potential assessment methods that may be utilized for each of the activities being considered. Level 1 outcomes indicate compliance with permit based activities. This is the most basic means of assessing program effectiveness. Measuring Level 2 outcomes will indicate changes in attitudes, knowledge and awareness. Surveys and quizzes provide the most common means for measuring Level 2 outcomes. Level 3 outcomes provide an opportunity to measure behavioral changes and implementation of Best Management Practices (BMPs). This can be accomplished through observations and program specific counts. For example, tracking sales of less toxic pesticides in a store where IPM information is available may indicate changes in the behavior of consumers. Level 4 outcomes indicate actual load reduction, and are more practical for activities such as clean up events or Household Hazardous Waste collection activities, which are sometimes associated with outreach activities.

Table 5) Potential Program Element Assessment Measures

Activity/ Level		Type of Assessment Measure
Branding		
1		Updating materials to reflect new regional brand.
2		Count number of survey respondents who are aware of brand/program.
3		N/A
4		N/A
Website		
1		Count number of hits to website, interactive use/quizzes taken, etc.
2		Administer survey/quiz to assess attitude/knowledge of web users.
3		Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data. Downloads of informational brochures.
4		N/A
Mass Media/Public Service Announcement (PSA)/Public Relations		
1		Count number of household/individuals reached.
2		Administer survey/quiz to assess attitude/knowledge of PSA recipients.
3		Comments and feedback received regarding PSA via the hotline or website.
4		N/A
Outreach Materials (i.e.: fact sheets and brochures)		
1		Count number of fact sheet/brochures handed out.
2		Administer survey/quiz to assess attitude/knowledge of fact sheet/brochure recipients
3		Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data.
4		N/A
Regional Outreach Event		
1		Count number of visitors to booths, brochures handed out, surveys/quizzes completed, etc.
2		Count number of mail-in cards, number of volunteers to organization, number of persons who attended community event. Administer survey/quiz to assess attitude/knowledge of visitors
3		Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data.
4		N/A

Partnerships

1	Count number of incentives distributed, participants in the program.
2	Survey or quiz to assess attitude/knowledge of volunteers pre- and post- participation
3	Administer survey to assess behavior change in program participants or count observable behavior of program participants and compare to pilot data, historical data, and/or control group. Count number of mail-in cards, number of volunteers to organization, or number of persons who signed a petition directed from incentive program.
4	Count amount of load reduction in targeted residential area or count amount of load removed from targeted area

Hotline

1	Count number of calls to hotline.
2	Administer survey/quiz to assess attitude/knowledge of hotline users.
3	Administer survey to assess behavior change of participants in program and compare to pilot, historical, or control data, count observable behavior of participants in program and compare to pilot data and/or control group.
4	N/A

7.0 CONCLUSIONS AND RECOMMENDATIONS

The San Diego region has widely diverse socio-economic, ethnic, biological, and physical characteristics. These characteristics create the region's appeal and present many challenges to the entities charged with developing and implementing an effective Regional Urban Runoff Management Program (RURMP).

The Regional Residential Education Program is a component of the San Diego RURMP. This program is designed to increase knowledge and awareness of stormwater issues and potentially change pollutant generating behaviors. Research indicates that these are attainable goals under a well-funded, long term, multi-faceted and strategic public outreach campaign.

In order to implement program goals, the Copermittees have agreed on general objectives: 1) maintain a consistent image, message and brand 2) use positive messages to increase knowledge and awareness, thereby increasing the likelihood of behavior change 3) develop community partnerships and 4) develop strategies to assess program effectiveness. In order to efficiently accomplish these objectives, Copermittees have agreed to adopt Think Blue as the regional flagship brand. In addition, strong and

focused outreach messages will be selected to increase knowledge and awareness and ultimately target the primary pollutant generating behaviors from residential activities.

The basic program elements include an array of methods and approaches that will be utilized for program management, message delivery, and effectiveness assessment. Over time, the Regional Residential Education Program will be adapted to utilize the most effective outreach and education strategies practicable while maintaining a clear focus for the entire region. Annual reports will summarize progress and provide an opportunity to reflect on the year's successes and shortcomings. At the end of the 5-year permit cycle, Copermittees will be able to assess of the program's progress and develop more effective regional outreach strategies.

Appendix G

JURMP Annual Report Requirements Checklist

G-1 Requirements Checklist

Appendix G-1
JURMP Annual Report Requirements Checklist

2.0 Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Section In Report**
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2.4, 2.3, 2.4.4.1, 2.4.4.2
ii. Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.4.4.2, 2.4.4.3, 2.4.4.4
iii. A listing of the development projects to which SUSMP requirements were applied.	2.4.4.3, Table 2-3
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.4.4.3, 2.4.4.4
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.4.4.3
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.4.4.3 (N/A)
vii. An updated treatment control BMP inventory.	2.4.4.4, Appendix A-1
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.4.4.7 (N/A)
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.4.4.6 (N/A)
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.4.5
xi. A listing of any projects which received a SUSMP waiver.	2.4.4.3 (N/A)
xii. A description of implementation of any SUSMP waiver mitigation program.	2.4.4.3 (N/A)
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.4.3.1, 2.4.4.1
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.4.4.3 (N/A)
xv. A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	2.4.4.3

2.0 Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	Section In Report
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	2.4.4.3 (N/A)
xvii. The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	2.4.4.8
xviii. A description of notable activities conducted to manage urban runoff from development projects.	2.4.4.9

3.0 Construction

Permit Annual Reporting Requirement—Section J.3.a.(3).(b)	Section in Report
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.5.1
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2.2, Appendix B-3
iii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iv. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.4.1
v. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.5.4 (N/A)
vi. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.5.3, 3.5.4 (N/A)
vii. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	Appendices B-1 and B-2
viii. A description of the general results of the inspections.	3.5.5.2
ix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5.5.1

x. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.5.5.2, Appendix B-6
xi. A description of notable activities conducted to manage urban runoff from construction sites.	3.2.2, 3.3

4.0 Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Section in Report**
i. Any updates to the municipal inventory and prioritization.	Appendix C-1
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2.3, 4.3.3, 4.4.3, 4.5.3, 4.6.3, 4.7.3
iii. A description of inspections and maintenance conducted for municipal treatment controls.	4.4.4.1, Appendix C-2
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4.4.1, Appendix C-2
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	Appendix C-2
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	Appendix C-2
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4.4.1, Appendix C-2
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	N/A
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	4.3.3.1
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2

4.0 Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	Section in Report
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2
xiii. Identification of the total distance of curb-miles swept.	4.2.4, Appendix C-2
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.2.4, Appendix C-2
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.2.4, Appendix C-2
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	4.5.4.1
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.3.2, 4.3.4.3, Appendix C-2
xviii. A description of the general results of the inspections.	4.3.4.3, Appendix D -5
xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	4.3.4.3, Appendix D -5
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	Appendix D-5
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	4.2.4, 4.3.3.2, 4.4.4.1, 4.5.4.1, 4.7.3.1, 4.7.4

5.0 Industrial and Commercial

Permit Annual Reporting Requirement—Section J.3.a.(3).(d)	**Section in Report**
i. Any updates to the industrial and commercial inventory.	5.2.2,
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.4.5, 5.3.4.4, Appendices D-5 & H-1
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.4.4, 5.3.4.1
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.4.2
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.4.1
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4.3, 5.2.4.5
vii. Identification of the number of third party inspections conducted.	5.2.4.3 (N/A)
viii. Identification of efforts conducted to verify third party inspection effectiveness.	5.2.4.3 (N/A)
ix. A description of efforts implemented to address mobile businesses.	5.3.4
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4.5, 5.3.4.4
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4.5
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	5.2.4, 5.3.4

6.0 Residential

Permit Annual Reporting Requirement—Section J.3.a.(3).(e)	Section in Report
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.3, 6.4.3, Appendix H-1
iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4.2
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4.2
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.2.3
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4.3, Appendix H-1
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4.4
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	6.4

7.0 IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Section in Report
To be included in FY 2007-08 Illicit Discharge Detection and Elimination Component on December 15, 2008.	N/A

8.0 Education

Permit Annual Reporting Requirement—Section J.3.a.(3).(g)	Section in Report
i. A description of education efforts conducted for each target community.	8.3
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	8.3.1
iii. A description of education efforts conducted for municipal departments and personnel.	8.2
iv. A description of education efforts conducted for the new development and construction communities.	8.3.2
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.3.4

9.0 Public Participation

Permit Annual Reporting Requirement—Section J.3.a.(3).(h)	Section in Report
i. A description of public participation efforts conducted.	9.3

10.0 Fiscal Analysis

Permit Annual Reporting Requirement—Section J.3.a.(3).(j)	Section in Report
i. A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order. (For 2007-2008, the requirements that apply are essentially the same as those found in Order No. 2001-01)	10.0

Same as old Permit for 2007-2008

11.0 Effectiveness Assessment

Permit Annual Reporting Requirement—Section J.3.a.(3).(i)	Section in Report
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11.0

12.0 Special Investigations

Permit Annual Reporting Requirement—Section J.3.a.(3).(k)	Section in Report
i. A description of any special investigations conducted.	12.0

13.0 Non-Emergency Firefighting

Permit Annual Reporting Requirement—Section J.3.a.(3).(l)	Section in Report
i. A description of efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	13.0

14.0 JURMP Revisions

Permit Annual Reporting Requirement—Section J.3.a.(3).(m)	Section in Report
i. A description of any proposed revisions to the JURMP.	14.0

Appendix H

Complaint Response

H-1 **Complaint Response Summary**

Complaint Response Summary

FY 2007 - 2008

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Actions/Follow up Actions Taken	Enforcement	Sub Basin
34609	6/22/07	Municipal	soapy wash water	NO		Discharge of other wash water - Someone saw men spraying off the sidewalk and brushing water into the parking lot. Another witness saw the parking lot lined with water marks draining down to Vulcan and puddles of soapy water in parking lot.		WO#50441 : Sent email to P&R with Plaza and Sidewalk Cleaning BMPs. He responded that he will see that the contractors change their ways.	None	Encinitas
34637	6/26/07	Construction	concrete/construction dust	NO		Discharge of concrete cutting slurry or wash water. – Owner of restaurant called saying the workers in front of his restaurant appear to be done working in a certain area, but haven't cleaned up the mess. dust continues to blow up onto his restaurant every time a car goes by.		WO#38830 : Inspector visited site on 7/11/07- found that street sweeper completely cleaned area. No further action necessary.	None	La Costa South
34724	7/7/2007	Residential	Latex paint	NO		Discharge of paint - Received complaint regarding paint dumped into gutter line/and worked its way to the storm drain box. Need to inspect condition and notify responsible party.		WO#39092 : 8/6/2007 Re-inspection by inspector showed sidewalk was stained, but no further cleanup to be done.	None	Lux Canyon
34773	7/11/07	Commercial	H2O colorless and odorless	NO		Discharge of water - Received a complaint from Starbucks manager about continuous water drainage down the driveway, for the last 3 days.		WO#39090 : called property manager and emailed photos to her 7/12/07 received a call stating that source had been found. Barns and Noble was using a mister for their A/C unit. Water has been shut off and property manager will follow up with the business owner 7/23/07 received an email from property manager stating that they have shut off the valve to the pipe and that Starbucks and Barns and Noble are reviewing their water usage. She will email me when they find a solution but the water is turned off	None	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34780	7/16/07	Municipal	unknown	NO		Discharge of water - A citizen walks regularly, and noticed in the rain on Windsor and Munevar that some type of water residue runs down the gutter line, and it's very rusty looking. Check it out.		WO#39008 : 7/19/07 Inspected storm drain outlet in front of 1294 Munevar that showed some seepage draining onto the street (Munevar). Investigated the storm drain upstream east side of Windsor road and found a brick in the storm drain. Removed the brick and took photos. Also observed a constant flow coming out of the storm drain on the north side of Munevar between 846 and 860. Took photos. 7/20/2007 No name or number to contact to relay information. Need to get a manhole puller and open the drain, check inside. 8/6/2007 Received closed work order from PW- Streets regarding vegetation on street.	None	Cardiff
34820	7/23/07	Commercial	Sidewalk wash water	NO		Discharge of building or sidewalk wash water - Report of sidewalk washing. 7/23/2007 - will call complainant to verify location, and will make site visit.		WO#38916 : 7/23/2007 Site inspection, storm drain west of 927 S Coast Hwy 101 needs to be cleaned. Took photos. Restaurant manager contacted, and she said the property mgr cleans the tables every Tuesday, and he is contact.	None	Encinitas
34843	7/23/07	Residential	concrete mixing	NO		Discharge of concrete waste. - Streets asked Clean Water Program to check a mixing job in the street.		WO#38981 : 7/23/07 issued NOV to clean the street no wash down dry cleaning only. 7/24/07 re-inspected area. appears in compliance. signed off NOV	Education, NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34848	7/26/07	Residential	Big pile of dirt in street	NO		Other discharge - Big pile of dirt in the right of way. Blocking the bike lane -traffic obstruction		WO#39007 : 7/26/07 Contacted resident and he informed me that the delivery guy spilled in the street by accident. Issued an NOV to clean up the street by 7/27/07 12 noon. 7/30/07 re inspected area, the street was clean. took photos	NOV	Lux Canyon
34849	7/6/07	Commercial	power washing runoff	NO		Discharge of other wash water - NCTD is power washing the depot without capturing the wash water. Mike Emerson responded, they were actually capturing the wash water. no violation, case closed.		WO#41558 : NCTD is power washing the depot without capturing the wash water. Mike Emerson responded, they were actually capturing the wash water. no violation. case closed.	None	Encinitas
34903	8/1/07	Commercial	Debris, food, particles	NO		Discharge of food waste. - Witnessing on drive in each morning, coffee shop on N Coast Hwy 101 n/o Jasper (west side), the crew members are sweeping the area where their chairs & tables are set. They are brooming from sidewalk, to asphalt walkway into the gutter		WO#39065 : 8/1/07 contacted the owner of the business and requested that she discontinue sweeping debris into the gutter and to collect the debris and put it in the trash	None	Leucadia
34930	8/2/07	Commercial	Detailing water	NO		Discharge of water - A citizen driving by on Saxony Rd-heading northbound, noticed a detailing truck cleaning trucks in the parking lot of 211 Saxony Rd (Businesses). The water is not being captured, it is running down the driveway into the city street.		WO#45956 : 8/2/2007 Inspector is out of office this morning. PW- Streets responded, did not see any discharge or washing of vehicles	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34935	8/2/07	Residential	trash, "muck"	NO		Other discharge - complainant called in about multiple neighbors dumping trash into storm drain by her house. storm drain on canyon side is clogged with muck/trash. wants to know if/when there will be a camera run thru line and when it will be cleaned.		WO#39108 : 8/2/07 contacted complainant, took photos of storm drain inlet and outlet into the canyon. Need to get storm drain cleaned and video taped 8/3/07 sent email to Streets regarding trees 8/6/07 sent email to Streets regarding clearing and video taping the storm drain 8/13/2007 2:29:32 PM received email from Streets that Wastewater had done the work: the storm drain was cleaned and televised on Tuesday 8/7/07. We did remove some debris from the box. Also, when televised, we found two small holes in the pipe. We have added this drain to our list of those to be slip lined. 8/20/2007 8:49:25 AM Ok to close	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34936	8/2/07	Residential	standing water	NO		Discharge of water - association mgr for Park Place HOA in Cardiff called to report standing water in front of 1423-1430 Big Canyon Terrace. Water drains off hill and has nowhere to go.		WO#39099 : 8/3/07 inspected storm drain adjacent to 1423 Big Canyon Terrace (SW of property). There is a section that has standing water. took photos and was contacted by the owner of 1423. She stated that the contractor had promised to fix the drainage problem after they complete the street resealing. Resident reported that the problem was never fixed. 8/6/07 emailed request to Streets to use the Bobcat sweeper to clear the standing water and then re inspect area in two weeks after sweep 8/8/2007 10:46:23 AM Streets reported that a crew went out and hand swept the standing water and will have an engineer shoot or survey the site for future improvements 8/8/2007 10:47:56 AM called resident and informed her of the actions that were taken 8/8/2007 3:18:57 PM Streets said they would contact HOA Association Manager to let her know what happened.	None	Cardiff
34937	8/3/07	Residential	pool water	NO		Discharge of water - Jim said the water is draining from the hill behind him down the culvert to the left side of his driveway. ongoing for about 2 hours now. Discharge was white-ish at first, now clear. cannot access violation address from Jim's property.		WO#39182 : 8/8/2007 1:25:03 PM did inspection, the owners of 1110 Hymettus discharged some jacuzzi water that was de-chlorinated	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34951	8/6/07	Construction	concrete wash	NO		Discharge of concrete waste. - I received a call from Rocco stating that his contractor dumped concrete wash into his lawn and into the storm drain		WO#39131 : 8/7/2007 7:53:10 AM Complainant stated that the contractor that he hired poured concrete waste down the storm drain and on to his vegetation 8/7/2007 9:38:01 AM Met the property owner/complainant on site. He showed me what his contractor had done and where he drained the concrete wash out. Took photos on the dirt and debris in the street. Received the contractor's information issued an NOV to the contractor to clean the street by 8/14/07 12 noon and to call me when the street is clean 8/13/2007 1:53:54 PM Inspected area. it appeared clean. took photos. contacted owner and signed off NOV	Education, NOV	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34953	8/4 & 8/5	Residential	Water- irrigation run-off from neighbor's yard	NO		Discharge of water - Neighbor has been over watering, and the water is traveling through his yard, and then to city right of way. Standing water accumulates all the time. He talked with county, but county referred him to the city.		WO#39154 : Wishes a drive-by and discussion on how to rectify the situation. Neighbor vs Neighbor 8/7/2007 2:02:29 PM I met the owner of 910 Sidonia, He showed me the run off and stated that he is a certified vector site and needs to be treated every three weeks. He gave me County vector control environment inspector's contact. called and left a message to confirm that it is a vector site. Streets stated that if it is a vector site then we can contact the owners of 920 Sidonia and require them to discontinue over watering. 8/8/2007 7:39:25 AM I received a call from County Environmental Specialist confirming that the water in front of 910 Sidonia is a site that needs to be treated every three weeks. 8/8/2007 11:16:13 AM Received call from complainant/respondent stating the drain is clogged on his side of the property. Updated him on the vector control issue and informed him that i would inform the PW streets person. Sent email to streets. 8/13/2007 2:01:08 PM I received an email from the county health tech verifying treatment, mosquito breeding, and need for site monitoring. 8/8/07 sent email to streets to inform about email from County Vector	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								8/31/2007 12:00:41 PM Streets informed me that they cleaned out the pipe 8/27/07 the water district will put door hanger on 920 Sidonia and Streets will monitor drainage. Informed complainant that pollutants must be leaving the property as a result of over-irrigation runoff to be a violation Ok to close.		
34964	8/7/07	Residential	Dirt in street	NO		Other discharge - I received a call from Chris Hicks 436-3560 stating that her neighbors are leaving dirt in the street and adding more land to their property.		WO#39155 : 8/7/2007 2:33:29 PM contacted the resident and he informed me that the landlord had placed the dirt on the side of his property. gave the resident my card and asked that the owner of the property give me a call and an action plan 8/7/07 called and left a message with complainant 8/27/07 I have not received a call from the landlord. Need to go and contact resident to get landlord's information 8/30/07 met with owner. He promised to clean up dirt by 10-1-07. sent him an nov and warning citation 10/3/07 site inspection. observed loose sediment in right-of-way with some cement rocks around the base. Took photos and left a card requiring the respondent to call me. Site does not appear to be in compliance.	Citation, NOV	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								10/4/2007 10:42:45 AM Met will Streets and it was agreed that a citation should be issued for sediment in storm drain and lack of BMPs. NOV and Administrative citations were drafted and sent out Cert and regular mail 10/30/07 site inspection observed that the sediment was removed. Took photos. Contacted the respondent about BMPs and how he was going to keep all of the sediment on the bank. He said he was delayed by the fire storms but was planning on installing jute-matting and some plants by 11/14/07 12/13/2007 12:05:34 PM See follow up work order 53399. Follow Up: 11/29/07 contacted respondent and thanked him for installing the min BMPs took photos OK to close case		
34967	8/7/07	Commercial	driveway wash water	NO		Discharge of other wash water - Received call from Streets regarding wash water from power washer.		WO#41556: Inspector investigated, contacted owner, issued NOV for not properly implementing BMPs. Owner will power wash and collect for the rest of the site.	NOV	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34970	8/7/07	Residential	dirt and dry cement	NO		Other discharge - 8/7/07 received a call regarding dirt and other debris in storm drain south of 705 L Mirada Ave.		WO#39166 : 8/7/07 contacted owner and showed him the piles of dirt and dry cement and asked that he remove them from the storm drain and give me a call when it is clean. took photos 8/8/2007 9:38:39 AM Keep open until respondent calls me for re-inspection 8/13/2007 1:46:42 PM Received an email from respondent stating that he had cleaned up the street. 8/13/2007 1:47:02 PM Inspected area- it was clean. OK to close	None	Encinitas
34977	8/5/07	Commercial	paint wash water	NO		Discharge of paint - Email from complainant: on Sunday i had breakfast at the potato shack cafe. yoga studio on the corner that just painted deep blue trim. residual blue paint in gutter, flowed across street to west and ponded on other street corner.		WO#39201 : 8/9/2007 3:27:13 PM contacted the worker and business owner and issued nov took photos.	Education, NOV	Encinitas
34979	8/8/07	Residential	diatomaceous earth	NO		Discharge of other wash water - Inspector saw diatomaceous earth in street gutter while he was out doing another service request. spoke to woman at house, she said her husband will call Inspector back.		WO#39185 : 8/9/2007 8:18:45 AM received a call from the respondent on 8/8/07. He told me that he had asked his new pool maintenance contractor to not empty the diatomaceous earth into the storm drain. He said he would sweep it up. He asked how to discharge i informed him to drain it through a pillow case. 8/8/07 received another voice mail call from respondent stating that he had swept up all of the discharge 8-9-07 re inspected area. appeared clean. OK to close	None	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
34980	8/8/07	Residential	oil	NO		Discharge of oil - Citizen lives next door to 1267 Calle Christopher, her neighbor drives a black ford ranger. The ranger is leaking oil, and he parks in the same place, and then the vehicle leaks oil, and he keeps putting down kitty litter.		WO#39200 : 8-9-07 site inspection observed dark blue ford truck with kitty litter under it. took photos. issued nov to mother in-law to comply by 8/16/07. Gave education fliers 8/22/2007 1:11:53 PM re inspected area. Street was cleaned and a pan was placed under vehicle. signed off nov. OK to close	NOV, Education	Lux Canyon
34988	8/8/07	Residential	diatomaceous earth from pool	NO		Discharge of water - White powder (diatomaceous earth) outside the curb drain between 282 and 276 Cerro. pool located at 282 Cerro. line of white down street to storm drain.		WO#39238 : 8/13/07 Took photos contacted resident. left my card for husband to give me a call. received a call from the husband stating that he will do a better job cleaning his pool. He had an accident with the pool filters	None	La Costa South
35006	8/16/07	Commercial	na	NO		Other discharge - Inspector received call. Inspected Nursery, found no evidence of discharge. Inspectors will go test water in storm drains around nursery. See attached email.		WO#43663 : 8/16/07 11am observed discharge took photos and collected sample from the south west corner of lot 9/12/2007 9:31:59 AM Received and attached several emails from complainant 9/10/07 received call from owner stating that they are working on the corrections 9/12/07 NOV and citation sent 10-2-07 Program Mgr and Inspector met with complainant to listen to her concerns and inform her that we were investigating the run off from the nursery. She informed us that her daughter has a brain tumor, along with two other people that live there.	Citation, NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								10-3-07 Program Mgr and Inspector met with nursery owner. he showed us where the water was running off the property and how they will fix the run off problem-cut the pipe so that it drains into a seepage pit. He will call me when all of the pipes are cut. 10-12-07 received a call from owner stating that he needed more time to cut the last pipe. He needed to get a crane to open the lip to cut the pipe. He said it would be done by 10-19-07 11/12/07 Received a call from owner stating that all of the pipes have been cut call to schedule re-inspection 11/13/07 All pipes cut. no discharge.		
35016	7/24/07	Commercial	sidewalk wash water	NO		Discharge of building or sidewalk wash water - Email from complainant with pictures showing that restaurant had washed off their front patio without containment. 2nd offense.		WO#52928 : 8/15/07 Referred complaint to inspector in clean water 11/29/2007 9:41:36 AM NOV letter/Admin Citation sent to restaurant manager and to corporate headquarters. Citation paid on 9/17/07.	Citation, NOV	Cardiff
35064	7/25/07	Commercial	pet waste	NO		Other discharge – Clean Water staff saw large amounts of dog waste on the ground West of Liverpool, east of train tracks, north of bridge. See attached emails for communication regarding this issue. Bacteria sampling results were higher than average in the area.		WO#75378 : 8/1/2008 2:00:10 PM Emails were sent to the Encinitas Chamber of Commerce and there were phone calls to the North County Transit District (NCTD). NCTD agreed to have a security guard patrol the area more frequently to discourage trespassers.	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
35073	8/21/07	Residential	water, over-irrigation	NO		Discharge of water - over-irrigation near 752 Bracero Rd. going into storm drain.		WO#46030 : 10/10/2007 8:26:47 AM Inspector's field investigation revealed that there was no illegal discharge at any point on Bracero Rd.	None	Encinitas
35076	8/21/07	Municipal	power washing wash water	NO		Discharge of building or sidewalk wash water - Power washing at City Hall. Inspector spoke with employee, saw that BMPs weren't properly being implemented. Wash water going down Vulcan. Drains in City Hall courtyard not connected to sewer. contact P&R or Facilities Maintenance to discuss.		WO#41447 : 8/21/07 took photos and called P&R and he informed me that the roofing contractor was hired by Facilities maint. Facilities Maint called me and gave me the name of the contractor. Contractor said he had a bad forman and has corrected the BMP problem. 8/22/07 re inspection showed that the contractor was using the correct BMPs OK to close	None	Encinitas
37084	8/22/07	Commercial	Building wash water	NO		Discharge of building or sidewalk wash water - Inspector received a call from PW Streets stating that a contractor was washing a building and not capturing the waste water		WO#41427 : I contacted contractor at 9am on 8/22/07 and informed him that he had to capture the wash water. I took photos and suggested that he sweep the wash water into the pervious area to the north of the building. Issued nov to comply by 12 noon 8/22/2007 3:18:46 PM re inspection showed that contractor is in compliance	NOV	Leucadia
37086	8/22/07	Commercial	water	NO		Discharge of building or sidewalk wash water - Received call from PW saying that business was washing bird poop off building and stairs. Water was going down street to Vulcan and into storm drain.		WO#41559 : Inspector visited site, no discharge.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
37097	8/22/07	Residential	diatomaceous earth from pool	NO		Discharge of other wash water - complaint call from County to Streets regarding cement-like substance dumped in gutter.		WO#41561 : Inspector visited site, turned out to be diatomaceous earth. Issued NOV to dry clean site and comply in 1 week. 8/31/07 site inspection showed street clean OK to close	NOV	Cardiff
37098	8/21/07	Residential	water	NO		Discharge of water – Streets called Hotline regarding water rushing down street..		WO#41554 : Inspector contacted homeowner, she said she was watering her garden. Inspector saw no signs of water on the street	None	Encinitas
37168	8/28/07	Residential	sewage	NO		Discharge of sewage - Resident lives in mobile home park in Leucadia. open sewage lines draining onto properties. prop manager uncapping sewage lines looking for leaks.		WO#50071 : Citation of $100.00 was paid on 9/19/07. Case closed letter mailed to responsible party on 10/12/07.	Citation, NOV	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
37170	8/28/07	Residential	water gathering in front of her house. green and moldy	NO		Discharge of water - Diane called in concerned about puddle of water that is always in front of her house. Nowhere for it to drain, worried about mosquitos. can something be done to improve drainage? test for west nile virus?		WO#41514 : 8/28/07 Site inspection observed some wetness in street. took photos and called complainant. The complainant will monitor area and send photos when the drainage is really bad. sent an email with photos to Streets. 8/29/2007 9:14:53 AM Keep open for 30 days to monitor 9/5/07 after speaking with Streets the complainant was called. Left a message that the street sweeper comes every third Thursday. The complainant was advised to keep vehicles off the street on that day. Also to sweep that area when the pooling is created. Informed her to contact her neighbors regarding irrigation run-off and vegetation in the storm drain. CC only wanted street sweeping done once a month 9/5/2007 8:44:29 AM OK to close	None	La Costa South
37232	8/30/07	Commercial	power washing wash water	NO		Discharge of building or sidewalk wash water – Program Mgr saw power washers washing without containment in front of restaurant.		WO#52932 : Inspector spoke to power washer, asked him to sweep water into landscaping and wet vac water in street. 11/29/2007 10:56:48 AM Admin Citation Warning CW-100307 sent via certified mail. returned. re-sent via regular mail. also sent copies to restaurant	Citation	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
37233	8/30/07	Residential		NO		Discharge of oil – Gas smell and dark substance in curb line leading to storm drain. Inspector to investigate.		WO#41534 : Resident said they were cleaning jacuzzi. saw no discharge. but heavy gasoline smell. Husband said he washed off a tractor. Fire dept washed street, containing water with VacCon. see attached email. 9/4/2007 7:36:37 AM Completed cost recovery and sent email to HR to get cost of fire crew. 9/5/07 issued NOV, cost recovery ($752.70), and administrative citation ($100)	Citation, NOV	La Costa South
37244	8/31/07	Municipal	wash water	NO		Discharge of other wash water – Clean Water staff saw public works washing down @ vulcan and the condo development at vista del rey dr. looked like water was running down vulcan to cottonwood creek.		WO#41560 : 8/31/2007 11:02:13 AM Staff stopped to talk to Wastewater, he said they always capture the water, but when she drove by it looked like water was going down to cottonwood creek. one man was hosing it off, the other was just standing there, and the vaccon was not in use. 8/31/2007 11:24:17 AM Staff spoke to Wastewater Manager, he will talk to his guys.	None	Encinitas
37250	8/31/07	Residential	silt	NO		Discharge of Silt or Sediment - Water drainage down from 372 Dollimore Rd, flooding the park -where the city host lives. Cotton wood creek park.		WO#45793 : 10/9/07 Re inspected area in compliance took photos and thanked respondent	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
39306	9/11/07	Commercial	water	NO		Discharge of other wash water - Wastewater called to report water coming from Henry's trash compactor/dumpster area. Inspector to investigate.		WO#43662 : 9/11/07 site inspection took photos of puddles around trash compaction area. contacted Assistant Manager. He informed me that they were watering the plants and not cleaning the trash area. The trash area is cleaned by the janitor with a scrubber and he contains all the wash water. Manager said he would water the plants in the cooler so the excess water flows into the sewer.	None	La Costa South
41347	8/31/07	Residential	wash water from auto detailing	NO		Discharge of vehicle wash water – Email forwarded from RWQCB regarding auto detailer not containing wash water. Not many details in complainant's original email.		WO#50153 : 9/10/07 Sent email to complainant requesting more info about the auto detailer and frequency of the violations. No response as of 9/13/07. The phone number provided goes to La Costa chiropractic, and there is no Gail there. 9/18/07 Sent email to RWQCB at the EPA to say we've tried contacting complainant, and if there is any other complaints for Encinitas she can forward them to Hotline or npdes email. 10/15/07: site inspection by Mike Emerson. no discharge observed.	None	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
41356	9/13/07	Residential	wash water	NO		Discharge of other wash water - Streets called to report wash water discharge at intersection of Stafford and Montgomery. Inspector to investigate.		WO#45692 : 8/12/2008 9:13:40 AM No illegal discharge observed. Looks like residential car-washing in the driveway. Residents were not home. 8/12/2008 9:17:59 AM See follow up WO 75529 Follow Up: 11/6/07 site inspection contacted property manager to route drainage to sewer 8/12/2008 9:15:30 AM See original WO 45692	None	Encinitas
41385	9/17/07	Residential	muddy water	NO		Discharge of water - Complainant reported dumping muddy water in great volumes on Bracero Rd.		WO#45774 : 9/17/07 3pm site inspection observed water in street across from 752 Bracero Road coming out of cement outlet drain. Observed dirt and sediment in the street. Met with complainant who believes there is a low point next to the outlet that does not allow the water to flow. Not enough slope. Appears that the 2nd house east of Bracero, where they are doing construction work, may have dirt and debris in the drainage ditch. Contacted residents at 843 Requeza, regarding over watering and runoff. The gardener will fix the timer and look into pumping the water back out to Requeza. The residents also complained about the dust from the construction at 829 Requeza blowing onto their property. Contacted the owner of 829 Requeza and requested that she instruct the workers to clean out the drainage ditch. She said her husband had already complained about the ditch and that it will be cleaned up ASAP. took photos of the street	NOV	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								9/18/2007 12:00:16 PM sent email construction inspector handling the permit for this site. 9/20/07 Eng. Const. inspector visited site. identified problem. requested brow ditch cleaned out and line edge with BMP's either sand bags or silt fence. 9/27/07 Returned to site to verify direction from 9/20/07 was followed. Brow ditch was clean, and (2) silt fences were placed adjacent to it to ensure no more erosion into it. took photo 10/3/07 I called the complainant and informed him of the actions that were taken for this address and that more would be taken for the drainage. Follow Up: 3/28/08 site inspection area cleaned up signed off NOV case closed 4/16/2008 1:50:20 PM See SR 63213 and Original WO 68227		
41393	9/18/07	Commercial	sewage from port-a-potties	NO		Discharge of sewage – Staff member's husband with the County called to let her know of port-a-potties flowing into storage tanks. the tanks are overflowing. Inspector to investigate.		WO#45857 : 9/20/07 Met with contact regarding the bathrooms and the sewage storage tank in the north side of the playground. Toilets were flowing all Labor Day weekend. Now they will pump the storage tank three times week. 9/25/2007 9:17:36 AM Former Program Mgr informed me that the health department is requiring sewer hook up within 30 days	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
41407	9/19/2007	Residential	Some type of pesticide from the plants on the property	NO		Discharge of yard waste - You will need to watch the resident listed at 1257 to witness their cleaning of the plant, and allowing the pesticide chemical to enter the curb & gutter line.		WO#45939 : 9/19/2007 9:46:11 AM standing water issue. check out the aesthetics of the area, and make recommendation to either visit one time per week and clean gutter line, or recommend something through the Engineering dept. Also check the debris behind the mail box, lots of debris. There are cans of spray near this area. 9/19/07 Site inspection observed some white power like substance in the street. Took photos left card at front door Follow Up: 6/12/08 site inspection BMP in place (gravel at the end of pipe took photo 8/12/2008 9:22:17 AM See original WO 75385 and 1st follow up 75386	None	Cardiff
41431	9/19/07	Commercial	power washing wash water	NO		Discharge of building or sidewalk wash water - email from complainant detailing violations, with pictures. Inspector to investigate.		WO#53012 : Sent NOV Letter 10/8/07 to business with mobile business pressure washing info.	NOV	Encinitas
41434	9/19/07	Construction	sediment	NO		Discharge of construction debris - construction stie with lack of BMPs. sediment running down H Street. Inspector to investigate.		WO#75418 : 8/4/2008 1:38:47 PM Inspector visited site, spoke with owner, told him to clean it up by end of 9/20/07. he hung up on her. called back to apologize. Forwarded case to Construction Inspector. 8/4/2008 1:45:19 PM See follow up WO 75419 Follow Up: 8/4/2008 1:42:36 PM Construction inspector called and left message with contractor. Contractor cleaned up street on 9/27/07.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
41448	9/25/07	Residential	Power washing	NO		Discharge of building or sidewalk wash water -		WO#45871 : 9/25/2007 3:58:47 PM Contacted workers and supervisor issued nov took photos and gave educational materials and advice of how to capture the water	Education, NOV	Encinitas
41507	10/1/07	Municipal	Window Washing water	NO		Discharge of other wash water - city hall personnel witnessed the window washer dumping his waste from his buckets into the drain in the city hall complex.		WO#45944 : 10/1/07 received complaint observed wash water in storm drain grate with a cleaning odor. Took photos. 10/8/2007 9:16:19 AM Inspector contacted contractor, he said they use biodegradable soaps and will dump wash water into planter boxes from now on.	None	Encinitas
41508	10/1/2007	Municipal	Trash & human waste	NO		Discharge of sewage - Complainant called to complain about the encampment behind the AM/Pm at Leucadia Blvd & El Camino Real, trash and other human waste going into the creek.		WO#45967 : 10/1/07 site inspection took photos of trash and encampment. Met with supervisor- it was agreed that the case should go to code enforcement. 10/2/07 sent email to code and dropped off photos.	None	La Costa South
41509	9/28/07	Commercial	the drain is clogged and has maggots	NO		Discharge of food waste. - the storm drain behind a restaurant is full of stuff/clogged and is full of maggots. Time to be cleaned out.		WO#45932 : 10-1-07 issued NOV for grease in storm drain. Ordered to clean grease area and street 10/2/2007 1:50:33 PM to keep open until follow inspection shows area cleaned up	NOV	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
41515	10/2/07	Residential	Flurries from the white brick that is being cut	NO		Discharge of construction debris - Contractor is cutting brick and the flurries are flying into the street.		WO#45940 : swept up area. Hose was used to control the dust from the cutting. Took photos of the street. Informed home owners of best management practices and gave them four educational flyers and suggested that they sweep up the street once it has dried. They asked that the property management be informed. property management was informed abouit BMPs for this job and the actions that the property owners will take (sweep street). Suggested that the PM inform the HOA in next newsletter or meeting and to send a street sweeper to this job.	Education	Leucadia
41519	10/3/07	Residential		NO		Discharge of oil - Email regarding complaint from Code Enforcement Violator has a vehicle parked in the street since 9/27/2007 that is dripping oil onto city street. Yard is full of junk too.		WO#45955 : 10/3/07 site inspection street in front of house was clear. Took photos of house and vehicle across the street. Ford 2dr truck 10/4/07 contacted complainant. Site inspection left card at respondent's door and on the truck. Waiting for a call back 10/15/07 site inspection truck no longer at site. case closed	None	Lux Canyon

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
41546	10/26/07	Commercial	H20 wash off	YES	COTTON-WOOD CREEK	Discharge of building or sidewalk wash water - restaurant washing down sidewalks, windows and the parking lot into the city storm drain system		WO#50455 : 10/26/2007 3:20:25 PM site inspection contacted general manager took photos and issued nov	NOV	Encinitas
41573	10/3/2007	Commercial	water from mobile business dumped into drain	NO		Discharge of other wash water - Reporting mobile business truck dumping into the storm drain in the vicinity of Calle de Madera and Jason St at noon today (parked on Hygeia) She went to the window and was told by the drivers "they always do this, etc".		WO#53400 : 12/13/07 call to company. Woman on phone will have a supervisor call me back	None	Leucadia
45614	10/11/2007	Residential	concrete	NO		Discharge of concrete waste. – Construction inspector is reporting wet concrete in the curb and gutter line along Calle magdalena in front of the church. He suspects its comng from the Pelican Ridge Development, but not sure, please check out.		WO#50064 : 10/11/07 10:50 aml contacted respondent/owner on site. informed him how to clean a pool filter so that it does not discharge white substance (Diatomaceous Earth) into storm drain. He said he would inform his pool guy. I requested that he dry sweep up the street when the liquid dries. took photos. 10/11/07 received another complaint call from stating that there was a white substance in the road way in front of the PW facility. I inspected Calle Magdelena and villa Blanca and observed a neighbor hosing down the street in front of her driveway (417 villa blanca) I asked her to discontinue washing down the street. I contacted the tile worker who said it was not them .	Education, NOV	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								Called the GC He met me on site and said he would get the street cleaned up. Resident arrived home and signed the NOV and promised that her husband would clean up(dry sweep the street) before 12 noon 10/12/07. 10/12/07 re-inspection showed area cleaned sign off on NOV OK to close		
45650	10/15/07	Residential	diatomaceous earth from pool discharge	NO		Other discharge - Staff saw large trail of white substance leading from drain hole in curb to storm drain. Inspector to investigate.		WO#50218 : 10/16/07 Site inspection observed white substance/stain in street leading up to 1611 Calle Plumerias. Took photos and contacted resident. She informed me that her husband was cutting tile and putting the tile debris in a drain in the back yard. She said he is done cutting tile. Issued NOV to discontinue discharge and gave her educational information (construction and help flyers)	Education, NOV	Lux Canyon
45687	10/19/07	Residential	Not sure	NO		Other discharge - Information came from the hotline in Code Enforcement, that someone in this vicinity was dumping a substance into the storm drain system. alley behind 2337 Newcastle ave, and the incident address was coming 2128 Manchester Ave. Check it out.		WO#50440 : 10/25/07 11am site inspection. Did not observe any discharge or stains in the street or the alley behind 2337 Newcastle Ave. Checked behind 2328 Manchester and found a white stain in the alley. Contacted the respondents and showed them the discharge stain. They said they had received a letter from the City and were trying not to use the sink that discharges into the alley 10/25/07 The respondent showed me the sink and i suggested that they use a bucket with a hole in the top to let the clear water out the top and the sediment will stay in the bucket	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
45708	10/24/07	Residential	driveway wash	NO		Discharge of other wash water – Staff saw neighbors spraying off their driveway after the fires without containing the wash water.		WO#50443 : 10/25/07 site inspection did not observe any discharge. Left doorhanger.	None	Lux Canyon
45709	10/24/07	Residential	over-irrigation water	NO		Discharge of water - Over-irrigation water running down street on multiple occasions.		WO#50452 : 10/25/07 site inspection observed water running off property. Contacted resident she turned off the water at site inspection	None	Lux Canyon
45710	10/24/07	Residential	car washing wash water and sidewalk wash water running down street into storm drain	NO		Discharge of vehicle wash water - Car washing and sidewalk washing wash water running down street. During fires when water is needed elsewhere.		WO#50453 : 10-25-07 contacted owner of property. He admitted to washing his car but said that he did not wash off the sidewalk. Gave him a door hanger and requested that he conserve water during the emergency.	None	Lux Canyon
45717	10/25/07	Residential	driveway wash water	NO		Discharge of other wash water - Homeowner hosing off his driveway after fires, sweeping all water and chunks into storm drain next to driveway. Inspector to investigate.		WO#52491 : 10/25/07 8:30 am site inspection did not observe any discharge	None	Encinitas
45726	10/26/07	Commercial	Water	NO		Discharge of water - Citizen called to say that the parking lot where restaurant is located, there is a company power washing the entire parking lot, and the H20 is running into curb and gutter line		WO#52487 : 10/26/07 Contacted property owner who showed me that they were capturing all the wash water except for the area next to the drive way where some wash water left the site. Issued an nov to collect all wash water	NOV	Encinitas
45728	10/26/07	Commercial	Wash water	YES	COTTON WOOD CREEK	Discharge of water - Washing water down the storm drains.		WO#50454 : 10/26/07 Site inspection contacted Days Inn GM issued NOV and took photos. Also gave GM ash clean up info from RWQCB.	NOV	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
47750	10/28/07	Residential	paint chips/ash	NO		Discharge of paint - Owner of 2533 and 2531 Manchester was seen washing paint chips and ash down street with no containment. close proximity to lagoon. owner is from Arizona, doesn't live in these houses.		WO#52747 : 11/13/07 Left card to give me a call regarding washing paint chips into the storm drain	None	Cardiff
47800	10/31/07	Commercial	parking lot wash water	NO		Discharge of building or sidewalk wash water - Power washers in old Yogi's parking lot power washing. containment measures in place, but not necessarily in use. Inspector to investigate.		WO#52619 : 10/31/07 site inspection did not observe any discharge. Contacted contractor who informed me that he was capturing all of the waste water. He showed me the vacuum on his truck	None	Cardiff
47801	10/31/07	Commercial	wash water	YES	OCEAN	Discharge of water - Staff saw a man power washing Pacific View parking lot this morning.		WO#52616 : 10-31-07 site inspection observed school worker spraying off pavement into storm drain. I asked and he did create a berm so that the wash water would go into the dirt/gravel instead of the strom drain. I gave him a copy of the ash clean up tips from the regional board. I also gave him 6 sandbags to put around the south drain.	Education	Encinitas
47802	11/1/2007	Residential	Paint	NO		Discharge of paint - A contractor is dumping gals of paint into the storm drain system. Need to check out status		WO#52645 : 11/1/07 930am contacted owner of property 11/1/07 9:40 property owner indicated that it was a mistake and that he was washing out dirt off the paint bucket and one bucket had a very little amount of paint in it. He showed me where the washout pits were located on his property. He felt it was unfair to issue a citation for a mistake. After calling my supervisor it was agreed that an NOV should be issued to clean up the street and gutter by 1pm. If it is not cleaned to satisfaction of the inspector then a citation would then be issued.	Education, NOV	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								11/5/2007 7:33:58 AM Re-inspection showed area clean signed off NOV Follow Up: 11/1/07 follow up inspection to make sure all paint was removed from street 12/24/2007 1:20:25 PM See service request 47802 and original work order 52645		
47806	10/18/07	Residential	over-irrigation water	NO		Discharge of water - complaining that neighbor waters yard 3 times a day. over-irrigation runoff drains down hill to complainant's yard, causing damage to hillside and driveway.		WO#52664 : 11/1/07 Contacted complainant and took photos of drainage on the street. appears to be irrigation runoff. Complainant was informed that the clean water program manager needed to be consulted on the SOP for over irrigation runoff and that he is out of town until 11/13/07 11/6/07 contacted respondent. she agreed to have her landscaper meet with me. He will give me a call. 11/8/07 met with complainant, her neighbors, and the respondent's landscaper on site on 11/8/07. Landscaper gave his cell phone # to the complainant and turned off all the irrigation for the area of complaint. Complainants are to monitor the drainage/runoff and make direct contact with Landscaper if they feel there is a runoff problem. I let the complainants know that I would keep the case open only until the street drainage stopped.	Education	Lower Escondido Creek

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
47807	11/1/07	Residential	vehicle wash water	YES	COTTON-WOOD CREEK	Discharge of water - Complaint from code enforcement. mobile washer on Saxony that has been there a couple hours- water running into storm drain. Inspector to investigate		WO#52663 : 11/1/07 site inspection contacted worker to stop washing drive way	None	Encinitas
47831	11/5/07	Residential	Water from the pool, the pool is constantly filling up, and overflowing into neighbors yard, and into city street curb and gutter line	NO		Discharge of water - Neighbor at 624 Faith Ave- her backyard is flooded due to the resident at 630 Faith Ave - allowing his pool to overflow all the time. The water comes out into her backyard, and overflows into city street. Please stop this from happening.		WO#52665 : 11/5/07 Site inspection did not observe any discharge. Left card and think blue fact sheet for discharging swimming pools	Education	Cardiff
47849	11/6/07	Residential	Soapy water	YES	OCEAN	Discharge of water - Noticed hose coming from home, discharging soapy water into city right of way. Need to check intermittently - to verify the discharge, and notify homeowner not to continue		WO#52741 : 11/6/07 site inspection took photos left card Follow Up: 11/6/08 site inspection contacted property manager to route drainage to sewer 8/12/2008 9:15:30 AM See original WO 45692	None	Leucadia
47865	11/6/07	Residential	pile of dirt	NO		Discharge of Silt or Sediment - large pile of dirt in front of residence, located directly in front of storm drain. Inspector to investigate.		WO#52740 : 11/6/07 contacted respondent Ward Mac and requested that the dirt pile be removed from the street 11/6/07 contacted respondent took photos, 11/8/07 contacted respondent issued nov to comply by 11/9/07 12 noon. 11/13/07 signed off NOV	NOV	La Costa South
47876	11/7/07	Commercial	Vegetation from leaf blower into storm drain	NO		Discharge of yard waste -		WO#52700 : 11/7/07 site inspection observed vegetation in storm gutter. Contacted Landscaper. Requested that his crew clean up the gutter line	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
47917	11/13/07	Residential	swimming pool	NO		Discharge of water – Complainant called in regarding neighbor's pool discharge. Inspector to investigate and follow up with Complainant after speaking with neighbor.		WO#52799 : 11/15/07 site inspection left card for respondent to give me a call. Inspected easement for drainage erosion from pool discharge. Observed some stains took photos. I called complainant and left message. 11/19/07 received voice messages from both the respondent and the complainant. I spoke with the respondent. He informed me that he is splitting the lot and needed to show how the lot drains. I left a message with the complainant 11/19/07 received a call from the complainant stating that the problem occurs three or four times a month. Complainant agreed to monitor the drainage for sediment and call me when it occurs 11/9/07 called respondent and requested that he clean the sediment off the street and monitor his discharge so there is no sediment in it. He said he would clean the street and give me a call when complete. He also stated that his neighbor to the north irrigates quite often so that run off occurs. Follow Up: 3/24/08 site inspection observed rock BMP took photo case closed 3/25/2008 10:57:10 AM See SR 48554 and original WO 54257	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
47925	11/15/07	Commercial	Water from green houses	NO		Discharge of water - Runoff from the green houses on Woodlake Dr. and also from the Mormon Church. Inspector to investigate.		WO#52880 : 11/20/07 preformed storm water quality inspection on two green houses at 1616 Lake. Also contacted property owner of east lot 11/29/2007 3:08:22 PM Inspector will perform inspections on other surrounding properties and Mormon Church. 11/29/2007 3:09:41 PM one of the inspections was Lois' flowers	None	Cardiff
47983	11/20/07	Residential	pool water	YES	ESCON-DIDO CREEK	Discharge of water - Call from an OMWD customer about neighbor discharging pool water into creek. unsure whether water had been de-chlorinated or not.		WO#52943 : 11/27/07 left card at door 11/28/07 received voice mail from neighbor that they tested the water before discharge and inspected path of drainage	None	Lower Escondido Creek
47985	11/21/07	Commercial	trash dumpster	NO		Other discharge - trash dumpster behind wamu overflowing and on a slant leading to the storm drain.		WO#52883 : 11/21/07 contacted back manager and took photo of overflowing dumpster. Manager said they had just completed their storage area for their trash. He will move the dumpster to that area	None	La Costa South
47986	10/31/07	Residential	irrigation water	YES	COTTTON-WOOD CREEK	Discharge of water - Ms. Barth walks every Wednesday morning with her group and noticed a considerable amount of water pooling at the end of neptune		WO#52865 : 11/9/07 contacted SDWD regarding water use at 452 Neptune. It appeared to be excessive. The water meter was tested and had no leaks 11/21/07 gave card at door and water conservation programs to resident	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
47988	11/22/07	Residential	driveway wash water	NO		Discharge of other wash water - Anonymous caller reported neighbor power washing driveway, letting wash water flow down street into storm drain. Caller stated that neighbor usually does this on days when City Hall is closed. send information letter.		WO#52879 : 11/26/2007 3:48:14 PM Mailed informational letter and Clean Water Toolbox BMPs from Project Clean Water website to resident at 1129 bonita dr. Follow Up: 5/19/08 site inspection area cleaned up case closed 5/20/2008 10:27:43 AM See SR 64499 and original WO 70201	Education	Cardiff
48021	11/13/07	Residential	H2O	NO		Discharge of water -		WO#52875 : 11/15/07 contacted neighbor at 842 Bonita regarding the drainage issues in the alley. She informed me that when the construction was done south of the driveway the large trucks sunk the driveway. She said the water pools right in front of her house and that her husband has to dig out the drainage regularly.	None	Encinitas
48022	11/15/07	Commercial	1. Debris in storm drain 2 Old tv monitors 3.misc building materials	NO		Discharge of construction debris - While doing an inspection for Shell, the storm drain north of Shell needed to be cleaned.		WO#52876 : 11/15/07 site inspection observed violations of storm drain maintenance and outdoor storage violations. Contacted property manager to clean it up.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48023	11/15/07	Commercial	water	NO		Discharge of water - Observed a large amount of water draining into the street.		WO#52877 : 11/15/07 Site inspection contacted workers. They were washing off the roof of the green houses. It appeared that their pump was broken. They turned off the water. The owner called me the next day stating that he replaced the pump.	None	Encinitas
48024	11/16/07	Residential	white concrete like	NO		Discharge of building or sidewalk wash water - Received a call stating that there is concrete building waste washing onto Bracero From a back yard on Requeza		WO#52878 : 11/19/07 site inspection took photos contacted complainant and respondent. Respondent will dry clean drainage area. Follow Up: 3/28/08 site inspection area cleaned up signed off NOV case closed See SR 63213 and Original WO 68227	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48027	11/19/07	Residential	water	NO		Discharge of water - 11/20/07 received a call from PW Director saying that City Manager has observed a lot of water in the street of 1300 north coast hwy 101. Inspector to investigate.		WO#52881 : 11/20/07 Left card at 188 Jason irrigation still going and contacted 1405 Coop and 1354 north coast hwy for over-irrigation/runoff	None	Leucadia
48030	11/20/07	Residential	mud/dirt debris	NO		Discharge of Silt or Sediment – Streets received a call from traffic stating that mud has entered the street at the sharp corner on Lone jack. A motorcyclist lost control after hitting the debris		WO#52882 : Site inspection on 11/20 and 11/21/07 took photos and reported back to Streets. It appears to need a street sweeper. Also over-irrigation may have made the cliff fail	None	Lower Escondido Creek
48031	11/1/07	Commercial	Building power washing wash water	NO		Discharge of building or sidewalk wash water – Email from complainant: Steam cleaning front of building, they have done this before, always in the middle of the night. The storm drains were not bermed. I went to bed at 0230 and he was still working. I have a picture of the man working. see attached email		WO#53439 : 12/3/07 Contacted California Bank & trust property manager. 12/4 called and left message 12/4 emailed copy of complainant email and photos with name of complainant removed 12/6/07 sent email to prop manager-Thank you for the email and contact person Hi Martha, I need to make sure that the wash water is not discharged into the storm drain. Please let me know that you have contacted the power washer contractor or give me their information so that I can inform them to	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								capture all wash water and dispose it legally. Thanks Please note that the City of Encinitas is required to report all complaints and the corrective actions to the regional water quality control board annually. Corrective actions can be clean up activities or (in this case) educating the contractor to comply with the clean water laws and Best Management Practices (BMPs) 12/6/07 Inspector received email from property manager: Our contractor is aware of the law and she does not use equipment that does not absorb the water. I have called him and informed him of your message and am waiting to talk to him. His company has been in business for quite a few years and services quite a few of our shopping centers. I will let you know what I find out. Thanks.		
48033	11/19/07	Residential	trash	NO		Discharge of yard waste - Code had asked clean water to ride along on their inspection and to look at the storm drain		WO#52884 : 11/19/07 site inspection showed storm drain fairly clear. Code will follow up with all of the other violations and make sure that the storm drains clear. Follow Up: 2/11/08 site inspection took photos of BMPs at driveway case closed	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48034	11/21/07	Residential	h2o	NO		Discharge of water - received call regarding over-irrigation every other or every third morning creating puddles in the street		WO#52944 : 11/29/07 contacted property owner. He said he sets his sprinklers to seven minutes. He will take a look to see if there is any runoff. He wanted to know when the cracked light post will be fixed. Referred him to Streets. He had concerns about the drainage north of his property. I took photos and will pass on to Streets	None	Leucadia
48035	11/21/07	Commercial	h2o	NO		Discharge of water - Over-irrigation		WO#52945 : 11/29/07 contacted school to discontinue over irrigation	None	Leucadia
48070	11/27/08	Residential	gray water	NO		Discharge of other wash water - gray water is draining into storm drain. Inspector to investigate		WO#53440 : 12/4/07 contacted resident and informed him that there was a complaint. He said he had done some construction and the drains come from his back yard and the neighbors also drain through his yard.	None	Encinitas
48236	11/30/07	Municipal	sediment	NO		Discharge of construction debris - Leucadia off Orpheus. Bad erosion control at fire station construction, mud running down street. Construction to investigate.		WO#53056 : Per construction inspector: contractor in process of grading, installing underground utilities; visqueen, wattles, and gravel bags in place. However BMPs were overflown by runoff, steep driveway +/- 8%. HAR construction is contractor on site. Foreman wrote email regarding BMPs and the company's approach at handling the upcoming rains.	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48238		Commercial	silt/sediment	NO		Discharge of construction debris -		WO#53473 : 12/3/07 contacted Steve on site. He informed me that he had dug a ditch to drain the water that had pooled in front of his business. Observed dirt and silt in the street. Took photos. PW streets to clean up area next to Mira Costa. Requested that Steve install some Min BMPs	None	Lux Canyon
48300	11/30/07	Commercial	silt/sediment	NO		Discharge of Silt or Sediment - large amount of silt laden water running off property and into City stormdrain		WO#53485 : 12/3/07 site inspection took photos 12/4/07 contacted workers on site and preformed storm water inspection 12/21/2007 3:52:35 PM See Routine Inspection work order number 53535	None	Lux Canyon
48325	12/4/07	Commercial	silt/sediment	NO		Discharge of Silt or Sediment - Wastewater noticed silt/sediment coming from nursery, most likely due to rain event. Bad erosion control. Routine Inspection was completed on 5/31/07.		WO#53038 : 12/6/07 contacted Manager of Leucadia Nursery. He said he would clean street and will maintain drainage from green house Follow Up: 12/11/07 follow up inspection showed correcetive action taken See SR 48325 and original work order 53038.	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48335	11/30/07	Construction	muddy water/silt and sediment runoff	NO		Discharge of construction debris - Clean Water staff witnessed large amounts of muddy water running off intersection of Leucadia Blvd and Vulcan Ave. appeared to be coming from roundabout construction.		WO#53006 : 12/5/2007 10:03:20 AM Per construction inspector: every rainstorm for last 18 years i have been with the City caused large amounts of silt to enter intersection at Vulcan and 101 at Leucadia. after this record breaking storm, less silt accumulated than normal. contractor will continue to monitor and maintain BMPs.	None	Leucadia
48336	11/30/07	Municipal	silt/sediment	NO		Discharge of construction debris - sediment runoff during rain event. From Library construction site onto road behind City Hall. referred to construction inspector		WO#53005 : Per construction inspector: spoke to job foreman Monday 12/3/07. he immediately had a laborer scoop up silt. the rest of the week, slope repair and BMPs will be installed above the wall in time for next rain event.	None	Encinitas
48344	12/5/07	Commercial	silt	NO		Discharge of Silt or Sediment - Resident filled out complaint form. sand is leaving neighbor's property (during rain event) and ending in her silt catch basin. abnormal amount will cause her to flood. not sure of neighbor's exact address. Rancho santa fe rd, south and west of 7th st.		WO#53418 : 12/7/07 Contacted resident at 2423 Fifth street. She showed me where the drainage concern was located on their property observed silt coming off vacant lot across from 2243 Ranch view. Needs BMPs. Appears that 2276, 2230, & 2234 Windword all need min BMPs. Contacted 230 RSF regarding hose in gutter.	Education	Rancho Santa Fe

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								12/11/07 site inspection with owner of 2276 Windword road. Identified three other property owners that need min BMPs 12/17/07 received call from complainant asking for an update. Informed her that the property owners were being contacted to install min BMPs. she wants to know what is going on with the street improvements. I informed her that either the street Superintendent or I would give her a call back. Sent email to Streets. 12/21/07 met with owner of grove maintaining company. showed him where Min BMPs area required and requested that no more sediment leave the properties. See follow up work order 54019 1/17/2008 9:01:29 AM Violation address is actually 2276 Woodwind Follow Up: 8/13/08 SITE INSPECTION ALL BMPS IN PLACE See original WO 54021 and SR 48584		

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48352	12/5/07	Municipal	silt and water	YES	COTTON-WOOD CREEK	Discharge of water – Clean Water staff noticed a pipe burst at a construction site at 2nd and A St. No BMPs in place.		WO#53544 : 12/6/07 contacted SDWD regarding the lack of BMPs. He said it was an emergency and that he will clean up all of the silt that washed into the street. took photos	None	Encinitas
48353	12/4/07	Construction	silt	NO		Discharge of Silt or Sediment - rain event caused silt runoff at construction site. Inspector to investigate.		WO#53681 : 12/5/07 Site inspection observed discharge from construction site on Urania. took photos and contacted complainant and resident. They wanted the silt to stop from entering their property at 775 Normandy from the construction site (1060 Urania). 12/26/07 called complainant to follow up on clean up. He said he was very happy with the actions that the City and the Contractor have taken. The contractor could not clean the pipe and will replace it with in 30 days from today (I will call to confirm work is done. Construction Inspector inspected the construction site and confirmed that the BMPs were in place on 12/18/07. Need to re-inspect within 30 days-on calendar 1/18/08 called complainant regarding clean up from silt spill. He said the contractor wants to wait until after the rainy season. Complainant said he was fine with that but that he would not sign off with the city. Called complainant and explained that the construction inspector assigned to the construction site should be his contact person.	Education	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48354	12/6/07	Commercial	silt	NO		Discharge of Silt or Sediment - silt runoff occurred during rain event. need to fix BMPs. mike emerson to investigate.		WO#53422 : 12/11/07 Inspector contacted manager of the Faith Community Church. 12/14/07 received voice mail from Church requesting that we meet on site. 12/17/07 Met contact on site- showed him the area that needs better BMPs. He asked to put out sand bags along the street next to the bank. We walked the site there appears to be some work the city could do for the storm drain at the corner of Urania and Normandy. 12/18/07 OK to close. Sent email to Streets regarding the storm drain and scheduled a follow up inspection on outlook for 1/3/07 <> 2 weeks See follow up work order 54251 Follow Up: BMPs in place on 1/16/08 See SR 48354 and WO 53422	Education	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48355	11/21/07	Commercial	wash water	NO		Discharge of water - 621B Second St. Power washing without containment. Inspector to investigate.		WO#53685 : 11/21/07 contacted manager regarding cleaning off patios and side walks. Showed him how to wash the area and capture the wash water. I will inform and show his son how to capture all the wash water	None	Encinitas
48356	12/4/07	Residential	silt	NO		Discharge of Silt or Sediment –Construction Inspector reported erosion control problems at vacant lot at 837 orpheus. Inspector to investigate.		WO#53699 : 12/3/07 site inspection took photos of dirt and sediment in street without any BMPs. 12/11/07 site inspection showed Min BMPs in place-sand bags. Streets superintendent stated that the contractor constructing the upgrades at the fire station needed access over the vacant lot and removed the tree.12/12 Nick informed me that the contractor did not need that site but had installed some BMPs.	None	Leucadia
48360	11/29/07	Construction	TVs, old paint stored outdoors	NO		Other discharge – Clean Water staff noticed illegal outdoor storage while doing inspection at Shell Station.		WO#53708 : 12/27/07 called property manager stating that there is misc building materials stored on north side of north building that need BMPs needed name and phone # of contractor 12/27/07 site inspection observed discharge took photos and contacted lead stucco worker. He turned off hose and called his boss. Boss said he would clean up the site or he would call me. 12/27 received call with general contractor's contact info. Left message. Received message from Gen Contractor stating that he will install all BMP tomorrow.	Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								See follow up work order 54005. Follow Up: From: Request ID: 48360, 1/7/08 after phone calls to the contractor, he installed adequate BMPs See SR 48360 and original WO 53708		

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48361	11/29/07	Commercial	wash water	NO		Discharge of other wash water – Construction inspector noticed wash water coming from white pipe that may be coming from nursing home on corner of santa fe and bonita dr.		WO#53415 : 12/11/07 Site inspection, took photos. Appears to be old sewer pipe. Contacted Maintenance supervisor and showed him the drainage. He will investigate and call me with completed corrective actions	None	Cardiff
48362	12/6/07	Residential	liquid from hoses	NO		Discharge of other wash water - hoses coming from 502 e glaucus. looks like they're draining something. Inspector to investigate.		WO#53411 : 12/7/07 did not observe any discharge left card to call me	None	Leucadia
48363	12/7/07	Residential	wash water	NO		Discharge of other wash water - caller reported power washing w/out containment on easement at 1129 Bonita Dr. Incident is over, caller had no pictures or proof. i told him we could send an educational letter, but no violation or citation. Inspector to investigate.		WO#53719 : Caller was adamant about sending citation to violator, but i told him we couldn't enforce without proof. he wouldn't give me any other info and said he was going to follow up at the federal level. Inspector will go to address to speak with office manager and distribute educational info. 11/22 sent education letter. 12/12/07 site inspection contacted owner of property. He said he power washed his driveway after the fire storms in early November. the other discharges may be from illegal garage units that are not hooked up to the sewer. He will call me when the discharge is occurring. Follow Up: 5/19/08 site inspection area cleaned up See SR 64499 and original WO 70201	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48365	12/5/07	Construction	silt from construction site	NO		Discharge of Silt or Sediment - Silt coming off construction site. Inspector to investigate		WO#53718 : 12/5/07 contacted contractors- requested BMP reinforcement 12/6/07 showed work is complete	Education	Encinitas
48375	12/9/07	Commercial	wash water	NO		Discharge of building or sidewalk wash water – Clean Water staff witnessed power washing at 7-11 with no containment. sudsy water running down street.		WO#53405 : 12/12/07 called 7/11 and spoke to owner. He informed me that the area is power washed every other sunday. 12/13/07 spoke to power washer and informed him to capture all wash water. Mailed NOV letter and Citation on 12/18/07. 1/22/2008 9:37:36 AM Payment received from 7-Eleven manager. Also sent a letter saying it wasn't fair that he had to pay, and that he should have gotten a warning first. Inspector spoke to owner saying the NOV and Citation were addressed to power washer, and that 7-Eleven wasn't responsible for paying. Owner said he would pay anyway, on behalf of power washer. Case closed letters mailed on 1/22/08.	Citation, NOV	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48376	12/10/07	Construction	muddy water	NO		Discharge of construction debris - Complainant emailed pictures. Erosion control failures during recent rain events.		WO#53519 : Construction inspector performed inspection at site, issued correct work. Clean Water inspector issued citation CW-121207C for $200 due to severity of discharge. Payment received 12/19/07 with a letter from property owner describing how issue was corrected and how runoff will be prevented in the future.	Citation, Education, NOV	Cardiff
48378	12/10/07	Construction	muddy water	NO		Discharge of construction debris - Complainant emailed pictures. Erosion control failures during rain event.		WO#54215 : NOV letter and Citation 121207B sent 12/12/07. Payment and written response letter received 1/9/08. Better erosion control measures were implemented.	Citation, Education, NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48398	12/11/07	Construction	sediment	NO		Discharge of construction debris - Anonymous neighbor, who wants to remain anonymous, called to report the construction at 1435 Rainbow Ridge Ln, saying there is sediment runoff. Construction inspector to investigate.		WO#53449 : Per construction inspector 12/17/07: no open permit at 1435. developer in process. told of problem and installed silt fence across front of all 3 properties.	None	Cardiff
48403	12/12/07	Construction	sediment	NO		Other discharge – Clean Water staff noticed a silt fence that wasn't very sturdy. Sediment had run off property during previous rain events. Send informational letter with BMPs.		WO#53344 : Certified letter mailed to home owner on 12/13/07. See follow up WO 53771 Follow up completed 12/31/07 by construction inspector. Follow Up: See original SR 48403 and WO 53344	Education, NOV	Leucadia
48409	12/13/07	Commercial	storm water runoff	NO		Other discharge - County Vector Inspector found large puddle at 1616 Lake Dr., possibly caused by runoff at Lois' Flowers or Browns' Plants. Inspector to investigate.		WO#53720 : 11/20 & 11/29 preformed commercial inspections on three greenhouses in the area see work order #s Lois's Flowers 53673, Rancho Verde growers 53682 & Cardiff green houses 53683 Follow Up: 5/19/08 site inspection area cleaned up See SR 64499 and original WO 70201	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48416	12/13/07	Construction	over-irrigation/rain	NO		Other discharge – Complainant called to report the erosion occurring on the hills behind and around her house. Due to rain events and over-irrigation. Please call her early next week to set up a time to come take a look.		WO#53722 : 12/17 site inspection took photos, left card with complainant. Contacted contractor to the east. said that he cleaned up all the silt that drained onto 539 Hermes. The silt is coming the adjacent property to the south 544 Hygeia 12/19 received call from complainant requesting that we call before we come over. Contractor came to her site when she was not home. 12/21 & 12/27 called complainant and LM. 12/27/07 sent email to Streets to fix berm on street	None	Leucadia
48418	12/17/07	Residential	trash	NO		Other discharge - Complainant called to report his neighbor dumping trash into the storm drain. This is not the first time. Inspector to investigate.		WO#53724 : 12/17/07 site inspection took photos issued NOV Follow up 12/27 showed site was clean. Follow Up: 1/22/08 site inspection trash removed See SR 48641 and WO 54222	NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48421	12/17/07	Construction	water runoff	NO		Discharge of construction debris - Complainant called in from Divine Orchids (residence only now) to complain about water erosion from construction behind her house. Drainage paths may have been changed during construction, and she wants to know when they will be fixed.		WO#53605 : Construction inspector met with complainant, appears that developer fence fell over in Oct. Runoff spilled on to owner's property. Repairs made 12/14/07. See original SR 48403 and WO 53344	None	Leucadia
48436	12/18/07	Construction	lack of erosion control	NO		Discharge of construction debris – Construction inspector saw demo site with lack of erosion control. no Eng permit, building only. building inspectors don't enforce erosion control. Inspector to investigate.		WO#53725 : 12/18 site inspection took photos call contractor left message to reinforce BMPs 12/19 site inspection took photos call contractor 12/27 received call from contractor stating that he will do the required work on 12/28. Inspect on 12/31/07 See Follow up work order 54003. 1/9/08 After meeting with the contractor he installed adequate BMPs and moved the port-a-potty out of the drainage path See SR 48436 and original WO 53725	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48461	12/20/07	Commercial	wash water	NO		Discharge of other wash water - Complainant saw mobile pet grooming business dumping wash water into street. See attached pictures.		WO#54116 : NOV Letter sent 1/4/08. Certified return receipt received on 1/10/08.	NOV	Encinitas
48463	12/12/07	Commercial	sediment	NO		Discharge of Silt or Sediment - Sediment entering street from SDG&E's easement. Public works has cleaned up sediment, but SDG&E is responsible for BMPs. Inspector to investigate. See attached emails.		WO#53726 : 12/20 contacted SDG&E after speaking to the complainant we agreed to meet out on site on 12/21/07 with her crew 12/21/07 site inspection BMPs in place	None	La Costa South
48492	12/12/07	Residential	trash	NO		Other discharge – Director of public works alerted Clean Water staff to trash and debris in the storm drain. Inspector to investigate.		WO#53723 : 12/12/07 contacted respondent. We informed her to keep the storm drain clean and to keep the trash screened. Site inspection issued NOV for trash in storm drain. 12/12 received and return two calls Follow Up: 1/22/08 site inspection trash removed See SR 48641 and WO 54222	NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48494	12/29/07	Residential	white masonry stain on gutter	NO		Discharge of concrete cutting slurry or wash water. – Clean Water staff saw white stain in gutter leading to storm drain. Inspector to investigate.		WO#54006 : 12/31/07 site inspection took photos and left card Received call from house sitter. Will pass BMP info on to owner.	Education	Leucadia
48495	12/29/07	Construction	sediment	NO		Discharge of construction debris - Report of dirt in street in front of driveway. Possibly from construction at 1441 Hygeia. Construction Inspector to investigate.		WO#53874 : Construction inspector issued correction notice at 10am on 1/3/08. Follow up by construction inspector on 1/4/08, 9am-contractor cleaned and placed BMPs. See before and after photos.	NOV	Leucadia
48523	12/31/07	Construction	sediment	NO		Discharge of Silt or Sediment - sediment runoff in street possibly coming from construction at 665 Orpheus. No construction inspector assigned to site. Inspector to investigate.		WO#53872 : 12/31/07 site inspection contacted owner of property and explained areas where silt/dirt could leave the property. He will make the required improvements. Took photos Drive by follow up inspection showed proper BMPs in place.	Education	Leucadia
48531	12/31/07	Residential	smelly runoff	NO		Discharge of water – Complainant received complaint at Park Place HOA board meeting on 11/13/07 or 12/11/07 of smelly runoff coming from houses on Lake Dr. Inspector to investigate.		WO#54028 : 12/31/08 put door hangers at 1602, 1608, 1610, and 1612 Lake Dr. 1/3/08 received a call back from 1602 Lake Drive reporting no spills or discharge off his property No other contacts made as of 1/10/07	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48534	1/2/08	Commercial	wash water	NO		Discharge of other wash water – Clean Water staff saw power washing evidence at YMCA. Inspector to investigate.		WO#53840 : 1/2/08 Site inspection contacted employees regarding power washing and capturing all the wash water. Gave them BMP information and list of power washers that capture wash water	Education	Encinitas
48536	1/2/08	Commercial	wash water/gasoline	NO		Discharge of liquid fuels. - Strong gasoline smell at Stonesteps. Excel Landscaping employees hosing off steps with large amount of water. One employee holding gas can. Complainant was very concerned with safety going up and down stairs with all the water. And what was the gas for?		WO#53862 : 1/4/08 forwarded voice message to Parks and Rec. with a message that storm water/clean water will do an inspection today and on Wednesday. Informed P&R that the Excel landscaping company has recently been educated clean water staff. 1/4/08 10am site inspection did not observe any smells or spills spoke to locals at scene and nearby construction sites and they did not observe any violation. 1/4/07 received call from Parks and recreation stating that there was some tough graffiti and the maintenance crew used gasoline to remove it. The crews have been told not to use it in the future.	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48543	1/3/08	Residential	water, possibly over-irrigation runoff	NO		Discharge of water - there is water constantly draining to gutter near complainant's house. Puddle of water is growing algae and leaving calcium deposits. possible breeding ground for mosquitos. Inspector to investigate.		WO#54016 : 1/4/08 site inspection contacted complainant and took photos of drainage. Left door hangers at all the properties above that could drain into bottlebrush. 1/10/08 sent email to Streets to review street and contacted complainant and sent water usage request to Olivenhain water district. 1/4/08 the houses that were given door hangers are 218,222,226,230,234,238 Meadow Vista Way. 1/9/08 received call from 226 meadow Vista way stating that drain has been bad since he moved in 12+ years ago. He stated about 5 years ago the owner of 2115 Bottlebrush Place had constructed a retaining wall with a sump pump to reduce the flooding that was occurring in the kitchen. No other contacts made as of 1/10/08	None	La Costa South
48544	1/4/08	Commercial	grease	NO		Other discharge - Complainant reported large amount of grease that was dumped on the SE and NE corner of Marcheta and Melrose. Inspector to investigate.		WO#54029 : area was cleaned ok to close WO and SR See follow up work order 54030. See SR 48544 and original WO 54029	NOV	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48545	1/4/08	Residential	degreaser/wash water	NO		Other discharge - Police called Fire. Fire called hotline to report resident degreasing parts in driveway. wash water into street. Fire had set up barricade. Inspector to investigate.		WO#53989 : 1/4/08 site inspection observed white liquid in storm drain. Met with Fire department and they stated that the entire driveway was filled with white degreaser foam. Took photos. Issued citation and explained how to clean up. Dry clean only and shop-vac oils and dispose of properly See Follow up work order 53990. site inspection area cleaned up took photos. Gave receipt for citation See SR 48545 and original WO 53989	Citation, Education	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48548	1/7/07	Commercial	carpet cleaning wash water	NO		Discharge of other wash water – Complainant witnessed Rug Doctor employees discharging soapy water from van and equipment into Ralph's parking lot. He told them it was illegal, and they were very rude and didn't listen. Inspector to investigate.		WO#53963 : 1/7/08 site inspection observed hair in parking lot contacted complainant. He showed me where the discharge was located and that the respondent was in Ralph's. Issued NOV to employee to clean area. Sent NOV letter to main office on 1/10/07. Included Project Clean Water's Carpet Cleaning Dos and Don'ts Fact Sheet in the NOV letter.	NOV, Education	La Costa South
48553	1/5/08	Municipal	brown water	NO		Discharge of construction debris - Email from Streets reporting chocolate water from 801 Orpheus (Fire Station #3) on Saturday during rain. Construction Inspector to investigate.		WO#53950 : Contractor to install straw bale barrier per caltrans SC9. Note: Sediment also flowing from upstream property. Clean Water is looking into sediment from upstream property.	None	Leucadia
48554	1/3/08	Residential	untreated water from koi pond	NO		Discharge of water - Owner is discharging significant amounts of untreated water form koi pond from underground pipe at the NW corner of his property, which travels down to Complainant's private road. Inspector to investigate.		WO#54257 : 1/9/08 called waste water and asked about draining pond into the sewer. He said he was only concerned about the flow rate but the code requires automation from City manager or engineer.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								1/24/2008 6:08:02 PM 1/18/08 contacted owner of pond. He said he drains his koi pond into the sewer but he will place some rock at the discharge points to prevent more silt from draining down the private drive within a week. Inspector to do follow up inspection 2/11/08 site inspection showed that BMPs are not in place. Complainant informed me that there was discharge this AM. Called pond owner and left a message to call me back. called self realization fellowship 3/3/08 received complaint call from SRF regarding discharge. Called and requested that he implement BMPs at drainage points. Set to inspect on 3/17/08 3/18/08 site inspection no BMPs in place took photos 3/19/08 left message with pond owner to get BMPs in place or more formal action will take place See follow up work order 68142 Follow Up: 3/24/08 site inspection observed rock BMP took photo case closed See SR 48554 and original WO 54257		

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48555	1/8/08	Commercial	Chunky, possibly sewage	NO		Discharge of sewage - Crystal reported chunky discharge coming from the Jack in the Box drains. Possibly sewage. Inspector to investigate.		WO#53952 : 1/8/08 Site inspection observed and took photos of what appeared to be sewage. I contacted the lead worker at Jack in the box and asked that she shut off the water supply and call a plumber. I showed her where the sewage flow was draining off the property 1/8/08 called waste water and asked that the vactor truck be dispatched to help clean up. installed spill kit with the help of the water crew. Vactor crew washed and captured waste water Owner was informed about the cost recovery and the citation. He will monitor water use until plumber arrives. 12:20 pm received voicemail call from owner that it was a sewer leak and the plumber has fixed it. 1/8/08 email information to Streets regarding cost recovery NOV letter and $200 Admin Citation sent to owner on 1/18/07. Get cost recovery amount from Streets. Received $200 payment 1/29/08. Cost recovery of $634.47 sent out by PW on 1/31/08.	Citation, NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48562	1/7/08	Residential	silt	NO		Other discharge - Streets complained about the silt bar in the street at Orpheus and Vulcan Ave. Inspector to investigate		WO#53937 : Contacted owner of property and requested that he upgrade BMPs took photos	Education	Leucadia
48564	1/8/07	Residential	sediment	NO		Discharge of construction debris - Woman called in to report sediment on road near 1349. Her previous call was for 1423, and more barriers were put up; however, more sediment is present.		WO#54004 : 1349 no active grading. Residential area producing some sediment. Left North County Construction brochure in mailbox- Per Construction Inspector 1/9/08.	Education	Leucadia
48567	1/7/08	Residential	sediment	NO		Other discharge - Streets complained about the siltbar at orpheus and vulcan. Inspector to investigate.		WO#53931 : 1/7/08 contacted owner of property and informed her that the City is having a problems with the silt bars off V8ulcan at Orpheus Owner will look into her sprinkler system and make sure erosion is not occurring.	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48572	1/7/08	Residential	silt	NO		Other discharge - 1/7/08 received complaint from Streets about a silt bar at orpheus. Inspector to investigate		WO#53986 : 1/9/08 site inspection contacted owner regarding silt in street and concerns about stagnate pond on the south side of property. She informed me that her husband had built a retaining wall to hold all of the dirt on the property and has CA Jumping frogs in her pond CA Jumping frogs are used to prevent mosquitoes. no issue with pond. no more silt from property is running into street.	None	Leucadia
48573	1/7/08	Residential	silt	NO		Other discharge - 1/7/08 Streets complained about the amount of silt in the street at Orpheus and Vulcan. Inspector to investigate		WO#53987 : 1/9/08 Site inspection. observed area where dirt and silt could leave property and enter the storm water conveyance system. left card and door hanger to call me 2/4/08 appeared that most of silt was coming from 403 Orpheus AVE. see SR 48574	None	Leucadia
48574	1/7/08	Commercial	silt/dirt	NO		Other discharge - 1/7/08 Streets reported a large silt bar on Orpheus at Vulcan. Inspector to investigate.		WO#53988 : 1/7/08 site inspection took photos left card in door hanger 1/9/08 site inspection contacted worker at 403 Orpheus. He informed me that this was a new green house called Palm Company. He said the owner lives at 395 Sunset Drive 1/9/08 contacted owner of 403 Orpheus at 395 Sunset and requested that BMPs be installed on 403 Orpheus (especially the drive) to prevent silt/dirt discharge	Education	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								See follow up 75725 Follow Up: 2/4/08 site inspection BMPs in place See original wo 53988		
48584	1/7/08	Commercial	silt/dirt	NO		Discharge of other wash water - 1/7/08 while on site visit Inspector observed erosion from 2276 Woodwind road. Mike to contact leasee		WO#54021 : 1/10/08 called Badger & Sons and left message regarding erosion control at 2276 Woodwind Drive This is another service request issued due to the lack of erosion controls at 2276 woodwind and surrounding properties. Badger and Sons is responsible for maintaining the orange groves at 2276, 2230, and 2234 Woodwind Dr. They fixed BMPs once, but after another rain event, erosion was still occurring, prompting this new SR and WO. See follow up WO 75582	None	Rancho Santa Fe

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48587	1/8/08	Construction	concrete cutting waste	NO		Discharge of concrete cutting slurry or wash water. - Shawn from waste water reported saw cutting of cement without containment. Inspector to investigate		WO#54031 : 1/8/08 11am site inspection observed cement cutting without containment took photos issued NOV to comply by 3pm 1/8/08 Follow up inspection showed clean up complete. See Follow up Work order 54032 Follow Up: 1/8/08 site inspection area cleaned up sign off NOV See SR 48587 and Original WO 54031.	Education, NOV	Cardiff
48604	1/14/08	Commercial	horse manure	NO		Other discharge - Complaint from Code Enforcement. Horse manure left outside of dumpsters- when it rains, drains into protected creek. Inspector to investigate. In Woodridge Farms Estates, LLC		WO#54255 : 1/16/08 site inspection observed manure outside of dumpster. Called owner of stable. She said she would have her guys clean it up ASAP and to take another look that same afternoon See Follow up work order 54256 Follow Up: 1/17/08 site inspection showed area cleaned See SR 48604 and Work Order 54255	Education	Lower Escondido Creek

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48616	1/16/08	Residential	water	YES	COTTON-WOOD CREEK	Discharge of water - Excessive water coming from sidewalk drain near 120-123 5th Street. Inspector to investigate.		WO#54238 : received call from Miller stating that he has walked the property twice for irrigation problems and his pool guy reported no pool problems but has found the leak. 1/22/08 Miller reported that leak is at a resident where the tenant is in Hawaii and will return in a few days. The water line is shared with another tenant so the water will flow until the tenant returns. See follow up work order 54415 Follow Up: 2/4/08 site inspection confirmed that water had stopped flowing case closed See SR 48616 and original work order 54238	None	Encinitas
48618	1/16/07	Residential	wash water	NO		Discharge of vehicle wash water - Neighbor complaint at front counter about washing off equipment in driveway and power washing without containment. Previous violation occurred on 1/4/08. Inspector to investigate.		WO#54253 : 1/16/08 site inspection observed drainage of green liquid under parked car west of 845 LA MIRADA. took photos and contacted resident. showed him where the discharge was located and asked him to clean without discharging wash water. Issued NOV to clean up by 5pm 1/16/08 See follow up work order 54254	Education, NOV	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48622	1/14/08	Commercial	Standing water, grease	NO		Discharge of water - Standing, smelly water, possibly grease, from shopping center at 251 el camino. possibly poor drainage. Inspector to investigate.		WO#54239 : 1/17/08 site inspection observed drainage took photos called property manager on 1/18/08 to clean area. He said he would contact the property owner and the restaurant owners and get the area clean ASAP 1/22/08 site inspection observed no clean up took photos 1/23/08 received information from Engineering that the structure built for trash was not permitted and is in the drainage course. Sent email to Code to get status on Code case 1/24/08 site inspection with Leucadia Waste Water, He confirmed that it was not sewage water. Payment and letter of correction received 2/10/08. case closed. Follow Up: 2/28/08 site inspection all required BMPs in place took photos case closed Original work order 56765 and SR 51034	Citation, NOV	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48641	1/18/08	Residential	trash	NO		Other discharge - Resident at 1956 Lahoud is dumping trash into storm drain again. Inspector to investigate.		WO#54222 : 1/18/08 site inspection observed two plastic trash bags in the storm drain. Took photos and contacted respondent and requested that she remove the trash from the storm drain. She said she would clean it up. See follow up WO 54223 Follow Up: 1/22/08 site inspection trash removed See SR 48641 and WO 54222	None	Cardiff
48657	1/23/08	Commercial	wash water	NO		Discharge of building or sidewalk wash water - parking lot is washed every Wednesday early am		WO#54236 : 1/23/08 site inspection observed drainage took photos and contacted owner. He said he understands that the wash water goes into the ocean and that it is against the law. He will discontinue practice.	None	Cardiff
48658	1/18/08	Residential	sediment	NO		Other discharge - inspector noticed sediment in curb line while inspecting another case. construction was done at residence, and dirt was left behind.		WO#54230 : 1/22/08 site inspection observed dirt in storm drain east of 1964 LaHoud 1/23/08 called respondent and requested that he clean up storm drain in front of his home. He stated that the dirt was washed down the storm drain by his neighbor. He will produce a video showing nieghbor washing down the storm drain	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48659	1/22/08	Municipal	concrete wash	NO		Discharge of concrete waste. - Inspector noticed concrete wash out area next to storm drain. Will notify Public Works.		WO#54225 : 1/22/08 site inspection observed washout next to storm drain. took photos 1/23/08 sent email to Public Works with photos and gave him construction flyer See follow up work order 54305 Follow Up: 1/29/08 site inspection area cleaned up. PW informed that the workers were washing off their tools in that area. Ok to close case See SR 48659 and WO 54225	Education	Encinitas
48660	1/23/08	Commercial	Unknown white power substance	NO		Other discharge - Mysterious white powdery substance piled down Summit every 50 feet. Caller is unsure what it is or where it came from.		WO#54258 : 1/23/08 site inspection observed piles of chalk or white substance took photos contacted complainant and PW streets. Complainant started that her neighbor observed a white VW van placing the piles out on the street at 10am. Received email from SDA see below:	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								Re: White power on streets I contacted our Athletic Director, who in turn contacted our Cross Country coach. He assured us that their team is green, the chalk was in fact, flour. I am confident that this won't happen again, and am reassured to know that our community's citizen's are proactively protecting our ocean. Thank you for your excellent work. Please contact me if I can be of further assistance. -Physical Education Department San Dieguito High School Academy Note that this work order is not GEO coded because it is on the streets		

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48691	1/28/08	Construction	silt	NO		Discharge of construction debris - Construction Inspector asked Mike to go out and take a look at erosion control measures. Inspector to investigate.		WO#56724 : 1/28/08 site inspection observed some sediment leaks and took photos and contacted construction inspector. Case was handled by Construction Inspector.	None	Cardiff
48692	1/28/08	Residential	silt	NO		Other discharge - Dirt driveway runs into storm drain during rains. Resident says landlord won't fix it. Inspector to investigate.		WO#56471 : 1/28/08 Site inspection took photos. 1/29/08 site inspection contacted complainant and took more photos 2/12/08 site inspection observed sand bags and no discharge case closed	Education	Encinitas
48693	1/28/08	Municipal	silt/mud	NO		Other discharge -Contractor is tracking dirt into street. Large puddle with no BMPs.		WO#56742 : 1/28/08 sent email to Streets and SDWD. see below: I noticed that there is a big puddle at the “A tank” site. I am not sure who is in charge of the contractor that are using that site. Can you please contact the contractor and request that he stop tracking into the street. Either stop drive through the mud puddle and/or put some gravel down at the entrance/exit. Thanks 3/4/08 received additional emails from SDWD to P&R: Please emphasize the importance to your Park & Rec contractors to not track any dirt/rock into the paved Right of Way. Obviously we need to be in compliance by utilizing BMPs, but also want to be a good neighbor. Appreciate your assistance on this matter.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								Email from Streets to P&R: Gents…Please make sure that our contractors adhere to sweeping this area and keeping it clean especially when we have inclement weather. SDWD and Streets have made a concerted effort to fill in the hole with class II and add rock at the entrance to help mitigate the mud and dirt being tracked out onto Santa Fe Dr. Thanks for the help. Follow Up: Email from CWP to Streets and SDWD: Thanks for getting the rock out at the A tank site. I took a look on Friday and attached these photos and a tracking BMP detail. The contractor using this site should be sweeping the pavement between the rock and Santa Fe Drive. Thanks for your help in keeping our ocean clean. See Original Work Order 56742 and SR 48693		

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48694	1/28/08	Commercial	silt	NO		Other discharge – Clean Water staff noticed drainage coming from orange trees. Puddle forming at bottom of Cornish. Orange trees may belong to Self-Realization Fellowship? Inspector to follow up.		WO#56725 : Follow Up: 2/12/08 conducted storm water quality inspection with SRF See original work order 56725 and SR 48694	None	Encinitas
48715	1/29/08	Commercial	dirt in street and storm drain	NO		Other discharge - Dirt tracking into street from driveway and falling into gutter and storm drain. Lack of BMPs. Inspector to investigate.		WO#68106 : 1/30/08 site inspection took photos of tracking onto street contacted three businesses (Pacific Verde, CM Landscaping and New way landscaping) that are using driveway. Issued NOV (PV & CM to clean storm drain-by 2/1/08 and stop tracking-install BMPs at entrance/exit-by 2/13/08, New way to clean up trash-by 2/1/08 and to stop track-install BMPs at entrance/exit by 2/13/08. also preformed formal Storm water Quality inspections at five businesses (Pacific Verde, New Way, Landworks , CM landscaping and LLM Landscape Inc.) Needs follow up. See follow up work orders 68107 and 68108 Follow Up: 2/11/08 site inspection took photos of BMPs at driveway case closed	Education, NOV	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48737	2/1/08	Commercial	water	YES	SAN ELIJO LAGOON	Discharge of water - Call about water being pumped onto street. Possible potable water dewatering. Inspector to investigate.		WO#56447 : 2/1/08 Site inspection took photos and met with construction inspector. He issued an NOV to provide test results and to contact other construction inspector regarding traffic control. 2/4/08. Construction inspector reported that they have a permit and that he will take care of the discharge. OK to close	Education, NOV	Lux Canyon
48742	2/3/08	Residential	pool water	NO		Discharge of water - Complaint from Code Enforcement. water running down street- potential pool draining. Inspector to investigate.		WO#56470 : 2/4/08 site inspection no discharge called complainant to confirm address took photos	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
48745	2/4/08	Municipal	wash water	NO		Discharge of building or sidewalk wash water - Library contractors washing off front area. Unsure if BMPs are in place. Inspector will contact Construction Inspector		WO#54397 : Per Construction inspector 2/4/08: visited site 11am. no visible signs of discharge from site. building is being washed down in order to apply sealant. 95% of building is adjacent to dirt planters. only front section drains onto sidewalk and parking lot. not enough water was used for runoff to make it to the storm drain system or street. Case closed.	None	Encinitas
48765	2/4/08	Construction	brown water	YES	SAN ELIJO LAGOON	Discharge of other wash water - Brown water being pumped from construction site. Construction Inspector Ben Oliver to investigate.		WO#54398 : Per construction inspector 2/4/08: I talked to the new workers on the job site. they need to run any pumped water through their de-silter drums before outletting onto street. they were not aware of the requirements. I also called the job site super and left a message with him. Case closed.	None	Cardiff
50815	2/8/08	Residential	water	NO		Discharge of water – Complainant working on 2265 Manchester, says water is leaking into the alley behind property. tried shutting off water meter for 2265, but water kept leaking from across street. Inspector to investigate.		WO#56530 : 2/11/08 per construction inspector: spoke with contact at site. There was a water leak at property across street. SDWD will be on site to repair today. Case closed.	None	Cardiff
50830	2/5/08	Residential	wash water	NO		Discharge of building or sidewalk wash water – Complainant noticed power washing at address without any containment. Inspector to investigate.		WO#56736 : 2/5/08 site inspection contacted home owner and took photos. Gave owner BMP information and informed him to collect all wash water	Education	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
50831	2/11/08	Commercial	wash water	NO		Discharge of other wash water – Clean Water staff noticed trail of water coming from trash enclosure behind hospital leading to storm drain. Inspector to investigate.		WO#56495 : 2/11/08 site inspection observed drainage from trash compactor site. Took photos and contacted worker. he said he would discontinue discharging wash water and will capture in the future.	Education, NOV	Encinitas
50833	2/5/08	Construction	brown water	YES	OCEAN	Discharge of construction debris - Construction site found pumping brown water from basement for the second time. They are bypassing the filtering unit. Inspector to investigate.		WO#68104 : 2/5/08 site inspection took photos of silt discharge from construction site. Issued NOV to discontinue silt discharge and to only discharge clear water.	Education, NOV	Cardiff
50835	1/27/08	Construction	water	NO		Discharge of water - waste water received a call regarding the trailer park discharging		WO#68105 : 1/28/08 site inspection took photos and contacted construction inspector. He informed me that he will speak to contractor to discontinue discharge and that BMPs will be in place per plan.	None	Leucadia
50842	2/13/08	Commercial	unknown white substance	NO		Other discharge – Complainant noticed man from nursery dumping two 55 gallon drums full of white substance into parking area/street on la costa side. Inspector to investigate.		WO#68111 : 2/13/08 site inspection did not observe any discharge. Called business and LM to call me back. Business owner stated that he will contact all of his employees and teach them the proper deposal methods. He believes that someone illegally dumped at his business.	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
50843	2/13/08	Residential	water/dirt	NO		Discharge of water - 2nd call regarding over-irrigation. also complaining of runoff. sdwd will check into over irrigation. Inspector will investigate erosion.		WO#68109 : 2/13/08 site inspection observed a broken sprinkler head contacted and informed tenant. Tenant will contact landlord sent email to the water department	None	Leucadia
50846	2/13/08	Residential	water/oil mixture	NO		Discharge of vehicle wash water - Puddle of water in front of driveway, looks to have oil in it. Neighbor at 1257 is always working on car in street and has oil containers in yard. Inspector to investigate.		WO#68112 : 2/13/08 site inspection did not observe any discharge. Took photos of puddles that were along the curb line south of 1257 LOCH LOMMOND. Left door hanger at 1257 LOCH LOMMOND Follow Up: 6/12/08 site inspection BMP in place (gravel at the end of pipe) took photo See original WO 75385 and 1st follow up 75386	None	Lux Canyon
50851	2/14/08	Residential	oil	NO		Discharge of oil. - call came to Fire dept about leaching oil containers located at 1702. Inspector to investigate.		WO#56539 : 2/14/08 SITE INSPECTION OBSERVED OLD OIL STORED OUTSIDE TOOK PHOTOS ISSUED NOV TO COMPLY BY 2/20/08 See follow up work order 68198 Follow Up: 2/20/08 site inspection contacted resident to clean up remaining oil pans that were stored outside. case closed See original work order 56539	Education, NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
50870	2/16/08	Commercial	warm soapy water	YES	OCEAN	Discharge of other wash water - Maintenance man dumping (possible) hot tub water into storm drain. Inspector to investigate.		WO#56595 : 2/19/08 site inspection spoke to neighbors and they confirmed that 952 Neptune does drain their hot tub every week. The tenants gave me the same email address. Sent email with think blue pool draining guidelines	Education	Leucadia
50871	2/13/08	Residential	dirt and trash	NO		Other discharge - Forwarded from Code Enforcement. Resident spilled dirt and "gunk" under dumpster. Inspector to investigate.		WO#56583 : 2/19/08 site inspection observed dumpster in street and work on tire in street. Took photos issued NOV left on door-needs follow up inspection. See follow up work order 68213 Follow Up: Trailer removed 3/20/08 case closed See original work order 56583	Education, NOV	Encinitas
50872	2/19/08	Construction	concrete	NO		Discharge of concrete waste. - Forwarded from Code Enforcement. Concrete in gutter along Edilee. Inspector to investigate.		WO#56722 : 2/27/08 sent citation and NOV to business and a CC to property owner 2/19/08 site inspection observed sediment and cement discharge took photos and contacted worker to clean up streets See follow up wo 56723 Follow Up: See original wo 56722 8/12/08 received and sent email regarding payment of fine see below	Citation, Education, NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								Thanks for getting back to me. To clarify the city's position, the discharge was cleaned up to the satisfaction of the City therefore there is no need for additional fines to obtain a clean storm drain. The contractor was fined for discharge and no control devices (BMPs) in place while he did his work. The citation is in the contactor's name. If it is not paid then it will be forwarded to collections. I am not sure what happens next but you are NOT responsible for his non payment. You and your property are not in violation. There will be a note attached to your property that a discharge occurred and the contractor was issued a citation. Call me if you have additional questions Email from property owner: I can't get in contact with the contractor, seems like the dropped off the face of the earth. While I hope the contractor pays since they caused the runoff I don't want to put any liability or additional fines on my residence. I wanted to confirm that the city is still going after the contractor. Email to property owner: No Limits Contracting has not paid their citation. They've been issued a $100 delinquency notice, and I believe the Finance Department will turn them over to collections if they continue to avoid payment.		

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
50879	2/19/08	Construction	concrete	NO		Discharge of concrete waste. - Inspector noticed concrete trail leading from driveway to storm drain. Inspector to investigate.		WO#68110 : 2/19/08 site inspection took photos of white dried stream along curb line. Contacted resident who gave me contractor's phone #. Called contractor and requested that area be cleaned up ASAP or no later than 2/21/08 See follow up 68172 Follow Up: 2/26/08 site inspection area cleaned up case closed See SR 50879 and original WO 68110	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
50880	2/19/08	Residential	dirt	NO		Other discharge - inspector noticed dirt in street. Inspector to investigate.		WO#68195 : 2/19/08 site inspection observed dirt in street and took photos and contacted resident and issued Nov to comply by 2/21/08 see follow up wo 68197 Follow Up: 2/26/08 site inspection dirt removed case closed See original wo 68195	Education, NOV	Encinitas
50881	2/14/08	Construction	silt	NO		Other discharge - lack of erosion control during rain event.		WO#56620 : Issued NOV on site to stop silt discharge, improve BMPs, and remove trash. Issued Admin Citation on 2/20/08 and Cc'd owners. clean water staff referred case to construction inspectors	Citation, Education, NOV	Encinitas
50882	2/14/08	Residential	silt	NO		Other discharge - Removed driveway, lack of erosion control during rain event.		WO#68218 : 2/14/08 site inspection issued nov took photos See Follow up WO 68219 Follow Up: 2/20/08 site inspection BMPs in place took photos close case See SR 50882 and original WO 68218	Education, NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
50884	2/14/08	Construction	silt	YES	OCEAN	Other discharge - lack of erosion control during rain event.		WO#68216 : 2/14/08 site inspection observed silt discharge took photos and issued NOV to Owner See Follow up WO 68217 Follow Up: site inspection BMPs in place only clear discharge See SR 50884 and original WO 68216	NOV	Encinitas
50886	2/14/08	Construction	SILT	YES	OCEAN	Other discharge - Lack of erosion control during rain event		WO#70286 : 2/14/08 site inspection contacted worker and issued NOV. Referred case to construction inspector	NOV	Encinitas
50892	2/14/08	Construction	silt	YES	OCEAN	Other discharge - lack of erosion controls during rain event.		WO#56596 : 2/14/08 site inspection observed silt and dirt discharge too photos. searched the web for owner information and phone # 2/20/08 ISSUED CITATION see follow up wo 68194 Follow Up: original work order 56596	Citation, Education, NOV	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
50898	9/14/07	Residential	surface water	NO		Discharge of water - forwarded from code enforcement. during construction, unwanted berm was built to channel water onto property. Inspector to investigate.		WO#57819 : took photos of 908 to 876. Reviewed plans at City Hall and did not see a drainage detail for 876 Bonita	None	Encinitas
50920	2/14/08	Construction	silt	YES	SAN ELIJO LAGOON	Other discharge - lack of erosion control during rain event. second offense.		WO#56628 : large amounts of silt and brown water leaving site during rain event. workers were on site trying to stop discharge. issued NOV on site. issued admin citation later for $400 because this is second offense. Citation paid 3/17/08 with pictures and letter showing how they corrected the BMPs.	Citation, NOV	Cardiff
50922	2/20/08	Residential	oil, antifreeze	NO		Discharge of vehicle wash water - Neighbor always working on cars in driveway, hoses off into street w/o containment. Mike Emerson to investigate.		WO#56694 : Inspector visited site, saw no signs illegal discharge. Spoke to woman resident. Left Auto brochure in Eng and Span, doorhanger, and card.	Education	Leucadia
50943	2/21/08	Residential	household hazardous waste	NO		Other discharge - Box labeled "toxic waste" outside on the curb. Neighbor is concerned.		WO#56614 : called the HHW hotline number to see if there is a pickup scheduled at this residence today. Clean Harbors said that it is generally their procedure to have residents place box of waste in driveway and that they are up in the Encinitas area today. Called complainant back to let him know and told him that if the box isn't gone by this afternoon, please call us back.	None	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
50944	2/14/08	Construction	silt	YES	SAN ELIJO LAGOON	Other discharge - lack of erosion control during rain event		WO#56625 : admin citation issued 2/15/08. illegal pumping of brown water during rain event. spoke with contractor on site. he turned off one pump, but brown water was still leaving site 10 minutes later from another area. Citation hasn't been paid as of 8/14/08. Finance has forwarded to Collections.	Citation, Education, NOV	Cardiff
50947	2/21/08	Residential	radiator fluid	NO		Discharge of vehicle wash water - Neighbor working on car, dumping radiator fluid in street.		WO#56630 : Site inspection showed wet driveway/road, but no evidence of illegal discharge. Inspector told resident on scene that nothing can be washed down storm drain, and if we get another call a notice of violation will be issued. Send Spanish automotive brochure to resident. site is in Park Place HOA	Education	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
50990	2/22/08	Municipal	gas/oil	YES	COTTON-WOOD CREEK AND OCEAN	Discharge of liquid fuels. - Caller complaining about gas and oil substance floating on Cottonwood creek. Inspector to investigate.		WO#56661 : 2/25/08: Site inspection, smelled some gas/diesel. Fire dept said there was an event on I-5 and HazMat responded. left message with lifeguard to find out more info about what happened. we were not alerted to the problem by any city or county departments. 2/27/08 Lifeguard informed me that there was a fuel spill on I-5 at 330am on 2/22/08 and that he contacted the coast guard and hazmat was on scene. Sent an email requested that his staff contact the clean water hotline for spills Subject: FW: please contact the clean water hotline for spills Thank you very much for all the information that you provided me regarding the recent fuel spill off the freeway. As a matter of procedure for future events, please notify the Clean Water Program about spills through the established hotline at (760) 633-2787 or email npdesmail@ci.encinitas.ca.us as we are required to report significant spills to the Regional Water Quality Control Board. A more formal coordination effort will be initiated by the Clean Water Program in the near future for any parties that may be involved in a spill event. Thanks again for all of your help. 3/3/08 received email from the Fire Department	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								Chiefs, On February 22, at approximately 345am, 2311, 2312, and medic 2395 responded to a traffic collision, southbound 5 on Encinitas Blvd bridge. Upon arriving on scene, a 52ft tractor and trailer was jack-knifed in the number 1 lane and the shoulder. It was noted that the 100gal tank on the driver's side on the tractor had been ruptured and diesel fuel was actively leaking. The call was ungraded to a full hazmat response, with truck 2375, 2313, and 2304 along with 2306 responding. The fuel leak was stopped using plug n dike, and attempted to be contained with a dam. The driver informed that he topped off 300 miles ago, so estimated loss of fuel was around 30-40gallons. San Diego hazmat, County health, Coastguard, and Caltrans were notified and responded to assist with efforts. The freeway lane #1 was reopened at approximately 7am. No injuries were reported during this incident. All units cooperated to mitigate the hazard and were released at the time of reopening. Any more questions please feel free to contact me,			

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
50997	2/25/08	Residential	water	NO		Discharge of water - possible illegal drainage into neighbor's yard. inspection scheduled at complainant's home for 2/28/08 at 9am.		WO#56760 : 2/28/08 site inspection at 715 Nardo. Inspectors were contacted by neighbor She showed us the water in the backyard and how she is constructing pipes to move the water out to the street. She is going to write letter the City regarding drainage/flooding and get neighbor to sign it too. Her neighbor to the north will do the same. We cautioned them to not create a slip hazard. We investigated upstream/slope to find origin of water. We were unable to find water source. 3/13/08 Inspectors informed Senior Civil Engineer of the water problem in that area.	None	Cardiff
50998	2/25/08	Commercial	sudsy water	NO		Discharge of vehicle wash water - Power washing in front of Public Works Yard without containment.		WO#68189 : 2/25/08 site inspection observed auto detailing without containment. Took photos and contacted the worker. He had no idea that he needed to capture the wash water because he was using biodegradable soap. He now understands that any wash water (if soap is use or not) needs to be captured. Issued him and NOV	Education, NOV	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
51034	2/27/08	Construction	silt	NO		Discharge of construction debris - Construction to fix trash enclosure at site is causing illegal discharge of silt and water and tracking onto Mountain Vista.		WO#56765 : 2/27/08 site inspection observed discharge took photos contacted worker and issued NOV to comply by 2/28/08 1115am. They stopped discharge temporarily with a pile of dirt. The workers said they were rebuilding the trash structure to 6/30/08 plan See follow up work order 56768 Follow Up: 2/28/08 site inspection all required BMPs in place took photos case closed Original work order 56765 and SR 51034	Education, NOV	La Costa South
51036	2/28/08	Residential	sudsy water	NO		Discharge of building or sidewalk wash water - Power washing w/o containment. 2nd offense. Inspector to investigate.		WO#56759 : 2/28/08 Site inspection did not observe any discharge of power wash water but there was sand, silt, dirt and mulch down stream from the property. The property owner showed me how he was power washing his drive way. He was shown where the sand bags did not completely stop the wash water debris from entering the storm drain. He said he would use a shop vac and/or contact a professional power washer to clean his driveway area	NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
51037	2/28/08	Residential	water	NO		Discharge of water - Complaint from P&R. Woman lives next to Sun Vista Park has excess water problem on her property. Sometimes runoff is muddy, sometimes oily. Inspector to investigate.		WO#57809 : 3/3/08 site inspection contacted complainant. She has been having this problem since the park was constructed four years ago. Appears curb on RSF road needs reinforcement or reconstruction. Sent copies of photos to Streets department and Senior Civil Engineer capital improvement. Called the water department and checked the area and did not find anything unusual. He thought it is over-irrigation. Email to Streets: Subject: Possible curb maintenance on RSF When you get a chance can you or your outstanding crew please take a look at the curb line along RSF west side between Morning Star Drive and Avenida La Posta. I received a complaint from 949 Springwood lane. She feels that the street (RSF) is seeping into her yard (she backs up to the street). See photos (1 and 2 are at her house the rest show RSF. 3/5/08 received an email (with photos) and phone call from complainant stating that there was drainage coming up from the water meter. Saved photos to file 3/13/08 discussed issue with Senior Civil Engineer and sent him photos via email 3/14/08 received call from complainant requesting guidance, sent email below	None	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								Subject: Drainage at 949 Springwood Ln. I received a call this morning from the owner/resident of 949 Springwood Ln. stating that she is still having problems with the drainage going through her property and killing/flooding her vegetation/trees. She believes the City may be responsible because the problems started occurring shortly after the park was constructed. She wanted to know if anyone from the City wanted to see her dying trees before she removes them. She is desperate for a solution. She said she had Streets, P&R, and Engineering out at her property. I have attached a couple of photos of the drainage going across her driveway. Thanks for your time OK to close WO as there are no additional actions that the clean water program can take		
51038	2/29/08	Residential	water	NO		Discharge of water - Neighbor called in AGAIN saying water still leaking from 120 Daphne . SDWD investigation could not find source. Inspector to investigate.		WO#57818 : 3/3/08 received call from complainant stating that the over-irrigation is occurring at 4am and there is a gushing sound. 2/29/08 site inspection took photos and left card, called and left message with complaint.	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
53077	3/6/08	Residential	unknown	NO		Discharge of other wash water - Resident left very vague message saying there is an infraction on Guildford Ct. and that it's being tracked into driveways. No contact info. Inspector to investigate.		WO#57889 : Inspector went to street, found dried white substance in the gutter on the west side of the road. possibly plaster wash water. no sign of construction done at any house on the block. unclear where the discharge started. left doorhangers at houses along west side.	Education	Leucadia
53078	3/6/08	Construction	wash water/sediment	NO		Discharge of building or sidewalk wash water - Power washing library wall behind City Hall.		WO#57890 : Clean Water staff spoke to washer on site, told him to contain water and that no water could go into storm drain. He said he would talk to his foreman. CWP Manager spoke to construction inspector and left a message for Assistant to the City Manager. Building maintenance man also spoke with contractor to let him know storm water requirements.	None	Encinitas
53089	3/7/08	Residential	white wash water/plaster	NO		Discharge of concrete cutting slurry or wash water. - Staff noticed large trail of dried white substance leading from driveway to storm drain. second offense. Inspector to investigate.		WO#68063 : NOV letter and C$100 Citation sent to homeowner. Payment received 3/17/08.	Citation, Education, NOV	Leucadia
53090	3/7/08	Commercial	wash water	NO		Discharge of building or sidewalk wash water - Staff noticed evidence of patio washing outside Pizzicato. Inspector to investigate.		WO#68042 : NOV letter was sent to owner of restaurant on 3/11/08 with BMP info from the Project Clean Water toolbox website and a picture of the wet ground next to patio.	NOV, Education	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
53091	3/7/08	Commercial	Grease	NO		Other discharge - Staff noticed trail of grease coming from trash enclosure behind Rubio's. Also, puddles of wash water at storm drain by Rubio's door. Unknown source. Inspector to investigate.		WO#68096 : 3/11/08 site inspection observed some grease spilling out of containment area too photos and contacted Manager and showed him the photos and issued an NOV to clean area by 3/25/08. A complete Storm Water Quality Inspection was done with follow up items. Needs follow up inspection See follow up work order 68173	Education, NOV	La Costa South
53097	3/10/08	Construction	water	YES	OCEAN	Discharge of water - Complaint at front counter regarding constant flow of water from unknown source across San Elijo Ave into channel just south of Chesterfield. Possible over-irrigation. Inspector to investigate.		WO#68067 : 3/11/08 site inspection showed that water was coming from construction site. sent email to clean water manager to pass on to construction inspector see below Subject: complaint regarding constant run off from 2351 San Elijo I received a Service Request regarding constant water flow along the 2300 blk. of San Elijo (attached). I traced it back to the construction site at 2351 San Elijo Ave. I have visited this site many times and the contractor informed me that he is pumping out ground water. He indicated that this pumping will occur forever. I also took the attached photos.	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63103	3/11/08	Construction	white construction waste	NO		Discharge of construction debris - Staff noticed white line of construction debris wash leading into storm drain. Most likely from construction occurring at site. Inspector to investigate.		WO#68079 : 3/11/08 site inspection observed spill of white paint or concrete mix, took photos contacted PW to contact contractor to clean area and sent email Subject: Photos of spill at 160 Calle Magdalena Here are the photos from 3/11/08. The date is correct on the photos but not the titles. Can you give me contact information so that I can give them educational information or I could give it to you to give to them? thanks for getting on them. See Follow up work order 68080	None	Encinitas
63104	3/11/08	Commercial	grease	NO		Other discharge - Property owner called about his restaurants dumping grease in alley behind building. Inspector to investigate.		WO#68043 : 3/11/08 site inspection observed grease discharge contacted owner who informed me that the cook from the fire fly dumped food into the dumpster without using a bag. The food fell out when the dumpster was unloaded. contacted fire	None	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								fly and the food was cleaned up 3/13/08 called PM and updated him on the inspections that were completed (Blue Finn Sushi, Fire Fly and Passage to India) He was informed that he has the ultimate responsibility to ensure compliance with the storm water ordinance and BMP manual. 3/17/08 sent email to property manager. see below Thanks for taking the time to speak with me yesterday. Attached are some of the issues that we discussed. I will list the areas of concern below: #26 shows washing of the Passage to India van without containment please note that even if only water is used to clean, the wash water is considered a pollutant and must be captured # 21 shows a mop dripping into storm drain Please ensure that your tenants comply with our ordinance and discontinue discharge and dumping into the storm water conveyance system. Thank you 3/17/08 Prop Mgr will send a memo which all the restaurant tenants signed regarding complying with city storm water codes Ok to close add memos to service request hard copy See follow up work order 68065		

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63105	3/11/08	Construction	silt	NO		Discharge of construction debris - Silt/water mixture in construction zone. Looks like a truck drove through and traced discharge to storm drain. Construction Inspector to investigate.		WO#68021 : Per Construction inspector 3/12/08: New curb island hit by semi-truck delivering to existing businesses. all sediment contained by Contech System underground. No discharge left site. Parking lot cleaned by HBI.	None	La Costa South
63119	3/13/08	Residential	paint	NO		Discharge of paint - Neighbor claims neighbor dumped paint and scraped paint chips into the street. Inspector to investigate.		WO#68041 : 3/13/08 site inspection observed over-irrigation from 1956 Lahoud and a slight sheen look to it. It appeared to be coming off the neighbor to the north 1948 lahoud he informed me that nieghbor often dumps trash over the fence and maybe some irrigation wash over the trash. He will check his drains. Referred neighbor dispute to code enforcement and over-irrigation to SDWD	None	Cardiff
63120	3/13/08	Commercial	wash water	NO		Discharge of vehicle wash water - Email regarding auto detailing without containment at business park. Inspector to investigate.		WO#68040 : 3/13/08 sent emails to complainant requesting more information location time... 3/13/08 left message stating that the car wash operator must capture all wash water. OK to close	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63127	3/14/08	Municipal	oil	NO		Discharge of oil. - Resident says someone poured some oil into storm drain near his house. Looks to be oil residue on the grate. Inspector to investigate.		WO#68058 : 3/14/08 site inspection observed some grease in storm drain and took photos. Called wastewater to advise him. After discussing spill it was determined to wait until Monday to clean storm drain 3/17/08 sent email below to waste water Here are the photos that I took. It appears that someone dumped a saucepan of cooking oil into the storm drain just south of 1015/13 Regal. FYI this resident also called the hotline at 6:30pm on Friday requesting the this storm drain be sucked before the rain hits on Sunday. He also alleges that the storm drain is plugged or was plugged. When you get a chance can you let me know what actions you took if any. Thanks. Note I need to change the time on my camera this occurred at 17:24 not 16:24 Email from Wastewater: We need to discuss this situation. I didn't realize when you called me on Friday, but this guy called us about a week before this complaining that the drain was plugged. We went out and cleaned the drain and showed him all was clear. Now, he's calling about some cooking grease. If we continue to get calls from this guy, we may have to start some kind of investigation and documentation process. We cleaned the oil up with some oil absorbent today (3/17/08) at 1:30pm.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63128	3/16/08	Residential	dog urine and feces	NO		Discharge of other wash water - Neighbor washes dog urine and feces from concrete on side of house into street on a daily basis. Inspector to investigate.		WO#68062 : 3/17/08 site inspection observed pet feces in storm drain took photos contacted owner who stated that his gardener has been washing the pet waste down the storm drain. he received educational information and the code section. He refused the NOV. Called complainant at 305pm no answer after <> 15 rings.	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63136	3/18/08	Residential	water	YES	OCEAN	Discharge of water - During rain, water runs north and overtakes the very small beaten up curb and runs down embankment. Drains cannot handle that much street water. Inspector to investigate.		WO#68087 : 3/18/08 site inspection met complainant and took photos of drainage on Dublin, Montgomery, and at 2342 Montgomery. Observed photos that the complainant had taken on 1/17/08 which were emailed to me, forwarded them to Streets, Engineering. Email from complainant: Subject: Fwd: Rain water overflow issue 2342 Montgomery Cardiff CA 92007 photos from 1/17/08 It happens every rain falls Main concern is front berm over flows during all rain events. 3/19/08 sent email to Streets and Engineering: Subject: Drainage complaint along the 2300 blk. Of Montgomery I received a complaint about drainage along the 2300 blk Montgomery Rd. west side. Complainant lives at 2342 Montgomery. he believes the curb is not high enough on the west side of Montgomery at 2350, 2348, 2342, and 2336. He sent me an email with photos showing rain drainage through his property on 1/17/08. I took photos yesterday of Dublin and Montgomery (Complainant thinks the drainage from Dublin flows to Montgomery) the other photos show his front area along Montgomery and how it flows through his property. Photo # 25 shows the alley west of his house (that was recently repaired for a water meter and now is sinking and creating pot holes) that he would like to be resurfaced.	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								Streets, can you please call him and let him know what you can do-he is a nice guy and is expecting a call from you- I did not promise him any improvements. Eng, please be aware of this concern the next time a CIP is in this area Thanks for your time and let me know if you need any other information		
63159	3/21/08	Residential	wash water	NO		Discharge of vehicle wash water - Wanted to know if we send notices to people washing cars. Inspector to investigate.		WO#68163 : 3/24/08 site inspection contacted resident and i was informed that the resident had washed his car on Friday and was not an auto detailer. The resident was given auto washing educational information.	Education	Cardiff
63160	3/20/08	Residential	oil	NO		Discharge of oil. - complaint forwarded from Code Enforcement. Van parked in driveway, leaking oil. Inspector to investigate. See attached email.		WO#68161 : 3/24/07 site inspection took photos and contacted respondent. They informed me that the van has stopped leaking oil/hydraulic fluid. They said they would clean driveway case closed	None	Encinitas
63161	3/20/08	Commercial	wash water	NO		Discharge of vehicle wash water - Power washing in business park without containment. Inspector to investigate.		WO#68166 : By EMERSON, MIKE: 3/25/2008 10:07:41 AM 3/20/08 site inspection observed discharge took photos and issued citation	Citation, Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63162	3/24/08	Residential	construction wash water	NO		Discharge of construction debris - House with construction may be washing waste down street to storm drain. Inspector to investigate.		WO#68158 : 3/24/08 Site inspection took photos issued NOV to clean white substance from street by 5pm 3/25/08. Sent email to Streets regarding EP and street improvements. see below Subject: erosion and public improvements on KilKenny I received a complaint about building waste at 327 KilKenny. I contacted the owner and he will discontinue discharge and clean up the mess he made. he would like to repave his side of the road as it is eroding pretty badly. He does not want to have to redo it. So I asked him to speak with you and then obtain an Encroachment Permit (EP). He has got a bid for $2,000. Can you please guide him to the correct material and the process to get an EP? Also the resident across the street wanted the city to do some improvements to her bank. She said that the City widened the street for fire access and promised her to replant the bank. Can you please call her and give her the process or answers to her questions. Thanks and I promised nothing. Here are some photos. See FU Wo 68229 Follow Up: 3/28/08 site inspection area cleaned up took photos case closed See SR 63162 and WO 68158	Education, NOV	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63174	3/23/08	Commercial	wash water	NO		Discharge of building or sidewalk wash water - Restaurant employee washing off front eating area and sidewalk with no containment. Inspector to investigate.		WO#68174 : 3/25/08 site inspection no discharge observed gave educational information regarding sidewalk cleaning to Amanda with my card to call me if there are any questions	Education	Encinitas
63175	3/25/08	Residential	Unknown dark substance	NO		Discharge of yard waste - Neighbor poured something onto his own yard, and it's draining onto complainant's property. Inspector to investigate.		WO#68183 : 3/25/08 site inspection contacted complainant and observed what appeared to be cooking oil dumped on 199 Pacific View lane and seeped into 201 Pacific View Lane. Took photos left card at 199 to call me regarding spill on north side of property.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63200	3/27/08	Commercial	wash water	NO		Discharge of vehicle wash water - Power washing at business complex, possibly without containment. Inspector to investigate.		WO#68220 : Minimal BMPs in place. No NOV or Citation issued. Send letter to property manager letting her know of situation.	None	Encinitas
63201	3/27/08	Commercial	wash water	NO		Discharge of water - City staff witnessed power washing trash enclosures without containment. no soap being used.		WO#68214 : Spoke to property manager in rental office about proper BMPs and that no runoff can leave property or enter storm drain. She will get shop vac and instruct power washer how to property was out trash enclosure.	None	Encinitas
63213	3/28/08	Commercial	cement-laden water	NO		Discharge of concrete cutting slurry or wash water. - Complaint of cement-laden runoff down street. Inspector to investigate.		WO#68227 : 3/28/08 site inspection observed discharge took photos contacted contractor cleaning up street. He informed me that he had an accident and was cleaning it up. I issued NOV to clean street using dry methods by 3/31 5pm See Follow up work order 68228 Follow Up: 3/28/08 site inspection area cleaned up signed off NOV case closed See SR 63213 and Original WO 68227	NOV	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63215	3/31/08	Commercial	paint	NO		Discharge of paint - White paint dumped into curb line somewhere along 900 block. Inspector to investigate.		WO#68226 : 3/31/08 site inspection observed white powder in storm drain took photos, Contacted company, spoke to employee who informed me that someone painting a fence is responsible for the white discharge. His worker was using a beige color. I contacted a landscaper he made a call and said it will be cleaned up today. Need a follow up inspection. See follow up WO 68235 Follow Up: See SR 63215 and original WO 68226	None	Leucadia
63217	3/31/08	Residential	sewage	NO		Discharge of sewage - 2nd call regarding overflowing septic tank. first call from LWD said sewage was not going into street, so referred to County DEH. Inspector to investigate.		WO#68225 : 3/31/08 site inspection no discharge observed left card at door to call me	None	Leucadia
63219	3/31/08	Construction	dirt	NO		Discharge of construction debris - Trucks tracking dirt onto road near entrance to fire station. Construction Inspector to investigate.		WO#69413 : Per Construction inspector: Active hauling operation 3/31/08-4/3/08. Will street sweep roadway each night.	None	Leucadia
63220	3/31/08	Municipal	water	NO		Discharge of water - Call regarding work being done on B Street. Water running down street, no BMPs.		WO#68236 : 3/31/08 site inspection no discharge observed case closed	None	Encinitas

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63221	3/31/08	Residential	water	NO		Discharge of water - Forwarded from SDWD. Runoff possibly from neighbor's property causing mold and mildew. Inspector to investigate.		WO#68237 : 4/1/08 site inspection observed discharge from drain in front of 1180 Kildeer ct. Took photos and left card at door to call me regarding discharge.	None	Leucadia
63233	4/2/08	Residential	water, possibly dirt	NO		Discharge of water - Neighbor to north hosed down yard/driveway. Silt runoff into street.		WO#69422 : 4/2/08 site inspection took photos called owner and requested that he remove dirt/silt from storm drain curb line in front of his house and the neighbors to the south (1257, 1263, and 1271 Loch Lomond See follow up WO 69425 Follow Up: 6/12/08 site inspection BMP in place (gravel at the end of pipe took photo See original WO 75385 and 1st follow up 75386	None	Cardiff
63234	4/1/08	Commercial	water	NO		Discharge of water - Constant flow of water from retirement home. Inspector to investigate.		WO#68252 : 4/1/08 site inspection observed water flowing out of property contacted SDWD on site. We determined that the water was ground water and that an encroachment permit would be required to lay a pipe under the sidewalk. Case closed	None	Lux Canyon

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63237	4/2/08	Residential	horse manure	NO		Other discharge - Horse manure being dumped into City Park. inspector to investigate.		WO#68253 : 4/2/08 site inspection observed large amount horse manure. took photos and contacted horse owner on site. sent email at 5pm see below I think you had the best solution to remove the Manure by using our waste hauler. Please give them a call and get a container that they will pick up. Otherwise you can compost on private property. I guess the lot across the street is owned by the City. To compost on City property will require an encroachment permit. Please remove all manure from the city lot by 4/17/08. If you have any questions please contact me. Thank you. Below is some more BMP (best management practices) to help you manage manure on private property. 4/15/08 called respondent and left message on status of clean up set up inspection on 4/17/08 4/15/08 received time extension request from 4/17/08 to 4/22/08. A follow up inspection was set up for 4/22/08 2pm See FU WO 69551 Follow Up: SR 63237 and original WO 68253	Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63238	4/2/08	Residential	water, silt	NO		Discharge of water - Possible over-irrigation causing silt in street. inspector to investigate.		WO#69356 : 4/2/08 site inspection observed discharge and erosion from what appeared to be an irrigation problem. took photos and left educational information. See follow up WO 69441 Follow Up: 4/16/08 site inspection no discharge observed case closed See SR 63238 and original WO 69356	Education	La Costa South
63254	4/4/08	Residential	water	NO		Discharge of water – Council member called in about excessive water leaving property at 294 Neptune. Inspector to investigate.		WO#68308 : Inspector followed up at address on 4/8/08. Took photos along street and in front of property and at the beach. No evidence of a discharge occurring. Possible illegal drain pipe (4") extending to beach from the property. No evidence of significant erosion due to the pipe. No complaints recorded with SDWD, water usage historically low. Called and left msg with OMWD letting her know we followed up.	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
63260	4/4/08	Commercial	over-irrigation runoff	NO		Discharge of water - Over-irrigation water running through parking lot going to storm drain. Inspector to investigate.		WO#68279 : Wastewater went to site, spoke to manager who said he'd put in a work order to repair the broken irrigation pipe. Inspector will follow up next week. 4/15/08 called to set up inspection for storm water quality See follow up work order 69710	None	La Costa South
63266	4/07/08	Residential	water	NO		Discharge of water - Forwarded from Code Enforcement. Water running down street, possible pipe break. Inspector to investigate.		WO#69392 : 4/14/08 site inspection no discharge observed during inspection	None	Cardiff
63295	4/9/08	Residential	water	NO		Discharge of water - Neighbor put valve on end of drain pipe at Oxford and Liverpool, causing backup and constant water in street. Possible source of water is swimming pool nearby. Inspector to investigate.		WO#69361 : 4/11/08 site inspection met complainant who showed me the flooding concerns. The cement box on the SW corner of 2057 Oxford is constantly flowing. I took photos of the clear water running into the pipe that daylights at the curb on the NW corner of Oxford and Liverpool. The owner of 324 Liverpool Drive has allegedly capped the outlet pipe and uses the water to irrigate his property. The capped pipe creates back up to the cement box (sw corner of 2057 oxford).	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								NO back up or drainage observed. The complainant stated that the water department has been out several times to locate where the water is coming from. SDWD was unable to locate source of water. Sent email to water department. See below Subject: Water use/drainage on Oxford at Liverpool Here is some background information On 4/11/08 I preformed site inspection met complainant who showed me his flooding concerns. The cement box on the SW corner of 2057 Oxford is constantly flowing (according the complainant). I took photos of the clear water running into the pipe that daylights at the curb on the NW corner of Oxford and Liverpool. The owner of 324 Liverpool Drive has allegedly capped the outlet pipe and uses the water to irrigate his property. The capped pipe creates back up to the cement box (sw corner of 2057 oxford). NO back up or surface drainage was observed during this inspection. The complainant stated that the water department has been out several times to locate the water source. He stated that SDWD was unable to locate source of water. The only pool in the area appears to be located at 2032 Cambridge. can you please look up water use in that area specifically 2032 Cambridge and 2057 Oxford and homes to the east on Cambridge (2054-2060)?			

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								4/14/08 Streets informed me that there was a big problem in that area for years until a contactor was hired to place a pipe under the street to shoot the ground water to Liverpool 4/11/08 I asked complainant to call me when the cement box overflows and I will perform a follow up inspection within two weeks. No discharge at follow up inspection will close case 4/28/08 sent email to Engineering Inspector: Subject: FW: Chronic flooding on Oxford Ave. in Cardiff I received a complaint from resident of 2075 Oxford Ave. I responded to the site. He showed me how his neighbor (324 Liverpool Drive) has plugged the street drainage (to use the water to irrigate his property) and created drainage and seepage problems for the complainant. Please advise		

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								Email from complainant: Subject: Chronic flooding on Oxford Ave. in Cardiff I found my camera and took some photos to document the severity of the flooding problem you came to investigate after my call to the water district. As we discussed this wasn't the first such call. In fact, the problem has persisted for years and the water district is well aware of the issue with the neighbor at the corner of Oxford and Liverpool having blocked the city installed drain, coupling it to a self installed sprinkler system (see attached photos). I was very pleased to have someone from the city at last take notice of this issue which I believe to be eroding the foundation of my home. In light of this, I trust you understand just how serious this matter has now become. A recent inspection of the crawlspace under my house indicates that I can no longer tolerate this problem. I have saturated soil as well as several piers which must be replaced. This aside from the plague of insects I am looking forward to from last summer's example. Having found the proper contact within the city I now urge you to take prompt actions.			

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63296	4/7/08	Commercial	oil, other unknown substances	NO		Discharge of oil. - Possible storage of unknown materials in large steel drums. Some drums have been tipped over. Citizen is concerned. Inspector to investigate.		WO#69368 : 4/14/08 site inspection with fire observed old grease, oil and oil filters. Some containers are turned over and grease and oils are seeping into the ground. Took photos. . Called property manager and left message to call me ASAP 4/14/08 drafted NOV 4/15/08 received voicemail from property manager. returned her call and left message. 4/16/08 received call and email address from prop manager. She will respond to my email and get the property properly cleaned up. See email below Subject: 797/225 Quail Gardens Drive Thank you for getting back to me. I have attached some of the photos I took on Monday 4/14/08 and I will give you a call. Subject: List of Haz Waste Haulers Here is a list of authorized hazardous waste haulers from the County of San Diego. It is strongly recommended that you use one of these companies or at a minimum have one of them evaluate the containers. Also please provide an email explaining how & when you are going to remove the oil and grease and their containers and provide a receipt. Once this area is cleaned up a follow up inspection will be completed. Thank you for your prompt attention to this matter	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
								4/28/08 received and sent email to respondent see below Subject: RE: List of Haz Waste Haulers.pdf I met with Safety Kleen out on site and they will be performing the site clean up of the Hazardous Waste on Quail Meadows project. We are hopeful that they will be able to obtain our EPA # early next week. We should be able to have the site cleaned up in approximately 1 week. As soon as I have a firm date, I will let you know. Subject: RE: List of Haz Waste Haulers.pdf Thank you for the update. Please let me know when the work is complete so I can inspect and close the case. I am very pleased that you are using a professional to properly clean this property. See FU WO 70202 FYI - As of yesterday afternoon (05/14/08), the below referenced Request for Assistance (RFA) from a concerned citizen, was successfully resolved thanks to a collaborative effort between Clean Water and Fire. A considerable amount of contaminated material was found on the property at 225 Quail Gardens Drive across from the Quail Botanical Gardens. In coordination with the property management company and City Staff, all of this material was removed by a certified hazardous waste hauler. The attached before and after pictures tell the whole story. This site contained significant conditions of concern which were successfully abated through these efforts. See SR 63296 and original WO 69368		

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64313	4/11/08	Construction	water/dirt	NO		Discharge of construction debris - Removal of retaining wall caused erosion control and drainage issues for next door neighbor. Inspector to investigate.		WO#69400 : 4/14/08 site inspection took photos and called complainant regarding retaining wall removal creating erosion 4/15/08 received VM from complainant to call her.. Called back and LM at both ph #s at 145pm 4/15/08 4/15/08 received call from complainant and informed respondent where the erosion was occurring. Contractor said he would take care of it ASAP. Need to do follow up in one week 4/22 See follow up WO 69445 Follow Up: 4/16/08 site inspection workers installing BMP on south side of property case closed See SR 64313 and original WO 69400	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64323	4/14/08	Commercial	trash	NO		Other discharge - Trash overflow in dumpster behind Mar Vista Liquor/Subway complex. Inspector to investigate.		WO#69391 : 4/14/08 site inspection took photo of approximately 15-20 trash bags outside of locked dumpster (all dumpsters appear to be locked). Called property manager of commercial Facilities and informed her of the trash problem. She said she would call Subway to get it cleaned up. Needs follow up inspection 4/15/08. called complainant and reported action taken See follow up WO 69402	None	Cardiff
64327	4/12/08	Municipal	water	NO		Discharge of water - Anonymous message about a broken pipe. No details were given. Inspector to investigate.		WO#69401 : 4/15/08 site inspection. the water department stopped to inform me that the Fire department had shut off the water and Parks and Rec. had fixed the pipe.	None	Encinitas
64355	4/21/08	Commercial	na	NO		Other discharge - Illegal connection found at corner of Piraeus and Normandy during dry weather monitoring preparations. Inspector to investigate.		WO#69545 : 4/22/08 Waste water reported that the Pipe used to serve the green houses but now it does not go anywhere or no drainage travels though it. Case closed	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64373	4/11/08	Residential	wash water	NO		Discharge of building or sidewalk wash water - Power washing w/o containment at 2520. GIS will not locate this exact address. Inspector to investigate		WO#69558 : 4/22/08 site inspection observed no discharge left educational information and a door hanger	None	Cardiff
64386	4/24/08	Commercial	silt/dirt	NO		Other discharge - Heavy erosion. Sand dumped on next door lot. Silt/dirt in storm drain. Inspector to investigate.		WO#69617 : 4/24/08 site inspection observed erosion and colored drainage from the BMW auto dealership. Took photos. Contacted owner and showed him all of the violations. He requested that I email him photos of the violations. We agreed that the contractor would remove the drip pans and the oil pans and reels by 5/5/08 and complete the landscaping by 5/28/08. The drainage from the vehicle washing was stopped immediately. See emails below Subject: Photos from 4-24-08 Here are the photos from yesterday. Here is the link to all different kinds of erosion control methods that will help stabilize the slope on the north east side of the property. Please make sure to capture all vehicle wash water so that it does not enter the storm drain. Make sure that no paint of dust leaves your painting area. Please remove or cover all outdoor storage. As we discussed contact your contractor to remove all of the drainage containers and other miscellaneous pans and reels. If you have questions please call me See follow up work order 75569	Education	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64387	4/24/08	Construction	dirt	NO		Other discharge - Pile of dirt in parking lot at new facility. Inspector to investigate.		WO#69607 : 4/24/08 site inspection observed stock pile of dirt without any BMPs took photo. PM informed me that it was left over dirt from the grease interceptor construction for Santa Fe Grill. Called other restaurant on Santa fe and left message. needs follow up inspection 5/1/08 Site inspection issued NOV to Contractor remodel and gave it to the head contractor to comply by 5/9/08 3pm See FU WO70234 Follow Up: 5/12/08 Site inspection dirt was loaded into plastic bags and stored on a pallets Case closed See SR 64387 and Original WO 69607	NOV	La Costa South
64394	4/25/08	Commercial	na	NO		Discharge of construction debris - Improperly stored containers full of liquid. Construction Inspector to investigate.		WO#69616 : Construction inspector said site just had water line and sewer installed. OMWD was testing water, using 5 gallon buckets. Site cleaned up at 3:30pm on 4/25/08.	None	Lower Escondido Creek

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64417	5/5/08	Construction	brick/concrete wash water	NO		Discharge of concrete waste. - Building a brick wall, washing concrete waste into street/storm drain. Inspector to investigate.		WO#69734 : 5/5/08 site inspection met Wastewater who informed me that there was building waste going into the storm drain. Issued an NOV to comply by 5pm by dry cleaning sweeping the area clean. Took photos See Follow up work order 69735 Follow Up: 5/6/08 site inspection area cleaned and BMPs in place Case closed signed off NOV and took photos See SR 64417 and original WO 69734	Education, NOV	Cardiff
64421	5/5/08	Residential	trash	NO		Other discharge - Alleged dumping of trash in gutter/storm drain. Neighbor/complainant says he has video of her dumping trash. Inspector to investigate.		WO#69736 : 5/5/08 site inspection observed some water in front of 1956 LaHoud. Took photos and called complainant. Informed the complainant that there was not any discharge or trail leading from 1956 LaHoud. She said the wind had blown the toilet paper away. Observed some recycles in a vehicle in front of 1956 and in the front yard of 1956. Knocked on door --no answer no discharge observed from 1956 case closed	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64492	5/12/08	Construction	construction debris/concrete	NO		Discharge of construction debris - Large pile of materials from Encinitas overlay project is unprotected on North side of Encinitas blvd, between Quail Gardens Dr and old Albertsons shopping area. Construction inspector to investigate.		WO#70121 : Construction Inspector said that the contractor will be hauling away the stockpile tonight.	None	Encinitas
64494	5/12/08	Construction	dirt	NO		Other discharge - Re-constructing sidewalk in front of St. Germaine's. Large pile of dirt unprotected on side of road. Inspector to investigate.		WO#70175 : Drive by at site showed that pile of dirt had been cleaned up. No illegal discharge.	None	Encinitas
64495	5/13/08	Residential	water	NO		Discharge of water - Resident hosing off driveway with no containment. Inspector to investigate.		WO#70200 : 5/13/08 site inspection contacted resident informed her that the City's storm water ordinance does not allow washing down drive ways and gave her a door hanger and a business card.	Education	Encinitas
64499	5/13/08	Residential	wood chips/mulch	NO		Discharge of yard waste - Neighbor is transporting large amounts of wood chips/mulch from driveway and placing them all along Private Dr. off Bonita Dr. No protection from running off. Inspector to investigate.		WO#70201 : 5/14/08 site inspection took photos of wood chips in close proximity to the storm drain. Left card at door to call or email me See FU WO 70238 Follow Up: 5/19/08 site inspection area cleaned up case closed See SR 64499 and original WO 70201	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64512	5/14/08	Residential	soapy water	NO		Discharge of other wash water - Wastewater DIV is on Parkwood LN which is off of Eolus and there is a residential drain line dumping directly into the storm drain. soap suds in the pipe. Has been problem in past. No sewer in the area.		WO#70199 : 5/14/08 site inspection took photos of what appeared to be waste water. Left card at door requesting a call or email 6/6/08 called and left messge 8/7/08 left message to call me 8/14/08 sent NOV to comply by 8/28/08. NOV will count towards FY 08-09 totals. Received email from CWP inspector after testing downstream: Subject: Dry Weather Monitoring Results for LUC-9 As you suspected, there were some water quality exceedances at LUC-9 (the manhole located in Leucadia Village). Are you able to join me around 9:00 am?... I'll send you an appointment in another email. Even though I will not get the bacteria results back from the lab until tomorrow afternoon, I am still required to confirm the results for the exceedances in Ammonia, Nitrate, Ortho-Phosphate and MBAS within two business days. Inspection is ongoing into FY 08-09.	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64517	5/15/08	Residential	water, sediment	NO		Discharge of water - Complainant's dog is getting sick from drinking water running off of 855. Wants water tested. Inspector to investigate.		WO#70220 : 5/15/08 site inspection took photos of drainage and spoke to complainant. He requested that the water be tested for pollutants. He was informed that the clean water program first attempts to stop the source of the water so that there is no need to test it. Left a card at the residence. 5/15/08 received call from respondent. He informed me that the drainage was coming from above and adjacent properties and his landscaping and back flushing of the Koi pond (monthly). I sent him an email with the BMP link for pools and fountains and requested that he drain his pond filter into a pervious surface. sent email to streets with photos regarding the erosion: Subject: Erosion along Sidonia I received a complaint about drainage on the south side of Sidonia east and west of Eugenie. I contacted the discharger and requested that he limit his runoff and review his irrigation. Anyway it appears that some erosion occurred on the south side of Sidonia. Can you please review this area and proceed as you desire	Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64518	5/15/08	Construction	sand/concrete cutting	NO		Discharge of concrete cutting slurry or wash water. - Inspector noticed white substance going down street from construction of driveway at 841. Will investigate.		WO#70221 : 5/15/08 site inspection observed white concrete drainage from property. contacted workers to sweep street no wash down See FU WO 70230 Follow Up: 5/19/08 site inspection appeared that debris was swept up Case closed See SR 64518 and original WO 70221	Education	Encinitas
64606	5/21/08	Construction	water, sediment	YES	COTTON-WOOD CREEK	Discharge of water - Construction caused broken water pipe, discharge to Moonlight Beach. Construction inspector to investigate.		WO#74548 : Contractor cleaned up silt from broken waterline, A St, 2nd St, B Street to Moonlight Beach per Construction Inspector 6/22/08.	None	Encinitas
64608	5/22/08	Construction	broken gravel bags at storm drain inlets, lack of BMPs at stockpiles	NO		Discharge of construction debris - Lack of BMPs during Encinitas overlay project. Construction inspectors to investigate.		WO#74746 : Per construction inspector 6/20/08: Approx. 40 cloth basins along the 3 mile overlay project were bagged and filter cloth was placed at each opening so gravel would not fall inside. So if there was an occasional gravel bag broken, gravel was not getting inside. A small pile of dirt (less than 1 yd) was left overnight but was picked up the next night.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64609	5/21/08	Commercial	grease	NO		Discharge of food waste. - Grease discharge in alley behind restaurant. Inspector to investigate.		WO#70299 : 5/22/08 site inspection contacted owner of Filiberto's and took photos of kitty litter in street. Walked the length of the alley with the owner. I requested additional kitty litter on the SE and NE corners of 2nd and C Street. Called wastewater and requested that the vactor truck vacuum the corners of 2nd and C Street. Advised owner to contact a clean up or power washing contractor to clean area from the restaurant to 2nd and C. Kitty litter was in place within 2 hours (at the corner) and the alley was swept up. Called owner and thanked her for the clean up and that it was OK to sweep up all of the kitty litter especially the pile at the se corner of 2nd and C. See FU Work Order 70320 Follow Up: 5/27/08 site inspection area cleaned up case closed See SR 64609 and Original WO 70299	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64621	5/23/08	Residential	Wash water	NO		Discharge of other wash water - Washer/dryer moved into garage, no sewer hookup, wash water flows from underground pipe into driveway. See complaint from from Code Enforcement. Inspector to investigate.		WO#75490 : 5/23/08 site inspection took photos and left card received call back that the drain is for landscaping.	None	Cardiff
64622	5/22/08	Commercial	soapy wash water	NO		Discharge of building or sidewalk wash water - Washing parking lot/patio with no BMPs. Soapy water running into street. Inspector to investigate.		WO#75491 : 5/22/08 SITE INSPECTION TOOK PHOTOS AND CONTACTED BUSINESS OWNER TO DISCONTINUE DISCHARGE 5/23/08 issued citation 6/26/08 paid citation Paid $100 on 6/26/08. On 6/30/08, called owner and ok'd only $100 payment and required that no runoff occur while cleaning and to spend $ on additional BMPs.	Citation, Education	Leucadia
64624	5/22/08	Commercial	Vacuum cleaner residue	NO		Other discharge - Inspector noticed litter and debris from vacuum cleaner dumped behind store while doing routine inspection next door.		WO#70322 : 5/22/08 site inspection observed waste and contacted store manager who confirmed that it was their trash and will clean it up asap See follow up WO 73492 Correction: See follow up WO 75492 Follow Up: 5/28/08 site inspection area cleaned See original WO 70322	None	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64626	5/22/08	Residential	white construction waste	NO		Discharge of construction debris - Home remodel- white construction materials being dumped into street. Inspector to investigate.		WO#70321 : 5/23/08 site inspection no discharge observed left card and took photos. 5/27/08 site inspection no discharge or storage violations case closed	None	La Costa South
64636	5/28/08	Commercial	unknown	NO		Other discharge - Call about a discharge at the Cardiff town center. No info on what or where discharge is. Inspector to investigate.		WO#75455 : 5/28/08 site inspection called PM and left message. He will be out of town until 6/2/08. I requested that he call me back ASAP as the discharge appears to be from washing down the patios and side walks . 6/2/08 Received call from property manager stating that he will speak to his cleaning crew.	None	Cardiff
64637	5/28/08	Residential	motor oil, kitty litter	NO		Discharge of oil. - Car leaking oil onto street, kitty litter used for cleanup is left on the ground. Inspector to investigate.		WO#70332 : 5/28/08 site inspection observed oil and kitty litter in street took photos and left card at door requesting a call or email regarding debris in street to be re-inspected by 6/4/08 See Follow up work orders 74749 and 74753 Follow Up: 6/5/08 site inspection took photos and issued NOV to comply by 6/12/08 See original WO 70332 and Follow up 74753	None	La Costa South

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64640	5/29/08	Residential	wash water/silt	NO		Discharge of other wash water - Washing machine is discharging next to complainant's driveway and causing some erosion. Inspector to investigate.		WO#70342 : 5/29/08 site inspection left card at door to call me regarding wash water discharge. Called complainant who informed me that the wash water only discharges when someone is home doing laundry in the late afternoon or early evening. Another inspection is scheduled for next week. See follow ups 75454, 75460, 75832. Follow Up: 8/15/08 site inspection drainage was restored to original pattern. Washer was correctly attached to the sewer See work orders 70342, 75454, 75460	None	Encinitas
64657	5/29/08	Municipal	soapy wash water	NO		Discharge of vehicle wash water - City vehicle washing at Public Works yard with no containment. Inspector to investigate.		WO#75390 : Contacted PW to discontinue discharge and contain all wash water in the future.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64658	5/29/08	Commercial	Sediment	NO		Other discharge - Prop Manager of HOA called to report runoff in parking lot coming from adjacent palm tree nursery. Also, sprinklers are causing fence to erode. Inspector to investigate.		WO#74613 : 6/5/08 site inspection contacted resident. We inspected the south west corner of his property and discussed solutions. He agreed to install some perimeter BMPs to prevent silt discharge 6/11-17/08 received complaint calls from John La Blanc requesting a meeting with the residents Follow Up: 6/26/08 received letter from Instant Jungle representative 8/6/08 Called complainant and respondent and received permission to forward the 6/26/08 letter to the complainant. requested a compliance inspection from the respondent. I called complainant and informed her that I had emailed a copy of the 6/26/08 letter but that I was still seeking a compliance inspection. The owner of the property is to call me back to set up an inspection 8/26/08 called property owner and set up compliance inspection for 9/3/08 11am see 2nd follow up	None	Leucadia

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64703	5/30/08	Municipal	Sudsy wash water	NO		Discharge of vehicle wash water - Fire Dept flushing sudsy water out of engines onto street with no containment. Inspector to investigate.		WO#75486 : 5/30/08 emailed Fire. he informed me that it was the B shift and that they would not be working until 6/7/08 6/11/08 received call from Fire stating that it was class A foam and the crew did not realize it was draining into the storm drain. They stopped their operation and tried to capture all the wash water. no inspection was preformed	None	Cardiff
64705	6/2/08	Residential	paint wash water	NO		Discharge of paint - Resident cleaning out paint supplies, no containment, wash water in street. Inspector to investigate.		WO#75488 : 6/2/08 site inspection contacted resident to clean the white substance in the street See follow up 75489 Follow Up: 6/9/08 site inspection discharge removed See original WO 75489	None	Leucadia
64718	6/5/08	Residential	water	NO		Discharge of water - Neighbors behind complainant cemented area between 2 houses, possibly w/o permit, causing excess water runoff into complainant's property/drain. Inspector to investigate.		WO#75449 : Site inspection- no discharge, left door hanger.	None	Cardiff

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64724	6/6/08	Residential	dirty water	NO		Discharge of water - Resident complaining that neighbor is doing something illegal to make dirty water/unknown substance pool in front of her driveway. Site has been inspected before. Inspector to investigate.		WO#75385 : By RYGIEL, KRISTINE: 8/4/2008 9:53:27 AM Site Inspection. Contacted resident who gave me landlord's #. Resident agreed to sweep area around storm drains to clear away dirt and silt. Complainant contacted me and requested to know my actions. I said I would return with a Spanish speaker to speak with landlord. Complainant would like a call back. See follow ups 75386 and 75450	None	Cardiff
64735	6/9/08	Residential	paint	NO		Discharge of paint - Possible illegal body/mechanical shop in house, spraying auto paint outside. Inspector to investigate.		WO#75384 : Site inspection. No discharge observed. left card to call me. Received call back stating that they do not discharge. Sent educational info via US Mail.	Education	Cardiff
64755	6/10/08	Residential	water, moss	NO		Discharge of water - Resident says there is a constant puddle of water in gutter between her house and house to the north. Causing moss buildup, mosquitoes. Unsure of source. Inspector to investigate.		WO#75388 : Site inspection, took photos of puddled water. Followed flow upstream, but did not find source. Appears that it is overirrigation. Forwarded to SDWD.	None	Leucadia
64759	6/10/08	Commercial	water	NO		Discharge of water - Runoff from underneath building. Water district has been to site. Can't find source. Possibly groundwater. Inspector to investigate.		WO#75389 : Site inspection appears to be ground water. Referred to SDWD.	None	Lux Canyon

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
64760	6/10/08	Residential	Sewage/water	NO		Discharge of sewage - Sewage stagnant in yard, over-irrigation causes flooding, overflow. Unsure of who is responsible. Inspector to investigate.		WO#75487 : 6/11/08 site inspection with program manager. contacted residents in the area and returned complainant's call. We informed all that this is not a clean water issue as it is not draining off the property and to contact their HOA and or their landscaping company.	None	Cardiff
68768	6/12/08	Commercial	water	NO		Discharge of water - Hotel hosing off parking lot/sidewalk. No containment. Inspector to investigate.		WO#75383 : Site inspection. contacted owner regarding discharge and gave her construction education info.	Education	Leucadia
68773	6/12/08	Residential	unknown liquids	NO		Other discharge - People living in RV parked in front of residence. Dumping things into storm drain. Inspector to investigate.		WO#75381 : Site inspection- no discharge observed. Left business card with teenager at the residence.	None	Leucadia
68783	6/11/08	Residential	water	NO		Discharge of water - Discharge of pool water. Inspector to investigate whether water is dechlorinated or not.		WO#75387 : Site inspection. Contacted workers regarding discharge. Received call that pool was dechlorinated.	None	Lower Escondido Creek
68784	6/9/08	Construction	gravel bags, rocks	NO		Discharge of construction debris - Construction site BMPs are breaking. Inspector to investigate.		WO#75451 : 6/9/08 Site inspection took photos contacted construction inspector See follow up WO 75452 Follow Up: the construction company no longer exists. I called and informed complainant that our streets division will be contacted to clean street and that he needed to contact code enforcement to address vacant lot complaint. I sent email to Streets requesting street cleaning site inspection area cleaned See original WO 75451	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
68785	6/14/08	Commercial	wash water	NO		Discharge of water - Clean Water Staff observed restaurant hosing off front patio into street. No containment.		WO#74513 : Sent NOV letter with Project Clean Water BMPs	NOV, Education	Encinitas
68792	6/12/08	Construction	sediment	NO		Discharge of construction debris - Sediment from construction site is being carried onto road. site is located to the north of 2626 Lone Jack. Construction Inspector to investigate.		WO#74560 : Construction inspector talked to contractor. Sediment will be cleared from road.	None	Lower Escondido Creek
68795	6/17/08	Commercial	water	NO		Discharge of water - Drain at Santa fe just east of Lake by curb. possibly comes from a nursery on Lake- it has a pump on it- not sure if they are pumping chemicals or just water. Inspector to investigate.		WO#75459 : 6/25/08 no discharge observed	None	Encinitas
68798	6/17/08	Commercial	Sewage smell	NO		Discharge of sewage - Strong sewage smell coming from drain in front of Vons. Mgr had grease inspector checked, can't find a problem anywhere. Inspector to investigate.		WO#75456 : 6/18/08 site inspection no discharge observed contacted store manager and I was informed that a contractor was called to service their grease interceptor. I requested that the last invoices be faxed to me. received copies of invoices dated 6/17/08 and 6/18/08	None	Encinitas
68800	6/17/08	Commercial	water, dirt	NO		Discharge of water - Landscaping Co. hosing off driveway into street. Inspector to investigate.		WO#74627 : Instructed landscaper to stop hosing off driveway. Educated landscaper on the permitted ways to clean a driveway: dry cleaning method, hosing off and collecting wash water and discharge water. See follow up WO 75382. Follow Up: Site inspection. Contacted owner, she will contact her workers. See original WO 74627	Education	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
68806	6/18/08	Commercial	red paint	NO		Discharge of paint - Neighbors discharged red paint into gutter- it ran down 11th St and puddled at 11th and Jacquelene. Inspector to investigate.		WO#74761 : 6/18/08 site inspection observed reddish substance in street took photos and contacted resident. The resident informed me that their roof had just been power washed. She asked me to call her father. Called and left message. The complainant was contacted and informed of the discharge material. She requested a call back. 6/24/08 received call back from power washer- set up meeting at site on 6/25/07. he called on 6/25/08 and stated that he is at the site and will sweep up what he can and will return on 7/15/08 to finish the house washing job and power wash the street and capturing all the wash water. 6/30/08 left message with complainant regarding city action and clean up schedule site inspection area appeared to be cleaned up See follow up WO 75528 See original WO 74761	None	Lower Escondido Creek

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin
68829	6/20/08	Construction	dirt and hydraulic fluid in street	NO		Discharge of liquid fuels. - Dirt and hydraulic fluid in street in front of neighbor's house. inspector to investigate.		WO#74747 : 6/20/08 site inspection took photos issued NOV to comply by 6/24/08 See follow up WO 74748 Follow Up: 6/24/08 site inspection street clean and BMP in place See original WO 74747	Education, NOV	La Costa South
68867	6/25/08	Commercial	Grease	NO		Other discharge - Inspector noticed grease dumped in and spilled on trash dumpster and surrounding areas.		WO#74755 : 6/25/08 site inspection took photos and issued NOV See follow up WO 75493 Follow Up: 7/28/08 site inspection area cleaned See original WO 74755	Education, NOV	San Elijo Lagoon
68870	6/23/08	Commercial	water	NO		Discharge of water - Hosing off sidewalk w/o containment.		WO#74694 : NOV letter and Project Clean Water BMP sheet sent 6/23/08. Bird House called to discuss the letter on 6/24/08. Staff told her why she needs to contain the wash water and went over BMPs she can use.	NOV, Education	Leucadia
68873	6/25/08	Commercial	soapy water	NO		Discharge of building or sidewalk wash water - Washing off parking lot w/ failing BMPs. Inspector to investigate.		WO#74760 : 6/25/08 site inspection requested that they slow down washing so that they can collect all wash water.	None	Leucadia
68874	6/26/08	Municipal	gasoline	NO		Discharge of liquid fuels. - Gas spill from truck in City Hall parking lot.		WO#75374 : 6/26/08 Gas can tipped in truck bed, small puddle spilled into parking lot. Owner of vehicle could not be located. Inspectors cleaned up spill, left card on truck.	None	Encinitas

SRID	Incident Date	Category	Substances	Entered Waterway?	Waterway	Event Description	Spill Contained	Comments	Enforcement	Sub Basin

Commercial Total:	**91**
Residential Total:	**123**
Construction Total:	**46**
Municipal Total:	**20**
Total:	**280**

Summary of Complaint Referrals or Requests for Info **FY 2007 - 2008**

SRID	Incident Date	Category	Substances	Comments	Referred To	Request for Info	Sub Basin
34725	7/9/07	Residential	polluted water run-off	Other discharge - A call came in from County resident. She had a notice of violation issued to her home for polluted water run-off from her horse ranch. She would like to discuss.	County of San Diego		
34798	7/11/07	Residential	over--irrigation runoff	Discharge of water – Property manager called, saying HOA is discharging water onto east side of property at 227 n. el camino real in back parking lot. Alerted the HOA prop manager about over-irrigation. Referred case to OMWD.	OMWD		LCS
37151	7/25/07	Municipal	debris/construction waste in concrete channel	Other discharge - Clean Water Staff out sampling saw debris and waste in concrete channel that discharges into Lagoon mouth. south of Chesterfield, east side of 101. Inspector spoke to Streets, see attached email/pictures.	Streets		CBS
37268	9/4/07	Residential	pool discharge inquiry	Discharge of water - Resident called in with a pool discharge inquiry. Inspector gave him the info he wanted.		pool drainage info	CBS
41441	9/5/07	Residential	car washing discharge	Discharge of vehicle wash water - Resident is asking about city ordinance against residential car washing. Inspector to respond. Flair Encinitas HOA. Clean Water staff spoke to woman from HOA board in July, gave her brochures to hand out to all residents.		car washing regulations	LCS
47878	11/7/07	Commercial	question regarding pressure washing house	Discharge of building or sidewalk washwater – Business owner wants to do power washing business in Encinitas, called to ask about our regulations. Sent him Power Washing BMP info.		Power washing	
47886	11/7/07	Commercial	na	Discharge of vehicle wash water – Business owner called in to get mobile detailing BMP info. Inspector spoke to him and gave him necessary info.		power washing	

SRID	Incident Date	Category	Substances	Comments	Referred To	Request for Info	Sub Basin
47984	11/20/07	Commercial	na	Other discharge - Woman from Latitude 33 called in regarding Encinitas Storm Water requirements and if there would be any updates occurring. Clean Water staff directed her to the BMP manuals and storm water ordinance online. Woman would like Inspector to caller her back.		Enc. storm water regulations/updates	
48115	11/28/07	Residential	pool water inquiry	Discharge of water - Resident called in to ask about discharging pool water. told her less than 1ppm chlorine, slowly empty into street/storm drain. or use on landscaping.		how to discharge pool water	CBS
48337	12/4/07	Municipal	sediment	Discharge of Silt or Sediment - Sediment from hill in front of City Hall eroded across driveway and onto Vulcan ave. Caused by rain event on 11/30.	Streets		ENC
48343	12/4/07	Commercial	na	Other discharge – Code enforcement received a question at Honey's regarding a styrofoam ban at restaurants. Owner wants to know if it's going to happen in Encinitas. please call her back.		styrofoam ban at restaurants?	ENC
48351	12/6/07	Commercial	na	Other discharge - Employee saw our Auto and Restaurant BMP posters on our website. Wanted a hard copy of each. Mailed 12/7/07.		Auto and Restaurant BMP posters	RSF
48358	11/29/07	Residential	wash water	Discharge of vehicle wash water - resident was washing car in street. Inspector gave educational info.		car washing BMPs	ENC
48359	11/28/07	Residential	vegetation, wood, trash on sidewalk and in storm drain	Other discharge -	Code Enforcement		CBS
48405	5/3/07	Commercial	wash water	Discharge of vehicle wash water - power washing at 169 saxony	Prop Mgr		ENC
48417	11/13/07	Residential	sediment	Discharge of construction debris -	Code Enforcement		ENC

SRID	Incident Date	Category	Substances	Comments	Referred To	Request for Info	Sub Basin
48532	1/2/08	Construction	water	Discharge of water – Clean Water staff noticed water running off from construction at Leucadia and Vulcan construction. Pipe broke during work. Inspector to investigate.	SDWD		LCD
48535	1/2/08	Residential	pool/spa water	Discharge of water - Wastewater noticed pool discharge, stopped to talk with resident. No chlorine had been added for 2 weeks prior to draining. No violation.		pool discharge requirements	ENC
48566	1/9/07	Residential	dark liquid, possibly oil	Other discharge - Resident called about this before. neighbor discharging something that is puddling in front of her driveway at 1263 Loch Lommond. looks to have oil in it. Inspector to investigate. Also wants to know if car washing in street is legal b/c neighbors do		Car washing in street legal?	CBS
48627	1/17/08	Residential	Water	Discharge of water - Sprinklers may be broken. They are always running and causing puddles in alley. SDWD will contact complainant for more info.	SDWD		LCD
48702	1/29/08	Residential	pool water	Discharge of water - Resident called regarding proper pool drainage procedures. He was prompted to call when a passerby on a bike expressed concern over the discharge.		pool drainage procedures	ENC
48800	2/6/08	Residential	trash	Other discharge - Resident came to front engineering counter requesting info to hand out in her neighborhood regarding litter and why it shouldn't be left in the streets. Neighborhood is around Regal from Requeza to Santa Fe.		Litter information	ENC
50945	2/21/08	Residential	trash	Other discharge - Citizen called in concerned with the trash that blows into the Lagoon. not from one in particular area. advised him to call Streets Dept for clean up and told him about beach cleanup coming up on April 26. gave him clean water hotline number.		trash cleanup info	SEL

SRID	Incident Date	Category	Substances	Comments	Referred To	Request for Info	Sub Basin
50993	2/25/08	Residential	na	Discharge of vehicle wash water - Complainant called in to find out what happened with 1251 Evergreen. Clean Water informed him that inspector went to site, couldn't see any illegal discharge, sent Spanish auto information in mail.		what happened with complaint at 1251 Evergreen?	CBS
51011	2/26/08	Residential	water	Discharge of water - Resident called in to report sinkhole on his property and large amounts of water on neighbor's property and Windsor Ave.	Eng, Public Works, SDWD		CBS
51015	2/27/08	Residential	water	Discharge of water - Over-irrigation concers from neighbor. Possibly another broken sprinkler. SDWD to investigate.	SDWD		LCD
53068	3/5/08	Municipal	wash water from stairs	Discharge of other washwater - Citizen concerned with water being wasted to wash stairs at Stonesteps. Also concerned with pollutants such as vomit and urine being washed to beach. why can't they sweep sand off stairs?	Parks and Rec		LCD
53069	3/5/08	Residential	water	Discharge of water - Resident called to report over-irrigation again. Inspector went to site previously and left doorhanger regarding broken sprinkler. Referred this call to SDWD.	SDWD		LCD
53074	3/5/08	Residential	leaves, trash, debris?	Other discharge - Private street drain in Olivenhain built to run street water into creek. Drain is not being maintained, and now it's clogged. Sent to Streets Dept for investigation.	Streets Dept.		LEC
53079	3/6/08	Residential	na	Discharge of water - Resident concerned with drinking water quality and the "toilet to tap" plan. Clean Water staff explained that we don't handle drinking water and referred her to SDWD or OMWD.	SDWD/OMWD		CBS

SRID	Incident Date	Category	Substances	Comments	Referred To	Request for Info	Sub Basin
63107	3/11/08	Residential	na	Discharge of building or sidewalk washwater - Resident called in wanting power washing BMPs. Interested in washing the driveway at his apt/condo complex. Sent him Project Clean Water BMPs, City code section 20.08.040, and list of complying power washers.		Power washing BMPs/requirements	
63137	3/18/08	Residential	na	Discharge of water - President of Village Park Rec Club 2 called to verify pool discharge regulations. Told him to dechlorinate water and discharge to landscaped area.		pool discharge regulations	LCS
63164	3/24/08	Residential	wash water	Discharge of vehicle wash water - Resident of HOA emailed to ask for car washing requirements. Sent Think Blue info. See attached email.		Car washing requirements	
63216	3/31/08	Residential	sewage	Discharge of sewage - Call from LWD, residential septic tank overflows on occasion. Discharge confined to yard, not in street. Referred to County Dept of Health.	County DEH 858-495-5579		LCD
63236	4/2/08	Commercial	na	Discharge of food waste. - David called in to find out if there are requirements for mobile food carts. Sent him BMP info from Project Clean Water Toolbox.		Mobile food facility regulations	
63246	4/3/08	Residential	na	Discharge of vehicle wash water - HOA sent newsletter to residents saying that residential car washing is illegal in Encinitas. Resident calling to find out if that is true. Told her HOA may have special rules against it, but Encinitas does not.		car washing regulations	
63259	4/7/08	Residential	na	Discharge of vehicle wash water - President of HOA called to confirm car washing regulations because her residents are calling us to ask whether it is legal or not. she thinks it used to be illegal, but it has always been an exemption. Program Manager to respond.		Car washing regulations	LCS

SRID	Incident Date	Category	Substances	Comments	Referred To	Request for Info	Sub Basin
64310	4/10/08	Residential	clogged storm drain	Other discharge - Resident says drain on her private street is clogged. Who is responsible for cleaning it? Wastewater to investigate.	Encinitas Wastewater		LEC
64322	4/10/08	Residential	brown/orange water	Discharge of water - Call about brown/orange water drying out skin. Referred to SDWD. Unknown if caller meant to call Encinitas. SDWD was unable to make contact with complainant.	SDWD		
64340	4/10/08	Residential	na	Other discharge - Question about renewing NOI for vacant lot next to his house. Inspector called him back and sent him State Water Resources Control Board info.		Rules for renewing NOI	CBS
64341	4/17/08	Residential	water	Discharge of water - Complaint about over-irrigation forwarded from Code Enforcement. No mention of pollutant runoff. Referred to SDWD.	SDWD		ENC
64366	4/22/08	Municipal	dead dog	Other discharge - Dead dog at beach near Campground/San Elijo Cliffs. Referred to Lifeguard Supervisor.	Lifeguards		CBS
64414	5/5/08	Residential	water	Discharge of water - Possible broken sprinkler or over-irrigation coming down hillside from Kildeer Ct onto Quail Hollow Dr. No erosion occurring. Referred to SDWD.	OMWD		LCD
64623	5/19/08	Residential	na	Discharge of water - Caller wanted to know regulations on pool draining because her neighbor was doing it.		Pool draining requirements	LCS
64625	5/22/08	Residential	bubbly water	Discharge of water - Large amount of water draining and puddling in front of 701-721 Vulcan Ave. Inspector to investigate.	SDWD		ENC
64702	5/31/08	Commercial	Wash water	Discharge of other washwater - Carlsbad resident called to report illegal dumping from carpet cleaner. Referred to Carlsbad Storm Water Program.	City of Carlsbad Storm Water		

SRID	Incident Date	Category	Substances	Comments	Referred To	Request for Info	Sub Basin
64723	6/5/08	Municipal	NA- Clogged drain	Other discharge - Vector Control called in clogged drain at Bottlebrush and Willowspring. Referred to Wastewater for cleanout.	Wastewater		LCS
68836	6/23/08	Municipal	na- no safety bar on storm drain	Other discharge - Resident called to report missing safety bar on storm drain in front of her house. Referred to Streets Division.	Street Maintenance		LCS
68883	6/30/08	Residential	pool water	Discharge of water - Resident calling to ask about pool drainage requirements. Done.		Pool drainage requirements.	RSF

Commercial Total:	**8**
Residential Total:	**34**
Construction Total:	**1**
Municipal Total:	**6**
Total:	**49**

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

12-8-08

Phil Cotton, City Manager
City of Encinitas

Date

EXECUTIVE SUMMARY

On March 24, 2008, the City of Encinitas finalized an updated Jurisdictional Urban Runoff Management Program (JURMP) as required by Water Quality Order No. R9-2007-0001 (San Diego Municipal Stormwater Permit). The updated JURMP serves as the City's foundational program management tool, capturing newly developed process, procedure, and implementation strategies for overall program effectiveness and compliance. Within the updated JURMP document, the City of Encinitas also details the City's comprehensive update of the Illicit Discharge Detection and Elimination (IDDE) and Dry Weather Field Screening and Analytical Monitoring (Dry Weather Monitoring) programs.

As required by Water Quality Order No. R9-2007-0001 (San Diego Municipal Stormwater Permit), on September 30, 2008 the City of Encinitas submitted its 2007-2008 JURMP Annual Report to the San Diego Regional Water Quality Control Board (RWQCB). Preceding this submittal, on September 10, 2008, the RWQCB adopted Addendum 2 to Order No. 2007-0001 (Addendum 2) titled:

AN ADDENDUM EXTENDING THE DUE DATE FOR THE ILLICIT DISCHARGE DETECTION AND ELIMINATION REPORTING REQUIREMENT AND CHANGING THE BIOASSESSMENT MONITORING PROGRAM FOR ORDER NO. R9-2007-0001

Addendum 2 effectively extended the deadline for submittal of the JURMP Annual Report Section 7.0 – Illicit Discharge Detection and Elimination (IDDE) to December 15 of each year, and established a separate submittal requirement. The following report culminates newly developed IDDE elements and supporting monitoring components to meet the standards established in Order No. 2007-0001 and the provisions of Addendum 2. This report covers IDDE program implementation for fiscal year 2007-2008, and Dry Weather Monitoring from May 1, 2008 – September 30, 2008, and details all reporting, response and enforcement actions related to illicit discharges and illicit connections to the City's MS4, Dry Weather Field Screening and Analytical Monitoring, follow-up investigations, sewer maintenance and spill prevention activities, and sewer spill response actions. Notably, the 2008 Dry Weather Monitoring program initiated a new trash assessment component to evaluate the presence of trash and debris in receiving waters and urban runoff at each dry weather location.

IDDE reporting and Dry Weather Monitoring results and analysis presented in the following report have been prepared in consideration of regulatory standards as well as a means to further advance programmatic elements in support of overall stormwater and water quality management in the City of Encinitas.

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7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

The Municipal Permit requires the establishment of an Illicit Discharge Detection and Elimination (IDDE) Program to actively seek and eliminate illicit connections and discharges into the MS4.

This component describes the IDDE program developed by the City of Encinitas to seek and eliminate illicit connections and discharges. Eliminating illicit connections and discharges helps minimize potentially negative impacts of human activities on receiving water bodies. Illicit connections and illicit discharges can be defined as the following:

- An *illicit connection* is a physical connection to the Storm Water Conveyance System or Receiving Waters which has not been reviewed and authorized by the City; or a permitted connection which conveys Illegal Discharges.

- An *illicit discharge* is any discharge to the Storm Water Conveyance System that is not composed entirely of storm water or is not discharged in compliance with the City's Storm Water Management Ordinance (Municipal Code Chapter 20.08).

The City of Encinitas uses its municipal personnel to assist in actively seeking, identifying and reporting illicit connections and discharges during their daily activities. Detection, prevention, and elimination of illicit connections and discharges is achieved by

1. Operating a public hotline and responding to complaints;
2. Inspecting commercial, industrial and municipal facilities;
3. Conducting the Dry Weather Monitoring Program;
4. Maintaining municipal MS4 and sewer systems; and
5. Educating the local community.

The City investigates, inspects, and appropriately follows-up on every illicit connection and discharge that is reported or detected to identify the source(s) of the discharge. Voluntary compliance and escalating enforcement mechanisms are implemented to immediately eliminate the illicit connection and discharge once the source has been identified. Educational materials are distributed to help prevent future illicit connection and discharge occurrences. This program involves the City's Clean Water Program staff, two Sanitary Districts (Leucadia Wastewater District and the City of Encinitas Wastewater Division), the City's Fire Department, Public Works Department, the Engineering Department, and County Hazardous Incident Response Team, (HIRT) as well as the public.

7.2 PUBLIC REPORTING OF ILLICIT DISCHARGES AND CONNECTIONS

7.2.1 METHODS OF REPORTING

To support the identification and notification of illicit discharges, the City actively promotes public and City staff reporting of all suspected illicit connections and discharges. Multiple opportunities are provided to facilitate public reporting of illicit discharges and connections to the City's Clean Water Program staff, and reporting of non-storm water discharges can be received from the public, City staff, or outside agencies. Clean Water Program staff maintains a 24 hour, bilingual Clean Water Hotline for reporting storm water discharges at (760) 633-2787. Additionally, the Public Works Wastewater Collection Division accepts calls at (760) 753-5018 for sewage related discharges. The public can also notify any City employee (the City Lifeguards are often notified of spills), who will promptly notify the appropriate staff in the Clean Water Program or Public Works Department. In cases of incidents occurring after working hours, the City provides a hotline number (760) 633-2922 where the public can call and report emergency cases of illicit discharges. Alternatively, a regional public reporting hotline is provided by the County of San Diego at (888) 846-0800. The County hotline is answered Monday through Friday, 8:00 a.m. – 5:00 p.m. and provides a voice mail message for 24-hour public access in both English and Spanish.

7.2.2 STORM WATER COMPLAINT RECEIPT PROCEDURES

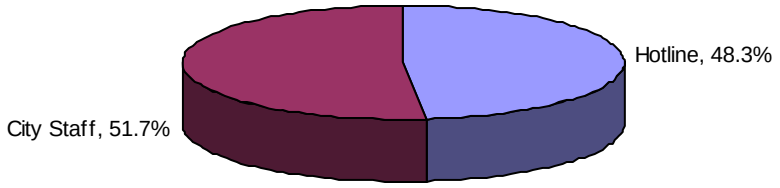
All calls to the City's Clean Water Hotline are documented and investigated in a timely manner. The City of Encinitas has configured its enterprise Geographic Information System (GIS) to document and track all complaints as well as complaint driven storm water inspections in a spatially-based program called Cityworks. This system supports the entry of service requests for educational inquiries, citizen complaints, inspection results, ad-hoc and cyclical work orders, and report generation. All of the information stored in the system is accessible to any City user through the City's standard desktop GIS application – CityGIS. Refer to Appendix A for a copy of the "Storm Water Complaints Service Request Form." Clean Water Program staff responds immediately, investigates each case, and takes appropriate action to educate the responsible party and/or enforce the City's Storm Water Management Ordinance when applicable. When a warning, Administrative Citation, or Notice of Violation is issued, this information is added to the case file created in Cityworks. The City's GIS system is a useful tool for tracking all complaints, follow-ups, enforcement, and education efforts, and to spatially locate potential problem areas throughout the City.

For each complaint investigation, Clean Water staff is prepared to run field screening analysis, sample for laboratory analysis, and document the discharge for enforcement proceedings as deemed necessary. If immediate clean up actions are required, the City's Public Works Department maintenance crews are equipped with absorbent materials, vacuum trucks, and other equipment to contain large volumes of illegal discharge and/or cleanup of large spills. If the violation or accident involves hazardous materials, the Fire Department is informed and responds immediately. When necessary, the Fire Department calls other responsible agencies

or contractors for cleanup and handling of hazardous materials, including the County of San Diego Department of Environmental Health (DEH).

During the defined reporting period of this report, the Clean Water Program received a total of 329 complaints from City staff and the general public. Detailed summaries of all complaint cases that were reported and closed (illegal discharge abated) in FY 2007-08 are included in Appendix H-1 of the City of Encinitas JURMP Annual Report FY 2007-08. Clean Water Program staff documented receipt of 159 complaints via the Clean Water Hotline, and 170 complaints were reported by City staff. Figure 7-1 shows the percentage of complaints that were reported via the hotline and by City staff in FY 2007-08.

Figure 7-1 Reporting of Complaints FY 2007-08



7.2.3 CATEGORIES OF COMPLAINTS

In FY 2007-08, the majority of complaints reported to the Clean Water Hotline were primarily related to residential and commercial activities. In total, 47.7% of the hotline complaints reported were related to residential activities, 30.1% were related to commercial activities, 14.3% were related to construction activites, and 7.9% were related to municipal activities. Figure 7-2 shows the percentage of complaints by category.

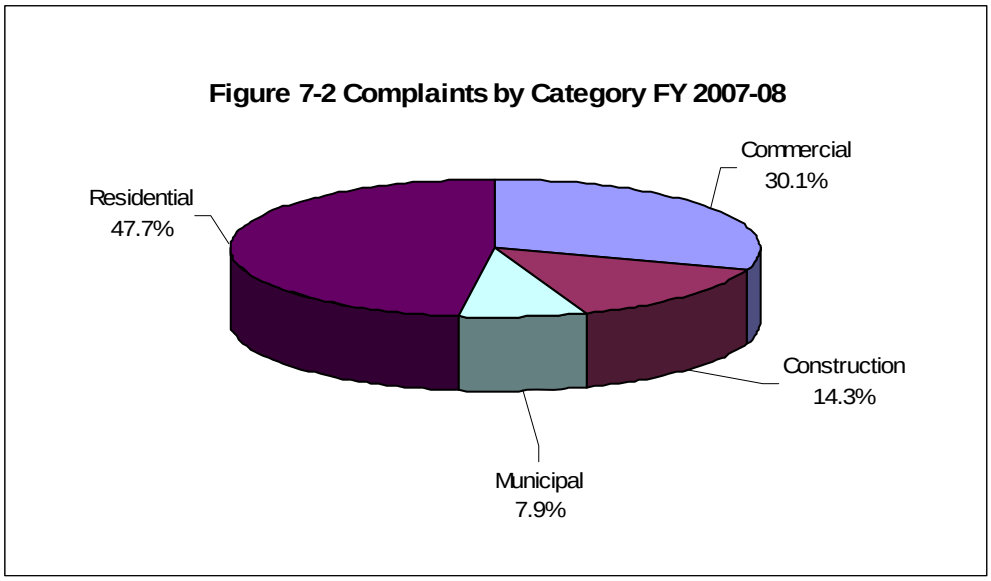
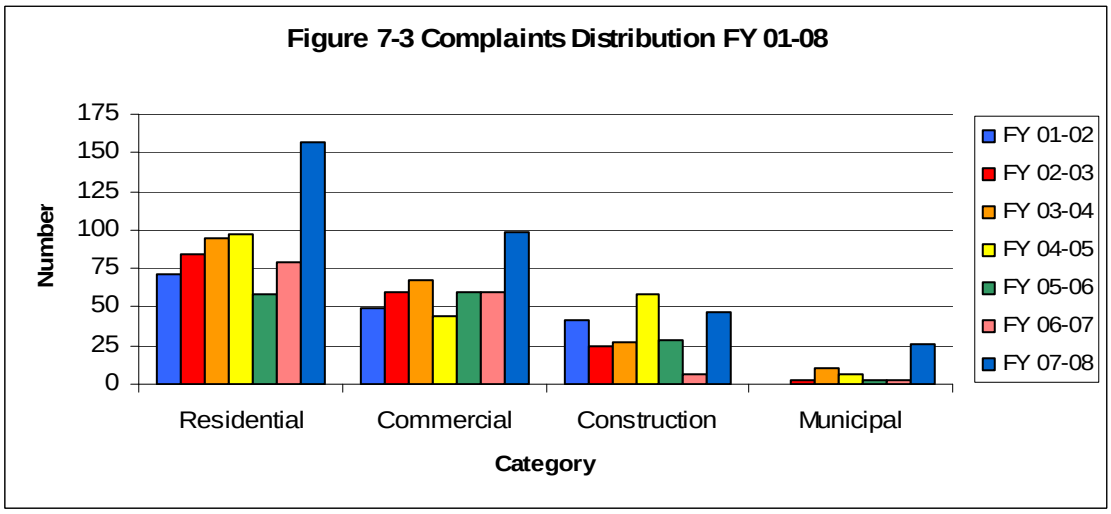
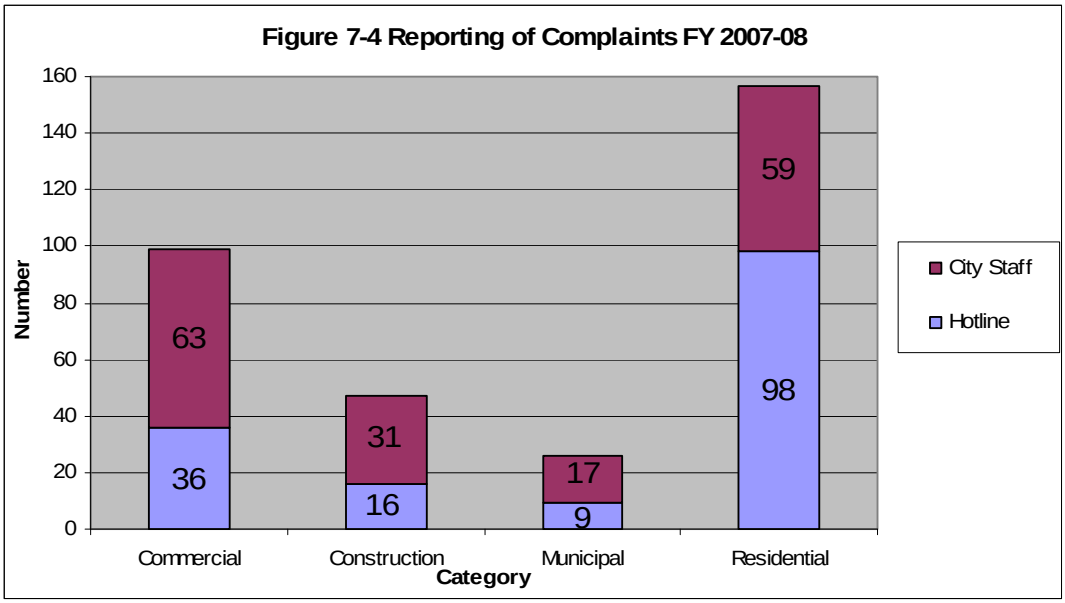


Figure 7-3 illustrates the complaints distribution over the past seven reporting periods. Although there were more complaints this fiscal year than in any other year, the complaint distribution remains consistent across categories with residential and commercial sectors receiving the most complaints.

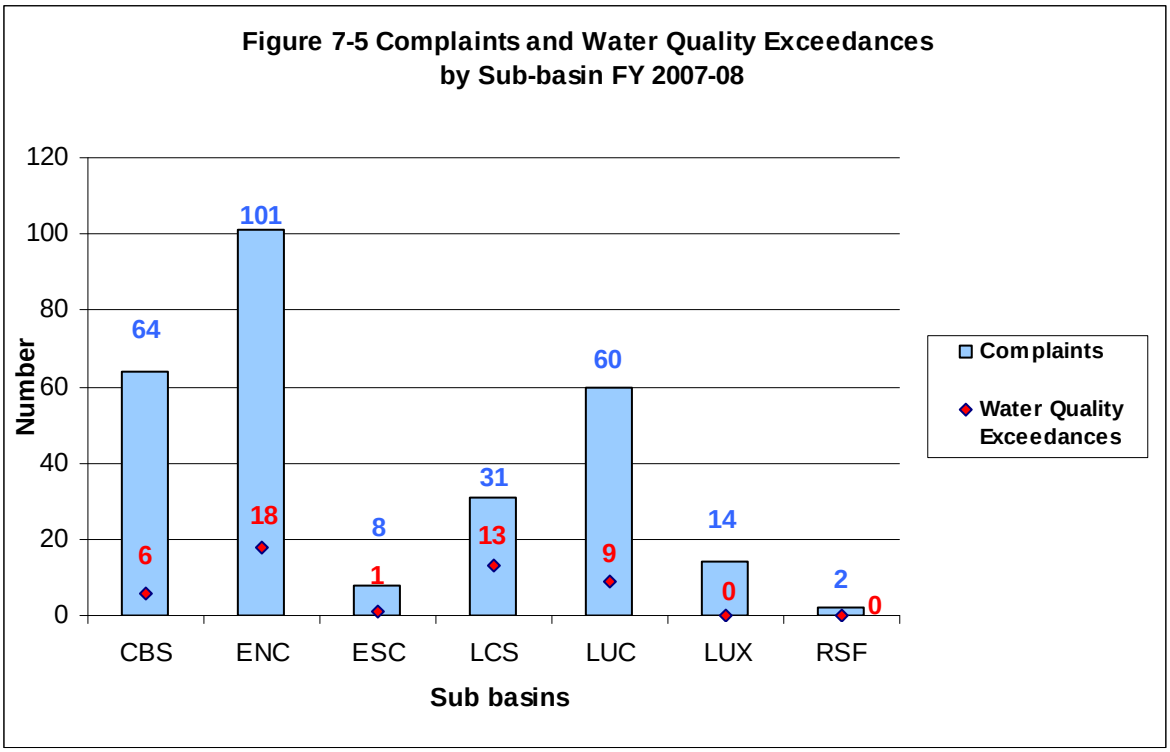


Clean Water Program staff provides education and training to City employees and City contractors on applicable storm water regulations to assure that proper storm water management practices are applied in all areas of the City. The City of Encinitas tracks all complaint calls received on the Clean Water Hotline and records whether each call is from the public or the from City staff. Figure 7-4 below shows the breakdown of reported complaints by the public and City staff for each category.



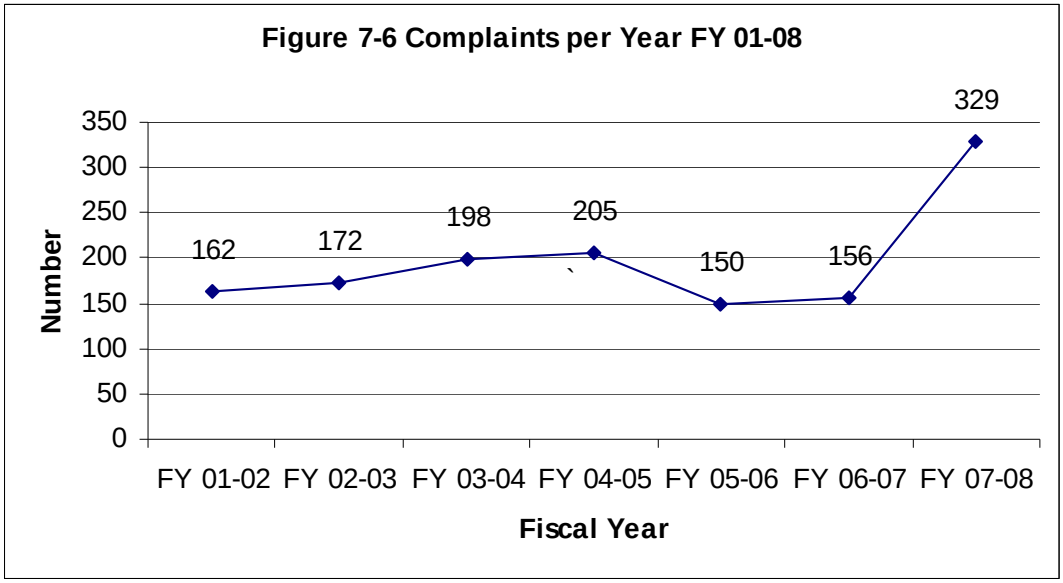
7.2.4 DISTRIBUTION OF COMPLAINTS BY SUB-BASIN

The City of Encinitas is broken up into seven distinct drainage sub-basins which include the Cardiff sub-basin (CBS), Encinitas sub-basin (ENC), Escondido sub-basin (ESC), La Costa South sub-basin (LCS), Leucadia sub-basin (LUC), Lux Canyon sub-basin (LUX) and Rancho Santa Fe sub-basin (RSF). Detailed maps of each of these sub-basins can be found in the 2008 Dry Weather Monitoring Assessment Report in Appendix C. A full map of the entire city that outlines each of the sub-basins can be found in Appendix C-1. Of the City's seven sub-basins, the Encinitas Sub-basin had the largest number of reported complaints followed by the Cardiff sub-basin and the Leucadia sub-basin. In Figure 7-6 below the numbers of complaints are compared to water quality exceedances in the sub-basins. This correlation helps the City prioritize inspection activities in specific sub-basins.



7.2.5 HOTLINE UTILIZATION

Through the ongoing education efforts of the Clean Water Program staff, both the general public and the City of Encinitas staff have become increasingly aware of the effects of illicit discharges on the environment, as well as what to look out for in identifying potential illicit discharges and connections. Methods to report storm water issues were continually publicized throughout the FY 2007-08 reporting period. The hotline number can be found on inspection forms, the City's website, and was also publicized in various newsletters, storm water brochures, the City's Environmental Services Guide, on product giveaways, and at all Clean Water Program presentations. In FY 2007-08, 329 complaints were filed with the Clean Water Program. A summary of the types of calls, follow-ups, and enforcement procedures related to the hotline are presented in Appendix H-1 of the City of Encinitas JURMP Annual Report FY 2007-08. As illustrated in Figure 7-7 below, both City staff and the public continue to actively participate in the reporting of suspected illegal discharges and illicit connections.



7.3 SPILL PREVENTION, RESPONSE, AND REPORTING

The City implements spill prevention, spill response, and reporting mechanisms to prevent, respond to, contain, and clean up all sewage and other spills that discharge to its MS4 from any source.

7.3.1 SEWAGE SPILL PREVENTION

The spill prevention measures outlined below were implemented in FY 2007-08 to prevent overflows, spills, and infiltration of seepage from sanitary sewer systems to the MS4.

Preventive Maintenance Activities

The City of Encinitas' sewage collection system consists of over 120 miles of pipeline. The City actively maintains its sewer collection system and MS4 by ensuring that the following measures are implemented:

- Sanitary sewer inspections
- MS4 inspections
- Thorough, routine preventive maintenance of both systems (annual cleaning of entire sanitary sewer system, and "high priority" sewer lines cleaned at least every three months)
- Dry Weather Monitoring
- Data tracking and management of all complaints in Cityworks GIS
- Video inspection of underground systems (televise sewer mains to visually detect any potential problems)
- Replacement and upgrade of sewer pipes as needed
- GIS mapping of sewer and MS4 intersects
- Alarm system at sewage pump stations

Sewer System Management Plan (SSMP)

An effort has been underway since November 2, 2006 to bring the City's sewer regulations into compliance with new State Water Resources Control Board (SWRCB) Order No. 2006-003-DWQ. This new permit describes the applicable set of regulations for sewer system maintenance and reporting with respect to Sanitary Sewer Overflows (SSOs). These regulations are met mainly through the development and implementation of a Sewer System Management Plan (SSMP). Many of the program requirements of the SSMP are currently being met or exceeded by the City, and the City will implement the SSMP by May 1, 2009, as required by SWRCB Order No. 2006-003-DWQ.

The City will continue to maintain a Sanitary Sewer Overflow Prevention Plan (SSOPP), and a Capacity, Management, Operations, and Maintenance (CMOM) program, which will be included as sections within the SSMP. The SSOPP has been designed to prevent or minimize the potential for SSOs. The CMOM describes how the City maintains and operates its sanitary sewer system, as follows:

- Manage, operate, and maintain at all times the parts of the collection system that the City owns or over which it has operational control
- Provide adequate capacity using citywide sewage flow monitoring programs to convey base flows and peak flows
- Take all feasible steps to stop and mitigate the impact of SSOs
- Provide notification to parties with a reasonable potential to exposure to pollutants associated with the overflow event through the County of San Diego
- Keep records of all maintenance activities

The City of Encinitas currently has a comprehensive Fats, Oil, and Grease (FOG) program. The primary purpose of this program is to reduce the amount of FOG introduced into the sanitary sewer system by consumers and businesses. The City's Municipal Code states that all Food Service Establishments (FSE) which discharge fats, greases, and waxes to the sewer system are required to install a grease pre-treatment device on the sewer lateral, which connects their facility to the City's wastewater collection system. The City is currently evaluating options to enhance existing FOG program elements which will include implementing a multi-phased process of information gathering, education, and targeted code enforcement.

The Municipal Permit also requires all sewage discharges caused by blockages or other problems within a privately owned lateral or failing septic systems to be dealt with appropriately. If a spill from a private sewer lateral is not being contained and the responsible party fails to take action to repair the lateral, the City can take necessary action to contain the spill, make necessary repairs to the lateral, and/or contact a contractor for appropriate maintenance and bill the responsible party. The City's Clean Water Program staff is tasked with handling all illicit connection and discharge citations. If there are sewage spills due to failing septic systems at private residences, the County Department of Environmental Health (DEH) is responsible for responding to these complaints.

7.3.2 SEWAGE SPILL RESPONSE

Spills from the sanitary sewer entering the MS4 may be discovered during routine maintenance activities or observed and reported to the City by the public. All Municipal personnel field crews call the Clean Water Hotline or report sewage spills to the Public Works Wastewater Collection Division. When spills occur, the appropriate agencies (as described in Table 7-1 below) are informed of all sewer related spills and are responsible for control, containment, and clean up of all reported discharges.

Table 7-1 Responsible Agency for Sewage Spills

Source	Responsible Agency
Leaks and spills from publicly owned collection system	City of Encinitas
Private residence (failing septic systems)	County DEH
Any spill reaching MS4	City of Encinitas

Both the City's Public Works Wastewater Collection Division and the City's Clean Water Program accept complaint calls for commercial lateral discharges. For any incidents that may occur after hours, callers are directed to contact the City's answering service at (760) 633-2922. Based on the urgency, City crews are dispatched immediately, work orders are prepared, and each case is tracked in the City's GIS based system. The City also provides a 24- hour, on-call City staff member with the ability to call additional resources or other appropriate agencies if necessary.

The City of Encinitas' Wastewater Collection Division has implemented the following remedial actions to the extent that they are applicable to any discharges:

- Interception and rerouting of sewage flows around the sewage line failure
- Vacuum truck recovery of SSOs and wash down water
- Cleanup of debris of sewage origin at the overflow site
- Inform the responsible party to cease and desist, clean and abate, and repair the problem to ensure that the incident will not occur again.

7.3.3 SEWAGE SPILL REPORTING

The City reports all SSOs online using the California Integrated Water Quality Management System (CIWQS) database, as required by SWRCB Order No. 2006-003-DWQ. Initial reports are sent to the CIWQS within three days, and final, certified reports are sent within 15 days. The City will report all SSOs that are at least 1,000 gallons and SSOs that cause a beach closure (regardless of volume) to the CIWQS within 2 hours. All illicit connections and discharges will be reported annually in the City of Encinitas JURMP Annual Report, which will include specific illicit connections and discharges and their resolution, inspections conducted, and enforcement

actions taken. If a Notice of Violation is issued by the Clean Water Program, copies of all NOVs will be sent to the Regional Board.

As required in the Municipal Permit, the City of Encinitas will provide oral notification to the Regional Water Quality Control Board (RWQCB) of all Illicit connections and discharges within its jurisdiction that are determined to pose a threat to human or environmental health within 24 hours of the discovery of non-compliance. Oral notification will be followed up by a written report to the RWQCB within five days of the incidence of non-compliance.

All sewage spills of at least 1,000 gallons, or any spills to surface waters are required to be reported to the RWQCB within 24 hours by fax or telephone. Surface waters include rivers, streams, ephemeral streams, lagoons, the ocean, dry arroyos, and storm drains. In all instances, the City must fax a Sanitary Sewer Overflow (SSO) Report Form to the RWQCB within five days of the spill. The completed SSO form must also be faxed to the County DEH. A quarterly report of all sewage spills, including those not meeting the criteria stated above, will also be submitted electronically to the RWQCB, as required.

In FY 2007-08, the City complied with the sewage spill reporting requirements outlined in Table 7-2.

Table 7-2 Summary of Sewage Spill Reporting Requirements

Spill Volume	Criteria	Agency Receiving Report	Reporting Timeframes
Any	Spills to waters of the State	SWRCB online RWQCB DEH	Immediate, but no later than 2 hours after becoming aware of the discharge
Any	Municipal Permit non-compliance threatening human or environmental health	RWQCB SWCRB	24 hours verbal and 5 days written 3 days (initial)
Any	Mitigated spills (absorbed, cleaned up, or captured)	DEH	24 hours
Any	Unmitigated spills to areas with potential public contact	DEH	Immediate, but no more than 2 hours after becoming aware of the discharge
Any	Unmitigated spills to areas without potential public contact	DEH	24 hours

Table 7-2 Summary of Sewage Spill Reporting Requirements			
Spill Volume	**Criteria**	**Agency Receiving Report**	**Reporting Timeframes**
>1000 gallons	Anywhere	Office of Emergency Services (OES) RWQCB DEH SWRCB online	2 hours 2 hours 2 hours 3 days (initial)

Table 7-3 below contains a summary of all SSOs in Encinitas in FY 2007-08.

Table 7-3 Sanitary Sewer Overflows, FY 2007-08							
Date	**Agency**	**Location**	**Approx. Volume Spilled (Gallons)**	**Approx. Volume Recovered (Gallons)**	**Approx. Volume Released (Gallons)**	**Cause**	**Reported To**
7/02/2007	City of Encinitas Wastewater Division	3049 Camino Del Rancho	330	100	230	Private sewer lateral pipe fell into the main sewer causing the blockage	SWRCB Online DEH

Table 7-3 Sanitary Sewer Overflows, FY 2007-08

Date	Agency	Location	Approx. Volume Spilled (Gallons)	Approx. Volume Recovered (Gallons)	Approx. Volume Released (Gallons)	Cause	Reported To
2/10/2007	City of Encinitas Wastewater Division	989 Sidonia	345	100	245	A piece of 8″ plastic sewer pipe was found causing the blockage. It is suspected that the plastic pipe came from a nearby constructio n project.	SWRCB Online DEH

7.3.4 OTHER SPILL PREVENTION AND MITIGATION PROCEDURES

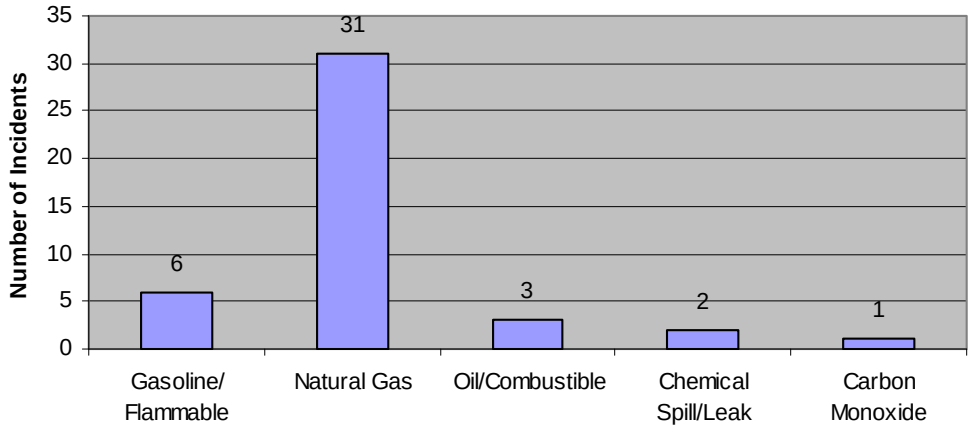
The City coordinates spill prevention, containment, and response activities throughout all appropriate departments, programs, and agencies so that maximum water quality protection is available at all times.

Spills are prevented and mitigated through the implementation and enforcement of minimum BMPs. These BMPs are described in the City of Encinitas 2008 JURMP update in the Development Planning, Municipal, Construction, Industrial and Commercial, and Residential components located in sections 4, 5, 6, 7, and 8 and in the City's BMP Manual Part I and II.

In FY 2007-08, the City of Encinitas Fire Department responded to a total of 43 hazardous materials incidents. These incidents included gasoline spills, gas leaks, oil spills, and chemical spills. The Fire Department is equipped with containment booms, absorbent material, shovels, storm drain covers, and disposal equipment. When hazardous material incidents occur, the City's Fire Department is typically the first responder. They are equipped to capture and contain most discharges on site and will notify the Public Works Department and the Clean Water Program for additional help when it is warranted. The Public Works Department is available to respond with additional sandbags, absorbent materials, and increased manpower. Clean Water Program staff is notified to document the incident and to issue any enforcement

actions that may be necessary. If warranted, storm drain samples and pictures are taken for potential court action and cost recovery. The City of Encinitas also has a contract with the County of San Diego Hazardous Incident Response Team (HIRT) who will respond when the chemical is unknown or is determined to be hazardous. Figure 7-8 below illustrates the distribution of hazardous materials incidents for FY 2007-08. All hazardous materials incidents that occurred in the City of Encinitas were documented by the Fire Department and are included in Appendix B.

Figure 7-7 Hazardous Materials Incidents FY 2007-08
Encinitas Fire Department



7.4 URBAN RUNOFF MONITORING

The Urban Runoff Monitoring Program incorporates MS4 outfall monitoring, source identification monitoring, and the Dry Weather Monitoring Program.

7.4.1 MS4 OUTFALL MONITORING

Regional guidance for the MS4 outfall monitoring program was developed by the Copermittees, which characterizes pollutant discharges from MS4 outfalls in each watershed during wet and dry weather. The MS4 Outfall Monitoring program includes the following:

- Rationale and criteria for selection of outfalls
- Type of samples collected, including pollutants causing or contributing to violations of water quality standards within the watershed

The MS4 Outfall Monitoring Program is a new regional Urban Runoff Monitoring requirement as outlined in the Receiving Waters and Urban Runoff Monitoring and Reporting Program (2007-0001). In FY 2007-08, the Copermittees developed and submitted a final MS4 Outfall Monitoring Program workplan to the RWQCB for review. In FY 2007-08, the County of San

Diego conducted sampling in each watershed to meet permit compliance. The City of Encinitas will continue MS4 outfall monitoring within the City's jurisdiction during the FY 2008-09 monitoring year.

7.4.2 SOURCE IDENTIFICATION MONITORING

Regional guidance for the source identification monitoring program was developed by the Copermittees, which aims to identify sources of discharges of pollutants causing the priority water quality problems within each watershed. This program includes the following:

- Focused monitoring which moves upstream into each watershed as necessary to identify sources.
- Use of source inventories and "Threat to Water Quality" assessment to guide monitoring efforts

The Source Identification Monitoring Program is a new regional Urban Runoff Monitoring requirement as outlined in the Receiving Waters and Urban Runoff Monitoring and Reporting Program (2007-0001). In FY 2007-08, the Copermittees developed and submitted a final Source Identification Monitoring Program workplan to the RWQCB for review. The Municipal Permit requires a monitoring program to be implemented within each watershed and to begin no later than the 2008-2009 monitoring year. The City of Encinitas will commence monitoring in the Carlsbad Watershed during the FY 2008-09 monitoring year.

7.4.3 DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING

The Dry Weather Field Screening and Analytical Monitoring Program is a crucial part of the City's Urban Runoff Monitoring Program (Dry Weather Monitoring Program). The City of Encinitas has been conducting dry weather monitoring since 1996. The City's previously established Dry Weather Monitoring Program included selecting city-wide monitoring stations, creating a map of the MS4 in GIS, developing dry weather monitoring program procedures, conducting field sampling, testing and follow-up investigations.

The updated requirements of the Dry Weather Monitoring Program component as outlined in the Municipal Permit (Order No. 2007-0001) are very similar to those in the previous Municipal Permit (Order No. 2001-01). However, the new Municipal Permit includes the following additional requirements: a trash assessment component and follow-up sampling conducted within two business days of receiving results which exceed identified action levels. The City of Encinitas 2008 Dry Weather Monitoring Assessment Report can be found in Appendix C.

There are four main components to the City's existing Dry Weather Monitoring Program:

- Field observations (site description and qualitative observations)
- Field screening monitoring (testing of sample while at site and flow estimation)
- Analytical monitoring (performing further tests of sample later at a laboratory)
- Follow-up and investigations of all field screening and analytical exceedances

As described in the City of Encinitas JURMP Update, dated March 24, 2008, the City revised its Dry Weather Monitoring Program in FY 2007-08 to meet all of the requirements that were established in the Municipal Permit (Order No. 2007-0001). Field screening and analytical lab results from the 2008 Dry Weather Monitoring Assessment Program are included in Appendix C of this section.

7.4.3.1 MS4 MAP

The City has developed a detailed map of its entire MS4 that includes MS4 facilities, dry weather monitoring stations, and drainage basins. When field staff finds inaccuracies in the map during dry weather monitoring, the inaccuracies are reported to the City's GIS Department so that updates can be made. Making updates to the City's MS4 map is assessed at least annually. The current map of the City of Encinitas MS4 and 2008 Dry Weather Monitoring Stations is located in the 2008 Dry Weather Monitoring Assessment Report in Appendix C-1.

7.4.3.2 DRY WEATHER ANALYTICAL MONITORING STATIONS

In March 2008, the City of Encinitas revised its Dry Weather Monitoring Program as part of the Jurisdictional Urban Runoff Management Program (JURMP) Update. The goal of the revised program was to continue to retain existing sites that had been monitored for analytical laboratory testing to establish long-term trend analysis and select additional sites to facilitate a better understanding of the water quality in Encinitas. The City removed and added new dry weather monitoring locations based on adequate coverage of the MS4, characterization of flow, land use, previous water quality data, areas of historic illegal discharges, and environmentally sensitive areas. The Dry Weather Monitoring Program for 2008 included 39 primary sites and 16 alternate sites distributed across seven sub-basins.

7.4.3.3 DRY WEATHER ANALYTICAL MONITORING PROCEDURES

The City's Dry Weather Monitoring Program utilizes methods and procedures in collecting and analyzing data which are consistent with those developed by the Copermittee Dry Weather Monitoring Workgroup. The elements of the City's dry weather program include established sampling locations, sampling frequencies, field screening and sampling procedures (including monitoring parameters), recommended action levels and data interpretation, follow-up investigations, and reporting. Qualitative observations were made at all sample locations. Each location had a unique field data sheet noting observations such as color, clarity, odor, and biological characteristics. In 2008, all monitoring sites were field screened and 28% of those locations (11 of 39 sites) were also analyzed in the lab. Meters were used in the field to determine pH, conductivity, temperature, and turbidity. Ammonia, nitrate, ortho-phosphate, and MBAS analyses were performed with CHEMetrics field kits. Oil and grease, Diazinon, Chlorpyrifos, dissolved Cadmium, dissolved Copper, dissolved Lead, dissolved Zinc, total coliform, fecal coliform, and enterococcus were all analyzed in the laboratory.

7.4.3.4 DRY WEATHER DATA ANALYSIS

Detailed analyses of the 2008 dry weather data are included in the Dry Weather Monitoring Assessment Report, May 1, 2008 – September 30, 2008 in Appendix C.

7.5 FOLLOW-UP AND ENFORCEMENT

7.5.1 INVESTIGATIONS/INSPECTIONS AND FOLLOW-UP

All potential illicit connections and discharges are investigated and eliminated in a timely manner after the City is notified of their occurrence. Illicit connections and discharges are mainly identified through public complaints; referrals; routine inspections of municipal, industrial, and commercial business facilities; and the Dry Weather Monitoring Program.

If an illicit connection and discharge is discovered as a result of the Dry Weather Monitoring Program, investigation are required to be conducted within two business days of receiving dry weather field screening and/or analytical laboratory data. All sampling results are compared to the regionally developed dry weather monitoring numeric action levels to determine if follow-up investigations/inspections are warranted. The numeric action levels (determined by the Regional Copermittee's Dry Weather Monitoring Workgroup), is the primary approach for interpreting pH, orthophosphate, nitrate, ammonia, surfactants, oil and grease, diazinon, chlorpyrifos, total coliform, fecal coliform, and enterococcus analytical results. The California Toxics Rule (CTR) is used to establish an action level for dissolved trace metals, including Cadmium, Copper, Lead, and Zinc. In general, best professional judgment is utilized as the primary approach for interpreting turbidity, water temperature, and conductivity and as a secondary approach for interpreting the results of all other field and laboratory analyses. Under best professional judgment, the need for a follow-up investigation is left to the discretion of the Clean Water Program field staff due to their familiarity with the City's Dry Weather Monitoring Program and their knowledge of typical levels for the tested parameters.

There were three main illicit connection and discharge investigations in response to Dry Weather Monitoring in 2008. These investigations took place in the La Costa South sub-basin, Leucadia sub-basin and the Encinitas sub-basin. A more detailed discussion including sample locations, parameters exceeded, follow-up sampling and investigation results can be found in the 2008 Dry Weather Monitoring Assessment report (Appendix C) in Sections 4.3, 4.4 and 4.5.

A complete table with all illicit connection and discharge complaints reported to the Clean Water Program which includes investigation dates, sources of discharge, investigation actions, follow-ups, and enforcement activities can be found in the City of Encinitas FY 2007-08 JURMP Annual Report, Appendix H-1.

7.5.2 ELIMINATION OF ILLICIT DISCHARGES AND CONNECTIONS

The City utilizes the following primary methods for the identification of illicit discharges and connections: complaint responses via the Clean Water Hotline, City staff complaints and observations, and detection and elimination through monitoring (primarily dry weather).

Action is taken to eliminate all detected illicit discharges and connections and their sources as soon as possible after detection. Illicit discharges and connections that pose a serious threat to public health or the environment are eliminated immediately. Illicit discharges and connections that are not deemed to pose serious threats to public health or the environment are eliminated through an escalating series of enforcement actions.

Remove Illicit Connections

The City ensures that the violator takes appropriate action to disconnect, block, stop, or divert drainage facilities and pipe connections that are determined to discharge pollutants to the MS4. Appropriate actions may include the following:

- Plug sinks and drains that are discharging illicit materials to the storm drain system
- Disconnect all drainage pipes found to discharge illicit pollutants to the storm drain system
- Dispose of illicit materials via the sanitary sewer or other appropriate disposal or storage methods
- Divert illicit discharges to the sanitary sewer or treat on-site

In some cases, special permits from the local wastewater authority are needed before material can be discharged to the sanitary sewer system.

Discontinue Illicit Discharges

As applicable to each individual circumstance, the City ensures that responsible parties implement the procedures outlined below to eliminate discharges that transport pollutant materials to the MS4.

- Eliminate the source of the discharge
- Remove pollutant materials from the site
- Prevent pollutant materials from coming in contact with the discharge
- Contain potential illicit discharges on site for treatment or proper disposal

In FY 2007-08, the Clean Water Program received a total of 329 complaints. A total of 49 complaints involved issues that were referred to other departments/agencies or requests for information only (requests related to the City's storm water regulations such as car washing and power washing requirements or general questions about the City's Storm Water Ordinance). In 2007-08, there were 280 complaints investigated. 114 complaints were determined to be unsubstantiated. The remaining 166 complaints resulted in enforcement actions including; 75 education actions, 67 Notice of Violations, 22 Administrative Citations, and 2 cost recoveries for illegal discharges. Clean Water Program staff responded to each complaint in a timely manner. In total there were 166 illicit discharges and connections eliminated in FY 2007-08 via follow-up and enforcement activities. Appendix H-1 in the FY 2007-08 City of Encinitas JURMP Annual Report identifies all complaints received by the hotline and includes incident dates, details of substances discharged, and the resulting actions taken by City Staff to eliminate and prevent discharges in the future.

The most serious violations observed by City staff resulted in Administrative Citations and cost recoveries issued to the responsible party. Table 7.5 below summarizes the violations and the resulting actions that occurred in FY 2007-08.

Table 7-4 Citations Issued FY 2007-08

Date	Encinitas Municipal Code Violation	Violation Description	Fine	Cost Recovery	Category
7/3/2007	20.08.140	Illegal storage of grease	$100.00	$0.00	Commercial
8/16/2007	20.08.040B	Illicit discharge of wash water	$100.00	$0.00	Commercial
9/10/2007	20.08.040, 20.08.110	Illicit connection	$100.00	$0.00	Commercial
10/3/2007	20.080.040B	Illegal discharge of wash water	Warning	$0.00	Commercial
12/18/2007	20.08.040B	Illicit discharge of wash water	$100.00	$0.00	Commercial
1/18/2008	20.08.040B	Illicit discharge of sewage	$200.00	$634.47	Commercial
1/29/2008	20.08.040B, 20.08.110	Illicit discharge of grease	$200.00	$0.00	Commercial
3/20/2008	20.08.040 & 20.08.140	Illicit discharge of wash water	$100.00	$0.00	Commercial
5/23/2008	20.08.040B & 20.08.140	Illicit discharge of wash water	$200.00	$0.00	Commercial
12/12/2007	20.08.040B, 20.08.080	Illicit discharge of sediment	$200.00	$0.00	Construction
12/12/2007	20.08.040B, 20.08.080	Illicit discharge of sediment	$200.00	$0.00	Construction
2/15/2008	20.08.040B, 20.08.080	Illicit discharge of sediment	$200.00	$0.00	Construction
2/15/2008	20.08.040B, 20.08.080	Illicit discharge of sediment	$400.00	$0.00	Construction
2/20/2008	20.08.040B, 20.08.080	Illicit discharge of sediment	$200.00	$0.00	Construction
2/20/2008	20.08.040B, 20.08.080	Illicit discharge of sediment	$200.00	$0.00	Construction

Table 7-4 Citations Issued FY 2007-08					
Date	**Encinitas Municipal Code Violation**	**Violation Description**	**Fine**	**Cost Recovery**	**Category**
2/27/2008	20.08.040B	Illicit discharge of construction debris	$100.00	$0.00	Construction
7/11/2007	20.08.040 & 20.08.140	Illicit discharge of antifreeze	$200.00	$0.00	Residential
8/28/2007	20.08.040B	Illicit discharge of sewage	$100.00	$0.00	Residential
9/5/2007	20.08.040B	Illicit discharge of oil/gas	$100.00	$752.60	Residential
10/4/2007	20.08.040B	Illicit discharge of sediment	$100.00	$0.00	Residential
1/4/2008	20.08.040B	Illicit discharge of degreaser	$100.00	$0.00	Residential
3/11/2008	20.08.040B	Illicit discharge of construction debris	$100.00	$0.00	Residential
		TOTAL	**$3,300.00**	**$1,387.07**	

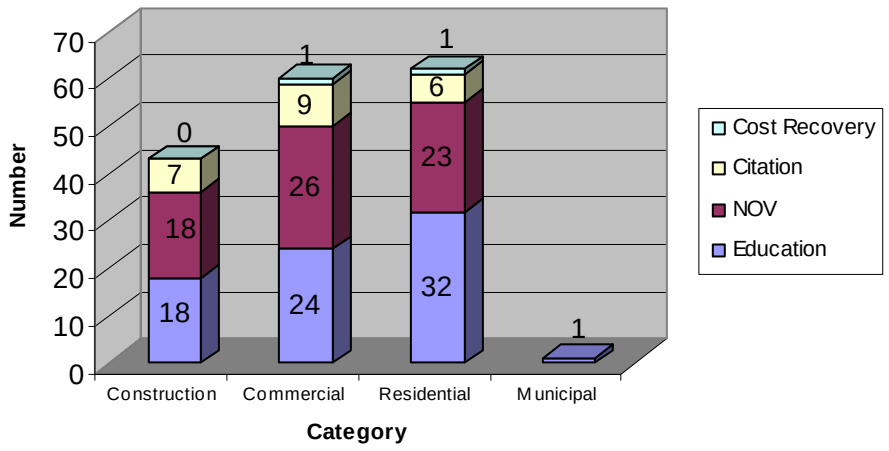
7.5.3 ENFORCING THE DISCHARGE PROHIBITIONS ORDINANCE

The City implements and enforces its ordinances, orders, or other legal authority to prevent illicit discharges and connections to its MS4. Many illicit connections and illegal discharges can be eliminated through voluntary compliance. Most violators are willing to change their behaviors when they learn that their actions are detrimental to the environment and local waterways. The City utilizes a variety of options under a flexible and graduated system of enforcement actions, emphasizing voluntary compliance when possible. Voluntary compliance may be used for first-time, minor violations, whereas more serious violations or continued non-compliance may warrant a more aggressive and enforcement oriented approach. Increased enforcement actions are taken until compliance is achieved or the illicit connection or illegal discharge is otherwise eliminated.

In cases where further enforcement is needed, the typical progressive enforcement procedures that the City can implement are as follows: verbal warnings and education, written warnings (Stop/Correct Work notice or a Notice of Violation), and administrative citations. A copy of the City's Administrative Citation can be found in Appendix D. The nature of the City's enforcement approach is determined on a case-by-case basis and is based on factors such as the severity of the violation, the threat to human or environmental health, site-specific circumstances, and past compliance history. If the situation is determined to pose an immediate risk to public health or the environment, the City may coordinate with other agencies or teams that are specially trained to assess and mitigate emergency situations (e.g., those involving hazardous wastes/materials, etc.).

In FY 2007-08, enforcement in each category varied according to the complaint. Residential complaints were primarily resolved with education while commercial complaints received more NOVs. Construction complaints were resolved with education and NOV actions equally; however, there were also seven citations issued. All of the municipal complaints were resolved internally with the Public Works Department except for one formal education action given to a City contractor. A breakdown of the enforcement actions performed per category of complaint is presented below in Figure 7-5.

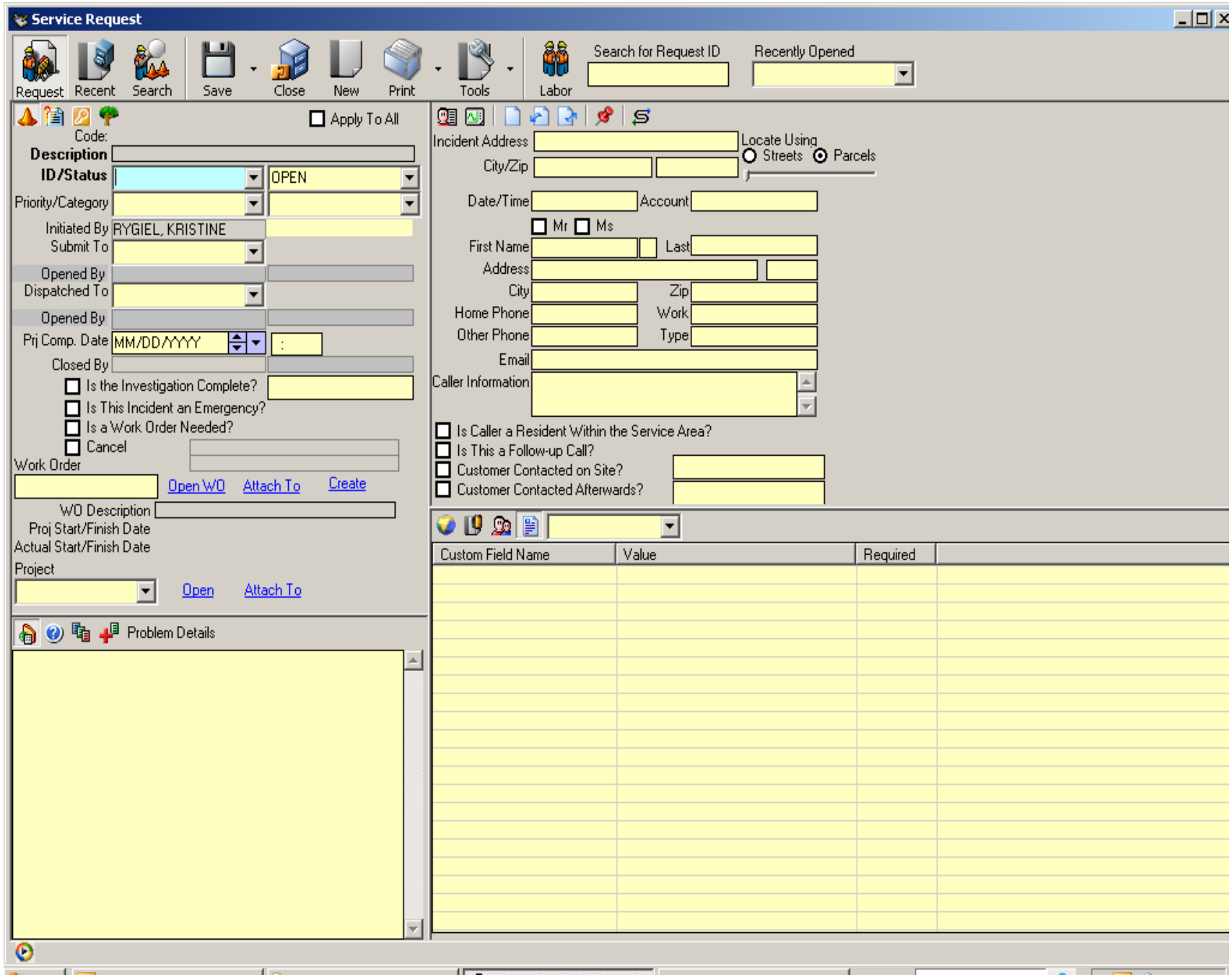
Figure 7-8 Enforcement Actions FY 2007-08



Commercial complaints totaled 30.1% of all complaints received and resulted in 24 educational actions, 26 Notices of Violation, nine citations, and one cost recovery action. Residential complaints accounted for 47.7% of all complaints received and resulted in 32 educational actions, 23 Notices of Violation, and six citations. Construction complaints totaled 14.3% of all complaints received and resulted in 18 educational actions, 18 Notices of Violation, and seven citations. Municipal complaints accounted for 7.9% of all complaints received and were mostly referred to the City's Public Works Department for immediate maintenance; however, one Municipal complaint resulted in an educational action issued directly to a Public Works contractor. There were no industrial complaints this fiscal year.

In FY 2007-08, Clean Water Program staff evaluated all reported illegal discharges and proceeded with appropriate enforcement actions as necessary. In total, Clean Water Program staff issued a total of 67 Notice of Violations, 22 Administrative Citations with 21 carrying fines of $100.00 or more and two additional notices for cost recovery totaling $1,387.07. With appropriate education and enforcement, numerous illegal discharges and connections were eliminated in 2008.

Storm Water Complaints Cityworks GIS Service Request Form



Incident Listing

Sunday July 1, 2007 through Monday June 30, 2008

411 - Gasoline or other flammable liquid spill

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0003041	000	08/15/2007 05:16:47	411	N	I-5 Nb	X		X
0003414	000	09/05/2007 09:25:54	411	N	510 Santa Fe Dr	X		X
0003830	000	10/08/2007 10:01:44	411	N	I-5 Nb	X		X
0000115	000	01/08/2008 14:12:18	411	N	1686 Villa Cardiff Dr	X		X
0000789	000	02/26/2008 14:08:16	411	N	805 Birmingham Dr	X		X
0001319	000	04/10/2008 22:34:07	411	N	354 Santa Fe Dr	X		X

End of Report

Incident Listing

Encinitas Fire Department

Sunday July 1, 2007 through Monday June 30, 2008

412 - Gas leak (natural gas or LPG)

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0002370	000	07/02/2007 07:10:42	412	4	518 N Rios Ave	X	X	
0002371	000	07/02/2007 08:54:38	412	N	1144 Orpheus Ave	X	X	
0002651	000	07/21/2007 14:34:35	412	N	233 Melrose Ave	X	X	
0002719	000	07/26/2007 10:02:55	412	N	On E F St at Cornish Dr	X	X	
0002846	000	08/02/2007 19:46:58	412	N	743 NARDO Rd	X	X	
0003244	000	08/25/2007 18:01:18	412	N	467 Encinitas Bl	X	X	
0003322	000	08/31/2007 08:28:28	412	N	288 N El Camino Real	X	X	
0003332	000	08/31/2007 23:32:36	412	3	2112 Ocean Front	X	X	
0003583	000	09/18/2007 14:57:08	412	N	467 Encinitas Bl	X	X	
0003594	000	09/19/2007 00:24:49	412	N	485 S Coast Highway 101	X	X	
0004354	000	11/11/2007 12:29:21	412	N	1050 Regal Rd	X	X	
0004435	000	11/17/2007 15:23:33	412	2	1006 N El Camino Real	X	X	
0004482	000	11/21/2007 17:24:49	412	2	1225 Rancho Encinitas Dr	X	X	
0004838	000	12/20/2007 10:25:23	412	N	581 Hygeia Ave	X	X	
0004864	000	12/22/2007 16:50:54	412	4	8011 Paseo Aliso	X	X	
0004897	000	12/24/2007 15:13:43	412	N	1134 Wild Canary Ln	X	X	
0000049	000	01/04/2008 09:48:16	412	N	325 ENCINITAS BL	X	X	
0000054	000	01/04/2008 13:16:00	412	4	137 Chesterfield Dr	X	X	
0000332	000	01/26/2008 09:54:13	412	4	1309 Camino Del Mar	X	X	
0000878	000	03/04/2008 06:16:23	412	N	236 N El Camino Real	X	X	
0001038	000	03/18/2008 14:03:08	412	N	2529 Meadowmist Ln	X	X	
0001057	000	03/19/2008 18:36:55	412	N	1375 Trabert Ranch Rd	X	X	
0001316	000	04/10/2008 15:32:12	412	2	3472 Calle Margarita	X	X	
0001379	000	04/15/2008 10:52:09	412	N	508 Leucadia Village Ct	X	X	
0001423	000	04/17/2008 11:42:48	412	2	3705 Fortuna Ranch Rd	X	X	
0001457	000	04/19/2008 16:12:30	412	N	1735 TATTENHAM Rd	X		
0001530	000	04/25/2008 20:48:37	412	N	878 CLARK Ave	X		
0001791	000	05/15/2008 14:36:42	412	N	858 Del Rio Ave	X		
0001841	000	05/18/2008 12:57:57	412	N	1769 Village Run	X		
0002225	000	06/16/2008 14:50:23	412	N	1735 TATTENHAM Rd	X		
0002314	000	06/21/2008 17:49:36	412	N	101 Rodney Ave	X		

End of Report

Incident Listing

Sunday July 1, 2007 through Monday June 30, 2008

413 - Oil or other combustible liquid spill

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0003297	000	08/29/2007 14:03:49	413	N	1610 Tucker Ln	X	X	
0003766	000	10/03/2007 12:31:46	413	N	410 Neptune Ave	X	X	
0002000	000	05/31/2008 12:08:39	413	N	608 S Coast Highway 101	X		

End of Report

Incident Listing

Encinitas Fire Department

Sunday July 1, 2007 through Monday June 30, 2008

422 - Chemical spill or leak

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0002649	000	07/21/2007 13:10:30	422	N	On Peartree Ct at Sprucewood Dr	X		X
0000133	000	01/10/2008 13:08:16	422	2	200 SAXONY Rd	X		X

End of Report

Incident Listing

Encinitas Fire Department

Sunday July 1, 2007 through Monday June 30, 2008

424 - Carbon monoxide incident

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0002573	000	07/17/2007 06:44:40	424	N	705 West Bluff Dr	X		X

End of Report

Dry Weather Monitoring Assessment

May 1, 2008 - September 30, 2008

Prepared by:

City of Encinitas
Clean Water Program
505 South Vulcan Avenue
Encinitas, CA 92024

December 2008

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Dry Weather Analytical Monitoring

1.0 Introduction

The Dry Weather Monitoring Program is a crucial part of the City of Encinitas' Urban Runoff Monitoring Program. Since May 2002, the California Regional Water Quality Control Board, San Diego Region (Regional Board), has required the San Diego County Copermittees to implement an annual Dry Weather Storm Drain Monitoring Program (Dry Weather Program). On January 24, 2007, a new storm water permit, Order No. R9-2007-0001 (Municipal Permit), was adopted by the Regional Board, regulating the discharge of urban runoff from municipal separate storm sewer systems (MS4) draining the watersheds of the County of San Diego and the incorporated Cities of San Diego County, including the City of Encinitas. The updated requirements of the Dry Weather Monitoring Program can be found in Section II.B.3 of the Receiving Waters and Urban Runoff Monitoring and Reporting Program of the Municipal Permit.

Order No. 2007-0001 requires the City of Encinitas to implement a dry weather analytical monitoring program for the detection and elimination of illicit discharges and connections to the City's Municipal Separate Storm Sewer System (MS4) in addition to including a trash assessment component. The purpose of this program is to actively seek and eliminate illicit connections and illegal discharges, to characterize dry weather flows and trash assessments throughout the City's MS4.

An illicit connection is defined as a point source discharge of pollutants to the MS4 that is not comprised entirely of storm water, not exempted by the City's Storm Water Ordinance, or not authorized by an NPDES Permit. The regulatory backbone of this program is the establishment of discharge prohibitions in the City's Municipal Code, Chapter 20.08 (Storm Water Management).

Dry weather monitoring of the MS4 is performed by establishing monitoring locations throughout the City to adequately cover the entire storm drain system. In 2008, the City of Encinitas' Dry Weather Program encompassed 39 primary monitoring locations and 16 alternate monitoring locations throughout the city. Monitoring of these locations included recorded observations, field screening where flow was present and analytical laboratory testing at selected locations.

The City of Encinitas conducted dry weather monitoring during the period of May 1, 2008 to September 30, 2008. The analysis of the dry weather monitoring results for 2008 is documented in the following report.

2.0 Dry Weather Analytical Monitoring Stations

In March 2008, the City of Encinitas revised its Dry Weather Monitoring Program as part of the Jurisdictional Urban Runoff Management Program (JURMP) Update. The goal of the

revised program was to continue to retain existing sites that had been monitored for analytical laboratory testing to support long-term trend analysis, select additional sites to facilitate a better understanding of the water quality in Encinitas, and to ensure compliance with Dry Weather Monitoring program standards established in Order No. 2007-0001.

Under the previous Municipal Permit (2001-01), the City of Encinitas conducted dry weather field screening at an average of 37 sites per year. On average, the City also visited another 13 dry sites per year, with the total number of sites visited varied from 48 to 52 sites per year. To make more efficient use of its resources, the City adjusted its Dry Weather Monitoring Program in 2008 to include 39 primary sites and 16 alternate sites. As part of the monitoring site evaluation, sites that had never had ponded or flowing water were removed from the monitoring site list. Sites that were regularly dry but had ponded or flowing water at least once during previous monitoring years were changed to alternate sites. The City also assessed whether any existing sites should be relocated and whether any new sites were necessary to provide better coverage of key areas of the MS4. This process relied on reviewing historical data from past monitoring programs and reviewing the MS4 and land use data. GIS data files of the City's drainage system, watersheds, major water bodies, environmentally sensitive areas, existing dry weather monitoring locations, and approximate locations of potential sources of pollutants were all evaluated to assist in this process. The City's Clean Water Program staff, accompanied by Public Works maintenance staff familiar with the storm drain conveyance system, conducted field visits to assess the suitability of 29 potential new sites. This process included locating appropriate access points and then checking for the presence of ponded or flowing water, assessing accessibility, and recording GPS coordinates or the GIS ID name of the relevant storm water facility. As a result of this assessment, 12 suitable locations were identified and added to the City's lists of dry weather monitoring sites. A more complete discussion of the process and rationale for monitoring site selection has been included in the City of Encinitas JURMP document dated March 24, 2008.

Revisions of the dry weather monitoring sites within each sub-basin should be considered in the evaluation of the action level exceedance ratio trend graphs presented throughout Section 4.0 of this report. For this monitoring period, only one out of seven sub-basins retained the same primary sites from the previous monitoring period. The vertical dashed line in each of the graphs indicate the point at which the program was revised.

A storm drain (MS4) database has been developed by the City of Encinitas in a geographical information system (GIS). The storm drain database in GIS is maintained in an ArcInfo platform by the City's Information Technology Division. The database is continually updated to include new additions to the MS4 as validation is ongoing. The City has also developed a detailed map of its entire MS4 that includes MS4 facilities, dry weather monitoring stations and drainage basins. A copy of the revised dry weather monitoring map for 2008 can be found in Appendix C-1.

3.0 Dry Weather Analytical Monitoring Procedures

The City's dry weather monitoring program uses methods and procedures in collecting and analyzing data which are consistent with those developed by the Copermittee Dry Weather Monitoring Workgroup. The elements of the dry weather program include sampling sites, sampling frequencies, field screening and sampling procedures (including monitoring parameters), recommended action levels and data interpretation, follow-up investigations, and reporting. Each of these procedures is outlined in detail below.

Dry weather monitoring was conducted at 39 primary sites and 2 alternate sites throughout Encinitas during the period May 1 – September 30, 2008. Of the 41 locations monitored, flowing water was observed at 30 sites, ponded water was observed at 9 sites and 2 sites were observed to be dry. Field analysis was conducted at all 39 sites with flowing or ponded water. A total of 11 monitoring locations or 28% of all 39 sites were sampled for full laboratory analysis to meet the minimum 25% requirement as established in the Municipal Permit. An additional 11 sites were analyzed for total coliform, fecal coliform, and enterococcus in order to further characterize bacteria concentrations throughout the City's MS4.

As required by the Municipal Permit, a trash assessment was conducted at 39 primary sites and 2 alternate sites throughout the City to provide information on the spatial extent and amount of trash present, as well as the nature of the types of trash present. A more detailed analysis and results of the trash assessment program can be found in Section 7.0 of this report. All of the 2008 Trash Assessment forms can be found in Appendix C-4.

Qualitative observations were made at all sample locations. A field data sheet noting observations such as color, clarity, odor, and biological characteristics was recorded at each monitoring site. The 2008 Dry Weather Monitoring Field Datasheets for each monitoring site are included in Appendix C-2.

Field tests were performed by Clean Water Program staff at all monitoring locations with flowing or ponded water. Field meters were used in determination of pH, conductivity, temperature, and turbidity. Ammonia, ortho-phosphate, nitrate, and MBAS analysis were performed with Chemetrics field kits. Where possible, flow was determined by filling a bottle of known volume using a timer and an estimation of the amount of flow captured. For the locations (such as manholes) in which flow was not able to be measured, these sites were always noted as flowing or ponded on the Dry Weather Monitoring Datasheets. Action levels for the field analysis were determined by the Copermittee Monitoring Workgroup and are shown in Table 3.0. Follow-up sampling for exceedances detected in field screening were performed within two business days of receiving the results that exceeded action levels as required in section D.4.d of the Municipal Permit.

Source investigation actions are initiated based upon field screening and analytical

monitoring results that have exceeded established action levels during initial testing and follow-up testing. Source investigation actions may include field investigations and/or formal facility inspection activities based upon a variety of considerations which are described in each of the sub-basin evaluations in Section 4.0.

There were 11 samples collected for full laboratory analysis in order to further characterize the water quality at specific locations throughout the City. When feasible, laboratory testing was performed as far down in the watershed as possible to assess water quality prior to discharging into a receiving water. Methods for laboratory analysis were based on EPA approved methods described in the *Standard Methods for the Examination of Water and Wastewater, 18th edition.* Follow-up sampling for exceedances detected in laboratory analyses were performed within two business days after receipt of data from the laboratory. The field and analytical results for each monitoring station are provided in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2008 Field Screening and Analytical Monitoring Results Table in Appendix C-3.

Table 3.0 Action Levels for Field Screening and Laboratory Analytical Parameters		
Field Screening Analytes	**Action Levels[1]**	**Source/ Notes**
pH	<6.5 or >9.0	Basin plan, w/ allowance for elevated pH due to excessive photosynthesis.
Ortho-Phosphate (mg/L) as P	2.0	USEPA Multi-sector GP
Nitrate-N (mg/L)	10.0	Basin plan, and drinking water standards
Ammonia-N (mg/L)	1.0	Workgroup experience, may also consider unionized ammonia fraction
Turbidity (NTU)	Best Professional Judgment	USEPA Multi sector general permit level-5 NTU. Typical levels are substantially higher. Base judgment on channel type and bottom
Temperature	Best Professional Judgment	Base judgment on season, air temp., channel type, shade, etc.
Conductivity (µmhos/cm) or TDS (mg/L)	Best Professional Judgment – City of Encinitas considers 5.00mS/cm (umhos/cm) an exceedance	EC may be highly elevated in some regions due to high TDS/groundwater exfiltration to surface water, mineral dissolution and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Also consider investigating unusually low EC (<800 umhos/cm) accompanied by unusual flows.
Laboratory Analytes	**Action Levels**	**Source/Notes**
MBAS (mg/L)	1.0	Basin plan, w/ allowance based on Workgroup field experience and possible field reagent interferences
Oil and Grease (mg/L)	15	USEPA multi-sector General Permit
Diazinon (µg/L)	.5	Response to diazinon and chlorpyrifos levels above 0.5 µg/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (µg/L)	.5	
Dissolved Cadmium	California Toxics Rule	Use CTR Table, 1-hour criteria to determine action level for sample.
Dissolved Copper	California Toxics Rule	
Dissolved Lead	California Toxics Rule	
Dissolved Zinc	California Toxics Rule	
Total Coliform (cfu/100 ml)	50,000	Action levels are based on upper 90% confidence level of Copermittees 2002 dry weather analytical monitoring data.
Fecal Coliform (cfu/ 100 ml)	20,000	
Enterococcus (cfu/100 ml)	10,000	

Notes: (1) The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry weather monitoring data should be interpreted using a variety of available information. Factors that should be considered include within site and between site sample variability

4.0 Dry Weather Data Analysis

Data analysis is based on three methods of data interpretation: numeric action levels, California Toxics Rule and best professional judgment.

The numeric action levels in Table 3.0 (determined by the San Diego Municipal Stormwater Copermittee's Dry Weather Monitoring Workgroup), is the primary approach for interpreting pH, orthophosphate, nitrate, ammonia, surfactants, oil and grease, diazinon, chlorpyrifos, total coliform, fecal coliform and enterococcus analytical results. A 90th-percentile statistical confidence interval test which was developed by the Copermittees in 2002 is used to determine exceedances for bacteria indicators.

The California Toxics Rule (CTR) is used to establish an action level for dissolved trace metals, including Cadmium, Copper, Lead and Zinc. The CTR equations provide benchmarks based on the total hardness of the sampled water, with the action levels increasing as hardness increases.

Best professional judgment is used as the primary approach for interpreting turbidity, conductivity and water temperature. Best professional judgment is also the secondary approach for interpreting the results of all other field and laboratory analyses. Best professional judgment accounts for historical data, as well as characteristics of a sample location, which may determine that sample data exceedances do not require follow-up or further investigation.

The following subsections contain analyses of the dry weather data collected for each of the seven sub-basins within the City of Encinitas.

4.1 Cardiff Sub-basin

The dry weather monitoring locations included eight primary sites and four alternate sites in the Cardiff sub-basin (CBS). Land use in the sub-basin is primarily residential with some commercial and agricultural uses in the upper reaches of the sub-basin. All runoff in the Cardiff sub-basin drains to the San Elijo Lagoon.

The changes that were implemented during the 2008 monitoring period included adding two new primary sites (CBS-8 and CBS-9) to provide additional coverage of the areas upstream of existing sites (CBS-1 and CBS-4). Three original locations (CBS-3N, CBS-3S and CBS-5) were all re-designated as alternate sites because they were ponded or dry during previous years of monitoring. One site (CBS-6) was removed from the program completely because it had been dry for every visit since 2003. Overall, 50% of the original primary sites in this sub-basin were retained from previous monitoring years.

Of the eight designated locations for routine monitoring in 2008, six locations were observed to have flowing water and two locations had ponded water. All eight locations

were field screened and analytical lab samples were collected at two locations (CBS-2 and SEL-2). These sites were both selected for full laboratory analysis to assure continuity from previous years of monitoring and to help establish long-term trend analyses. CBS-2 is an open channel that discharges directly to San Elijo Lagoon and drains both commercial and residential areas. SEL-2 is an open channel that drains residential areas and discharges directly to the San Elijo Lagoon.

Of the eight locations where routine field screening was performed, four of the sites sampled had results exceeding the action levels for conductivity. One site exceeded for pH and one site exceeded the action levels for nitrates. There were six sites analyzed for bacteria and none exceeded action levels for total coliform, fecal coliform, or enterococcus. Table 4.0 summarizes the action levels exceeded in the Cardiff sub-basin.

Table 4.0 Cardiff Sub-basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
CBS-2	7/1/08	Flowing	Conductivity	5.32	mS/cm	5
CBS-4	7/29/08	Flowing	Conductivity	7.55	mS/cm	5
CBS-7	7/29/08	Flowing	pH	9.38	pH	<6.5 or >9.0
CBS-8	7/29/08	Flowing	Nitrate	15	mg/L	10
SEL-2	7/23/08	Ponded	Conductivity	5.63	mS/cm	5
SEL-3	8/13/08	Ponded	Conductivity	5.11	mS/cm	5

CBS-2

The water at CBS-2 contained slightly elevated conductivity. No other constituents analyzed at this site exceeded action levels. Land use upstream is primarily commercial and residential. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity was not warranted and was not performed.

CBS-4

The water at CBS-4 contained elevated conductivity. No other constituents analyzed at this site exceeded action levels. The water at CBS-4 was flowing out of the Cape Sebastian detention basin and was clear and colorless. Land use upstream is primarily residential with some agricultural nurseries interspersed. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity was not warranted and was not performed.

CBS-7

The water at CBS-7 contained elevated pH and temperature as a result of low flow

conditions in the concrete channel. A confirmation sample for pH was collected the next business day and was below the action level.

CBS-8

The water at CBS-8 contained elevated nitrates. No other constituents analyzed at this site exceeded action levels. A confirmation sample for nitrates was collected the next business day and was below the action level.

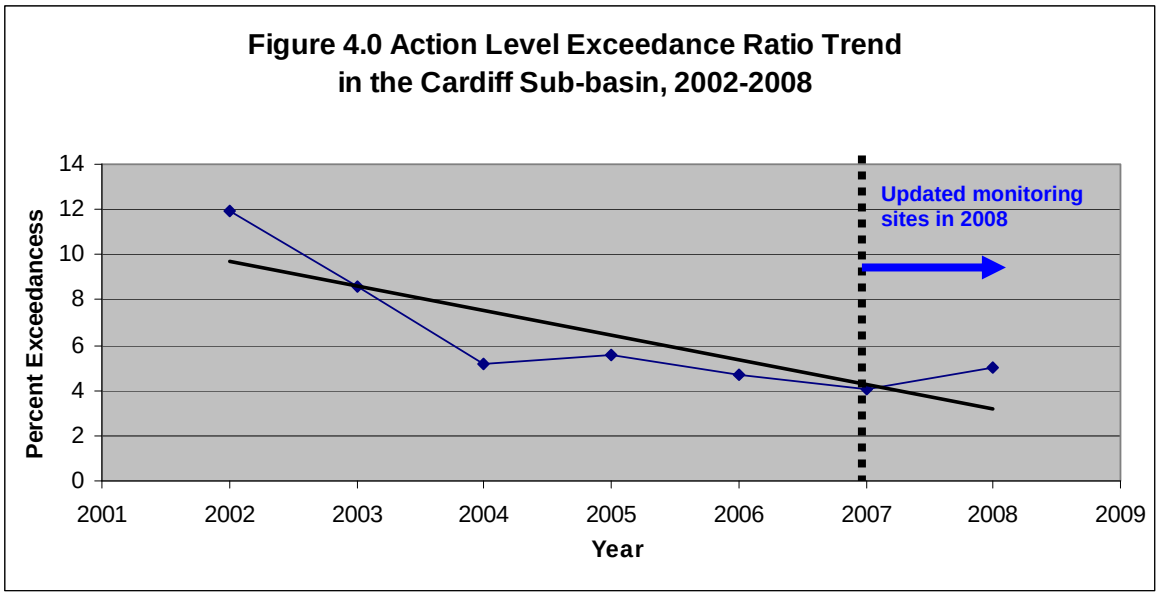
SEL-2

The water at SEL-2 contained slightly elevated conductivity. No other constituents analyzed at this site exceeded action levels. The water was ponded in a natural channel and originated from a small drainage area within a residential area. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity was not warranted and was not performed.

SEL-3

The water at SEL-3 contained slightly elevated conductivity. No other constituents analyzed at this site exceeded action levels. The water was ponded in a natural channel and originated from a small drainage area consisting of residential areas, a school, and a church. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity was not warranted and was not performed.

Although several water quality exceedances have been typical for the Cardiff sub-basin, water quality has been improving over the last six years of dry weather monitoring. Figure 4.0 illustrates a downward trend in water quality exceedances in Cardiff based on dry weather data collected from 2002 to 2008.



Data collected in the Cardiff sub-basin during the 2008 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2008 Field Screening and Analytical Monitoring Results Table in Appendix C-3. Figure 4.1 illustrates the Cardiff sub-basin.

Figure 4.1


LUX-3
CBS-7
CBS-8
LUX-2
CARDIFF
CBS-9
CBS-3N
CBS-3S
CBS-2
SEL-3
SEL-5
CBS-5
CBS-1
SEL-2
CBS-4
San Elijo Lagoon
Encinitas Map
Cardiff Sub-basin
1 Inch equals 1,361 Feet

4.2 Lower Escondido Creek Sub-basin

The dry weather monitoring locations included three primary sites and two alternate sites in the Lower Escondido Creek sub-basin (ESC). The land uses consist primarily of residential and open space areas with a few commercial establishments interspersed throughout the sub-basin. All runoff in the Lower Escondido Creek Sub-basin drains to the San Elijo Lagoon.

The changes that were implemented during the 2008 monitoring period included adding one new primary site (ESC-5) to provide additional coverage of the area upstream of an existing site (ESC-2). Two new original locations (ESC-3 and ESC-4) were added as alternate sites to provide additional coverage of the sampling sites upstream. Overall, 100% of the original primary sites in this sub-basin were retained from previous monitoring years.

Of the three designated locations for routine monitoring in 2008, all three locations were observed to have flowing water. All three locations were field screened only. One of the sites (ESC-5) sampled had results exceeding the action levels for conductivity.

Table 4.1 summarizes the action levels exceeded in the Cardiff Sub-basin.

Table 4.1 Lower Escondido Creek Sub-Basin Action Level Exceedances

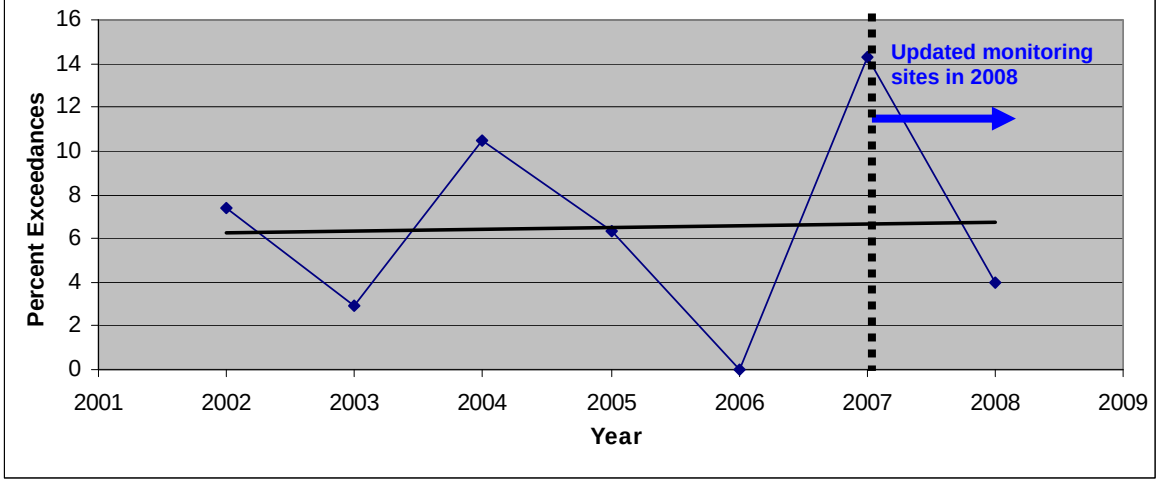
Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ESC-5	8/18/08	Flowing	Conductivity	5.03	mS/cm	5

ESC-5

The water at the sample location at ESC-5 contained slightly elevated conductivity. No other constituents analyzed at this site exceeded action levels. The sample from ESC-5 was drawn from a manhole location adjacent to a residential area. This monitoring site is in the lower reaches of the sub-basin nearest to the San Elijo Lagoon. Land use upstream is primarily residential. Elevated conductivity due to groundwater has been observed in other low reaches of the sub-basin at site ESC-1 in previous monitoring years. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity was not warranted and was not performed.

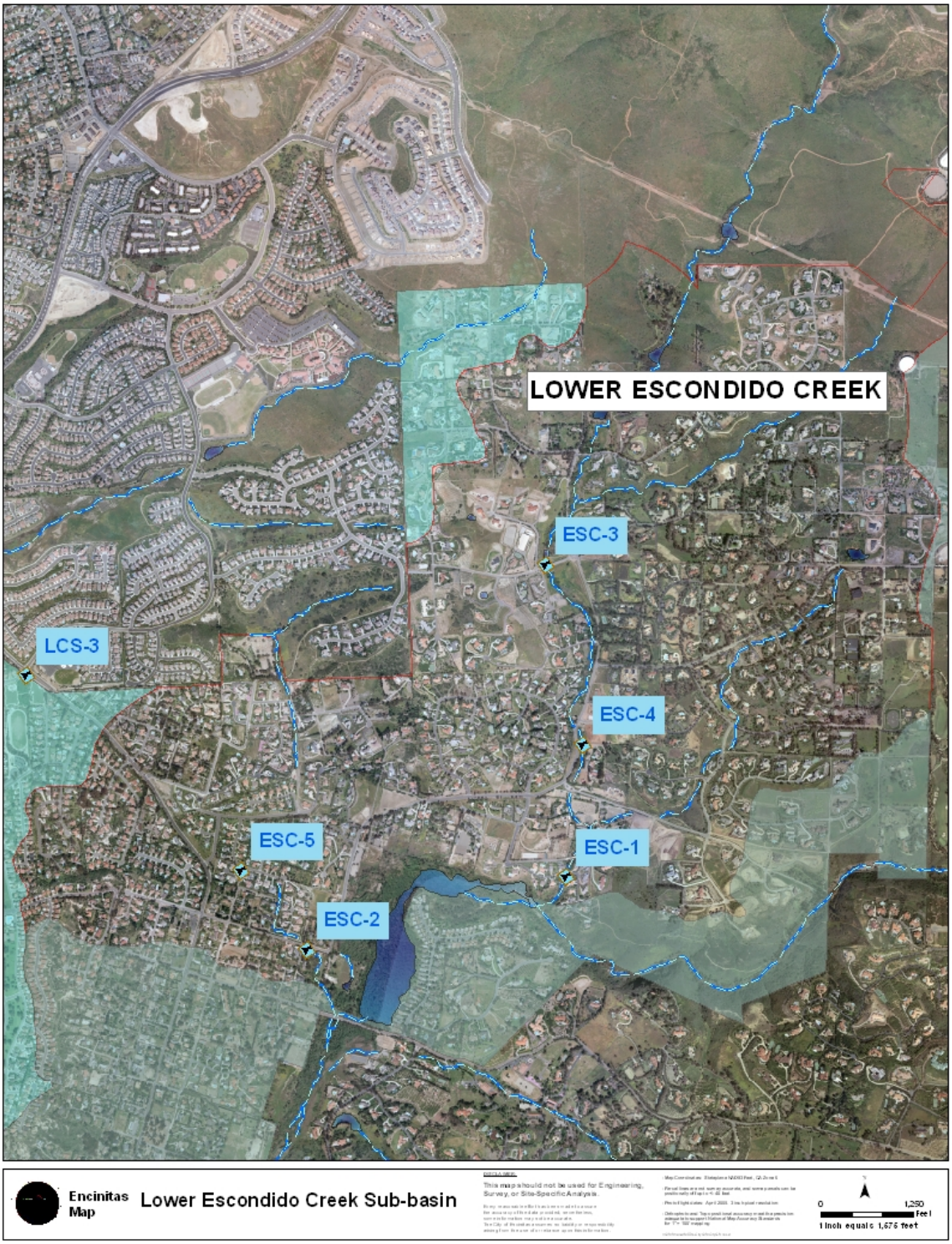
The historical frequency of exceedances in this sub-basin is variable. Figure 4.2 below illustrates water quality exceedance trends in the Lower Escondido Creek sub-basin based on dry weather data collected from 2002 to 2008. With 100% of the primary sites in this sub-basin remaining the same in the updated monitoring program, there was a marked improvement in water quality when compared to the previous year.

Figure 4.2 Action Level Exceedance Ration Trend in the Lower Escondido Creek, 2002-2008



Data collected in the Lower Escondido Creek sub-basin during the 2008 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2008 Field Screening and Analytical Monitoring Results Table in Appendix C-3. Figure 4.3 illustrates the Lower Escondido Creek sub-basin.

Figure 4.3


LOWER ESCONDIDO CREEK
ESC-3
LCS-3
ESC-4
ESC-5
ESC-1
ESC-2
Encinitas Map
Lower Escondido Creek Sub-basin
This map should not be used for Engineering, Survey, or Site-Specific Analysis.
0
1,250
Feet
1 inch equals 1,875 feet

4.3 La Costa South Sub-basin

The dry weather monitoring locations include six primary sites and two alternate sites in the La Costa South sub-basin (LCS). Land use in this sub-basin is largely commercial and residential. All runoff in the La Costa South sub-basin drains to Encinitas Creek. Encinitas Creek flows north into Batiquitos Lagoon in the City of Carlsbad. Monitoring locations in the La Costa South sub-basin were all located within the City of Encinitas.

The changes that were implemented during the 2008 monitoring period included removing LCS-6 from the program and adding a new primary site (LCS-8) which is located further east along the same storm drain line. The location for LCS-8 was chosen to more effectively isolate flows from upstream residential areas more effectively. Overall, 71% of the original primary sites in this sub-basin were retained from previous monitoring years.

Of the six designated locations for routine monitoring in 2008, five locations were observed to have flowing water and one location had ponded water. All six locations were field screened and two were sampled for a full laboratory analysis (LCS-1 and LCS-5) to assure continuity from previous years of monitoring and to retain long-term trend analysis. One location (LCS-2) was analyzed in the laboratory for bacteria indicators as a possible illicit connection and discharge follow-up for the bacteria exceedances at LCS-1 and LCS-5.

There were five routine monitoring water quality exceedances in the La Costa South sub-basin in 2008. These results were validated through five follow-up monitoring results, and three additional monitoring results. Table 4.2 summarizes the action levels exceeded in the La Costa sub-basin during routine monitoring.

Table 4.2 La Costa South Sub-Basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LCS-1	7/10/08	Ponded	Ammonia	1.0	mg/L	1.0
LCS-1	7/10/08	Ponded	Total Coliform	67,000	cfu/100 ml	50,000
LCS-5	7/10/08	Flowing	MBAS	1.0	mg/L	1.0
LCS-5	7/10/08	Flowing	Enterococcus	16,500	cfu/100 ml	10,000
LCS-5	7/10/08	Flowing	Fecal Coliform	47,000	cfu/100 ml	20,000

LCS-1

The water at LCS-1 was field screened and sampled for full laboratory analysis. The samples at LCS-1 contained elevated ammonia and total coliform bacteria. The water was sampled from ponded water in a natural channel. The surrounding land use in this sub-basin is primarily commercial. A follow-up sample for ammonia was analyzed on 7/14/08 and the result was below the action level. A follow-up sample for bacteria indicators was also analyzed on 7/15/08, both Enterococcus and Fecal Coliforms exceeded the action levels.

Table 4.3 LCS-1 Follow-up Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LCS-1	7/15/08	Ponded	Enterococcus	24,000	cfu/100 ml	10,000
LCS-1	7/15/08	Ponded	Fecal Coliform	40,000	cfu/100 ml	20,000

Follow-up sampling upstream of LCS-5 occurred on 7/15/08. Since this site exceeded action levels for fecal coliform and Enterococcus during routine monitoring and follow-up monitoring, the field team immediately conducted a field investigation upstream. After thorough investigation, the field team did not find any obvious sources.

As part of follow-up investigation actions for LCS-5 exceedances, on 7/30/08 the Clean Water Program field team conducted follow-up sampling downstream for bacteria analysis at LCS-2 and LCS-7. Refer to discussions of LCS-2 and LCS-7 below for a more detailed discussion of these sites.

Upon receipt of the exceedance results from the confirmation samples at LCS-1, LCS-5 and LCS-7, the Clean Water Program's storm water inspector was notified of the exceedances and potential sources in the area. A total of eight storm water inspections at nearby residential areas and commercial facilities were later initiated to try and identify potential bacteria sources in the La Costa South sub-basin. Table 4.4 includes a complete list of the inspections that were performed.

Table 4.4 LCS-1 and LCS-5 Investigation Activities			
Name	**Address**	**Date of Inspection**	**Results**
United States Post Office	1150 Garden View	10/10/08	No violations noted.
Park Encinitas HOA	444 N. El Camino Real	10/10/08	No violations noted.
Little Oaks Plaza	352-398 N. El Camino Real	10/10/08	No violations noted.
Green Valley Mobile Estates	350 N. El Camino Real	10/10/08	No violations noted.
Boston Pizza	294 N. El Camino Real	10/13/08	Corrective action required however, no violations noted.
Q.C. Szechwan	288 N. El Camino Real	10/13/08	Corrective action required however, no violations noted.
Burger King	242 N. El Camino Real	7/22/08 10/06/08	Corrective action required however, no violations noted.
Brett's BBQ	1505 Encinitas Blvd	10/14/08	Corrective action required however, no violations noted.

LCS-2

The water at LCS-2 was initially field screened on 6/11/08 and re-sampled for laboratory analysis of bacteria on 7/30/08 in response to bacteria exceedance results at LCS-1 and LCS-5. LCS-2 is located in a natural creek, flows freely at approximately 200 gpm and is located at the furthest point downstream in the La Costa South sub-basin.

The sampling results from 6/11/08 revealed that all constituents were well below action levels. The follow-up sample which was analyzed for bacteria on 7/30/08 revealed that all constituents were again well below action levels. Additional bacteria analysis was conducted upstream at LCS-7 on 7/30/08 to try track the source upstream. See LCS-7 below for a more detailed discussion of this site.

LCS-5

The water at LCS-5 was sampled from flowing water in a manhole. It was field screened and sampled for full laboratory analysis on 7/10/08. The field team observed over-irrigation coming from a nearby shopping center during sampling. Land use in this sub-basin is primarily commercial. The initial sample at LCS-5 on 7/10/08 contained elevated MBAS, enterococcus and fecal coliform. A confirmation sample for MBAS and bacteria was taken on 7/15/08 and the results contained elevated total coliform, fecal coliform and enterococcus

bacteria as indicated in Table 4.5 below.

Table 4.5 LCS-5 Follow-up Investigation

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LCS-5	7/15/08	Flowing	Total Coliform	86,000	cfu/100 ml	50,000
LCS-5	7/15/08	Flowing	Fecal Coliform	47,000	cfu/100 ml	20,000
LCS-5	7/15/08	Flowing	Enterococcus	73,000	cfu/100 ml	10,000

Follow up investigations and commercial facility inspections as described above in the LCS-1 discussion were performed near LCS-2 and LCS-7 which are downstream of LCS-5. The goal of this follow-up investigation was to identify the magnitude of the exceedances and attempt to identify a source.

LCS-7

The water at LCS-7 was field screened and sampled for laboratory analysis of bacteria on 7/30/08. This site was not originally designated for additional laboratory analysis however, a laboratory analysis of bacteria was added to try and better isolate the source(s) of bacteria in this sub-basin. LCS-7 is located in between sites LCS-5 (located a half mile upstream) and LCS-1 (located one fifth of a mile downstream) which had both previously exceeded action levels for bacteria. The analytical results for LCS-7 on 7/30/08 exceeded action levels for total coliform, fecal coliform and enterococcus as indicated in Table 4.6 below.

Table 4.6 LCS-7 Follow-up Investigation

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LCS-7	7/30/08	Flowing	Total Coliform	78,000	cfu/100 ml	50,000
LCS-7	7/30/08	Flowing	Fecal Coliform	38,000	cfu/100 ml	20,000
LCS-7	7/30/08	Flowing	Enterococcus	65,000	cfu/100 ml	10,000

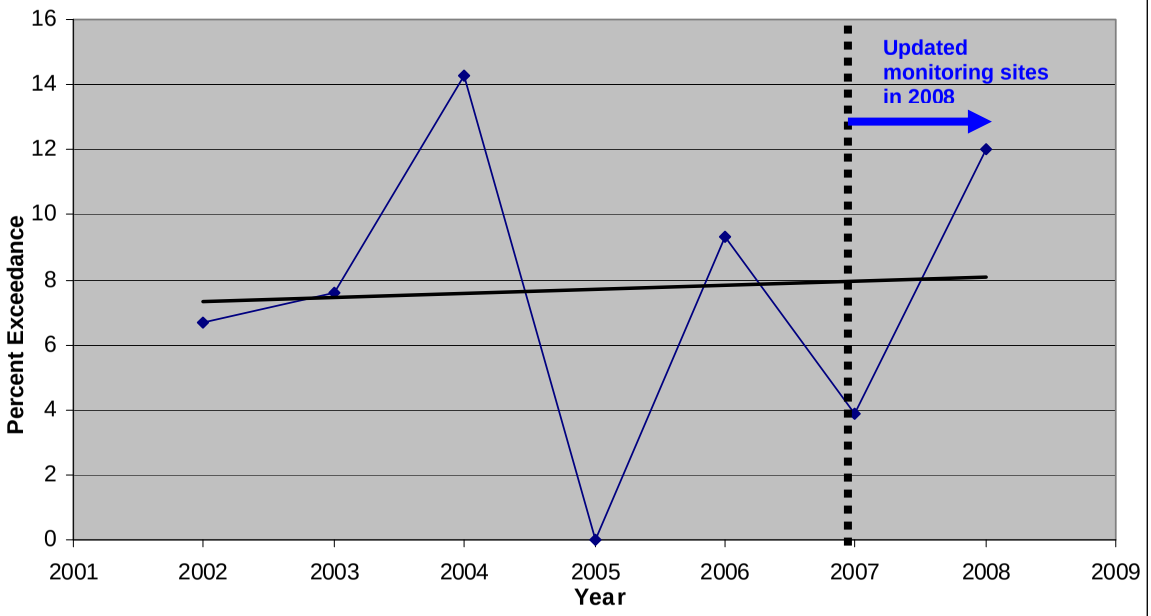
Since LCS-7 was sampled as part of a follow-up investigation for exceedances occurring at LCS-1 and LCS5 and therefore not re-sampled; alternatively the Clean Water Program initiated both informal and formal investigations in the immediate area to try and identify a source. A complete list of formal investigations is included in the discussion of LCS-1 above.

Figure 4.4 below illustrates water quality exceedance trends in the La Costa South sub-basin based on dry weather data collected from 2002-2008. Overall, the trend of water quality exceedances is variable in this Sub-basin. Higher values were observed in 2004 and 2006 when dry weather monitoring investigations located and abated two significant illegal

discharges in this sub-basin. It is also important to note that the percent exceedance values include routine, follow-up and investigative monitoring results. The high percent exceedance value is reflective of the significant amount of additional monitoring that was conducted as a result of initial exceedances occurring during routine monitoring.

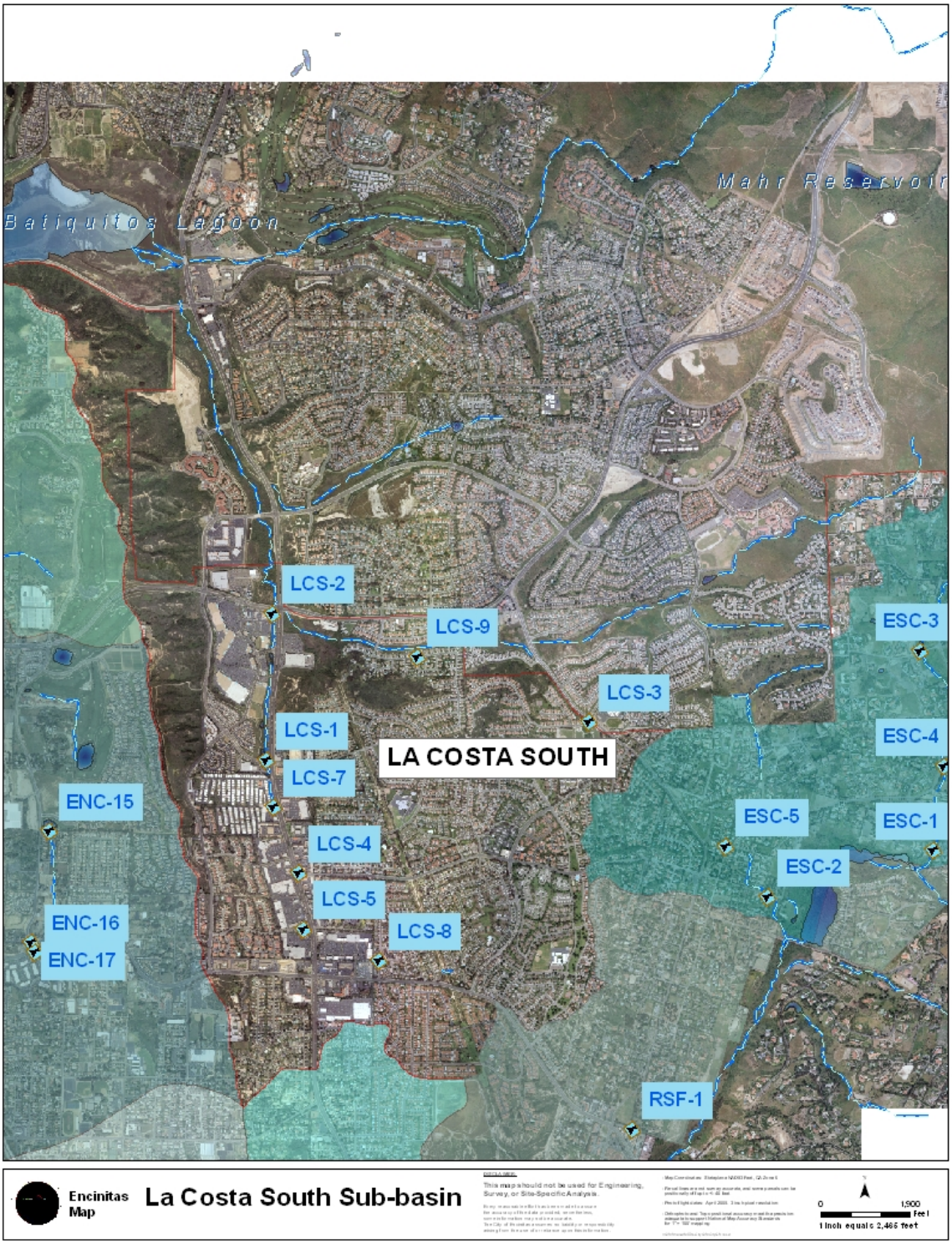
Although sites LCS-7 and LCS-1 did not exceed action levels for nitrates or phosphates, the field team observed excessive algal growth along the creek at both locations. Water flow at LCS-1 was significantly constrained due to excessive vegetation and organic matter decay at this site and was mostly ponded at this site. Both field investigations and formal commercial inspection activities performed upstream were unable to determine any specific sources. It should also be noted that while there were many bacteria exceedances in this sub-basin, both field screening and laboratory analytical samples from LCS-2 (the furthest site downstream in the channel) were all below the action levels when screened on two separate occasions.

Figure 4.4 Action Level Exceedance Ratio Trend in the La Costa South Sub-basin, 2002-2008



Data collected in the La Costa South sub-basin during the 2008 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and in the 2008 Field Screening and Analytical Monitoring Results Table in Appendix C-3. Figure 4.5 illustrates the La Costa South sub-basin.

Figure 4.5


Batiquitos Lagoon
Mahr Reservoir
LCS-2
LCS-9
LCS-3
LCS-1
LCS-7
LA COSTA SOUTH
ENC-15
LCS-4
LCS-5
LCS-8
ENC-16
ENC-17
ESC-3
ESC-4
ESC-5
ESC-1
ESC-2
RSF-1
Encinitas Map
La Costa South Sub-basin
This map should not be used for Engineering, Survey, or Site-Specific Analysis.
0
1,900
Feet
1 inch equals 2,466 feet

4.4 Leucadia Sub-basin

The dry weather monitoring locations included six primary sites and three alternate sites in the Leucadia sub-basin (LUC). Land uses in this area include both residential and commercial with significant, albeit decreasing, numbers of commercial nurseries and growers. All flow where monitoring sites are located in the Leucadia sub-basin drain to the Batiquitos Lagoon.

The changes that were implemented during the 2008 monitoring period included adding two new primary sites (LUC-8 and LUC-10) to replace two original dry sites (LUC-5 and LUC-7). Another site, LUC-9 was added as a new alternate site to provide additional coverage of the MS4 if determined to be necessary. Two original locations (LUC-4 and LUC-7) were re-designated as alternate sites because they were observed to be ponded or dry most years. Two sites (LUC-2 and LUC-5) were removed from the monitoring program because they had been dry for every monitoring visit since 2003. Overall, 43% of the original primary sites in this sub-basin were retained from previous monitoring years.

Dry weather monitoring in the Leucadia sub-basin included monitoring a total of six locations (five primary sites and one alternate location). These sites all covered distinct drainage areas throughout the basin. Four of the six sample locations had water to sample at the time of monitoring, one primary location was ponded and one was dry. Alternate site LUC-9 was monitored as a substitute for the primary dry site at LUC-6. All five locations with water were field screened. One sample at LUC-8 was collected for full laboratory analysis and LUC-9 was analyzed for bacteria as a possible illicit connection and discharge follow-up.

Of the six locations where routine field screening was performed the resulting exceedances were variable. Three of the sample sites (LUC-1, LUC-9 and LUC-10) had elevated nitrates. Only one site, LUC-8 had elevated total coliform, fecal coliform and enterococcus bacteria. LUC-9 had elevated ammonia, orthophosphate and MBAS in addition to nitrates, as mentioned above.

Table 4.7 below summarizes the action levels exceeded in the Leucadia sub-basin.

Table 4.7 Leucadia Sub-basin Action Level Exceedances						
Station ID	**Date**	**Water Flow**	**Analyte**	**Result**	**Unit**	**Action Level**
LUC-1	8/18/08	Ponded	Nitrate (NO3-N)	15	mg/L	10
LUC-8	7/10/08	Flowing	Total Coliform	143,000	cfu/100 ml	50000
LUC-8	7/10/08	Flowing	Fecal Coliform	98,000	cfu/100 ml	20,000
LUC-8	7/10/08	Flowing	Enterococcus	28,000	cfu/100 ml	10,000
LUC-9	8/13/08	Flowing	Ammonia	1.5	mg/L	1.0
LUC-9	8/13/08	Flowing	Nitrate (NO3-N)	37.5	mg/L	10
LUC-9	8/13/08	Flowing	Orthophosphate (PO4-P)	10	mg/L	2
LUC-9	8/13/08	Flowing	MBAS	1.0	mg/L	1.0
LUC-10	8/18/08	Flowing	Nitrate (NO3-N)	12	mg/L	10

LUC-1

The water at LUC-1 contained elevated nitrates. No other constituents analyzed at this site exceeded action levels. LUC-1 is located in the lowest elevations of the Leucadia sub-basin and the majority of the flow in this area appears to be groundwater containing elevated nitrate concentrations. A follow-up investigation on the next business day concluded that nitrate concentrations were below action levels. Because the flow was ponded, there was no source to track upstream and further investigations were not performed.

Table 4.8 LUC-1 Follow-up Results						
Station ID	**Date**	**Water Flow**	**Analyte**	**Result**	**Unit**	**Action Level**
LUC-1	8/19/08	Ponded	Nitrate (NO3-N)	5	mg/L	10

LUC-8

The water at LUC-8 contained elevated bacteria. No other constituents analyzed at this site exceeded action levels. This site was added as a new primary site to the Dry Weather Monitoring program in 2008 to isolate flows from this area in the sub-basin more effectively. The land use upstream consists of a golf course, residential area and an open space park area.

Despite an exceedance for total coliform, fecal coliform and enterococcus on the first

sampling event, the confirmation samples on 7/15/08 were significantly below the initial sampling results and the action levels indicating a transient nature of the bacteria source. No obvious residential, golf course or park related activities were found to be contributing to the initial exceedance during the confirmation investigation.

Table 4.9 LUC-8 Follow-up Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LUC-8	7/15/08	Flowing	Total Coliform	22,000	cfu/100 ml	50000
LUC-8	7/15/08	Flowing	Fecal Coliform	11,000	cfu/100 ml	20,000
LUC-8	7/15/08	Flowing	Enterococcus	8,000	cfu/100 ml	10,000

LUC-9

This site was designated as an alternate site in the 2008 Dry Weather Monitoring Program and was field screened and analyzed for Total coliform, Fecal coliform and Enterococcus bacteria based on a complaint of an illegal discharge upstream. The water at LUC-9 had elevated ammonia, nitrate, orthophosphate and MBAS. The water was sampled from a manhole location with minimal flow. Confirmation of the exceedances for bacteria, ammonia, nitrate, orthophosphate and MBAS were unable to be determined because this site was completely dry the next business day.

The Clean Water Program's storm water inspector was notified of the monitoring results and exceedances. The following inspection activities were initiated to mitigate the non-stormwater discharge observed at this site.

Table 4.10 LUC-9 Follow-Up Investigation Activities			
Name	**Address**	**Date of Inspection**	**Results**
Private Residence	450 Parkwood Lane	8/12/08	Observed gray water and debris at storm drain adjacent to property.
Dry Weather Monitoring downstream at LUC-9	Near Rockport Ct. and Nantucket St.	8/13/08	Sample exceeded action levels for bacteria, ammonia, nitrate, orthophosphate and MBAS.
Open storm drains leading to LUC-9	Near Rockport Ct. and Nantucket St.	8/14/08	Inspected open storm drains that connect to LUC-9 and found no additional evidence of drainage from other locations.
Private Residence	450 Parkwood Lane	8/14/08	NOV issued to responsible party to comply by 8/28/08
Private Residence	450 Parkwood Lane	8/28/08	Follow-up inspection revealed all corrective actions have been implemented. Case closed-

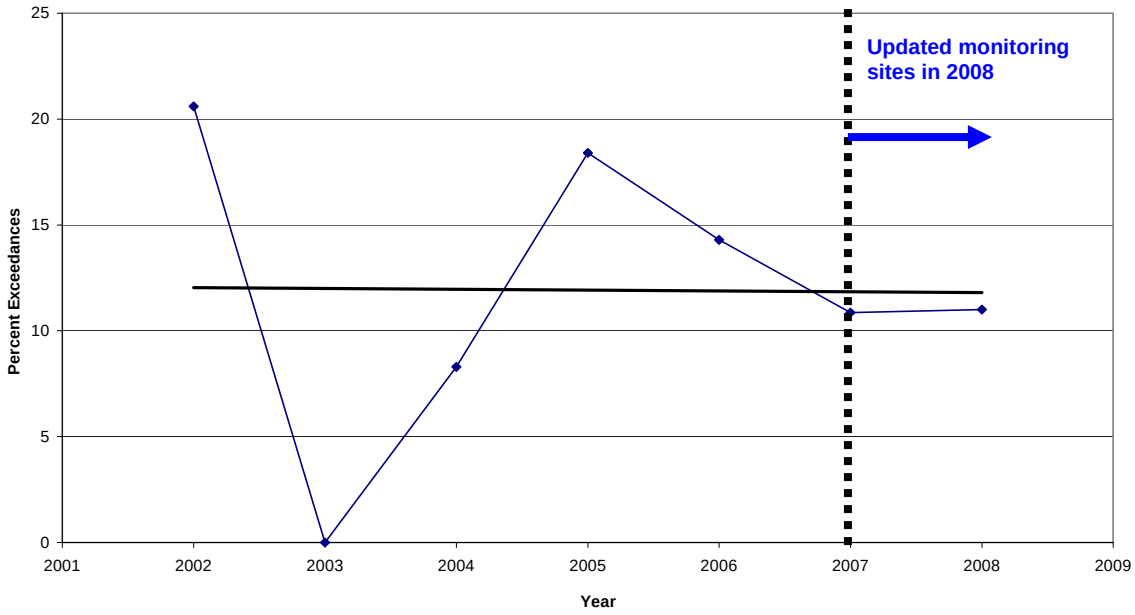
LUC-10

The water at LUC-1 contained elevated nitrates. There were no other exceedances at this location; all other results were below action levels. This site was added as a new primary site to the Dry Weather Monitoring program in 2008 to isolate flows from this area in the sub-basin more effectively and to replace an existing dry site. A follow-up investigation on the next business day concluded that nitrate-nitrogen concentrations were below action levels. Since there were no other exceedances, an upstream investigation for the elevated nitrates was not warranted and was not performed.

Table 4.11 LUC-10 Follow-up Results						
Station ID	**Date**	**Water Flow**	**Analyte**	**Result**	**Unit**	**Action Level**
LUC-10	8/19/08	Flowing	Nitrate (NO3-N)	7.5	mg/L	10

Figure 4.6 illustrates water quality exceedance trends in the Leucadia sub-basin based on dry weather data collected from 2002-2008. Overall, the trend of water quality exceedances has been decreasing since 2005 and remains consistent with last year's levels.

Figure 4.6: Action Level Exceedance Ratio Trend in the Leucadia Sub-basin, 2002-2008



Data collected in the Leucadia sub-basin during the 2008 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and in the 2008 Field Screening and Analytical Monitoring Results Table in Appendix C-3. Figure 4.7 illustrates the Leucadia sub-basin.

Figure 4.7


Batiquitos Lagoon
LUC-1
LUC-6
LUC-9
LEUCADIA
LUC-10
LUC-8
LUC-7
LUC-4
LUC-3
ENC-18
ENC-7
ENC-15
ENC-14
Encinitas Map
Leucadia Sub-basin
This map should not be used for Engineering, Survey, or Site-Specific Analysis.
0
1,250
Feet
1 inch equals 1,667 feet

4.5 Encinitas Sub-basin

The dry weather monitoring locations included thirteen primary sites and four alternate sites in the Encinitas sub-basin (ENC). All runoff in the Encinitas sub-basin drains to the Pacific Ocean via Cottonwood Creek. This sub-basin covers the oldest area of development in the city and consists primarily of residential and commercial land uses including many nurseries. The established sampling points isolate these specific land uses. Many of the monitoring locations were established in 2002 when the Cottonwood Creek Urban Runoff Assessment and Action Plan was developed. The locations monitored in this sub-basin are primarily located along Cottonwood Creek with a few sites located on tributaries to Cottonwood Creek.

The changes that were implemented during the 2008 monitoring period included adding one new primary site (ENC-18) and re-designating four original primary sites (ENC-2, ENC-7, ENC-14 and ENC-16) to alternate sites. One original primary site (ENC-13) was removed completely because it was observed to be dry for every monitoring site visit since 2003. Overall, 71% of the original primary sites in this sub-basin were retained from previous monitoring years.

Dry weather monitoring in the Encinitas sub-basin included monitoring a total of fourteen locations (thirteen primary sites and one alternate location). This sub-basin has the most monitoring locations as it has historically had the most water quality exceedances. Sample locations were based on previous sampling points established in dry weather programs and other special studies. Of the 13 primary locations, 12 had water to sample, with ponded water at one location (ENC-4) and flowing water at all other locations. One alternate site in this sub-basin was also sampled as a replacement for routine monitoring of a primary site in another sub-basin that was not able to be sampled because it was dry. All 14 locations with water were field screened. Four locations were collected for full laboratory analysis, while five locations were only analyzed for bacteria indicators at the laboratory. Of the 14 locations sampled and tested, seven of those samples exceeded water quality standards for various field screened analytes. In total, two of the sample sites (ENC-6 and ENC-11) had elevated conductivity, three sites (ENC-3, ENC-6 and ENC-8) had elevated nitrates and three sites (ENC-7, ENC-15 and ENC-17) had elevated orthophosphates, ENC-7 also exceeded for ammonia and MBAS. Table 4.12 below summarizes the action levels exceeded in the Encinitas sub-basin.

Table 4.12 Encinitas Sub-basin Action Level Exceedances						
Station ID	**Date**	**Water Flow**	**Analyte**	**Result**	**Action Level**	**Unit**
ENC-3	9/2/08	Flowing	Nitrate (NO3-N)	20	mg/L	10.0
ENC-6	9/2/08	Flowing	Conductivity	7.06	mS/cm	5.00
ENC-6	9/2/08	Flowing	Nitrate (NO3-N)	45	mg/L	10.0
ENC-7	6/2/08	Ponded	Ammonia	10	mg/L	1.0
ENC-7	6/2/08	Ponded	MBAS	1	mg/L	1.0
ENC-7	6/2/08	Ponded	Orthophosphate (PO4-P)	4.5	mg/L	2.0
ENC-8	9/2/08	Flowing	Nitrate (NO3-N)	15	mg/L	10
ENC-11	7/15/08	Flowing	Conductivity	8.17	mS/cm	5.00
ENC-15	7/15/08	Flowing	Orthophosphate (PO4-P)	10	mg/L	2.0
ENC-17	9/3/08	Flowing	Orthophosphate (PO4-P)	3	mg/L	2.0

ENC-3

The water at ENC-3 contained elevated nitrates. No other constituents analyzed at this site exceeded action levels. Land use in this sub-basin is primarily commercial however, no explicit sources were observed during a field investigation. Follow-up sampling on the next business day concluded that nitrate concentrations still exceeded action levels at this site. It is believed that elevated nitrates are a result of groundwater infiltration that is often observed in this sub-basin (refer to Section 5.4 Nitrate Exceedances for a more detailed discussion of groundwater).

Table 4.13 ENC-3 Follow-up Results						
Station ID	**Date**	**Water Flow**	**Analyte**	**Result**	**Unit**	**Action Level**
ENC-3	9/3/08	Flowing	Nitrate (NO3-N)	13	mg/L	10

ENC-6

The water at ENC-6 contained elevated conductivity and nitrates. No other constituents analyzed at this site exceeded action levels. Land use upstream is primarily residential. A follow-up investigation on the next business day concluded that nitrate concentrations still exceeded action levels at this site. These results are consistent with elevated conductivity and nitrate results at this site in previous monitoring years (Refer to Table 5.3). It has been well reasoned that the elevated nitrates are a result of groundwater infiltration that is often observed in this sub-basin (refer to Section 5.4 Nitrate exceedances for a more detailed

discussion of groundwater). In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity and nitrates was not warranted and was not performed

Table 4.14 ENC-6 Follow-up Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ENC-6	9/3/08	Flowing	Nitrate (NO3-N)	75	mg/L	10

ENC-7

This site was designated as an alternate site in the 2008 Dry Weather Monitoring Program and was field screened to replace a dry monitoring site at LUC-6. ENC-7 was field screened from a sample of ponded water. The sample contained elevated ammonia, MBAS and orthophosphate. All other field screened constituents were below action levels. Land uses near this site include both residential and commercial with significant, albeit decreasing, numbers of commercial nurseries and growers directly adjacent to the site. Field crews noted that this site was near a nursery, a pet hotel, adjacent to a residential dog park and also received flow from the Encinitas YMCA sport fields. A follow-up investigation on the next business day concluded that ammonia and orthophosphate concentrations still exceeded action levels at this site.

Table 4.15 ENC-7 Follow-up Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ENC-7	6/3/08	Ponded	Ammonia	10	mg/L	1.0
ENC-7	6/3/08	Ponded	Orthophosphate (PO4-P)	5.5	mg/L	2.0

Upon receipt of the exceedance results from the confirmation samples at ENC-7 the Clean Water Program's storm water inspector was notified of the exceedances and potential sources in the area. A total of two informal inspections were conducted at the Saxony at Encinitas Ranch HOA residential dog park and the Magdalena Ecke Family YMCA sport fields, two formal storm water inspections were also conducted at nearby commercial facilities to try and identify the potential sources of ammonia, orthophosphates and MBAS observed at this site. Table 4.16 includes a complete list of the inspections that were performed.

Table 4.16 ENC-7 Inspections and Investigation Activities			
Name	**Address**	**Date of Inspection**	**Results**
Saxony at Encinitas Ranch HOA/Residential Dog Park and Storm Drain Channel	Saxony Dr	06/02/08, 06/03/08	Accumulation of sediment and irrigation run-off in the concrete storm drain channel immediately adjacent to ENC-7. Sediment was completely removed from storm drain channel on 6/23/08.
Magdalena Ecke Family YMCA Sport Fields	200 Saxony Dr.	06/03/08	Corrective action required to minimize over-irrigation from City maintained right of way near the sports fields however, no violations noted.
Holiday Pet Hotel	551 Union St.	6/5/08	Corrective action required however, no violations noted.
Flora Bunda Nursery	603 Union St.	6/10/08	Corrective action required however, no violations noted.

Re-sampling at ENC-7 was scheduled on 7/7/08 after all inspections and corrective actions had been completed at the four locations listed in table 4.16 above. As a result of the inspections, all four locations had eliminated all runoff from their sites. When Clean Water Program staff returned to re-sample ENC-7, the site was completely dry and the adjacent storm drain channel was also documented as clean and dry. No further follow-up was conducted.

ENC-8

The water at ENC-8 contained elevated nitrates. No other constituents analyzed at this site exceeded action levels. Land use in this sub-basin is primarily commercial however, no commercial sources were observed to be contributing to the exceedance of nitrates during the cursory investigation. A follow-up investigation on the next business day concluded that nitrate concentrations still exceeded action levels at this site and conductivity results from the follow-up sampling also slightly exceeded action levels.

Table 4.17 ENC-8 Follow-up Results						
Station ID	**Date**	**Water Flow**	**Analyte**	**Result**	**Unit**	**Action Level**
ENC-8	9/3/08	Flowing	Nitrate (NO3-N)	18	mg/L	10
ENC-8	9/3/08	Flowing	Conductivity	5.05	mS/cm	5.00

These results are consistent with elevated conductivity and nitrate results at this site in previous monitoring years. Since there were no other exceedances, an upstream investigation for the elevated nitrate and conductivity was not performed. It has been well reasoned that the elevated nitrates are a result of groundwater infiltration that is often observed in this sub-basin (refer to Section 5.4 Nitrate-nitrogen exceedances for a more detailed discussion of groundwater).

ENC-11

The water at ENC-11 contained elevated conductivity. No other constituents analyzed at this site exceeded action levels. Elevated conductivity and nitrate results at this site are consistent with documented exceedances for these constituents in previous monitoring years. It is has been well reasoned that the elevated conductivity is a result of groundwater infiltration that is often observed in this sub-basin (refer to Section 5.4 Nitrate-nitrogen exceedances for a more detailed discussion of groundwater). In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity and nitrates was not warranted and was not performed

ENC-15

The water at ENC-15 was sampled from the Encinitas Ranch Detention Basin and contained elevated orthophosphates. No other constituents analyzed at this site exceeded action levels. Land uses near this site include residential areas, a golf course and significant, albeit decreasing, numbers of commercial nurseries and growers. A follow-up investigation within two business days concluded that orthophosphate concentrations still exceeded action levels at this site.

Table 4.18 ENC-15 Follow-up Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ENC-15	7/17/08	Flowing	Orthophosphate (PO4-P)	10	mg/L	2.0

Upon receipt of the exceedance results from the confirmation samples at ENC-15 the Clean Water Program's storm water inspector was notified of the exceedances and potential sources in the area. One drive-by inspection in the nearby residential neighborhood was conducted, one informal inspection was conducted at the nearby golf course and one formal storm water inspection was also conducted at a nearby commercial nursery to try and identify the potential sources of orthophosphates. Table 4.19 includes a complete list of the inspections that were performed.

Table 4.19 ENC-15 Inspection and Investigation Acitivites			
Name	**Address**	**Date of Inspection**	**Results**
Open storm drains connected to ENC-15	Quail Gardens Drive	7/17/08	Inspected all open drains connected to ENC-15 and found no evidence of illegal discharges.
Encinitas Ranch Neighborhood	Quail Gardens Drive	7/17/08	Run-off traced to a home upstream with new landscaping. Homeowner stated that landscaping had not yet been fertilized. No violations noted.
Encinitas Ranch Golf course	1253 Paseo De Las Flores	7/17/08	Minor corrective action required however, no violations noted.
Dramm & Echter	1150 Quail Gardens Dr.	7/17/08	Observed run-off coming from the nursery. Drainage system pump was broken. Corrective action required however, no violations noted.
Dramm & Echter	1150 Quail Gardens Dr.	7/23/08	Follow up site inspection confirmed that discharge had ceased -case closed.

ENC-17

The water at ENC-17 contained elevated orthophosphates. No other constituents analyzed at this site exceeded action levels. Land uses near this site include residential areas, a golf course and significant, albeit decreasing numbers of commercial nurseries and growers. A follow-up investigation the next business day concluded that orthophosphate concentrations still exceeded action levels at this site.

Table 4.20 ENC-17 Follow-up Results						
Station ID	**Date**	**Water Flow**	**Analyte**	**Result**	**Unit**	**Action Level**
ENC-17	9/4/08	Flowing	Orthophosphate (PO4-P)	2.5	mg/L	2.0

Upon receipt of the exceedance results from the confirmation samples at ENC-17 the Clean Water Program's storm water inspector was notified of the exceedances and potential sources in the area. One drive-by inspection in the nearby residential neighborhood was conducted and one formal commercial inspection was conducted at the nearby golf course to try and identify the potential sources of orthophosphates. There were no violations

observed through the follow-up actions, and no explicit source was identified,

Groundwater in the Encinitas Sub-basin

Historically consistent nitrate and conductivity exceedances in the Encinitas sub-basin support a groundwater source. As such, in 2008 it has been reasoned that groundwater flows are the cause for the six exceedances in nitrate at ENC-3, ENC-6 and ENC-8 and the three exceedances of conductivity at ENC-6, ENC-8 and ENC-11. The locations of the conductivity exceedances are persistent from year to year and have been detected at the primary groundwater tributaries in the sub-basin: ENC-6 and ENC-11. A historical analysis of ENC-3 and ENC-8 show that these sites have exceeded for nitrates 86% in six out of seven analyses since 2002. ENC-6 has exceeded for nitrates 100% in seven out of seven analyses since 2002. The conductivity exceedances have been consistently accompanied by elevated levels of nitrate. The six nitrate exceedances are all located downstream of the confluence of the groundwater tributaries and the other flows in Cottonwood Creek. All three stations, ENC-3, ENC-6, and ENC-8, are all located west of Pacific Coast Highway 101 and samples at these locations are collected within 1,500 feet of each other. All of these sampling locations are near the topographic low point in this sub-basin near the coast. Nitrate concentrations remain consistent in this reach along an open channel, and a natural creek. Further discussion of nitrate and conductivity exceedances is located in Section 5.3 and more detailed analysis was included in Appendix J of the 2007 Dry Weather Monitoring Assessment and included as reference in Appendix C-5 of this report. Figure 4.8 illustrates the parameters in which water quality criteria were exceeded in the Encinitas Sub-basin from 2002-2008.

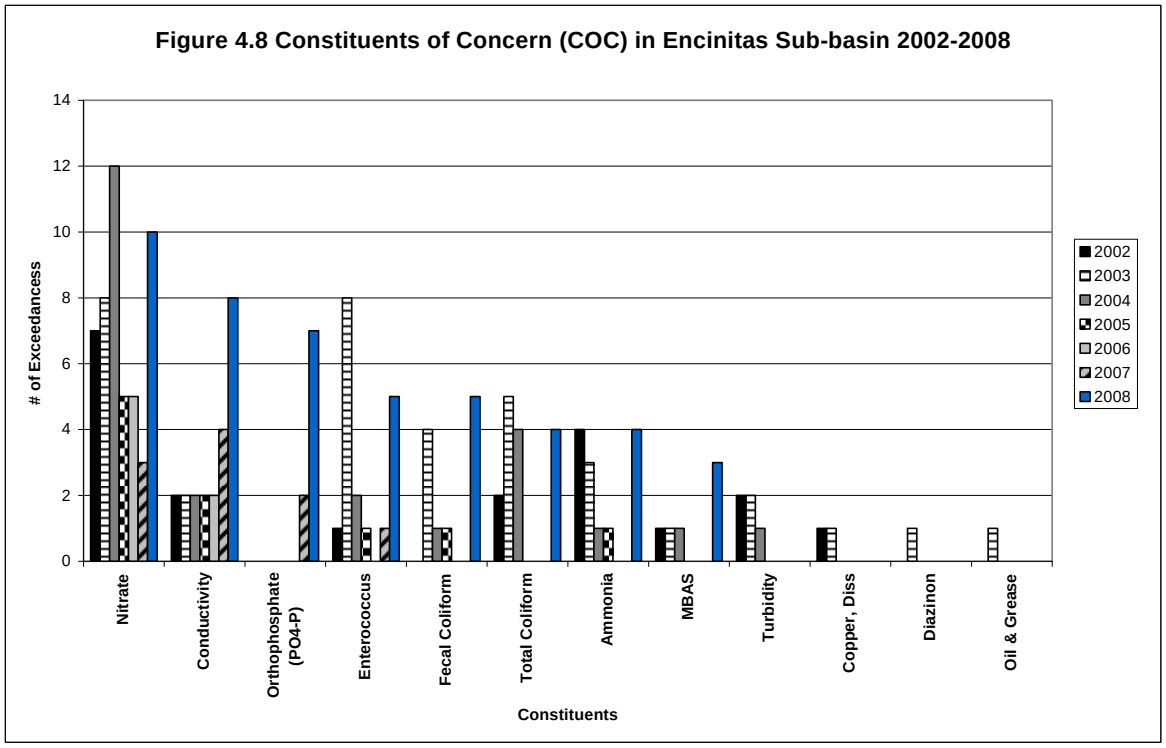
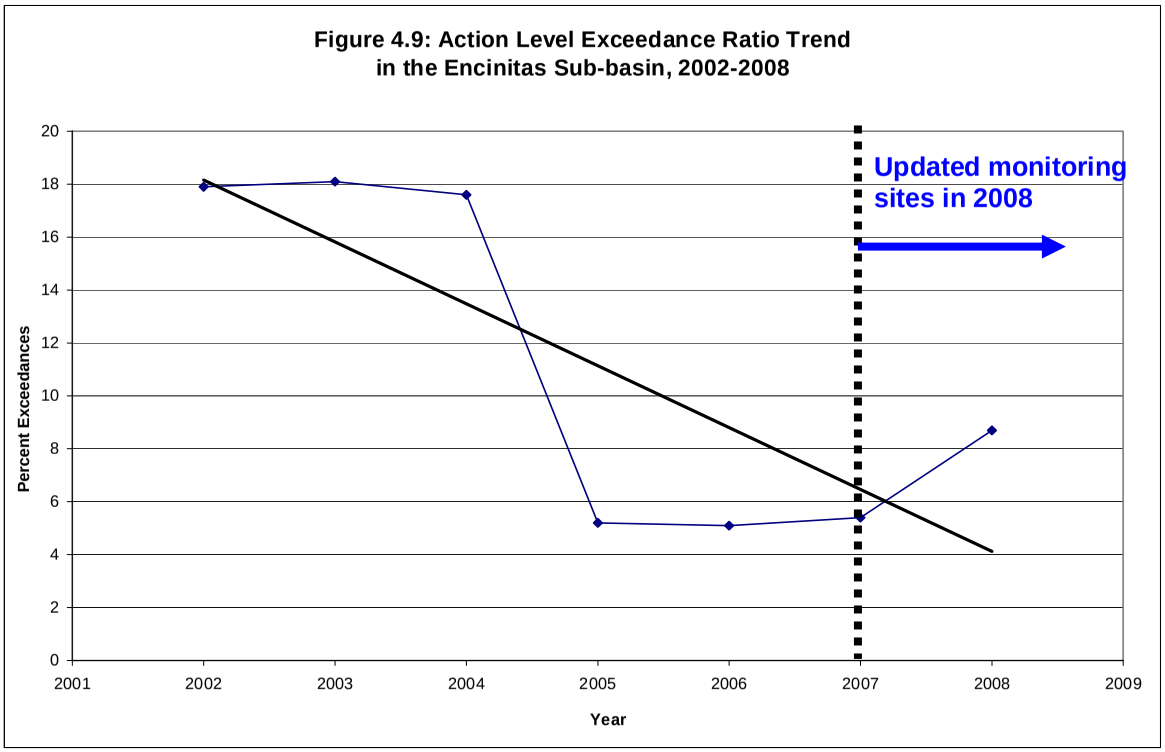


Figure 4.9 below illustrates water quality exceedance trends in the Encinitas Sub-basin based on dry weather data collected from 2002-2008. Although several water quality exceedances have been typical for the Encinitas sub-basin, overall water quality has been improving over the last six years of dry weather monitoring (Figure 4.9). The increase in the 2008 exceedance ratio can be attributed to the increase in the overall number of samples collected. There were 22 more samples collected and analyzed in this sub-basin than in previous monitoring years.



Data collected in the Encinitas sub-basin during the 2008 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and in the 2008 Field Screening and Analytical Monitoring Results Table in Appendix C-3. Figure 4.10 illustrates the Encinitas sub-basin.

Figure 4.10


LUC-3
ENC-18
ENCINITAS
ENC-7
ENC-15
ENC-14
ENC-6
ENC-5
ENC-1
ENC-8
ENC-4
ENC-3
ENC-9
ENC-11
ENC-10
ENC-12
ENC-16
ENC-17
ENC-2
CBS-7
CBS-8
Encinitas Map
Encinitas Sub-basin
This map should not be used for Engineering, Survey, or Site-Specific Analysis.
0
1,250
Feet
1 inch equals 1,629 feet

4.6 Rancho Santa Fe Sub-basin

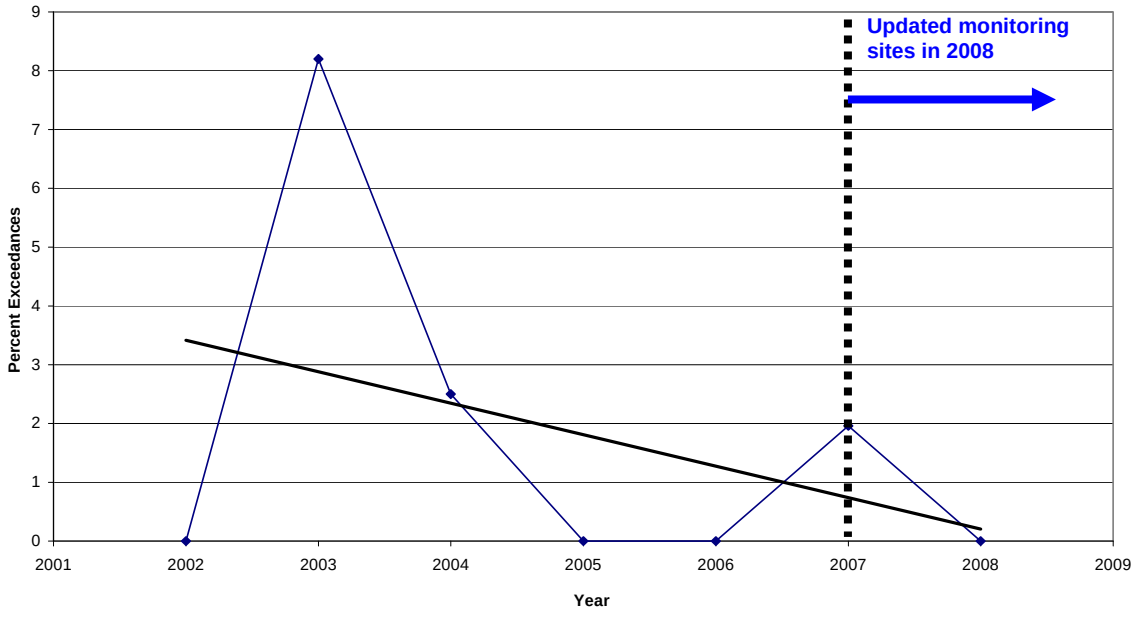
The dry weather monitoring locations included two primary sites in the Rancho Santa Fe sub-basin. All runoff in this sub-basin drains to Escondido Creek which feeds into the San Elijo Lagoon. Land use in this area is primarily residential with few commercial facilities also located in the sub-basin.

In March 2008, two primary sites (RSF-2 and RSF-3) were removed from the monitoring program. RSF-2 was removed because it had been completely dry during each dry weather monitoring site visit since 2003. RSF-3 was removed because it is located outside of the City of Encinitas' jurisdiction and is also being maintained as a monitoring location by the County of San Diego. Overall, 50% of the original primary sites in this sub-basin were retained from previous monitoring years.

Of the two designated locations for routine monitoring in 2008, one location (RSF-4) was observed to have flowing water and one location (RSF-1) had ponded water. Both locations were field screened however; analytical lab samples were only collected at RSF-4. There were no water quality exceedances in this sub-basin in 2008.

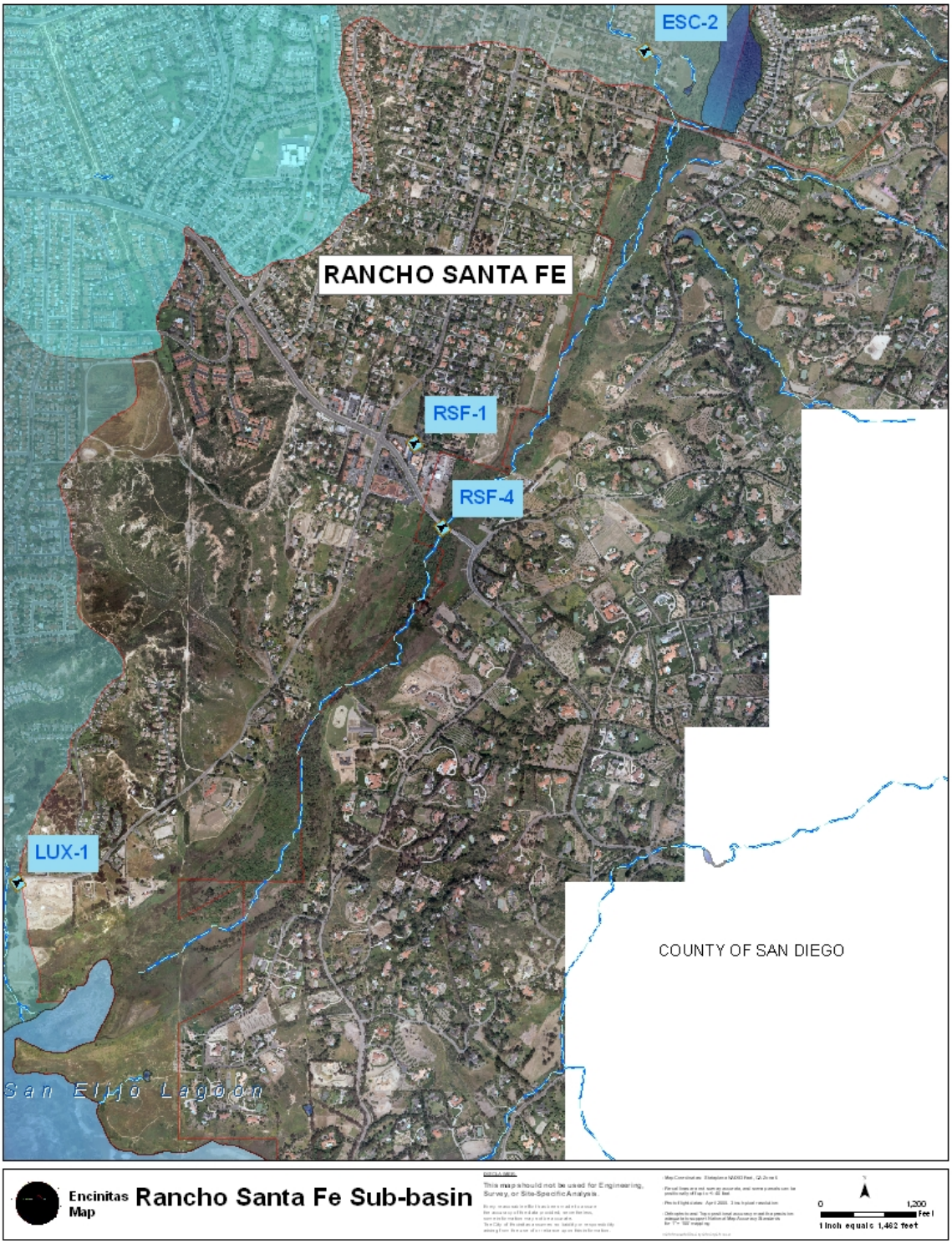
Although there have been some water quality exceedances in the Rancho Santa Fe sub-basin in the past, water quality has been improving over the last six years of dry weather monitoring. Figure 4.11 illustrates a downward trend in water quality exceedances in the Rancho Santa Fe sub-basin based on dry weather data collected from 2002 to 2008.

Figure 4.11: Action Level Exceedance Ratio Trend in the Rancho Santa Fe Sub-basin in 2002-2008



Data collected in the Rancho Santa Fe sub-basin during the 2008 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and in the 2008 Field Screening and Analytical Monitoring Results Table in Appendix C-3. Figure 4.12 illustrates the Rancho Santa Fe Sub-basin.

Figure 4.12


ESC-2
RANCHO SANTA FE
RSF-1
RSF-4
LUX-1
COUNTY OF SAN DIEGO
San Elijo Lagoon
Encinitas Map
Rancho Santa Fe Sub-basin
0
1,200
Feet
1 inch equals 1,462 feet

4.7 Lux Canyon Sub-basin

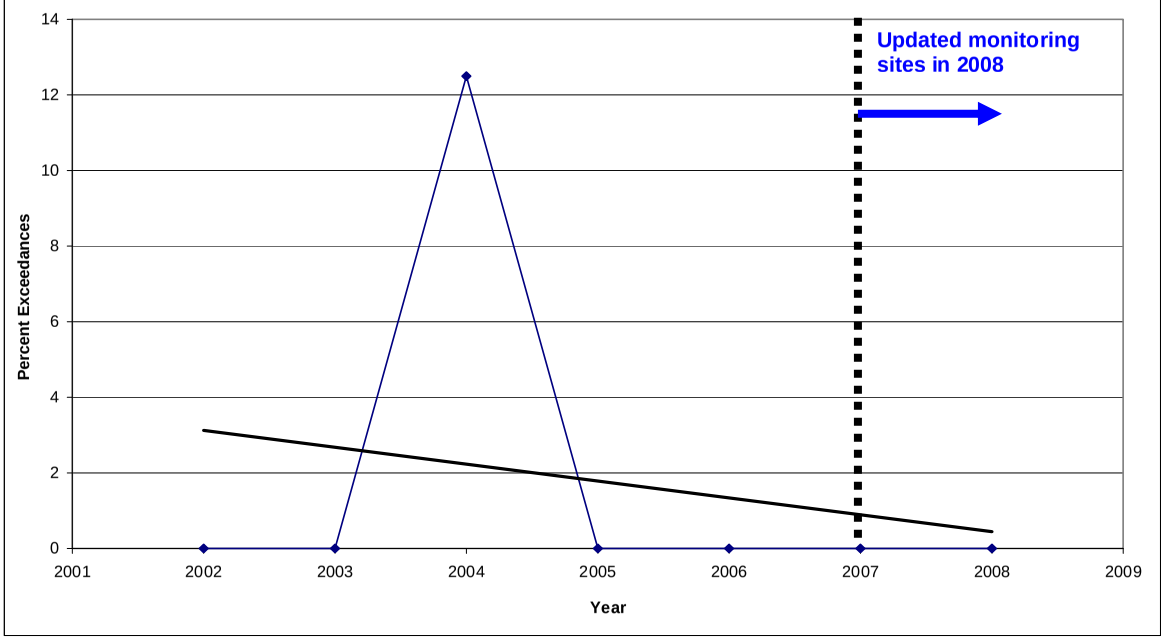
The dry weather monitoring locations included two primary sites in the Lux Canyon sub-basin (LUX). All runoff in this sub-basin drains to the San Elijo Lagoon. Land use in this area is primarily residential with a few commercial facilities located in the sub-basin.

In March 2008, one new primary site (LUX-3) was added to provide additional coverage to another primary site (LUX-2) upstream. LUX-1 an original primary site for this sub-basin, (LUX-1) was designated as an alternate site because it had been dry during most dry weather monitoring site visits since 2003. Overall, 50% of the original primary sites in this sub-basin were retained from previous monitoring years.

Of the two designated locations for routine monitoring in 2008, LUX-2 had ponded water and LUX-3 was completely dry. There were no analytical lab samples collected in this sub-basin, LUX-2 was only field screened. There were no water quality exceedances in this sub-basin in 2008.

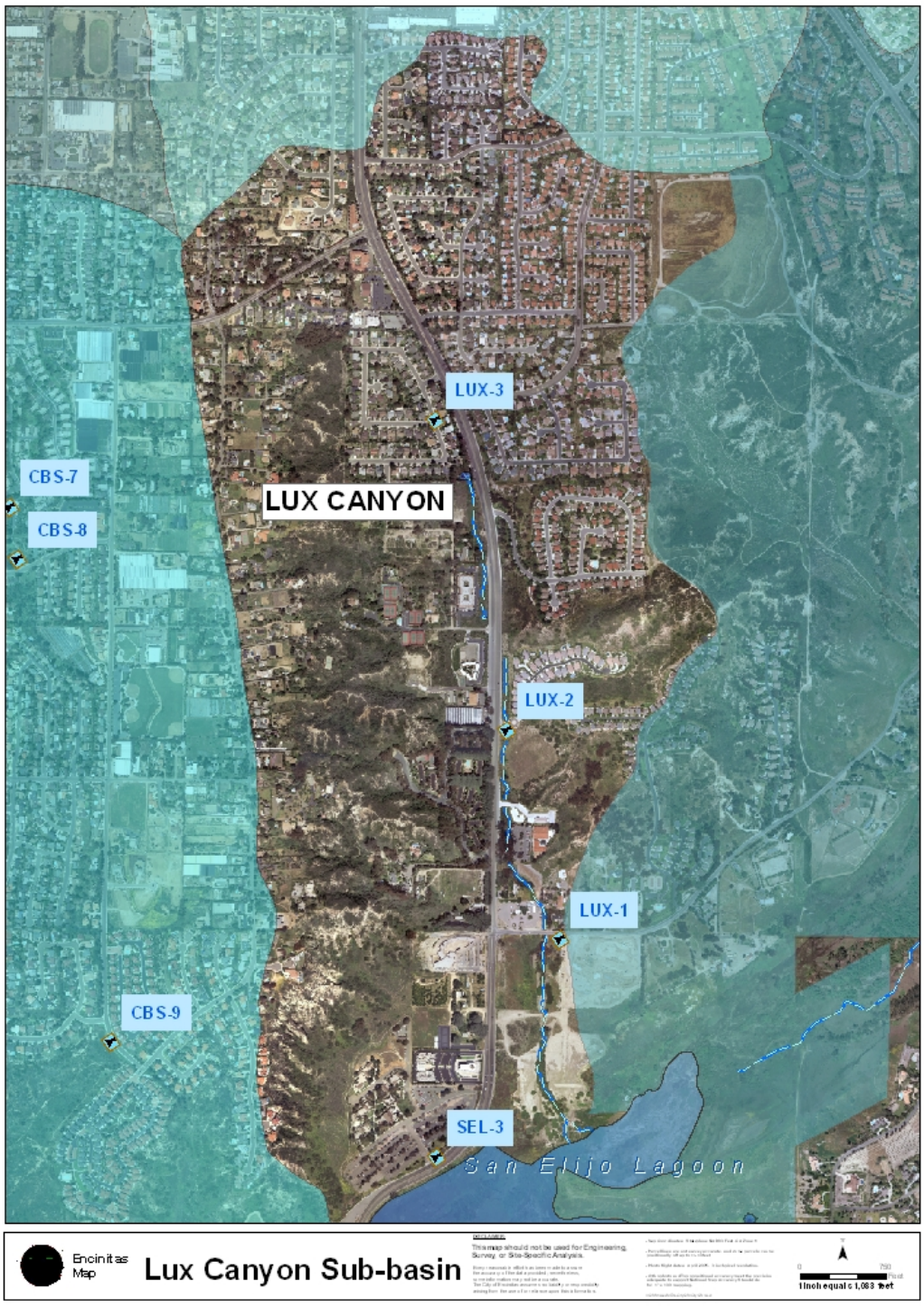
Figure 4.15 illustrates a downward trend in water quality exceedances in the Lux Canyon Sub-basin based on dry weather data collected from 2002 to 2008.

Figure 4.13: Action Level Exceedance Ratio Trend in the Lux Canyon Sub-basin, 2002-2008



Data collected in the Lux Canyon sub-basin during the 2008 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and in the 2008 Field Screening and Analytical Monitoring Results Table in Appendix C-3. Figure 4.14 illustrates the Lux Canyon sub-basin.

Figure 4.14

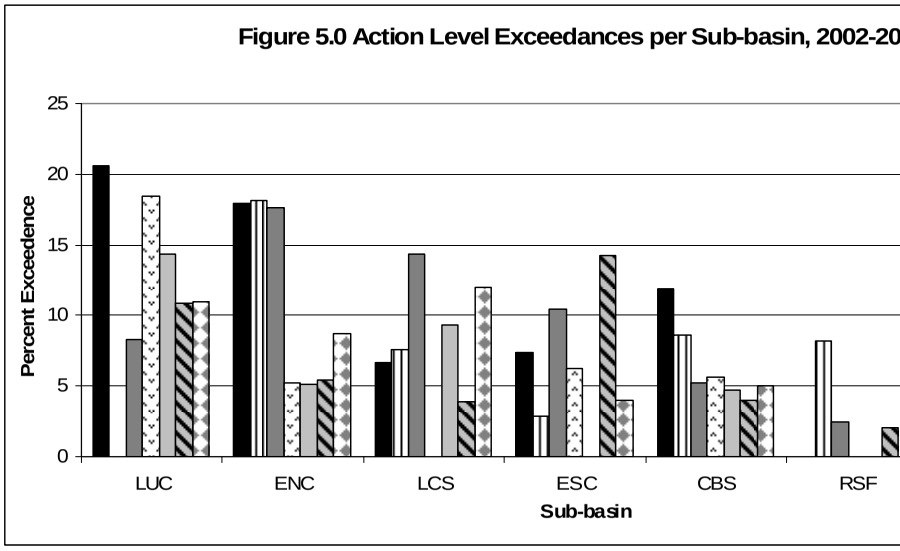

LUX-3
CBS-7
LUX CANYON
CBS-8
LUX-2
LUX-1
CBS-9
SEL-3
San Elijo Lagoon
Encinitas Map
Lux Canyon Sub-basin
This map should not be used for Engineering, Survey, or Site-Specific Analysis.
1 inch equals 1,083 feet

5.0 Summary

The City's comprehensive dry weather water quality monitoring per
all of the Dry Weather Monitoring requirements as established in
Water Permit (Order 2007-01) in section II.B.3 of the Receiving Wat
Monitoring and Reporting Program. The data that was collected se
storm drain facilities and creeks for illicit connections and illicit c
characterization of the water quality in the City and subsequent prior
in the watershed and pollutants of concern in those sub-basins. T
summary of all the dry weather monitoring results for 2002-2008.

5.1 Water Quality Exceedances and Trends

The City of Encinitas can be sub-divided into seven distinct drainage
below in Figure 5.0. According to the number of exceedances of esta
parameters between 2002 and 2008 these sub-basins have been ranke
quality to best. Figure 5.0 illustrates the percent of analytes exceedin
sub-basin according to data collected from 2002 through 2008.



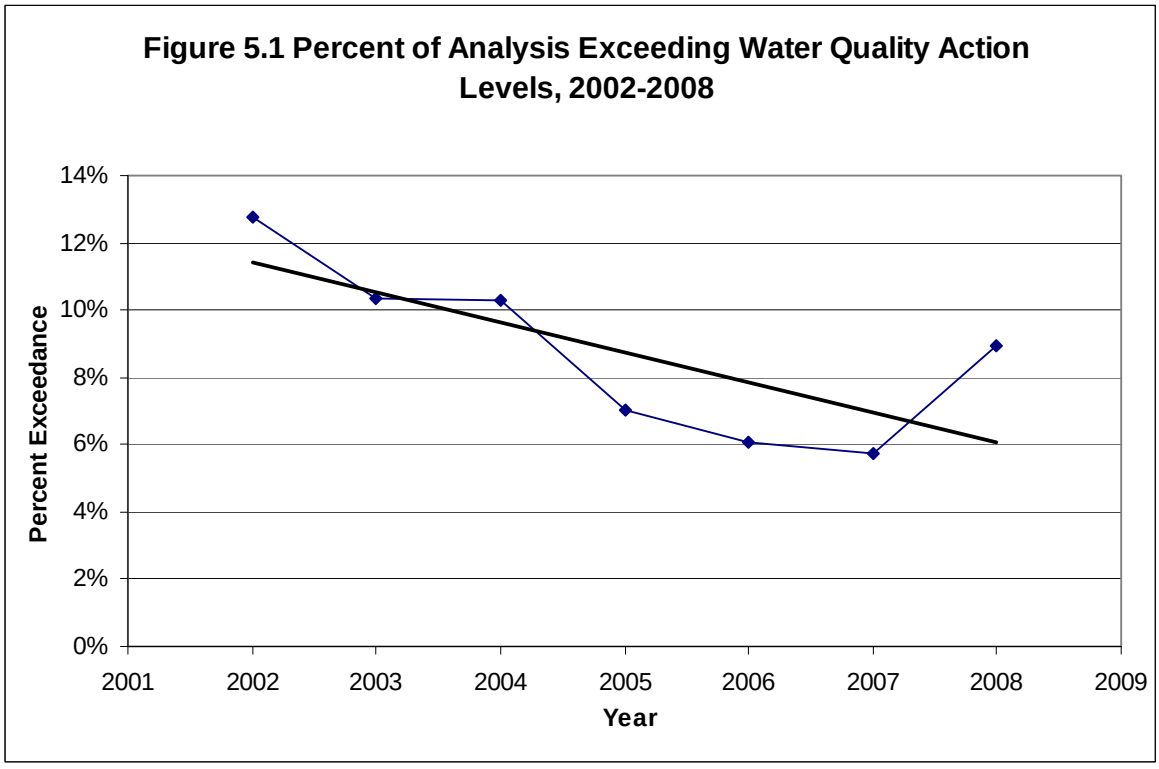
Data from Figure 5.0 illustrates that despite some increasing exceedar
last year, water quality on the whole has been improving since 200
higher exceedance ratios in many sub-basins in 2008, steady improver
are evident in all the sub-basins throughout Encinitas. There were
Lux Canyon Sub-basin (LUX) and the Rancho Santa Fe Sub-basin (RS
Creek Sub-basin (ESC) increased in exceedance rates in 2007 as
conductivity levels, however has dropped to an exceedance ratio of 4
the La Costa South Sub-basin (LCS) had an exceedance rate of 12% du
results. The Encinitas Sub-basin (ENC) has had water quality excee

the analyses in previous dry weather monitoring. In 2005 through 2007, the exceedance rates averaged 5%, showing overall improvements in water quality in the sub-basin. An increase in the overall exceedance rate of 8.7% in 2008 is attributable to the increased sampling efforts and the elevated conductivity and nitrates from suspected groundwater in the Encinitas sub-basin.

Figure 5.1 illustrates the total exceedance rate for all sites sampled during each Dry weather monitoring year. The 2008, the total exceedance rate was 8.7%, an increase when compared to years past. This increase is most likely attributable to the increased sampling efforts and the elevated conductivity and nitrates from suspected groundwater in the Encinitas sub-basin.

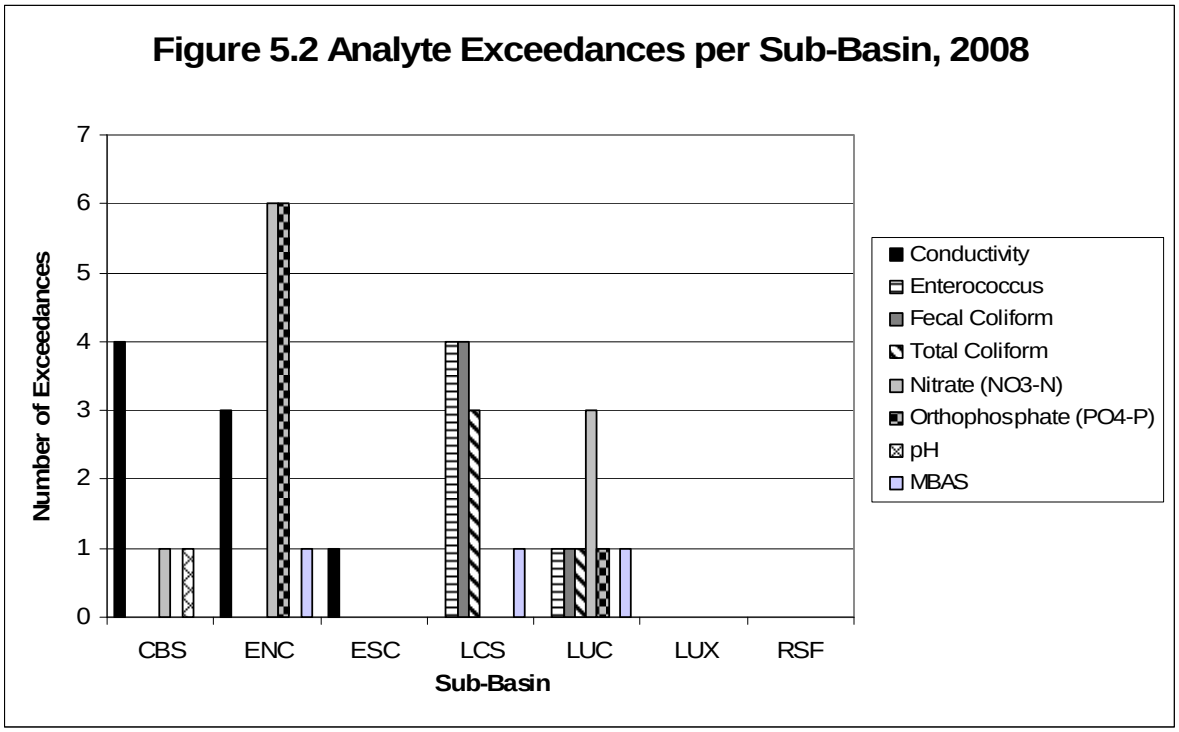
During the 2008 monitoring period, the City's Dry Weather Monitoring program was revised to include fewer primary sites than in years past. Because the primary sites were carefully chosen to include only sites with flowing or ponded water, 95% of all primary sites were analyzed, and two alternate sites were sampled in lieu of dry primary sites. Overall, there were more samples analyzed and an average of 17% more water quality analyses were conducted than had been done in years past. As indicated in Figure 5.1, although there were more samples which exceeded action levels in 2008, water quality exceedances have generally been decreasing in the City of Encinitas since dry weather monitoring began in 2002.

Figure 5.1 Percent of Analysis Exceeding Water Quality Action Levels, 2002-2008



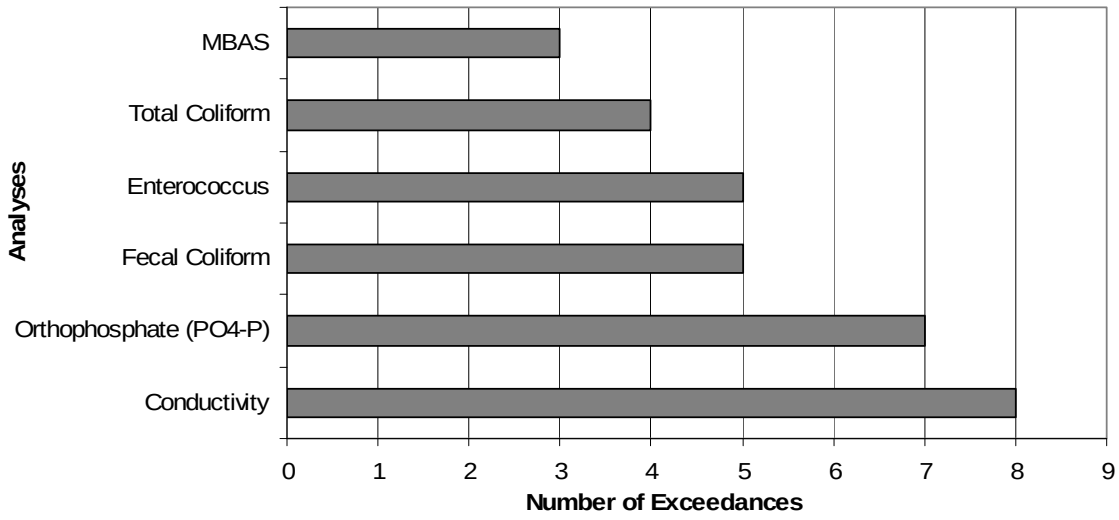
5.2 Prioritization of Constituents of Concern (COCs)

Figure 5.2 illustrates all water quality exceedances for each sub-basin in 2008.



To further prioritize water quality issues in the sub-basins, the COCs were stratified by exceedances per COC in 2008 as illustrated in Figure 5.3.

Figure 5.3 Constituents Exceeding Water Quality Action Levels During Dry Weather Monitoring in 2008



The COCs can be divided into three priority categories based on criteria established as part of the 2003 Dry Weather Program. The criteria were modified in 2004 to better address COCs and their frequency of occurrence. Table 5.0 is a matrix of criteria for selecting COC priorities.

Table 5.0 Constituents of Concern Prioritization Criteria

	Criteria	Priority	Recommended Action*
I	Exceedance Ratio <10% and trends are not increasing	Low	Continue routine monitoring and place COC on watch list.
II	Exceedance Ratio greater than 10%, less than 50%	Medium	Increase Monitoring Frequency in Following Dry Weather Program
III	Persistent Exceedances	Medium	Increase Monitoring Frequency in Following Dry Weather Program
IV	Impacting Receiving Waters, 303d listed	High	Special Study, ICID Investigations, BMP implementation
V	Exceedance Ratio >50%	High	Special Study/Investigations
VI	II and III	High	Special Study/Investigations

*unless best professional judgment indicates otherwise

In order to lower the priority for a constituent from one year to the next, the COC must

qualify for the lower category according to the criteria listed above and not show an increasing trend over the data collected. A constituent may only decrease one step per year and may be removed from the list if the constituent was ranked low the previous year and had no exceedances in monitoring for the current year. Figure 5.4 below illustrates the exceedance ratios per COC in the 2008 monitoring period. The exceedance ratio is calculated by the following formula:

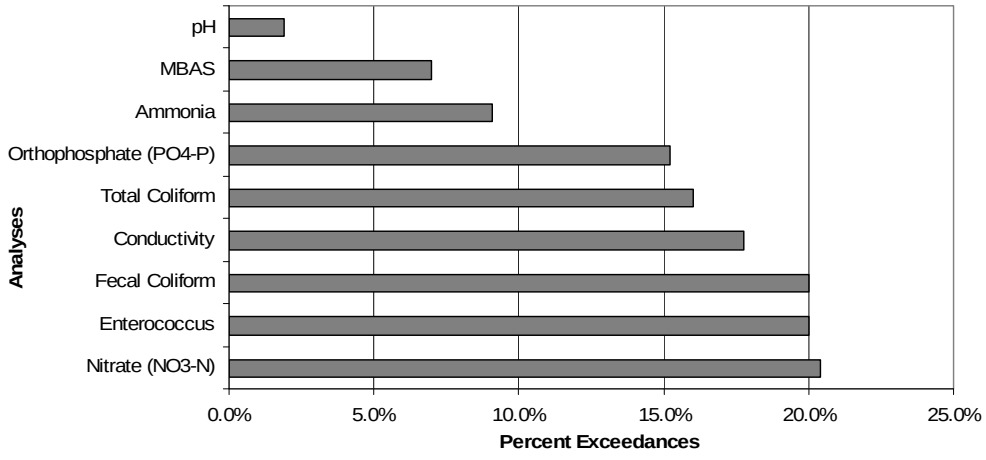
$$E=x/y*100$$

where,

E = exceedance ratio
x = total number of exceedances for selected COC
y = total number of analyses for the COC

This method allows for a comparison of the exceedance rates for each indicator. For 2008, exceedance ratios for nitrate were higher than the exceedance ratios of the other constituents. The exceedance ratios for bacteria indicators ranked second and third. The indicator exceedance ratios in Figure 5.4 define the ranks assigned to each constituent.

Figure 5.4 Analyses Exceeding Water Quality Action Levels
Dry Weather Monitoring 2008



The City of Encinitas COCs were selected and prioritized according to criteria in Table 5.0 and the data presented in Figure 5.4. The COCs are presented below in Table 5.1.

Table 5.1 2008 High Priority Constituents of Concern		
COC	**Priority**	**Action Plan**
Bacteria •Total Coliform •Fecal Coliform •Enterococcus	High	• Continuing encampment removals • BMP implementation (grease removal equipment, coverage/containment for grease bins) • Maintain the Ultra Violet Treatment Facility • Continue to assess bacteria data by land use and by conveyance type
Nitrate-nitrogen	High	• Number of nitrate exceedances have been trending downward since 2002, however, San Elijo Lagoon is on 303(d) list of impaired water bodies for nutrients • Focus on education targeting irrigation runoff and inspections of nurseries. • Proceed with TMDL Investigation Order examining nutrients in San Elijo Lagoon

The justification for the 2008 COC prioritization and the reasons supporting any changes are listed in Table 5.2 below.

Table 5.2 Annual Prioritization of Constituents of Concern, 2003-2008							
Constituent	**2003 Priority**	**2004 Priority**	**2005 Priority**	**2006 Priority**	**2007 Priority**	**2008 Priority**	**Reason for Change**
Conductivity	None	Low	Medium	Medium	Medium	Medium	Conductivity exceedances >10% and the exceedances are persistent from year to year at the same locations. However, criteria in evaluating conductivity exceedances are based on best professional judgment and high values of conductivity where groundwater is confirmed are not considered problematic from an illicit discharge and connection standpoint. Because this persistence is likely due to a constant source of groundwater flow in many locations, conductivity remains a medium priority.
Oil and Grease	None	None	None	Low	None	None	There were no exceedances for oil and grease during the past two monitoring years, therefore this constituent is being removed from the list of COCs.

Table 5.2 Annual Prioritization of Constituents of Concern, 2003-2008							
Ammonia	High	Medium	Low	None	None	Low	Ammonia exceeded action levels 4 out of 44 analyses and has an exceedance ratio of 9% in 2008. The constituent will be routinely monitored and has been placed on the COC watch list.
MBAS	Medium	Medium	Low	None	None	Low	MBAS exceeded action levels 3 out of 43 analyses and has an exceedance ratio of 7% in 2008. The constituent will be routinely monitored and has been placed on the COC watch list.
pH	None	None	Low	None	Low	Low	In 2008 monitoring, there was one exceedance for pH which was attributable to increased temperature in a concrete channel. The constituent will be routinely monitored and remains on the COC watch list.
Temperature	None	None	Low	None	None	None	There were no exceedances for temperature during the past two monitoring years, therefore this constituent is being removed from the list of COCs.
Orthophosphate				None	Low	Medium	In 2008, there were seven exceedances for orthophosphate, The constituent has been elevated from low to medium priority and will be monitored more frequently in the following dry weather program.
Turbidity					Low	None	There were no exceedances for turbidity during the past two monitoring years, therefore this constituent is being removed from the list of COCs.

Bacteria and nitrate remain high priority COCs. Conductivity has increased in priority over the preceding monitoring periods. After factoring in all potential sources, groundwater is the most prevalent; therefore, conductivity remains a medium priority. Ammonia, MBAS and orthophosphates were raised in priority this year, as a result of 14 exceedances. The COCs that have decreased in priority over the 2008 monitoring period includes temperature and oil and grease. There were no exceedances for temperature during the past two monitoring years and it has been removed from the list of COCs. Oil and grease was added to the watch list in 2006; however, with no exceedances in the 2007 and 2008 monitoring periods, it was lowered in rank and removed from the list of COCs

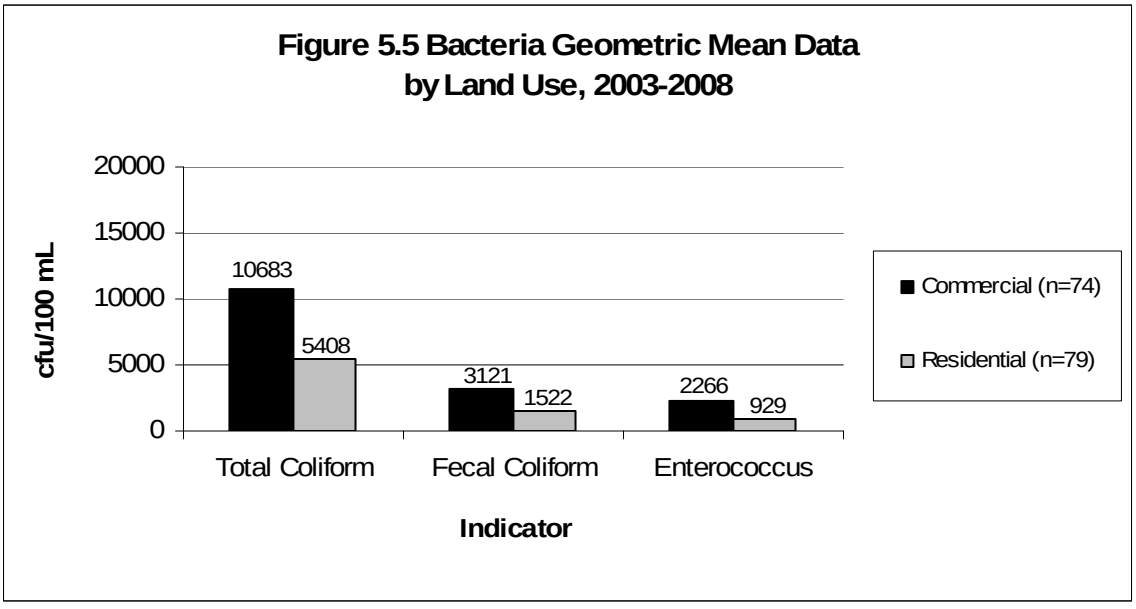
this year.

5.3 Bacteria Indicator Exceedances

Extensive bacteria data has been collected for the past six dry weather seasons, allowing for a better overall characterization of bacteria sources and loading in the City. Enough data has been collected to attempt to characterize bacteria concentrations based on land use. The additional data collection at 11 sites located throughout the City also allows for long term trend assessments of bacteria concentrations in the City.

The two major land uses in Encinitas are commercial and residential and are often not distinct to a drainage basin but are mixed. The assessment of bacteria loading from these areas is based on primary land use as listed in the data set. Figure 5.5 illustrates the geometric mean concentrations of total coliform, fecal coliform and enterococcus based on land use. According to the data collected from 2002 to 2008, the commercial areas contribute more bacteria to the MS4 for all three indicators, as calculated based on concentration only, which is not indicative of overall loading. The total coliform concentrations are approximately 49% higher, fecal coliform are approximately 51% higher, and enterococcus concentrations are approximately 59% higher in commercial areas. The differences between commercial and residential areas are illustrated in Figure 5.5.

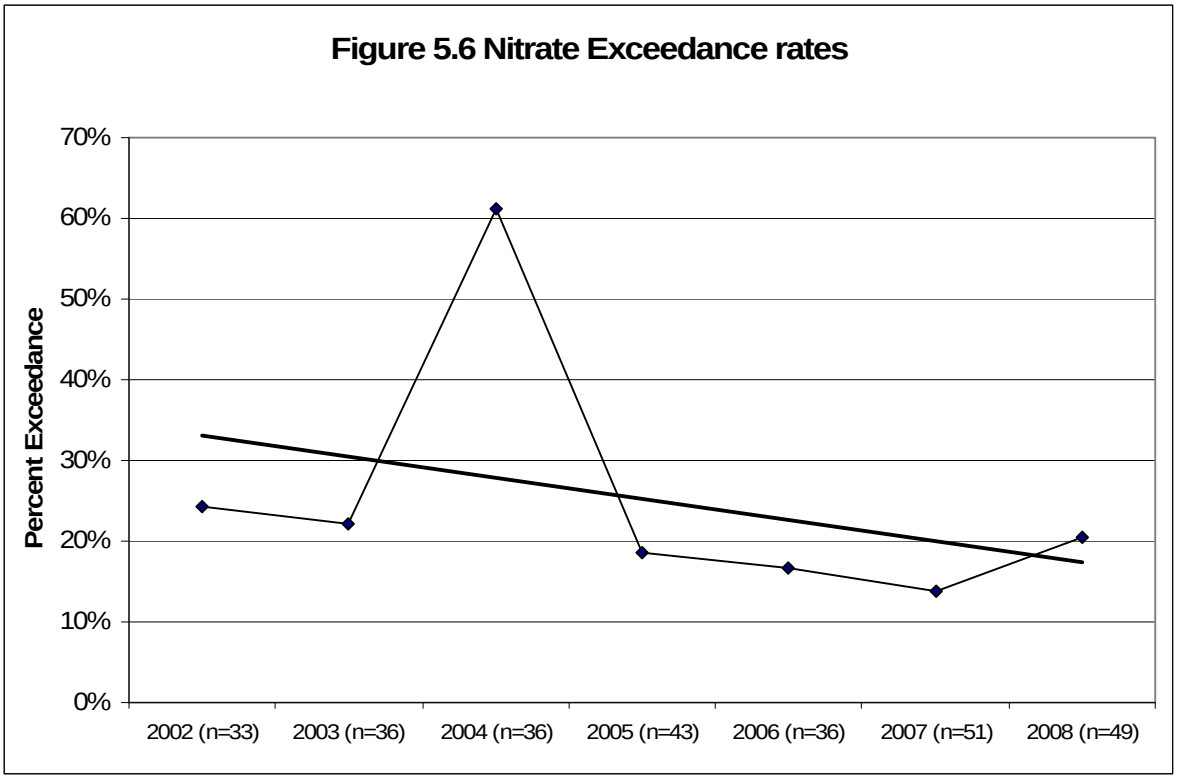
Figure 5.5 Bacteria Geometric Mean Data by Land Use, 2003-2008



5.4 Nitrate Exceedances

The exceedance rates for nitrate increased from 14% in 2007 to 20% in 2008. Overall, the exceedance rates for nitrate have declined from 2004 to 2008 across all sub-basins. Exceedance rates for nitrate for all six years of dry weather monitoring are illustrated in Figure 5.8.

Figure 5.6 Nitrate Exceedance rates



Over the five years of monitoring, groundwater remains a constant source of dry weather flow within Moonlight Creek and Cottonwood Creek in the Encinitas Sub-basin. There are six monitoring locations in the City's dry weather monitoring program that are located within this geographical area. Since 2002, five primary monitoring sites, ENC-1, ENC-3, ENC-6, ENC-8 and ENC-11 have consistently exceeded for nitrates and are often accompanied by elevated conductivity. Over the monitoring periods, other nitrate exceedances have been present on occasion, most notably in 2004. Reasons for the increase in nitrate exceedances in 2004 are unknown. The spike in exceedances that year may have been likely due to residential and nursery runoff affecting nutrient concentrations. Often concentrations of pollutants are consistent at locations with irrigation runoff from nurseries. It is more common to find elevated concentrations of ammonia, orthophosphate and nitrate with low conductivity and higher bacteria levels in the samples.

Most of the nitrate exceedances in the Encinitas sub-basin are consistent with elevated nitrate results from previous years of monitoring and have been reasoned to be a result of

groundwater in the region. The San Diego region has elevated concentrations of nitrates in the groundwater as documented in the 1997 Groundwater Report by the San Diego County Water Authority and most recently in the 2007 Groundwater Assessment Study by the Metropolitan Water District of Southern California. It is common to find elevated nitrates in groundwater in regions of agriculture and it is likely that the sources of nitrogen in the groundwater in Encinitas are from historical land uses such as nurseries. It should be noted, however, that local water authorities do not consider Encinitas groundwater a viable source of drinking water because it is subject to sea water intrusion. As a result, there is little groundwater quality data specific to Encinitas. Table 5.3 contains all sites with nitrate exceedances in the dry weather monitoring within 2002 through 2008 and suspected source of nitrogen.

Table 5.3 Nitrate Exceedances, 2002-2008

Site	Nitrate Exceedances							Suspected Source
	2002	2003	2004	2005	2006	2007	2008	
CBS-1			X					Groundwater
CBS-2				X				Combination
CBS-3N			X					Irrigation
CBS-3S			X					Irrigation
CBS-8*							X	Groundwater
ENC-1	X	X	X	X	X			Groundwater
ENC-3	X	X	X	X	X		X	Groundwater
ENC-4			X					Irrigation
ENC-5	X	X	X			X		Combination
ENC-6	X	X	X	X	X	X	X	Groundwater
ENC-8	X	X	X	X	X		X	Groundwater
ENC-9			X		NS			Irrigation
ENC-10	X		X					Irrigation
ENC-11	X	X	X	X	X	X		Groundwater
ENC-12		X			NS			Irrigation
ENC-14			X		NS			Irrigation
ENC-15		X	X					Irrigation
ENC-17		X	X					Irrigation
ESC-1			X					Groundwater
ESC-2			X					Irrigation
LCS-1			X			X		Irrigation
LCS-2			X					Irrigation
LCS-5						X		Irrigation
LUC-1	NS	NS	X	X	X	X	X	Groundwater
LUC-7			X	NS	NS			Groundwater
LUC-9*							X	Groundwater
LUC-10							X	Groundwater
LUX-2			X		NS			Irrigation
SEL-2						X		Combination
SEL-5	NS	NS	NS	X	NS			Irrigation

NS=No sample, Combination = Groundwater and Irrigation, *New site Added in 2008

The sites with nitrate exceedances attributable to groundwater are typically not causing water quality problems in the receiving waters. These locations do not contribute excessive bacteria, other nutrients, or metals to the waters downstream due to the natural filtration occurring within the sub-surface soils. In 2008, all nitrate exceedances except two locations (LCS-1 and LCS-5) appeared to be attributable to groundwater. A more detailed discussion of nitrate and conductivity exceedances was included in Appendix J of the 2007 Dry Weather Monitoring Assessment and has been provided for reference in Appendix C-5 of this report.5.5 Receiving Waters

Finally, the sub-basins can be divided by respective receiving waters. Runoff in the City of Encinitas drains either north to Batiquitos Lagoon, south to San Elijo Lagoon, or west to the Pacific Ocean at Moonlight Beach.

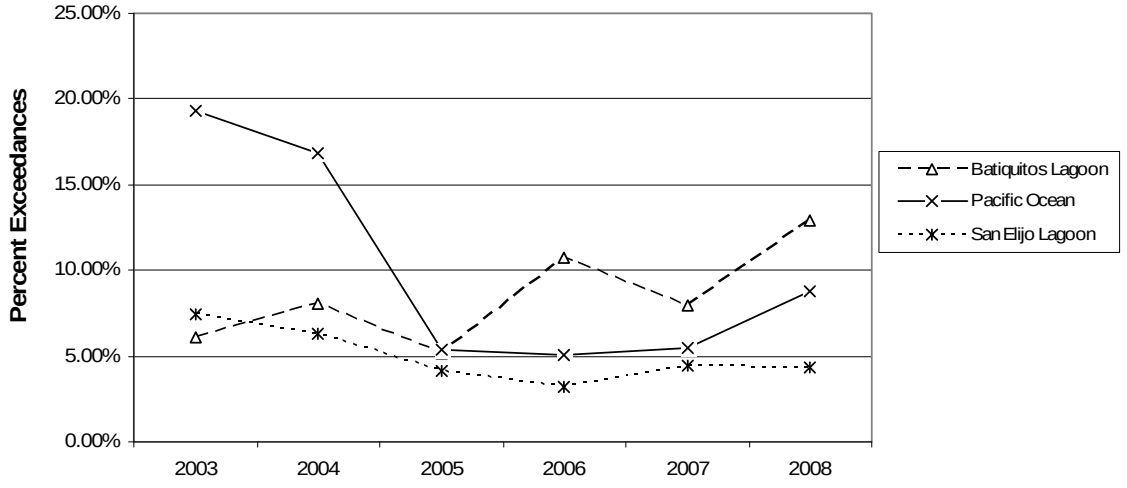
Table 5.4 shows the sub-basins and their associated receiving water.

Table 5.4 Receiving Waters and Associated Sub-basins

Batiquitos Lagoon	Pacific Ocean	San Elijo Lagoon
Leucadia	Encinitas	Cardiff
La Costa South		Lux Canyon
		Lower Escondido Creek
		La Orilla Creek
		Rancho Santa Fe

In dividing the City of Encinitas into receiving water drainage areas, general conclusions as to the water quality entering these waters can be inferred. In order to compare the water quality across these three drainage areas, a ratio of the number of water quality exceedances to analytes tested is calculated. Figure 5.9 presents the ratios calculated for the three drainage areas over the five years of dry weather monitoring.

Figure 5.7 General Trends in Water Quality Exceedances by Receiving Water



According to these ratios, the waters flowing north to the Batiquitos Lagoon exceeded action levels more than flows to the Pacific Ocean or the San Elijo Lagoon. The primary COCs in this area continue to be bacteria. The sub-basin exceedances that drain into the Batiquitos Lagoon have been variable from year to year. Exceedances were higher in 2006, as a result of illicit discharges which were identified and abated in the La Costa South Sub-basin. Exceedances increased again in 2008 due to high bacteria indicators although no known sources were identified.

The primary COCs draining to the Pacific Ocean continue to be bacteria and nitrates. The bacteria are mitigated by an Urban Runoff Treatment Facility which utilizes ultra-violet light to reduce bacteria in the creek discharge. This facility is located near the mouth of Cottonwood Creek and effectively eliminates bacteria from 85% of the creek flow volume. In 2008, all of the nitrate exceedances in the sub-basin appeared to be attributable to groundwater.

The sub-basins draining to San Elijo Lagoon continue to exhibit a relatively low exceedance ratio under 5%.

6.0 Conclusions

Throughout the six years of dry weather monitoring the City of Encinitas has succeeded in identifying jurisdictionally significant water quality COCs. The sources of these COCs have been identified and eliminated where possible. Ongoing monitoring for the Dry Weather Monitoring Program will allow for continuous trend assessments within each of the sub-basins and the receiving waters in future years. Currently, these trends are captured in the exceedance ratios which are delineated by sub-basin and by land use.

The high priority COCs in Encinitas are bacteria indicators (total and fecal coliform and enterococcus) and nitrates. High bacteria levels occur most often in commercial land use areas throughout the City of Encinitas. Sources for bacteria have been identified in several instances in years past and have included natural loading from wildlife, regrowth in the MS4, and various illegal connections to the MS4. Commercial washing is also a concern and is addressed aggressively in the City's inspection program. Bacteria indicators in the MS4 have been trending downward since 2003 for both residential and commercial areas in Encinitas.

It is not known if the elevated nitrates observed throughout Encinitas are entirely from anthropogenic sources. The possible sources of nitrates have been identified as groundwater, nursery irrigation run-off and residential irrigation run-off containing fertilizers. With the exception of a few nitrate exceedance in 2004, most exceedances appear to be groundwater and have been relatively consistent. In 2008, 5 out of 7 nitrate exceedances were determined to be groundwater. In these locations, the high nitrate concentrations are accompanied by elevated conductivity and no other COC exceedances. Nitrate is a constituent of concern for the groundwater in the San Diego region and historical land uses, such as nurseries are likely sources of nitrogen in the groundwater in Encinitas. The elevated conductivity may be from various minerals entering the groundwater from the sedimentary soils or seawater intrusion in the region. A detailed discussion of nitrate and conductivity exceedances is included in Appendix J of the 2007 Dry Weather Monitoring Report and provided for reference in Appendix C-5 of this report. The program will continue to focus on education targeting irrigation runoff and inspections of nurseries.

Using the COC prioritization method described in Table 5.0, City staff has evaluated and ranked water quality concerns in the City, which will allow appropriate attention in the upcoming year. The City of Encinitas Clean Water Program shall continue to focus on illicit discharges and connections as a means to improve water quality. The dry weather monitoring program assists the City in focusing efforts targeting identifiable pollution problems throughout the City. Efforts, including targeting specific audiences for education, enforcement activity, and Best Management Plan (BMP) implementation, have expanded as a result of the water quality characterization gained from the Dry Weather Monitoring Program.

In 2008, the City of Encinitas initiated two notable activities that in combination with the dry weather monitoring program have served to better manage illicit discharges and connections. First, a commercial restaurant binder pilot program was implemented to properly educate restaurant employees on appropriate storm water BMPs. Secondly, the City of Encinitas, collaborated with the Carlsbad Watershed copermittees assessed all dry weather monitoring data across the Carlsbad Hydrologic Unit in order to improve the development of appropriate watershed-based stormwater BMPs.

Since restaurants have been targeted as a probable source of COCs in past monitoring years, the City of Encinitas developed a pilot education and outreach program to distribute a Stormwater Pollution Prevention Manual to restaurant facilities throughout the City in FY 2006-07. The intent of the binder and CD is to support restaurant owners and staff to ensure that proper BMPs are utilized to eliminate non-stormwater discharges. Approximately 180 binders were distributed during routine restaurant inspection activities. Each binder included a site map of each facility, BMP information specific to restaurant operations, and sections to record training, inspection, maintenance activities. In addition, each binder included an educational video related to storm water BMPs which could be used to train employees.

During FY 07-08 commercial inspections, the year following the distribution of the binder/CD, Clean Water Program staff evaluated the overall success and effectiveness of the restaurant binder/CD program. Commercial facility inspection forms were augmented to capture answers to questions aimed at evaluating the utility and use of the information provided the previous year. After conducting the survey, City of Encinitas evaluated the overall effectiveness of the binder/CD distribution using three assessment measures, 1) a targeted binder/CD use survey, 2) a knowledge level comparison from FY 06-07 to FY 07-08 and 3) BMP implementation comparison from FY 06-07 to 07-08. In general, the assessment showed that although the restaurant manager survey demonstrated marginal utilization of the binder and CD, marked improvements in stormwater knowledge and BMP implementation from FY 06-07 to FY 07-08 suggest that distribution of the binder/CD were a beneficial endeavor which could improve water quality. In future years, encouraging restaurant managers to utilize their binder and CD is likely to result in further water quality benefits.

To address comprehensive assessment of all dry weather monitoring data within the Carlsbad watershed, the Carlsbad WURMP copermittees designed and implemented a web-based GIS data warehousing application in FY 2007-08. Copermittees are able to compare dry weather constituents of concern across the Carlsbad Hydrologic Unit. Each jurisdiction provided pollutant source inventories and historical dry weather data. The data was processed and integrated into the interactive mapping application. The GIS mapping application is the platform by which the assessment of dry weather monitoring data can be analyzed within the watershed. The final product was presented to the Carlsbad WURMP group in August of 2008. Some of the mapping application's tools include, zooming in and out, turning different layers on and off for display, selecting features, exporting data and creating maps of selected views. This mapping application provides the Carlsbad WURMP group with the practical means to assess the source of water quality impacts within the watershed and provides a platform from which to develop appropriate BMPs to minimize impacts to receiving water bodies.

Overall, exceedance rates in the MS4 have been trending downward over the six years of monitoring. By assessing the exceedance trends based on the ultimate downstream receiving waters (i.e. the Pacific Ocean, Batiquitos Lagoon, and San Elijo Lagoon), consistent improvements in water quality are evident for each drainage area (see Figure 5.9.) Loading of pollutants to these receiving waters has been reduced.

In 2008, the following recommendations for future dry weather monitoring include:

1. Consider recommended follow-up actions identified in Section 5.2 – Prioritization of Constituents of Concern.

2. Assess the TMDL monitoring data collected in FY 2007-08 to support adaptive management of our Dry Weather Monitoring Program.

3. Continued assessment of all dry weather monitoring data within the watershed to compare dry weather constituents of concern across the Carlsbad Hydrologic Unit and develop appropriate BMPs and watershed activities as a group.

With the on-set of TMDLs in the Pacific Ocean at Cottonwood Creek and the TMDLs for San Elijo Lagoon, it is recommended that resources be shifted to investigations in these areas. During the FY 2007-08, a TMDL monitoring program for the watershed lagoons was developed and monitoring of the lagoons commenced in the Fall of 2007. Results from this study will help to provide detailed information on sediment, nutrient and bacteria and their effects on the receiving waters throughout the Carlsbad watershed, and more specifically in Encinitas, the Pacific Ocean at Cottonwood Creek and San Elijo Lagoon.

Much time and effort has been expended in identifying COCs in the larger Carlsbad Hydrologic Unit. Now that these have been identified, it is prudent to allocate efforts to those pollutants in an adaptive monitoring approach. Many of the analysis in the dry weather program have not been productive over the six years of testing. Due to the analytical timeframes necessary for metals, oils and grease, and pesticides, these analytes have not yielded significant results in IC/ID investigations. However, the field screening parameters and bacteria analysis have been productive in source tracking and investigations and must continue to be a part of the program. A comprehensive assessment of all dry weather data in the watershed is recommended. This will result in consistent COC identification and lead to an adaptive monitoring plan for the dry weather program. The adaptive monitoring will focus efforts on high priority COCs with TMDL implementation plans in mind and may reduce monitoring of constituents that have not been identified as problematic.

7.0 Trash Assessment

7.1 Regulatory Requirements

Section II.B.3.C.(7) of the Municipal Permit's Receiving Waters and Urban Runoff Monitoring and Reporting Program requires Copermittees to assess the presence of trash in receiving waters and urban runoff at each dry weather field screening site. This trash assessment program is designed to provide information on the spatial extent and relative amount of trash present, as well at the nature and origin of the trash at the site.

7.2 Procedure and Definitions

The San Diego Copermittee Dry Weather Monitoring Workgroup developed a two-page Trash Assessment Form (Appendix C-4) to document the amount and extent of trash and the threat to human and aquatic health. The first page is completed at every site. The second page, which includes information about the types, prevalence, potential routes, and sources of trash, is also completed at sites where a larger amount of trash is observed.

A qualitative estimate of the abundance of trash is made based upon a general impression of the site. The Trash Assessment Form includes five categories to describe the amount and extent of trash. The definitions are primarily qualitative, although numbers of trash pieces are also included in each category as a rough guideline. The five categories are listed below.

- *Optimal:* On first glance, no trash is visible. Little or no trash (<10 pieces) is evident when the evaluated area is closely examined for litter and debris.
- *Suboptimal:* On first glance, little or no trash is visible. After close inspection, small levels of trash (~10-50 pieces) are evident in the evaluated area.
- *Marginal:* Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing are present.
- *Submarginal:* Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing are present.
- *Poor:* Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human health and threat to aquatic health is assessed at each site using the following definitions:

- *Threat to Human Health* - Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris have the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g., medical waste, diapers, human waste), or have the potential for physical harm (sharps, entanglement, nails, etc.).
- *Threat to Aquatic Health* – Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc.) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category.

In the event that a site is noted as potentially posing a threat to human or aquatic health, additional descriptive comments are recorded in the "Comments" section of the Trash Assessment Forms, included in Appendix C-4.

If a site is labeled as submarginal or poor, it is then assessed for types of trash present (e.g., automotive, biohazard, food waste), which are ranked based on the prevalence and potential threat to water quality of the items. Lastly, the potential mechanism through which trash reached the site (e.g., dumping, littering, upstream sources) and the potential source of the trash (e.g., construction, commercial, transient) are identified.

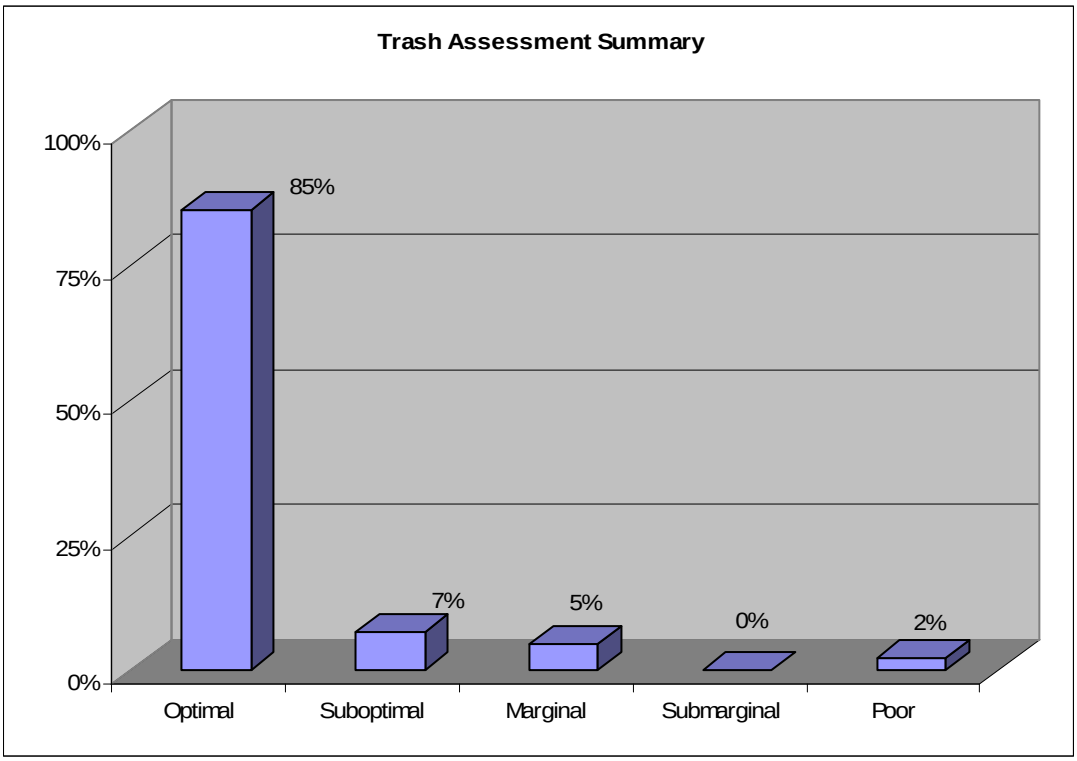
7.3 Trash Assessment Results

Trash assessments were conducted at 39 primary dry weather monitoring sites and 2 alternate dry weather monitoring sites throughout the monitoring period (May 1, 2008 – September 30, 2008). Table 5-1 and Graph 5-1 summarize the trash assessment results. Figure 5-1 provides a map of sampling sites and their corresponding trash assessment.

TABLE 7.1 TRASH ASSESSMENT RESULTS

Optimal (35 sites)	**Suboptimal** (3 sites)	**Marginal** (2 sites)	**Submarginal** (0 site)	**Poor** (1 site)
CBS-1 CBS-4 CBS-7 CBS-8 CBS-9 SEL-2 SEL-3 ENC-3 ENC-4 ENC-5 ENC-6 ENC-7 ENC-8 ENC-9 ENC-11 ENC-12 ENC-15 ENC-17 ENC-18 LCS-1 LCS-2 LCS-4 LCS-5 LCS-8 LUC-1 LUC-3 LUC-6 LUC-8 LUC-9 LUC-10 ESC-1 ESC-2 ESC-5 LUX-2 LUX-3	CBS-2 LCS-7 RSF-4	ENC-1 RSF-1	None	ENC-10

Figure 7.1



7.3.1 Threat to Human or Aquatic Health

In FY 2007-08, there were two sites (ENC-1 and ENC-10) that were identified as a threat to aquatic health. ENC-1 is an outfall location on Moonlight Beach with a conveyance that is comprised of three metal pipes that each measure 5 ft x 6 ft. This conveyance carries an estimated 200 gpm of treated runoff from the UV Treatment Facility onto Moonlight Beach. The land uses that drain to this area is primarily commercial with residential areas interspersed throughout the sub-basin. There is also a municipally maintained park, Moonlight Beach Park which is adjacent to ENC-1. The beach at ENC-1 is regularly impacted by tidal intrusions and sea wrack which often constricts the water flow coming out of ENC-1. ENC-1 was given a trash assessment rating of "marginal" for having low to medium levels of trash (51-100) pieces at first glance. It was also rated as a "threat to human health" due to the abundant pieces of small plastic debris and small styrofoam pieces that were observed on site. These small floatable pieces are considered persistent once they are a released into the environment, can be transported long distances and may resemble food.

ENC-10 is a 72 inch concrete pipe outfall that discharges into a natural creek area just east of Interstate 5 in the Encinitas sub-basin. The runoff from this location is conveyed directly into Cottonwood Creek which ultimately flows into the Pacific Ocean at Moonlight Beach.

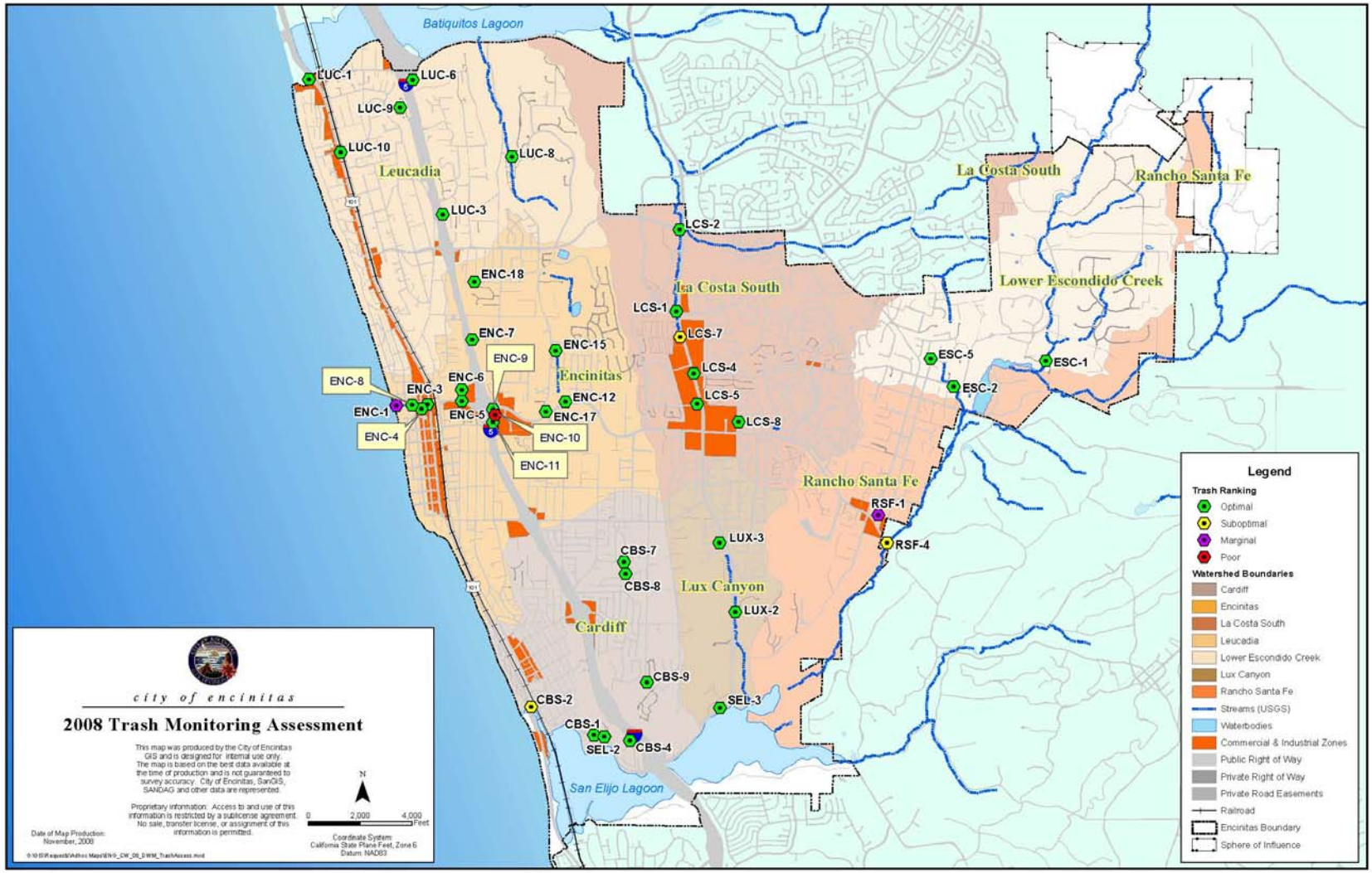
The land uses that drain to this area is primarily commercial with residential areas interspersed throughout the sub-basin. ENC-10 was given a "poor" trash rating and was evaluated as a "threat to aquatic health" for being significantly impacted by trash from a homeless encampment. This site has been identified as a problem area for encampments in the past and the City maintains this area on an as needed basis. Most of the observed trash items at this location were food packaging, cigarette butts, toilet paper and human waste due to use of the site by transients.

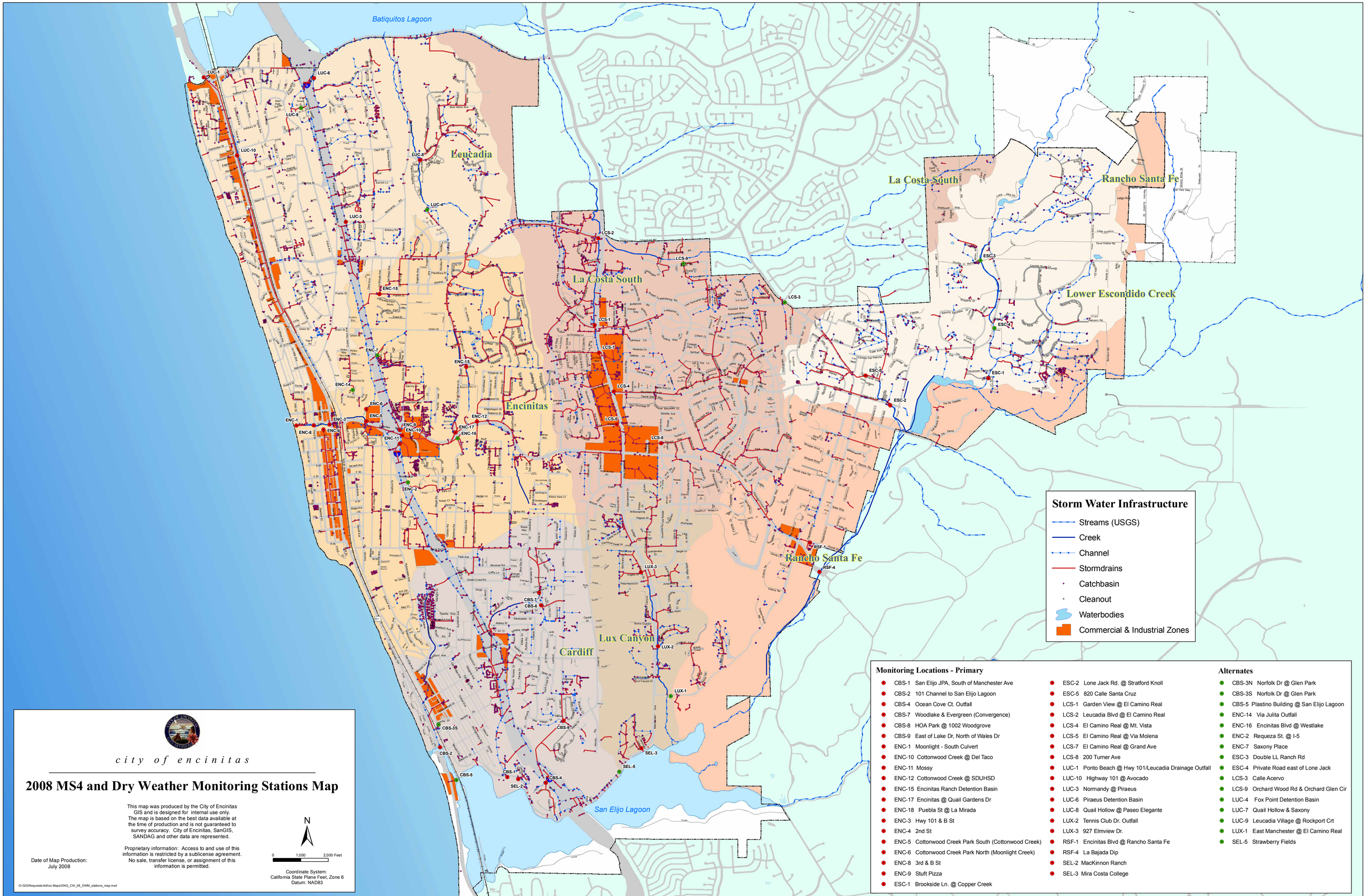
7.3.2 Trash Assessment - Poor Sites

Table 7.2 Breakdown of Poor Sites

Site	Types of Trash	Ranking	Potential Route 1	Potential Route 2	Potential Source 1	Potential Source 2
ENC-10	Household	1	Littering	Dumping	Transient	Commercial
	Food Packaging	2	Littering	Dumping	Transient	Commercial
	Cigarette Butts	3	Littering	Dumping	Transient	--

Figure 7.2


Batiquitos Lagoon
LUC-1
LUC-6
LUC-9
LUC-10
LUC-8
Leucadia
LUC-3
LCS-2
La Costa South
Rancho Santa Fe
Lower Escondido Creek
ENC-18
LCS-1
LCS-7
ENC-7
ENC-15
ENC-9
Encinitas
LCS-4
ESC-5
ESC-1
ENC-8
ENC-6
ENC-3
ENC-12
LCS-5
ESC-2
ENC-1
ENC-5
ENC-17
LCS-8
ENC-4
ENC-10
ENC-11
Rancho Santa Fe
RSF-1
RSF-4
LUX-3
CBS-7
CBS-8
Lux Canyon
LUX-2
Cardiff
CBS-9
SEL-3
CBS-2
CBS-1
SEL-2
CBS-4
San Elijo Lagoon
city of encinitas
2008 Trash Monitoring Assessment
This map was produced by the City of Encinitas GIS and is designed for internal use only. The map is based on the best data available at the time of production and is not guaranteed to survey accuracy. City of Encinitas, SanGIS, SANDAG and other data are represented.
Proprietary information: Access to and use of this information is restricted by a publicense agreement. No sale, transfer license, or assignment of this information is permitted.
N
0 2,000 4,000 Feet
Date of Map Production: November, 2008
Coordinate System: California State Plane Feet, Zone 6 Datum: NAD83
Legend
Trash Ranking
Optimal
Suboptimal
Marginal
Poor
Watershed Boundaries
Cardiff
Encinitas
La Costa South
Leucadia
Lower Escondido Creek
Lux Canyon
Rancho Santa Fe
Streams (USGS)
Waterbodies
Commercial & Industrial Zones
Public Right of Way
Private Right of Way
Private Road Easements
Railroad
Encinitas Boundary
Sphere of Influence



Storm Water Infrastructure

- Streams (USGS)
- Creek
- Channel
- Stormdrains
- Catchbasin
- Cleanout
- Waterbodies
- Commercial & Industrial Zones

Monitoring Locations - Primary

- CBS-1 San Elijo JPA, South of Manchester Ave
- CBS-2 101 Channel to San Elijo Lagoon
- CBS-4 Ocean Cove Ct. Outfall
- CBS-7 Woodlake & Evergreen (Convergence)
- CBS-8 HOA Park @ 1002 Woodgrove
- CBS-9 East of Lake Dr, North of Wales Dr
- ENC-1 Moonlight - South Culvert
- ENC-10 Cottonwood Creek @ Del Taco
- ENC-11 Mossy
- ENC-12 Cottonwood Creek @ SDUHSD
- ENC-15 Encinitas Ranch Detention Basin
- ENC-17 Encinitas @ Quail Gardens Dr
- ENC-18 Puebla St @ La Mirada
- ENC-3 Hwy 101 & B St
- ENC-4 2nd St
- ENC-5 Cottonwood Creek Park South (Cottonwood Creek)
- ENC-6 Cottonwood Creek Park North (Moonlight Creek)
- ENC-8 3rd & B St
- ENC-9 Stuft Pizza
- ESC-1 Brookside Ln. @ Copper Creek
- ESC-2 Lone Jack Rd. @ Stratford Knoll
- ESC-5 820 Calle Santa Cruz
- LCS-1 Garden View @ El Camino Real
- LCS-2 Leucadia Blvd @ El Camino Real
- LCS-4 El Camino Real @ Mt. Vista
- LCS-5 El Camino Real @ Via Molena
- LCS-7 El Camino Real @ Grand Ave
- LCS-8 200 Turner Ave
- LUC-1 Ponto Beach @ Hwy 101/Leucadia Drainage Outfall
- LUC-10 Highway 101 @ Avocado
- LUC-3 Normandy @ Piraeus
- LUC-6 Piraeus Detention Basin
- LUC-8 Quail Hollow @ Paseo Elegante
- LUX-2 Tennis Club Dr. Outfall
- LUX-3 927 Elmview Dr.
- RSF-1 Encinitas Blvd @ Rancho Santa Fe
- RSF-4 La Bajada Dip
- SEL-2 MacKinnon Ranch
- SEL-3 Mira Costa College

Alternates

- CBS-3N Norfolk Dr @ Glen Park
- CBS-3S Norfolk Dr @ Glen Park
- CBS-5 Plastino Building @ San Elijo Lagoon
- ENC-14 Via Julita Outfall
- ENC-16 Encinitas Blvd @ Westlake
- ENC-2 Requeza St. @ I-5
- ENC-7 Saxony Place
- ESC-3 Double LL Ranch Rd
- ESC-4 Private Road east of Lone Jack
- LCS-3 Calle Acervo
- LCS-9 Orchard Wood Rd & Orchard Glen Cir
- LUC-4 Fox Point Detention Basin
- LUC-7 Quail Hollow & Saxony
- LUC-9 Leucadia Village @ Rockport Crt
- LUX-1 East Manchester @ El Camino Real
- SEL-5 Strawberry Fields

city of encinitas

2008 MS4 and Dry Weather Monitoring Stations Map

This map was produced by the City of Encinitas GIS and is designed for internal use only. The map is based on the best data available at the time of production and is not guaranteed to survey accuracy. City of Encinitas, SanGIS, SANDAG and other data are represented.

Proprietary information: Access to and use of this information is restricted by a sublicense agreement. No sale, transfer license, or assignment of this information is permitted.

Date of Map Production: July 2008

N

0 1,000 2,000 Feet

Coordinate System: California State Plane Feet, Zone 6 Datum: NAD83

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San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-1	**Latitude**	(e.g., 33.41174) 33.013611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	SEJPA Outfall	**Longitude**	(e.g., -117.35213) -117.27305555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/29/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:10 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☑ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.8	NH_3-N (mg/L)	0	NO_3-N (mg/L)	5	Ortho-PO_4 (mg/L)	**0.8**
pH (pH units)	7.76	TURB (NTU)	0.97	COND (mS/cm)	4.519	MBAS (mg/L)	**0.5**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	2	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-2	**Latitude**	(e.g., 33.41174) 33.016666666667	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Highway 101 Channel	**Longitude**	(e.g., -117.35213) -117.28138888889		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/01/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:45 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☑ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.6	NH_3-N (mg/L)	0.2	NO_3-N (mg/L)	5	Ortho-PO_4 (mg/L)	**0**
pH (pH units)	8.91	TURB (NTU)	11.2	COND (mS/cm)	5.32	MBAS (mg/L)	**.25**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	1	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Nearby construction project is de-watering their site

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-4	**Latitude**	(e.g., 33.41174) 33.009722222222	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Cardiff Cove	**Longitude**	(e.g., -117.35213) -117.26722222222		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/29/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	12:08	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.5	NH_3-N (mg/L)	0	NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	**0**
pH (pH units)	8.07	TURB (NTU)	1.22	COND (mS/cm)	7.55	MBAS (mg/L)	**.75**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	1.5	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-7	**Latitude**	(e.g., 33.41174) 33.031111111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Woodlake and Evergreen	**Longitude**	(e.g., -117.35213) -117.2825		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/29/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:07	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.2	NH_3-N (mg/L)	0.6	NO_3-N (mg/L)	2.0	Ortho-PO_4 (mg/L)	**0.2**
pH (pH units)	9.38	TURB (NTU)	1.22	COND (mS/cm)	3.030	MBAS (mg/L)	**.75**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Water was trickling through the storm drain channel**
1:1 dilution on NH3-N

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** ___**pH**_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-7	**Latitude**	(e.g., 33.41174) 33.031111111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Woodlake and Evergreen	**Longitude**	(e.g., -117.35213) -117.2825		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/30/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:45	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No **pH Only**

Water Temp (°C)	25.3	NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)	7.70	TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Water was trickling through the storm drain channel**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-8	**Latitude**	(e.g., 33.41174) 33.03062	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	HOA Park at 1002 Woodgrove	**Longitude**	(e.g., -117.35213) -117.26909		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/29/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:35	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☑ Bubbles/Foam	☑ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.5	NH_3-N (mg/L)	0.8	NO_3-N (mg/L)	15.0	Ortho-PO_4 (mg/L)	**0.4**
pH (pH units)	7.54	TURB (NTU)	10.6	COND (mS/cm)	4.46	MBAS (mg/L)	**0.75**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Investigated flow upstream saw a lot of algae/plant growth in storm drain channel leading to nursery.**
1:1 dilution on NH3-N

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

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   Single- and multi-family homes, mobile home parks, etc.

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   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** Nitrate ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-8	**Latitude**	(e.g., 33.41174) 33.03062	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	HOA Park at 1002 Woodgrove	**Longitude**	(e.g., -117.35213) -117.26909		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/30/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:15	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.9	NH_3-N (mg/L)		NO_3-N (mg/L)	3.0	Ortho-PO_4 (mg/L)	
pH (pH units)	7.12	TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Clean Water Program inspector to investigate possible source of over-fertilization and over-irrigation from Rancho Verde Nursery located upstream.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

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   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-9	**Latitude**	(e.g., 33.41174) 33.08005	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Lake Dr. and Wales	**Longitude**	(e.g., -117.35213) -117.29813		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/18/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:10 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☑ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.6	NH_3-N (mg/L)	0.6	NO_3-N (mg/L)	0	Ortho-PO_4 (mg/L)	**0.9**
pH (pH units)	7.86	TURB (NTU)	2.73	COND (mS/cm)	1.257	MBAS (mg/L)	**0.25**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-1	**Latitude**	(e.g., 33.41174) 33.04805	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Moonlight Beach	**Longitude**	(e.g., -117.35213) -117.29861		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/1/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:18	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑Partly Cloudy ☐ Overcast ☐ Fog

Tide ☐ N/A ☑ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 2.2** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☑ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other	
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other	
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other	
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other	
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☑ Other	**Organic matter**
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other	
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	17.1	NH_3-N (mg/L)	0.6	NO_3-N (mg/L)	7.5	Ortho-PO_4 (mg/L)	**0.2**
pH (pH units)	8.06	TURB (NTU)	2.43	COND (mS/cm)	4.787	MBAS (mg/L)	**0.5**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	30	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

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   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

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   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-10	**Latitude**	(e.g., 33.41174) 33.047777777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Cottonwood Creek @ Del Taco	**Longitude**	(e.g., -117.35213) -117.28583333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/15/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	12:20 p.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.3	NH_3-N (mg/L)	0.2	NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	**0.8**
pH (pH units)	7.62	TURB (NTU)	21.0	COND (mS/cm)	3.225	MBAS (mg/L)	**.75**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	7.5	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Evidence of encampments including trash, used toilet paper and human feces.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

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   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-11	**Latitude**	(e.g., 33.41174) 33.047222222222	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Requeza Channel – West of Public Works Yard	**Longitude**	(e.g., -117.35213) -117.28583333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/15/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	12:46 p.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☑ Algae ☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.7	NH_3-N (mg/L)	0.2	NO_3-N (mg/L)	7.5	Ortho-PO_4 (mg/L)	**0**
pH (pH units)	8.26	TURB (NTU)	1.00	COND (mS/cm)	8.17	MBAS (mg/L)	**.75**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	2	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Excessive algae observed at this site.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-12	**Latitude**	(e.g., 33.41174) 33.048611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Cottonwood Creek Channel @ SDUHSD	**Longitude**	(e.g., -117.35213) -117.27777777778		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/03/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:25 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.0	NH_3-N (mg/L)	0.4	NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	**1.5**
pH (pH units)	7.86	TURB (NTU)	5.28	COND (mS/cm)	1.978	MBAS (mg/L)	**.25**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-15	**Latitude**	(e.g., 33.41174) 33.055	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Encinitas Ranch Detention Basin	**Longitude**	(e.g., -117.35213) -117.27833333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/15/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:40 p.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	27.7	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)	7.5	Ortho-PO_4 (mg/L)	**> 10**
pH (pH units)	8.06	TURB (NTU)	2.23	COND (mS/cm)	4.044	MBAS (mg/L)	**.5**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	8.2	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For ___Orthophosphate___** ☐ **IC/ID Follow-Up For _____**

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-15	**Latitude**	(e.g., 33.41174) 33.055	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Encinitas Ranch Detention Basin	**Longitude**	(e.g., -117.35213) -117.27833333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/17/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	16:45 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.0	NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	**> 10**
pH (pH units)	7.81	TURB (NTU)	3.74	COND (mS/cm)	3.010	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	8.2	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Continued exceedance of orthophosphate. Clean Water Program inspector to conduct investigation upstream. Investigate residential areas and conduct full commercial inspections of nurseries and golf course upstream.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-17	**Latitude**	(e.g., 33.41174) 33.047777777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Sunshine Nursery (NE Corner of Enc. Blvd. and Quail Gardens Dr.)	**Longitude**	(e.g., -117.35213) -117.27833333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/03/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:03 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.8	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)	3	Ortho-PO_4 (mg/L)	**3**
pH (pH units)	7.96	TURB (NTU)	10.1	COND (mS/cm)	2.796	MBAS (mg/L)	**.5**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Trickle flow, manhole 20 ft. deep, confined space with unknown flow.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For Ortho-PO_4** ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-17	**Latitude**	(e.g., 33.41174) 33.047777777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Sunshine Nursery	**Longitude**	(e.g., -117.35213) -117.27833333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/4/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	16:09 p.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No **Phosphate Only**

Water Temp (°C)	26.9	NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	**2.5**
pH (pH units)	7.90	TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Trickle flow, manhole 20 ft. deep, confined space with unknown flow.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-18	**Latitude**	(e.g., 33.41174) 33.06155	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Puebla St. and La Mirada St.	**Longitude**	(e.g., -117.35213) -117.28860		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/03/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:33 a.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.0	NH_3-N (mg/L)	0.4	NO_3-N (mg/L)	3	Ortho-PO_4 (mg/L)	**0.8**
pH (pH units)	7.87	TURB (NTU)	5.68	COND (mS/cm)	1.642	MBAS (mg/L)	**.5**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Trickle flow, manhole > 20 ft. deep, confined space with unknown flow.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☑ **Receiving Water**

Site ID	**ENC-3**	**Latitude**	(e.g., 33.41174) 33.048333333333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	**Pacific Coast Highway and B St.**	**Longitude**	(e.g., -117.35213) -117.29416666667		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	**9/2/08**	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:06 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☑ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.3	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)	20	Ortho-PO_4 (mg/L)	**0.1**
pH (pH units)	7.17	TURB (NTU)	4.35	COND (mS/cm)	4.705	MBAS (mg/L)	**.75**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	125	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **1 Coke bottle floating in the water**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** Nitrate ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☑ **Receiving Water**

Site ID	**ENC-3**	**Latitude**	(e.g., 33.41174) 33.048333333333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	**Pacific Coast Highway and B St.**	**Longitude**	(e.g., -117.35213) -117.29416666667		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	**9/3/08**	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:46 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No **Nitrate Only**

Water Temp (°C)	23.3	NH_3-N (mg/L)		NO_3-N (mg/L)	13	Ortho-PO_4 (mg/L)	
pH (pH units)	7.36	TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	125	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-4	**Latitude**	(e.g., 33.41174) 33.048055555556	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Second St.	**Longitude**	(e.g., -117.35213) -117.295		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/1/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:30	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☑ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	12.7	NH_3-N (mg/L)	0.6	NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	**1.5**
pH (pH units)	7.66	TURB (NTU)	5.16	COND (mS/cm)	1.354	MBAS (mg/L)	**0.5**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Cannot determine the flow at site because it is ponded.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☑ **Receiving Water**

Site ID	ENC-5	**Latitude**	(e.g., 33.41174) 33.048611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Cottonwood Creek South	**Longitude**	(e.g., -117.35213) -117.29		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/2/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:25 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☑ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☑ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.0	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)	7.5	Ortho-PO_4 (mg/L)	**0.2**
pH (pH units)	7.19	TURB (NTU)	2.88	COND (mS/cm)	4.386	MBAS (mg/L)	**0.75**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	10	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☑ **Receiving Water**

Site ID	ENC-6	**Latitude**	(e.g., 33.41174) 33.048888888889	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Moonlight Creek	**Longitude**	(e.g., -117.35213) -117.29		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/2/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:54 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☑ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.9	NH_3-N (mg/L)	0.6	NO_3-N (mg/L)	45	Ortho-PO_4 (mg/L)	**0.2**
pH (pH units)	7.18	TURB (NTU)	5.56	COND (mS/cm)	7.05	MBAS (mg/L)	**0.75**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	10	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** Nitrate ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☑ **Receiving Water**

Site ID	**ENC-6**	**Latitude**	(e.g., 33.41174) 33.048888888889	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	**Moonlight Creek**	**Longitude**	(e.g., -117.35213) -117.29		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	**9/3/08**	**TB Page**			**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:06 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☑ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No **Nitrate Only**

Water Temp (°C)	23.6	NH_3-N (mg/L)		NO_3-N (mg/L)	75	Ortho-PO_4 (mg/L)	
pH (pH units)	7.22	TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	10	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-7 (Alternate Site)	**Latitude**	(e.g., 33.41174) 33.055277777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Saxony Place	**Longitude**	(e.g., -117.35213) -117.28888888889		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	6/2/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	3:50 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☑ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☑ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☑ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.9	NH_3-N (mg/L)	10.0	NO_3-N (mg/L)	3.0	Ortho-PO_4 (mg/L)	**4.5**
pH (pH units)	7.41	TURB (NTU)	31.1	COND (mS/cm)	2.238	MBAS (mg/L)	**1.0**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0 (Ponded Water)	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Exceedances of Nitrate, Orthophosphate and MBAS. This site is near a nursery, adjacent to an HOA dog park and receives flow from Encinitas YMCA sport fields.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-7 (Alternate Site)	**Latitude**	(e.g., 33.41174) 33.055277777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Saxony Place	**Longitude**	(e.g., -117.35213) -117.28888888889		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	6/2/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	15:50 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☑ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☑ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☑ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.9	NH_3-N (mg/L)	10.0	NO_3-N (mg/L)	3.0	Ortho-PO_4 (mg/L)	**4.5**
pH (pH units)	7.41	TURB (NTU)	31.1	COND (mS/cm)	2.238	MBAS (mg/L)	**1.0**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0 (Ponded Water)	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Exceedances of Nitrate, Orthophosphate and MBAS. This site is near a nursery, adjacent to an HOA dog park and receives flow from Encinitas YMCA sport fields.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For: Nitrate, Orthophosphate & MBAS** ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-7 (Alternate Site)	**Latitude**	(e.g., 33.41174) 33.055277777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Saxony Place	**Longitude**	(e.g., -117.35213) -117.28888888889		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	6/3/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:32 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☑ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	18.3	NH_3-N (mg/L)	10.0	NO_3-N (mg/L)	3.0	Ortho-PO_4 (mg/L)	**5.5**
pH (pH units)	7.78	TURB (NTU)	22.4	COND (mS/cm)	2.381	MBAS (mg/L)	**.5**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Continued exceedances for Nitrates and Orthophosphates. Follow-up with community HOA to clean out adjacent concrete channel and reduce run-off irrigation from hillside, nearby nursery and Ecke YMCA sports park. Ask Clean Water Program inspector to conduct full commercial inspections at adjacent nursery and pet hotel.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For: Nitrate, Orthophosphate & MBAS** ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-7 (Alternate Site)	**Latitude**	(e.g., 33.41174) 33.055277777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Saxony Place	**Longitude**	(e.g., -117.35213) -117.28888888889		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	6/3/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:32 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☑ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	18.3	NH_3-N (mg/L)	10.0	NO_3-N (mg/L)	3.0	Ortho-PO_4 (mg/L)	**5.5**
pH (pH units)	7.78	TURB (NTU)	22.4	COND (mS/cm)	2.381	MBAS (mg/L)	**.5**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0 (Ponded Water)	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Continued exceedances for Nitrates and Orthophosphates. Follow-up with community HOA to clean out adjacent concrete channel and reduce run-off irrigation from hillside, nearby nursery and Ecke YMCA sports park. Ask Clean Water Program inspector to conduct full commercial inspections at adjacent nursery and pet hotel.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☐ **Confirmation For:** _____ ☑ **IC/ID Follow-Up For:** Nitrate & Orthophosphate

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-7 (Alternate Site)	**Latitude**	(e.g., 33.41174) 33.055277777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Saxony Place	**Longitude**	(e.g., -117.35213) -117.28888888889		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/7/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	15:45 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Site was dry-no flow or ponded water to sample. Follow-up actions included verifying appropriate maintenance of adjacent concrete channel on 6/24/08 and conducting full inspections of two nearby businesses to address run-off concerns.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☑ **Receiving Water**

Site ID	ENC-8	**Latitude**	(e.g., 33.41174) 33.048333333333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Third St. and B St.	**Longitude**	(e.g., -117.35213) -117.29611111111		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/2/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:20 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☑ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.2	NH_3-N (mg/L)	0.4	NO_3-N (mg/L)	15	Ortho-PO_4 (mg/L)	**0.2**
pH (pH units)	6.87	TURB (NTU)	4.63	COND (mS/cm)	4.396	MBAS (mg/L)	**.75**

Analytical Lab Samples Collected? ☑ **Yes** ☐**No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	50	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** Nitrate ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☑ **Receiving Water**

Site ID	**ENC-8**	**Latitude**	(e.g., 33.41174) 33.048333333333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	**Third St. and B St.**	**Longitude**	(e.g., -117.35213) -117.29611111111		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	**9/3/08**	**TB Page**			**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:35	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☑ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☑ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No **Nitrate Only**

Water Temp (°C)	24.3	NH_3-N (mg/L)		NO_3-N (mg/L)	18	Ortho-PO_4 (mg/L)	
pH (pH units)	7.45	TURB (NTU)		COND (mS/cm)	5.05	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	50	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-9	**Latitude**	(e.g., 33.41174) 33.048055555556	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Enc. Blvd. & Saxony Rd./Behind Oggi's Pizza	**Longitude**	(e.g., -117.35213) -117.28583333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/3/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	12:01 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☑ Other **Organic matter**

Deposits ☐ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	28.1	NH_3-N (mg/L)	0.4	NO_3-N (mg/L)	2	Ortho-PO_4 (mg/L)	**1.2**
pH (pH units)	7.87	TURB (NTU)	1.76	COND (mS/cm)	1.715	MBAS (mg/L)	**.25**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ESC-1	**Latitude**	(e.g., 33.41174) 33.05388	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Brookside Ln.	**Longitude**	(e.g., -117.35213) -117.21638		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/30/08	**TB Page**	1148		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:24 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 2.2** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☑ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	20.5	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)	0	Ortho-PO_4 (mg/L)	0.2
pH (pH units)	7.89	TURB (NTU)	4.13	COND (mS/cm)	2.875	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	100	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ESC-2	**Latitude**	(e.g., 33.41174) 33.05138	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Lone Jack Rd. @ Stratford Knoll	**Longitude**	(e.g., -117.35213) -117.22861		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/30/08	**TB Page**	1148		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:45 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 2.2** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☑ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☑ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.5	NH_3-N (mg/L)	0	NO_3-N (mg/L)	1.0	Ortho-PO_4 (mg/L)	0.4
pH (pH units)	7.33	TURB (NTU)	2.94	COND (mS/cm)	4.429	MBAS (mg/L)	0.5

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	118	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ESC-5	**Latitude**	(e.g., 33.41174) 33.05334	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Calle Santa Cruz	**Longitude**	(e.g., -117.35213) -117.22926		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/18/08	**TB Page**	1148		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:13 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 2.2** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.1	NH_3-N (mg/L)	0.0	NO_3-N (mg/L)	0.0	Ortho-PO_4 (mg/L)	0.2
pH (pH units)	7.58	TURB (NTU)	0.57	COND (mS/cm)	5.03	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Manhole >20 ft. deep, confined space cannot determine the flow.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☑ **Receiving Water**

Site ID	LCS-1	**Latitude**	(e.g., 33.41174) 33.058611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Garden View @ El Camino Real	**Longitude**	(e.g., -117.35213) -117.288605555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/10/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:19 p.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☑ Bubbles/Foam	☑ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.9	NH_3-N (mg/L)	1	NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	**0.8**
pH (pH units)	7.27	TURB (NTU)	10.0	COND (mS/cm)	2.174	MBAS (mg/L)	**.5**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For __Ammonia_____** ☐ **IC/ID Follow-Up For _____**

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☑ **Receiving Water**

Site ID	LCS-1	**Latitude**	(e.g., 33.41174) 33.058611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Garden View @ El Camino Real	**Longitude**	(e.g., -117.35213) -117.288605555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/14/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:55 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☑ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.3	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	0.6
pH (pH units)	7.62	TURB (NTU)	8.76	COND (mS/cm)	1.879	MBAS (mg/L)	.25

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Sample has a yellow color. Run a 1:1 to dilution for ammonia.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** __Bacteria_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☑ **Receiving Water**

Site ID	LCS-1	**Latitude**	(e.g., 33.41174) 33.058611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Garden View @ El Camino Real	**Longitude**	(e.g., -117.35213) -117.288605555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/15/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:25 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☑ Bubbles/Foam	☑ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)	23.3	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	0.6
pH (pH units)	7.62	TURB (NTU)	8.76	COND (mS/cm)	1.879	MBAS (mg/L)	.25

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☑ **Receiving Water**

Site ID	LCS-2	**Latitude**	(e.g., 33.41174) 33.068055555556	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Leucadia Blvd. @ El Camino Real	**Longitude**	(e.g., -117.35213) -117.26222222222		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	6/11/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	15:15 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☑ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.8	NH_3-N (mg/L)	0.2	NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	**0.8**
pH (pH units)	7.46	TURB (NTU)	0.59	COND (mS/cm)	2.118	MBAS (mg/L)	**.25**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	200	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☐ **Confirmation For** _____ ☑ **IC/ID Follow-Up For:** **Bacteria exceedance at LCS-1**

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☑ **Receiving Water**

Site ID	LCS-2	**Latitude**	(e.g., 33.41174) 33.068055555556	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Leucadia Blvd. @ El Camino Real	**Longitude**	(e.g., -117.35213) -117.26222222222		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/30/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:16 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.3	NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)	7.44	TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	200	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Bacteria sample results received on 7/31/08 are: Total Coliform = 7800, Fecal Coliform = 3200 and Entero = 2300**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-4	**Latitude**	(e.g., 33.41174) 33.051944444444	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Garden View @ El Camino Real (NE Corner of Intersection)	**Longitude**	(e.g., -117.35213) -117.26055555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	6/11/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:50 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☑ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☑ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☑ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.0	NH_3-N (mg/L)	0.5	NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	**1**
pH (pH units)	7.28	TURB (NTU)	5.68	COND (mS/cm)	3.788	MBAS (mg/L)	**.5**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Trickle flow, manhole > 20 ft. deep, confined space with unknown flow.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-5	**Latitude**	(e.g., 33.41174) 33.048888888889	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Via Molena @ El Camino Real	**Longitude**	(e.g., -117.35213) -117.26027777778		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/10/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:55 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.4	NH_3-N (mg/L)	0.8	NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	**0.8**
pH (pH units)	7.71	TURB (NTU)	16.2	COND (mS/cm)	3.223	MBAS (mg/L)	**1.0**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Over-irrigation from shopping mall across the street. No flow data available -manhole > 20 ft. deep, confined space. Analytical sample results received on 7/14/08 indicated a bacteria exceedance at this location. Conduct re-sample to confirm results on 7/14/08.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For MBAS and Bacteria** ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-5	**Latitude**	(e.g., 33.41174) 33.048888888889	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Via Molena @ El Camino Real	**Longitude**	(e.g., -117.35213) -117.26027777778		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/15/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:45 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.1	NH_3-N (mg/L)	0.4	NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	**0.6**
pH (pH units)	7.53	TURB (NTU)	13.9	COND (mS/cm)	2.231	MBAS (mg/L)	**0.5**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **No flow data available -manhole > 20 ft. deep, confined space. Continued bacteria exceedances at this site. Clean Water Program staff to conduct full commercial inspections of businesses in this area.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-7	**Latitude**	(e.g., 33.41174) 33.055833333333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	El Camino Real (South of La Entrada Lane)	**Longitude**	(e.g., -117.35213) -117.2625		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/30/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:47 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☑ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.1	NH_3-N (mg/L)	0.4	NO_3-N (mg/L)	2.0	Ortho-PO_4 (mg/L)	**0.2**
pH (pH units)	7.53	TURB (NTU)	21.9	COND (mS/cm)	2.691	MBAS (mg/L)	**0.5**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	61	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Analytical sample results received on 7/31/08 indicated a bacteria exceedance at this location.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-8	**Latitude**	(e.g., 33.41174) 33.04693	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	200 Turner Ave.	**Longitude**	(e.g., -117.35213) -117.25507		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/18/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:41 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.4	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)	0.0	Ortho-PO_4 (mg/L)	**0.5**
pH (pH units)	7.07	TURB (NTU)	15.1	COND (mS/cm)	2.363	MBAS (mg/L)	**0.5**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **No flow data available -manhole > 20 ft. deep, confined space.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-1	**Latitude**	(e.g., 33.41174) 33.082777777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Ponto Beach Detention Basin	**Longitude**	(e.g., -117.35213) -117.30944444444		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/18/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:02 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other **Organic Matter**
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☑ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.9	NH_3-N (mg/L)	0.0	NO_3-N (mg/L)	15	Ortho-PO_4 (mg/L)	**0.2**
pH (pH units)	7.23	TURB (NTU)	0.61	COND (mS/cm)	2.657	MBAS (mg/L)	**0.25**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **No flow –detention pond.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** Nitrate ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-1	**Latitude**	(e.g., 33.41174) 33.082777777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Ponto Beach Detention Basin	**Longitude**	(e.g., -117.35213) -117.30944444444		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/19/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	09:30 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other **Organic Matter**
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☑ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☑ Other Crawdad

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.8	NH_3-N (mg/L)		NO_3-N (mg/L)	5.0	Ortho-PO_4 (mg/L)	
pH (pH units)	7.26	TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **No flow –detention pond.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-10	**Latitude**	(e.g., 33.41174) 33.07522	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Avocado and Highway 101	**Longitude**	(e.g., -117.35213) -117.30565		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/18/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:30 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.0	NH_3-N (mg/L)	0.0	NO_3-N (mg/L)	12.0	Ortho-PO_4 (mg/L)	0.2
pH (pH units)	6.96	TURB (NTU)	0.29	COND (mS/cm)	2.626	MBAS (mg/L)	0.5

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Manhole >20 ft. deep, confined space cannot determine the flow**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For: Nitrate** ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-10	**Latitude**	(e.g., 33.41174) 33.07522	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Avocado and Highway 101	**Longitude**	(e.g., -117.35213) -117.30565		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/19/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:05 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.0	NH_3-N (mg/L)		NO_3-N (mg/L)	7.5	Ortho-PO_4 (mg/L)	
pH (pH units)	6.94	TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Manhole >20 ft. deep, confined space cannot determine the flow**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-3	**Latitude**	(e.g., 33.41174) 33.068611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Piraeus and Normandy	**Longitude**	(e.g., -117.35213) -117.29388888889		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	6/2/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:45 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.4	NH_3-N (mg/L)	0.4	NO_3-N (mg/L)	3.0	Ortho-PO_4 (mg/L)	**0**
pH (pH units)	7.77	TURB (NTU)	3.54	COND (mS/cm)	1.168	MBAS (mg/L)	**0**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	1	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-6	**Latitude**	(e.g., 33.41174) 33.081666666667	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Piraeus Detention Basin	**Longitude**	(e.g., -117.35213) -117.29666666667		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	6/2/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:15 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **No sample collected. Site was completely dry.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-8	**Latitude**	(e.g., 33.41174) 33.07496	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Quail Hollow Dr.	**Longitude**	(e.g., -117.35213) -117.28397		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/10/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:29 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.0	NH_3-N (mg/L)	0.6	NO_3-N (mg/L)	5	Ortho-PO_4 (mg/L)	0.4
pH (pH units)	7.82	TURB (NTU)	2.76	COND (mS/cm)	4.160	MBAS (mg/L)	0.50

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Manhole >20 ft. deep, confined space cannot determine the flow. Bacteria sample results received on 7/11/08 are: Total Coliform = 143,000, Fecal Coliform = 98,000 and Entero = 28,000.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For __Bacteria________** ☐ **IC/ID Follow-Up For _____**

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-8	**Latitude**	(e.g., 33.41174) 33.07496	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Quail Hollow Dr.	**Longitude**	(e.g., -117.35213) -117.28397		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/15/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	8:47 a.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Manhole >20 ft. deep, confined space cannot determine the flow.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-9 (Alternate Site)	**Latitude**	(e.g., 33.41174) 33.08005	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Leucadia Village (Between Rockport Ct. and Nantucket)	**Longitude**	(e.g., -117.35213) -117.29814		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/13/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:08 a.m.	**Observer**	MP/KR/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.4	NH_3-N (mg/L)	1.5	NO_3-N (mg/L)	37.5	Ortho-PO_4 (mg/L)	> 10
pH (pH units)	7.38	TURB (NTU)	1.80	COND (mS/cm)	1.718	MBAS (mg/L)	1.0

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Manhole >20 ft. deep, confined space cannot determine the flow.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For: Ammonia, Nitrate, Orthophosphate and MBAS** ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-9 (Alternate Site)	**Latitude**	(e.g., 33.41174) 33.08005	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Leucadia Village (Between Rockport Ct. and Nantucket)	**Longitude**	(e.g., -117.35213) -117.29814		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/14/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:45 a.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☐ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **No water to sample, box is completely dry.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUX-2	**Latitude**	(e.g., 33.41174) 33.02833	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Sage Canyon Dr.	**Longitude**	(e.g., -117.35213) -117.25527		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/13/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:00 p.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.0	NH_3-N (mg/L)	0.4	NO_3-N (mg/L)	1.0	Ortho-PO_4 (mg/L)	**0.1**
pH (pH units)	8.34	TURB (NTU)	17.2	COND (mS/cm)	4.361	MBAS (mg/L)	**0.75**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUX-3	**Latitude**	(e.g., 33.41174) 33.03404	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	927 Elmview Dr.	**Longitude**	(e.g., -117.35213) -117.25972		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/13/08	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	12:30 p.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **No flow to sample. Storm drain is completely dry.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	RSF-1	**Latitude**	(e.g., 33.41174) 33.0375	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Peppertree Lane	**Longitude**	(e.g., -117.35213) -117.23861		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/23/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	12:30 p.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☑ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)	29.5	NH_3-N (mg/L)	0.2	NO_3-N (mg/L)	0	Ortho-PO_4 (mg/L)	**0.6**
pH (pH units)	8.74	TURB (NTU)	3.51	COND (mS/cm)	1.475	MBAS (mg/L)	**0.25**

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **There was a trickle flow at this site.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☑ **Receiving Water**

Site ID	RSF-4	**Latitude**	(e.g., 33.41174) 33.03444	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	La Bajada Dip	**Longitude**	(e.g., -117.35213) -117.23583		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/23/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:30 p.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.2	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)	0	Ortho-PO_4 (mg/L)	0.2
pH (pH units)	7.86	TURB (NTU)	10.3	COND (mS/cm)	2.497	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Difficult to determine flow. Water was ponded at sample location.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	SEL-2	**Latitude**	(e.g., 33.41174) 33.01333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	McKinnon Ranch	**Longitude**	(e.g., -117.35213) -117.27167		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/23/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:25 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.4	NH_3-N (mg/L)	0.4	NO_3-N (mg/L)	0	Ortho-PO_4 (mg/L)	**0.1**
pH (pH units)	7.40	TURB (NTU)	20.3	COND (mS/cm)	5.63	MBAS (mg/L)	**0.5**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Water is ponded at this location.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	SEL-3	**Latitude**	(e.g., 33.41174) 33.01639	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Mira Costa College Detention Basin	**Longitude**	(e.g., -117.35213) -117.25694		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/13/08	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:15 p.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☑ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.4	NH_3-N (mg/L)	0.6	NO_3-N (mg/L)	1.0	Ortho-PO_4 (mg/L)	**0**
pH (pH units)	8.60	TURB (NTU)	44.4	COND (mS/cm)	5.11	MBAS (mg/L)	**0.5**

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **No flow- detention pond.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

Appendix C-3 2008 Dry Weather Monitoring Analytical Results

Station ID	Sample Date	Ammonia (mg/L)	Conductivity (mS/cm)	MBAS (mg/L)	Nitrate (mg/L)	Orthophosphate (mg/L)	pH (pH)	Water Temperature (°C)	Turbidity (NTU)	Cadmium (µg/L)	Copper (µg/L)	Lead (µg/L)	Zinc (µg/L)	Oil & Grease (mg/L)	Chlorpyrifos (ng/L)	Diazinon (ng/L)	Hardness, Total (mg/L)	Enterococcus (cfu/100 ml)	Fecal Coliform (cfu/100 ml)	Total Coliform (cfu/100 ml)
CBS-1	7/29/2008	0	4.519	0.5	5	0.8	7.76	23.8	0.97	NT	NT	NT	NT	NT	NT	NT	NT	1650	1200	E>1200
CBS-2	7/1/2008	0.2	**5.32**	0.25	5	0	8.91	26.6	11.2	ND	ND	ND	ND	ND	ND	ND	620	1890	790	E>790
CBS-4	7/29/2008	0	**7.55**	0.75	5	0	8.07	24.5	1.22	NT	NT	NT	NT	NT	NT	NT	NT	1050	800	800
CBS-7	7/29/2008	0.6	3.03	0.75	2	0.2	**9.38**	26.2	1.22	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
CBS-7	7/30/2008	NT	NT	NT	NT	NT	7.7	25.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	6450	2900	4200
CBS-8	7/29/2008	0.8	4.46	0.75	**15**	0.4	7.54	24.5	10.6	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
CBS-8	7/30/2008	NT	NT	NT	3	NT	7.12	22.9	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
CBS-9	8/18/2008	0.6	1.257	0.25	0	0.9	7.86	24.6	2.73	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-1	7/1/2008	0.6	4.787	0.5	7.5	0.2	8.06	17.1	2.43	ND	ND	ND	ND	ND	ND	ND	1040	200	3400	7200
ENC-10	7/15/2008	0.2	3.225	0.75	5	0.8	7.62	25.3	21	ND	0.021	ND	0.027	ND	ND	ND	680	4000	11000	9000
ENC-11	7/15/2008	0.2	**8.17**	0.75	7.5	0	8.26	26.7	1	ND	0.012	ND	ND	ND	ND	ND	1760	4000	1000	1000
ENC-12	9/3/2008	0.4	1.978	0.25	5	1.5	7.86	24	5.28	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-15	7/15/2008	0.3	4.044	0.5	7.5	**10**	8.06	27.7	2.23	ND	0.018	ND	0.074	ND	ND	ND	980	2000	4000	10000
ENC-15	7/17/2008	NT	3.01	NT	NT	**10**	7.81	26	3.74	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-17	9/3/2008	0.3	2.796	0.5	3	**3**	7.96	23.8	10.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-17	9/4/2008	NT	NT	NT	NT	**2.5**	7.9	26.9	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-18	9/3/2008	0.4	1.642	0.5	3	0.8	7.87	23	5.68	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-3	9/2/2008	0.3	4.705	0.75	**20**	0.1	7.17	21.3	4.35	NT	NT	NT	NT	NT	NT	NT	NT	1600	4000	4800
ENC-3	9/3/2008	NT	NT	NT	**13**	NT	7.36	23.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-4	7/1/2008	0.6	1.354	0.5	5	1.5	7.66	12.7	5.16	ND	ND	ND	0.069	ND	ND	ND	340	200	1200	8200
ENC-5	9/2/2008	0.3	4.386	0.75	7.5	0.2	7.19	22	2.88	NT	NT	NT	NT	NT	NT	NT	NT	1600	2400	6000
ENC-6	9/2/2008	0.6	**7.05**	0.75	**45**	0.2	7.18	20.9	5.56	NT	NT	NT	NT	NT	NT	NT	NT	800	10000	22000
ENC-6	9/3/2008	NT	NT	NT	**75**	NT	7.22	23.6	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-7	6/2/2008	**10**	2.238	**1**	3	**4.5**	7.41	23.9	31.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-7	6/3/2008	**10**	2.381	0.5	3	**5.5**	7.78	18.3	22.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-7	7/7/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ENC-8	9/2/2008	0.4	4.396	0.75	**15**	0.2	6.87	23.2	4.63	NT	NT	NT	NT	NT	NT	NT	NT	600	3000	9400
ENC-8	9/3/2008	NT	**5.05**	NT	**18**	NT	7.45	24.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-9	9/3/2008	0.4	1.715	0.25	2	1.2	7.87	28.1	1.76	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ESC-1	7/30/2008	0.3	2.875	0.25	0	0.2	7.89	20.5	4.13	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ESC-2	7/30/2008	0	4.429	0.5	1	0.4	7.33	22.5	2.94	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ESC-5	8/18/2008	0	**5.03**	0.25	0	0.2	7.58	23.1	0.57	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-1	7/10/2008	**1**	2.174	0.5	5	0.8	7.27	23.9	10	ND	0.013	ND	ND	ND	ND	0.0529	800	5600	5000	**67000**
LCS-1	7/14/2008	0.3	1.879	0.25	5	0.6	7.62	23.3	8.76	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-1	7/15/2008	0.3	1.879	0.25	5	0.6	7.62	23.3	8.76	NT	NT	NT	NT	NT	NT	NT	NT	**24000**	**40000**	37000
LCS-2	6/11/2008	0.2	2.118	0.25	5	0.8	7.46	22.8	0.59	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-2	7/30/2008	NT	NT	NT	NT	NT	7.44	22.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	2300	3200	7800
LCS-4	6/11/2008	0.5	3.788	0.5	5	1	7.28	24	5.68	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-5	7/10/2008	0.8	3.223	**1**	5	0.8	7.71	24.4	16.2	ND	0.012	ND	0.024	ND	ND	ND	720	**16500**	**47000**	48000
LCS-5	7/15/2008	0.4	2.231	0.5	5	0.6	7.53	24.1	13.9	NT	NT	NT	NT	NT	NT	NT	NT	**73000**	**47000**	**86000**
LCS-7	7/30/2008	0.4	2.691	0.5	2	0.2	7.53	24.1	21.9	NT	NT	NT	NT	NT	NT	NT	NT	**65000**	**38000**	**78000**
LCS-8	8/18/2008	0.3	2.363	0.5	0	0.5	7.07	23.4	15.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-1	8/18/2008	0	2.657	0.25	**15**	0.2	7.23	22.9	0.61	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-1	9/19/2008	NT	NT	NT	5	NT	7.26	21.8	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-10	8/18/2008	0	2.626	0.5	**12**	0.2	6.96	23	0.29	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-10	8/19/2008	NT	NT	NT	7.5	NT	6.94	22	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-3	6/2/2008	0.4	1.168	0	3	0	7.77	22.4	3.54	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-6	6/2/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
LUC-8	7/10/2008	0.6	4.16	0.5	5	0.4	7.82	25	2.76	ND	0.012	ND	0.029	ND	ND	ND	720	**28000**	**98000**	**143000**
LUC-8	7/15/2008	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	8000	11000	22000
LUC-9	8/13/2008	**1.5**	1.718	**1**	**37.5**	**10**	7.38	23.4	1.8	NT	NT	NT	NT	NT	NT	NT	NT	7000	6800	17200
LUC-9	8/14/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
LUX-2	8/13/2008	0.4	4.361	0.75	1	0.1	8.34	24	17.2	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUX-3	8/13/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
RSF-1	7/23/2008	0.2	1.475	0.25	0	0.6	8.74	29.5	3.51	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
RSF-4	7/23/2008	0.3	2.497	0.25	0	0.2	7.86	22.2	10.3	ND	0.012	ND	ND	ND	ND	ND	740	680	1350	4200
SEL-2	7/23/2008	0.4	**5.63**	0.5	0	0.1	7.4	21.4	20.3	ND	0.012	ND	ND	ND	ND	ND	2000	200	190	1000
SEL-3	8/13/2008	0.6	**5.11**	0.5	1	0	8.6	24.4	44.4	NT	NT	NT	NT	NT	NT	NT	NT	600	8600	7200

Notes :	ND	Indicates Analyte was Not Detected above the reporting limit
	NS	Indicates No Sample was taken
	NT	Indicates analyte was Not Tested at that site
	J	Indicates associated value is an estimated quantity
	E>	Indicates associated value is an estimate
	Bold	Indicates value exceeded Action Levels

Trash Assessment Form

SITE ID: _____CBS-1_____ **DATE:** _____7/29/08_____

LOCATION: _____SEJPA OUTFALL_____ **TIME:** _____11:10_____

OBSERVER: _____MP/KR_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____N/A_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____10X10_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: _____**CBS-2**_____ **DATE:** _____**7/1/08**_____

LOCATION: ___**HWY 101 CHANNEL**_____ **TIME:** _____**10:55**_____

OBSERVER: _____**MP**_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):___**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**40X10**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☐ **RECEIVING WATER** ☑ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____CBS-4_____ **DATE:** _____7/29/08_____

LOCATION: _____CARDIFF COVE_____ **TIME:** _____12:08_____

OBSERVER: _____MP/KR_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____N/A_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____20X20_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments: Cigarette butts, fabric/clothing, and food packing present

Trash Assessment Form

SITE ID: _____CBS-7_____ **DATE:** _____7/29/08_____

LOCATION: _____WOODLAKE AND EVERGREEN____ **TIME:** _____13:07_____

OBSERVER: _____MP/KR_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____N/A_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____30X30_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____CBS-8_____ DATE: _____7/29/08_____

LOCATION: _____HOA PARK @ 1002 WOODGROVE____ TIME: ____13:35_____

OBSERVER: _____MP/KR_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____N/A_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____50X10_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**CBS-9**_____ **DATE:** _____**8/18/08**_____

LOCATION: _____**LAKE DR & WALES**____ **TIME:** ____**11:10**_____

OBSERVER: _____**MP/CN**_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**10X10**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ___ENC-1_____DATE: __7/1/08_____

LOCATION: _MOONLIGHT BEACH_____TIME: __14:18_____

OBSERVER: __MP_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):__N/A_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):___30X10_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☐ **RECEIVING WATER** ☑ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☑ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: Abundant pieces of small plastic and Styrofoam.

Trash Assessment Form

SITE ID: ____ENC-10_____ **DATE:** _____7/15/08_____

LOCATION: _COTTONWOOD CREEK @ DEL TACO__ **TIME:** ___12:20_____

OBSERVER: ___MP/ME_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):__N/A_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____20X20_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☐ **RECEIVING WATER** ☑ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☑ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☑ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts	**3**	☑	☑								☑	
Construction												
Fabric/Clothing												
Food Packaging	**2**	☑	☑								☑	
Food Waste												
Household	**1**	☑	☑								☑	
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: There was evidence of a recent encampment at site. Trash included food packaging, cigarette butts, human waste, and toilet paper.

Trash Assessment Form

SITE ID: _____**ENC-11**_____ **DATE:** _____**7/15/08**_____

LOCATION: _____**REQUEZA CHANNEL**____ **TIME:** _____**12:46**_____

OBSERVER: _____**MP/ME** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**20X20**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☐ **RECEIVING WATER** ☑ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**ENC-12**_____ **DATE:** _____**9/3/08**_____

LOCATION: _____**COTTONWOOD CREEK CHANNEL @ SDUHSD**____**TIME:** ____**11:25**_____

OBSERVER: _____**MP/CN** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**5X5 MANHOLE**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: _____**ENC-15**_____ **DATE:** _____**7/15/08**_____

LOCATION: _____**ENC RANCH DETN BASIN**____ **TIME:** ____**13:40**_____

OBSERVER: _____**MP** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**10X10**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**ENC-17**_____ **DATE:** _____**9/3/08**_____

LOCATION: _____**SUNSHINE NURSERY**____ **TIME:** ____**13:03**_____

OBSERVER: _____**MP/CN** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**5X5 MANHOLE**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: _____**ENC-18**_____ **DATE:** _____**9/3/08**_____

LOCATION: _____**PUEBLA ST. & LA MIRADA**____ **TIME:** ____**09:33**_____

OBSERVER: _____**MP/CN** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**5X5 MANHOLE**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: _____**ENC-3**_____ **DATE:** _____**9/2/08**_____

LOCATION: _____**COAST HWY & B ST**____ **TIME:** _____**10:06**_____

OBSERVER: _____**MP/KR** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**50X30**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☐ **RECEIVING WATER** ☑ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: _____**ENC-4**_____ **DATE:** _____**7/1/08**_____

LOCATION: _____**2ND STREET**____ **TIME:** ____**13:35**_____

OBSERVER: _____**MP** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):____**10X10**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**ENC-5**_____ **DATE:** _____**9/2/08**_____

LOCATION: _____**COTTONWOOD CREEK PARK SOUTH**____ **TIME:** _____**10:25**_____

OBSERVER: _____**MP/KR** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**50X30**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☐ **RECEIVING WATER** ☑ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: _____**ENC-6**_____ **DATE:** _____**9/2/08**_____

LOCATION: _____**MOONLIGHT CREEK**____ **TIME:** _____**10:54**_____

OBSERVER: _____**MP/KR** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**30X15**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☐ **RECEIVING WATER** ☑ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**ENC-7 (ALT)**_____ **DATE:** _____**6/2/08**_____

LOCATION: _____**SAXONY PLACE**____ **TIME:** ____**15:50**_____

OBSERVER: _____**MP/CN** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**20X20**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____ENC-8_____ DATE: _____9/2/08_____

LOCATION: _____3RD ST & B ST____ TIME: _____11:20_____

OBSERVER: _____MP/KR _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____N/A_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____50X30_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☐ **RECEIVING WATER** ☑ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____ENC-9_____ DATE: _____9/3/08_____

LOCATION: _____ENC. BLVD & SAXONY____ TIME: ____12:01_____

OBSERVER: _____MP/CN _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____N/A_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____40X10_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**ESC-1**_____ **DATE:** _____**7/30/08**_____

LOCATION: _____**BROOKSIDE LN**____ **TIME:** _____**10:24**_____

OBSERVER: _____**MP/CN** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**30X30**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☐ **RECEIVING WATER** ☑ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: _____**ESC-2**_____ **DATE:** _____**7/30/08**_____

LOCATION: _____**LONE JACK RD @ STRATFORD KNOLL**____ **TIME:** _____**10:45**_____

OBSERVER: _____**MP/CN** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**50X20**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**ESC-5**_____ **DATE:** _____**8/18/08**_____

LOCATION: _____**CALLE SANTA CRUZ**____ **TIME:** _____**10:13**_____

OBSERVER: _____**MP/CN** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**5X5**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**LCS-1**_____ **DATE:** _____**7/10/08**_____

LOCATION: _____**GARDEN VIEW @ ECR**____**TIME:** _____**13:19**_____

OBSERVER: _____**MP/KR** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**30X10**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☐ **RECEIVING WATER** ☑ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**LCS-2**_____ **DATE:** _____**6/11/08**_____

LOCATION: _____**LEUCADIA BLVD & ECR**____ **TIME:** _____**15:15**_____

OBSERVER: _____**MP/CN** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**20X20**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☐ **RECEIVING WATER** ☑ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: _____**LCS-5**_____ **DATE:** _____**7/10/08**_____

LOCATION: _____**VIA MOLENA @ ECR**____ **TIME:** ____**11:55**_____

OBSERVER: _____**MP/KR** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**2X2 MANHOLE**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: _____LCS-7_____ DATE: _____7/30/08_____

LOCATION: _ECR (SOUTH OF LA ENTRADA LN)_____ TIME: _____11:47_____

OBSERVER: _____MP/CN_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):___N/A_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____100X20_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments: food packaging waste on site

Trash Assessment Form

SITE ID: _____**LCS-8**_____ **DATE:** _____**8/18/08**_____

LOCATION: _____**TURNER AVE**____ **TIME:** ____**10:41**_____

OBSERVER: _____**MP/CN** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**5X5 MANHOLE**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: _____**LUC-1**_____ **DATE:** _____**8/18/08**_____

LOCATION: _____**PONTO BEACH DETN BASIN**____ **TIME:** ____**13:02**_____

OBSERVER: _____**MP/CN** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**30X30**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**LUC-10**_____ **DATE:** _____**8/18/08**_____

LOCATION: _____**HWY 101 & AVOCADO**____ **TIME:** _____**09:30**_____

OBSERVER: _____**MP/CN** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):___**5X5**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: _____**LUC-3**_____ **DATE:** _____**6/2/08**_____

LOCATION: _____**PIRAEUS & NORMANDY**____ **TIME:** ____**13:45**_____

OBSERVER: _____**MP/CN** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**100X10**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**LUC-6**_____ **DATE:** _____**6/2/08**_____

LOCATION: _____**PIRAEUS DETN BASIN**____ **TIME:** ____**13:15**_____

OBSERVER: _____**MP/CN** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**100X10**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: _____**LUC-8**_____ **DATE:** _____**7/10/08**_____

LOCATION: _____**QUAIL HOLLOW DR**____ **TIME:** ____**10:29**_____

OBSERVER: _____**MP/KR** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**2X2 MANHOLE**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**LUC-9**_____ **DATE:** _____**8/13/08**_____

LOCATION: _____**LEUCADIA VILLAGE**____ **TIME:** _____**10:08**_____

OBSERVER: _____**MP/KR** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**5X5**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**LUX-2**_____ **DATE:** _____**8/13/08**_____

LOCATION: _____**SAGE CANYON DR**____ **TIME:** _____**13:00**_____

OBSERVER: _____**MP/KR** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**50X50**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**LUX-3**_____ **DATE:** _____**8/13/08**_____

LOCATION: _____**927 ELMVIEW DR**____ **TIME:** _____**12:30**_____

OBSERVER: _____**MP/KR** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**5X5**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: ___RSF-1_____ DATE: __7/23/08_____

LOCATION: _PEPPERTREE LANE_____ TIME: __13:40_____

OBSERVER: __MP/CN_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):__N/A_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):___50X20_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments: Food packaging waste and cigarette butts observed at site.

Trash Assessment Form

SITE ID: _____RSF-4_____ **DATE:** _____7/23/08_____

LOCATION: ___LA BAJADA DIP_____ **TIME:** _____13:30_____

OBSERVER: _____MP/CN_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):___N/A_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____20X50_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☑ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: Food packaging, fabric/clothing, and an abandoned bicycle found on site.

Trash Assessment Form

SITE ID: _____SEL-2_____ **DATE:** _____7/23/08_____

LOCATION: _____MACKINNON RANCH____ **TIME:** _____10:25_____

OBSERVER: _____MP/CN _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____N/A_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____10X10_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☐ **RECEIVING WATER** ☑ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**SEL-3**_____ **DATE:** _____**8/13/08**_____

LOCATION: _____**MIRA COSTA COLLEGE DETN**____ **TIME:** ____**13:15**_____

OBSERVER: _____**MP/KR**_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**30X30**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Threat to Human Health and/or Aquatic Health	
☐ **Threat Human Health**	Site poses a threat to human health via swimming, wading, or walking through the area. Trash and debris has the potential to contain chemicals that may bioaccumulate, transmit dangerous bacteria (e.g. medical waste, diapers, human waste), or has the potential for physical harm (sharps, entanglement, nails, etc…). Comments should be added for clarification.
☐ **Threat to Aquatic Health**	Site poses a threat to aquatic health or other wildlife (via contact, ingestion, entanglement, etc...) from the trash and debris present. Trash and debris such as small floatable material that is persistent and can be transported long distances may resemble food and may be ingested. Wire, plastic, fishing line, and other material that has the potential for entanglement. Oil and other visible chemicals or chemical containers falls in this category. Comments should be added for clarification.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Discussion of Nitrate-Nitrogen and Conductivity Exceedances

On September 25, 2007 the City of Encinitas received comments on the 2005-2006 Jurisdictional Urban Runoff Management Program Annual Report. This appendix has been prepared as a formal response to the following comment:

The Annual Report states that the above action-level nitrate and conductivity measurements, obtained at several monitoring sites, are attributable to inflow of groundwater. In future Annual Reports please provide data demonstrating that groundwater in the vicinity of the monitoring sites has elevated nitrate and conductivity levels. Also, indicate what the City would consider to be the 'above-groundwater' action level for these constituents, i.e., the levels that would warrant follow-up action in areas with elevated nitrate and conductivity.

This following discussion describes the information and data used by the City of Encinitas to identify the inflow of groundwater as a likely source for the action level exceedances of nitrate and conductivity measurements at six dry weather monitoring stations. The information presented includes background information, data collected throughout the course of the Dry Weather Program, historical land use data, and regional data. Sources of nitrate-nitrogen have been identified as primarily groundwater and fertilizer-laden nursery and residential irrigation run-off.

Background Information

The City of Encinitas has implemented a Dry Weather Monitoring Program for 6 consecutive years. The dry weather program includes field screening and sampling throughout the storm water conveyance system to identify illicit connections and the need for follow-up investigations. Dry weather monitoring is conducted annually at each selected location during the period from May 1 to September 30. The City monitors 52 sites within its jurisdiction. In addition to the dry weather monitoring in 2002, the city conducted an urban runoff water quality assessment of the Cottonwood Creek watershed. This project consisted of three consecutive weeks of sampling at ten sites that coincided with sampling at the dry weather monitoring stations. This assessment was performed to better characterize dry weather flows in the Cottonwood Creek Watershed.

Of the 52 monitoring sites monitored in 2007, 6 locations exceeded nitrate and/or conductivity action levels that were attributed to groundwater (2 other sites with exceedances were attributed to irrigation). Of these six locations, one is located in the Leucadia Sub-basin and the remaining five are located in the Cottonwood Creek watershed of the Encinitas Sub-basin. All monitoring stations are located near the topographic low point (near the coast) within their respective sub-basins.

The monitoring station in the Leucadia Sub-basin is located at the Ponto Beach detention basin. The Ponto Beach detention basin contributes flow to Batiquitos Lagoon. Typically, there is water present at this location throughout the year. For the past 6 dry seasons, water was present and nitrate consistently exceeded the action level at the monitoring station at Ponto Beach detention basin. Field records show water was ponded or flowing at the monitoring station but no overland flow was observed. Based upon follow-up investigations, the flow could not be directly connected with a human-induced source and, considering the hydrology and historical data of this monitoring station, the City determined that groundwater in the region was a most-likely source.

Discussion of Nitrate-Nitrogen and Conductivity Exceedances

Runoff from the Cottonwood Creek watershed enters Cottonwood Creek, which discharges into the Pacific Ocean at Moonlight State Beach. Cottonwood Creek is a perennial stream comprised of groundwater and urban runoff during the dry season. In the Cottonwood Creek Urban Runoff Assessment and Action Plan in 2002, the average dry weather flow was approximated at 100 gallons per minute (gpm) near the mouth of Cottonwood Creek as it passed beneath Third Street (City of Encinitas, 2002). Continual flow monitoring was performed at this location for a one-week period in November of 2001. During the 2001 monitoring, measured dry weather flows averaged approximately 65 gpm. The flow data was generally consistent and did not show diurnal fluctuations. A strong diurnal pattern may be indicative of urban runoff associated with early morning or evening over-irrigation. The absence of a diurnal pattern strongly suggests that groundwater makes up a significant portion of the creek flows. Groundwater extrusion on the slopes above the channel (along Hwy 101) also supports that groundwater is present in the creek (Pacific Southwest Biological Services, 2000).

For the past 6 dry seasons, water was present and nitrate and/or conductivity concentrations consistently exceeded the action levels at the monitoring stations located in the Cottonwood Creek watershed. Field records show water was ponded or flowing at the monitoring stations but no overland flow was observed. The flow could not be directly connected with a human-induced source and, considering the hydrology and historical data of this monitoring station, it was determined that groundwater in the region was a probable source. The Cottonwood Creek Urban Runoff Assessment also reported nitrate and conductivity measurements exceeding the action levels throughout the sampling period. This comprehensive and focused study distinguished groundwater as a likely source of these exceedances.

Summary of Detailed Analysis in 2004 Dry Weather Monitoring Report

In the 2004 Dry Weather Monitoring Report, the City discussed the nitrate-nitrogen and conductivity exceedances in detail. This discussion is summarized in the following paragraphs.

The nitrate-nitrogen exceeded water quality action levels in 22 of the 36 total analyses performed in 2004, 61%, as part of the 2004 monitoring. The majority of the exceedances were in the Encinitas Sub-basin, accounting for 12 of the 22, with other scattered in all other sub-basins except La Orilla Creek and Rancho Santa Fe. Much of the nitrate-nitrogen was attributed to groundwater in the region. This groundwater is typically rich in nitrate-nitrogen and low in other nutrients and metals. Groundwater usually has elevated conductivity levels and low bacteria concentrations. In contrast, irrigation water, often laden with fertilizer, contains elevated concentrations of ammonia and ortho-phosphate, has low conductivity, and typically higher bacteria levels. Using these parameters and knowledge of the conveyances and land uses around monitoring locations, it is possible to characterize the sources of nitrate-nitrogen exceedances in the City. Of the 22 exceedances, 9 appeared to be attributable to irrigation runoff in the drainage areas, 10 associated with groundwater influence, and three sites seemed to be influenced by a combination of both sources. In these three sites, the water quality data was uncharacteristic of pure groundwater or irrigation. The following tables and figures are taken directly from the 2004 Dry Weather Monitoring Report. Table 5.5 lists the sites with data and land use supporting the characterization of the nitrate-nitrogen exceedances.

Discussion of Nitrate-Nitrogen and Conductivity Exceedances

Table 5.5 Suspected Sources of Nitrate-nitrogen at Sites with Nitrate-nitrogen Exceedances	
Groundwater	Irrigation
ENC-1	ENC-4
ENC-3	ENC-9
ENC-5	ENC-10
ENC-6	ENC-14
ENC-8	ENC-15
ENC-11	ENC-17
CBS-1	CBS-3 N
LUC-1	CBS-3 S
LUC-7	ESC-2
ESC-1	LUX-2
	LCS-1
	LCS-2

Figures 5.4, 5.5, and 5.6 are scatter plots containing water quality data used to characterize the sources of nitrate-nitrogen exceedances.

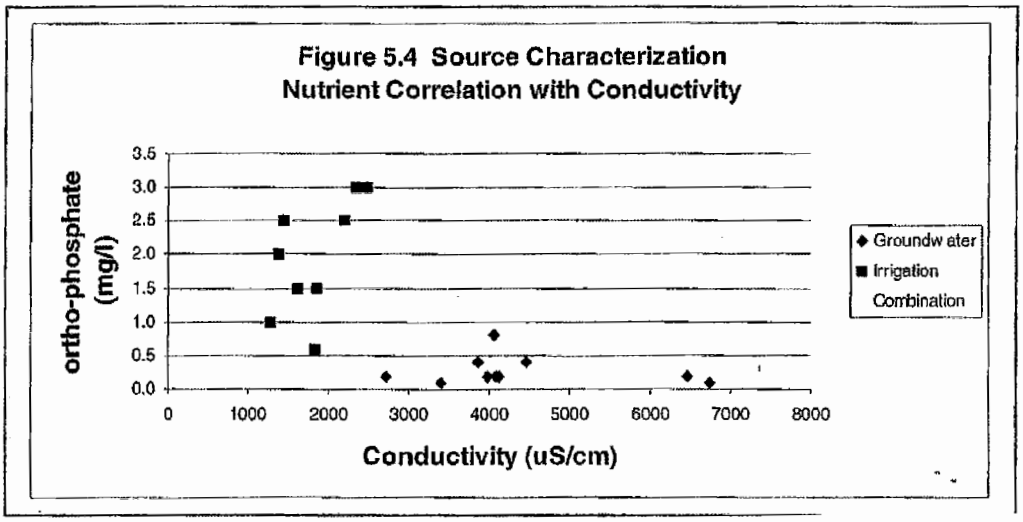
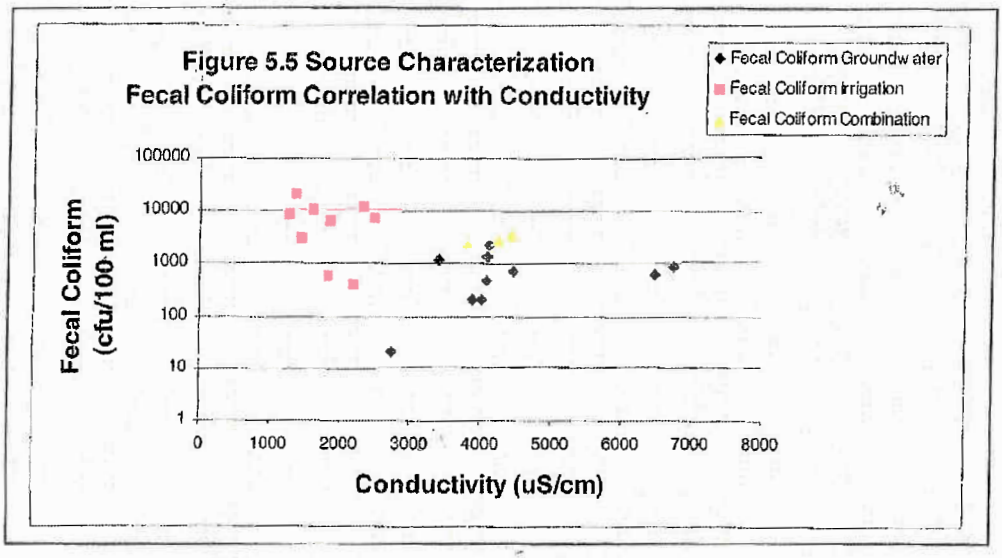
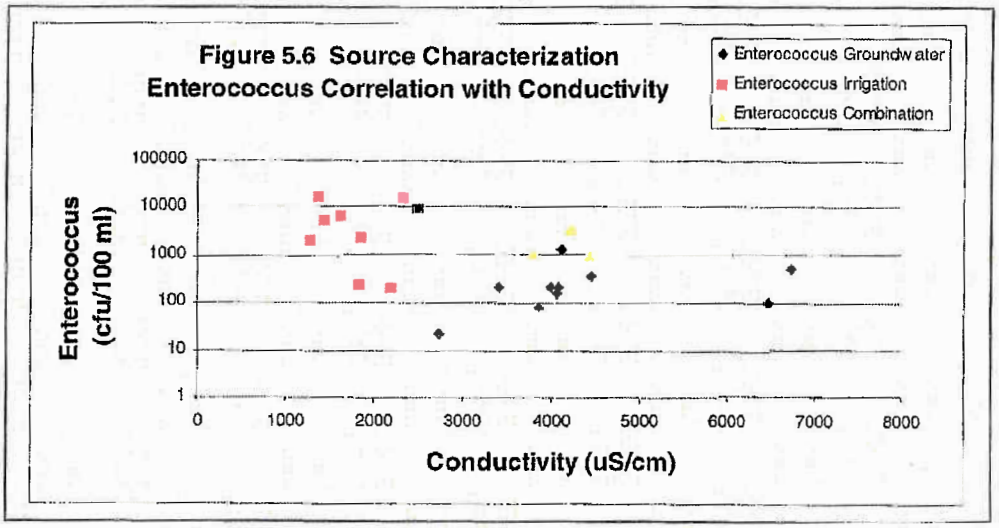


Figure 5.4 illustrates the relationship between ortho-phosphate concentrations and conductivity values. Results of the scatter show two distinct groups where water samples with conductivity measurements greater than 3000 uS/cm have ortho-phosphate concentrations below 1.0 mg/l. This is characteristic of groundwater, having high conductivity and low nutrients. The second grouping of samples shows those with conductivity below 3000 uS/cm containing ortho-phosphate concentrations ranging from 0.6 to 3.0 mg/l. Where higher nutrient levels are coupled with lower conductivity, irrigation is suspected to be a major contributor to water quality concerns.

Discussion of Nitrate-Nitrogen and Conductivity Exceedances





Figures 5.5 and 5.6 reflect similar groupings of the sites when comparing bacteria levels to conductivity measurements. As with the first grouping in Figure 5.4, the first grouping in Figure 5.5 and 5.6 have conductivity measurements greater than 3000 uS/cm and both have low bacteria concentrations, typical of groundwater. Conversely, in group two, the conductivity values are generally less than 3000 uS/cm with bacteria ranging from approximately 200-20, 000 cfu/100ml, indicative of irrigation runoff influencing the water quality at these locations.

Discussion of Nitrate-Nitrogen and Conductivity Exceedances

Table 5.6 lists the locations where nitrate-nitrogen exceeded the action level and depicts the data used to identify the suspected source.

Table 5.6 Data to Characterize NO_3-N Exceedances, 2004

Location	NO_3-N (mg/l)	NH_3-N (mg/l)	o-PO_4 (mg/l)	Conductivity (uS/cm)	Total Coliform (cfu/100 ml)	Fecal Coliform (cfu/100 ml)	Enterococcus (cfu/100 ml)	Suspected Source
ENC-1	25.0	0.1	0.2	4080	15000	1400	200	Groundwater
ENC-3	30.0	0.1	0.2	3990	4000	200	200	Groundwater
ENC-5	15.0	0.1	0.4	3860	18000	200	80	Groundwater
ENC-6	60.0	0.2	0.2	6470	7000	600	100	Groundwater
ENC-8	25.0	0.2	0.2	4120	47000	2200	1200	Groundwater
ENC-11	25.0	0.1	0.1	6740	12000	900	500	Groundwater
CBS-1	10.0	0.2	0.4	4450	2400	700	340	Groundwater
LUC-1	20.0	0.1	0.2	2730	100	20	20	Groundwater
LUC-7	10.0	0.2	0.8	4060	2200	450	150	Groundwater
ESC-1	15.0	0.2	0.1	3400	8000	1200	200	Groundwater
ENC-4	10.0	60	1.0	1293	78000	8200	2000	Irrigation
ENC-9	15.0	0.3	2.5	1459	11000	3000	5400	Irrigation
ENC-10	10.0	0.6	3.0	2490	27000	7200	9800	Irrigation
ENC-14	20.0	0.4	2.0	1388	92000	20800	3600	Irrigation
ENC-15	25.0	0.4	1.5	1876	13000	6200	2200	Irrigation
ENC-17	20.0	0.6	3.0	2340	160000	12000	16000	Irrigation
CBS-3N	15.0	0.1	0.2	3790	24000	2575	1100	Irrigation/Groundwater
CBS-3S	10.0	0.4	0.6	1850	2200	550	225	Irrigation
ESC-2	20.0	0.1	0.6	4230	29000	2800	3600	Irrigation/Groundwater
LUX-2	25.0	0.2	2.5	2210	11000	400	200	Irrigation
LCS-1	15.0	10	1.5	1633	57000	10400	6600	Irrigation
LCS-2	10.0	0.1	0.6	4430	8400	3400	1100	Irrigation/Groundwater

*shaded areas denote other action levels that were exceeded in the same sample

Regional Groundwater Data Showing Elevated Nitrate and Conductivity Levels

After discussions with the San Diego County Water Authority, Municipal Water District, San Diego County Department of Environmental Health, and Olivenhain Municipal Water District, it was determined that there is little groundwater quality data specific to Encinitas because the local water authorities do not consider Encinitas groundwater a viable source of drinking water. However, several studies and reports indicate elevated concentrations of nitrates and conductivity in groundwater basins throughout the San Diego region.

Elevated Nitrates in the Region

Encinitas has historically been home to growers and continues to support many nurseries throughout the City. The Leucadia sub-basin supports a number of commercial growers. The number of growers has decreased over the years and, although the nitrates continue to exceed the action levels, the concentrations have decreased. In the 2002 Cottonwood Creek Urban Runoff Assessment and Action Plan, agriculture-related land uses were found to comprise 17% of the Encinitas sub-basin. According to the article, "The ABCs of Water Quality Assessment in Georgia" published in the Stormwater Journal in March/April 2002, it is common to find elevated nitrates in groundwater in regions of agriculture and it is likely fertilizers and over irrigation are primary sources of nitrogen in the groundwater. In the publication, Nonpoint Sources of Pollution in Irrigated Agriculture by the University of California in partnership with Natural Resources Conservation Service, the following sources of nutrients were found from agricultural practices: fertilizers, biodegradation of crop residues, agricultural and municipal wastes applied to land, and waste generated directly by animals. This study concluded that irrigated agriculture is a significant source of surface and groundwater

non-point source pollution in California.

The San Diego region has elevated concentrations of nitrates in the groundwater as documented in the 1997 Groundwater Report by the San Diego County Water Authority and most recently in the 2007 Groundwater Assessment Study by the Metropolitan Water District of Southern California. According to the 2007 Groundwater Basin Reports, San Diego County groundwater basins have a range of nitrate levels above and below the drinking water standard of 10 mg/L. The Batiquitos Lagoon Basin and San Elijo Valley Basin were not discussed in detail in the groundwater basin reports because of limited available data. The San Luis Rey River Valley Basin, San Dieguito, and Lower Santa Margarita River Basins are located in the vicinity of the Batiquitos Lagoon and San Elijo Valley basins. The San Luis Rey River Valley Basin did not specifically list concentrations for nitrate, but did list nitrate as a constituent of concern. The San Dieguito River Basin had nitrate concentrations that ranged from 0.2 mg/L to 385 mg/L. The Lower Santa Margarita River Basin had nitrate concentrations within the drinking water standard. The dry weather monitoring stations in exceedance of the action levels had nitrate concentrations that range from 4.4 mg/L to 64 mg/L. This appears consistent with the aforementioned concentrations reported in nearby groundwater basins with agricultural-related land uses within their watersheds.

Additionally, the sites with nitrate-nitrogen exceedances attributable to groundwater have not been found to cause water quality problems in the receiving waters, as they do not contribute excessive bacteria, other nutrients, or metals to the waters downstream due to the natural filtration occurring within the sub-surface soils.

The City will continue to monitor these sample locations as a part of the Dry Weather Program. As standard procedure, the City conducts a cursory investigation to locate the source(s) of any exceedance. The City investigates each exceedance in the attempt to identify a human-induced source of the exceedance. The City's educational and commercial programs target irrigation runoff and include regular inspections of nurseries.

Elevated Conductivity in the Region

The elevated conductivity may be from various minerals entering the groundwater from the sedimentary soils in the region or seawater intrusion as a result of its proximity to the ocean. In the publication, Nonpoint Sources of Pollution in Irrigated Agriculture by the University of California in partnership with Natural Resources Conservation Service, it states that the amount of salt in the water depends on its source and groundwater that leaches through alluvial sediments derived from sedimentary rocks, which often occur along California's coast range, collects many minerals and have a much higher salt content.

The San Diego region has elevated concentrations of dissolved material (as measured by TDS) in the groundwater as documented in the 1997 Groundwater Report by the San Diego County Water Authority and most recently in the 2007 Groundwater Assessment Study by the Metropolitan Water District of Southern California. According to the 2007 Groundwater Basin Reports, San Diego County groundwater basins have TDS above the drinking water standard of 500 mg/L. The Batiquitos Lagoon Basin and San Elijo Valley Basin were not discussed in detail in the groundwater basin reports because of limited available data. The San Luis Rey River Valley Basin, San Dieguito, and Lower Santa Margarita River Basins are located in the vicinity of the Batiquitos Lagoon and

San Elijo Valley basins. The San Luis Rey River Valley Basin had TDS concentrations that ranged from 168 mg/L to 3,400 mg/L. The San Dieguito River Basin had TDS concentrations that ranged from 320 mg/L to 27,000 mg/L. It was reported that the San Dieguito River Basin was subject to seawater intrusion and, therefore, experienced increased salinity levels in the groundwater. The Lower Santa Margarita River Basin had TDS concentrations that ranged from 325 mg/L to 1,260 mg/L.

The amount of dissolved material (as measured by TDS) in a sample correlates to electrical conductivity. The following calculation is derived from the 20th edition of the Standard Methods for the Examination of Water and Wastewater; TDS = SC * 0.65 (TDS in mg/l and SC in um/cm). Based on converting conductivity measurements to TDS concentrations, the City of Encinitas dry weather monitoring stations with exceedances of the action level had TDS values that ranged from 1,523.6 mg/L to 4,628 mg/L. This appears consistent with the aforementioned concentrations reported in nearby groundwater basins subject to seawater intrusion.

Conclusion

In consideration of information summarized above including historic monitoring trends, constituent and geographically focused studies, background information, and literature and report reviews, the City of Encinitas has reasoned various nitrate and conductivity exceedances to groundwater influences. Notably, this deduction has not precluded the City from taking source determination actions to identify the likely contributor to an exceedance of nitrate or conductivity. As such, the City will continue to monitor the various sample locations as part of the ongoing Dry Weather Monitoring Program, and conduct cursory investigations to determine the source(s) of any exceedance, and conduct follow-up actions as warranted. The information presented and considered in this discussion will be used as the premise for determination of follow-up actions in the future if no conclusive source of nitrate or conductivity can be identified.

City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024
TELEPHONE NO.: (760) 633-2600
FAX NO: (760) 633-2818
www.ci.encinitas.ca.us

Citation #CW-

Administrative Citation

Date of Violation:

☐ **WARNING** ☐ 1st Citation $100 per violation ☐ 2nd Citation $200 per violation
☐ 3rd Citation $500 (per violation and each subsequent violation within a 12-month period)

Payment of $0.00 is due no later than (see reverse side for payment and appeal information)

This citation prohibits the continuation or repeated occurrence of the violation described below. Payment of the fine shall not excuse the failure to correct the violation nor shall it bar further enforcement by the City.

Violation Address	**Assessor's Parcel Number**
Person Cited	**Relationship of person being cited**
Mailing Address	**Business (if applicable)**

Code Section Violated	**Description of Violation**

As per the City of Encinitas Municipal Code Section 20.08.110 the following corrective actions must be implemented:

Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

Enforcing Officer	**Phone Number** (760) –	**Signature**	**Date issued**
Person Cited (Print Please)		**Acknowledgement of Receipt-Signature**	**Date**

Method of Delivery
☐ **In Person** ☐ **Posted on Property** ☐ **By Mail** ☐ **Certified Mail** ☐ **Other**

CC:

ADMINISTRATIVE CITATIONS

Encinitas Municipal Code Chapter 1.08.080 provides for the issuance of an administrative citation for violations of the Code. There are four levels of citations that may be issued progressively for a violation. The levels, as indicated on the front of the citation, are a Warning, a $100 First Citation, a $200 Second Citation, and a $500 Third and subsequent Citations. These fines are per violation and are cumulative. A warning, if issued, does not incur a fine and, therefore, cannot be appealed.

A. RIGHTS OF APPEAL

You have the right to appeal this citation within 15 calendar days from the date the citation was issued. An appeal must be made in writing, including a return address, a basis for the appeal in detail must be included, and be accompanied by the fine amount. An appeal will result in an administrative hearing.

Failure of any person to properly file a written appeal within 15 calendar days shall constitute a waiver of his or her right to an administrative hearing and adjudication of the citation or any portion thereof and the total amount of the fine.

B. HOW TO PAY FINE

The amount of the fine is indicated on the front of the administrative citation and is due within 30 calendar days of the issue date of the citation. You may pay by mail or in person. Payment should be made by credit card, personal check, cashier's check, or money order payable to the City of Encinitas. Payment should be made at the address below. Please write the citation number on your check or money order.

City of Encinitas
505 S. Vulcan Ave.
Encinitas, CA 92024
Attention: Finance Department / Administrative Citations

If the fine is not paid within 30 calendar days of the issue date of the citation, you will receive a Delinquent Notice from the Finance Department and there will be a 100% penalty fee assessed in addition to the original fine.

Payment of any fine shall not excuse the failure to correct the violation nor shall it bar further enforcement by the City.

C. CONSEQUENCES FOR FAILURE TO PAY THE FINE

The failure of any person to pay the fine assessed by a citation within 30 calendar days of the issuing date of the citation or the due date on a Delinquent Notice may result in turning the account over to a collection agency, filing a claim with Small Claims Court, a lien against your property, or any other available legal remedy to collect such money. The City has the authority to collect all costs associated with the filing of such actions.

D. CONSEQUENCES OF FAILURE TO CORRECT VIOLATIONS

There are numerous other enforcement options that may be used to encourage correction of violations. These options include, but are not limited to: criminal prosecution, civil litigation, abatement, recording the violation with the County Recorder, and forfeiture of certain benefits for substandard residential rental property.

If you need further information about the violation and/or how to comply, please call the officer designated on the front of the citation.

Appendix E
JURMP Annual Report Requirements Checklist

IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
i. Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.	7.4.3.1, Appendix C (Section 2.0) Appendix C-1
ii. Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.	Appendix C
iii. Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.	N/A
iv. A brief description of any other investigations and follow-up activities for illicit discharges and connections.	Appendix C
v. The number and brief description of illicit discharges and connections identified.	7.5.2
vi. The number of illicit discharges and connections eliminated.	7.5.2
vii. Identification and description of all spills to the MS4 and response to the spills.	Appendix H-1
viii. A description of activities implemented to prevent sewage and other spills from entering the MS4.	7.3.1, 7.3.4
ix. A description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received.	7.2.1
x. Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	7.2.5
xi. A description of efforts to publicize and facilitate public reporting of illicit discharges.	7.2.5
xii. The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	7.5.3
xiii. A description of notable activities conducted to manage illicit discharges and connections.	Appendix C (Section 6.0)

IDDE—Additional Dry Weather Monitoring Program Requirements

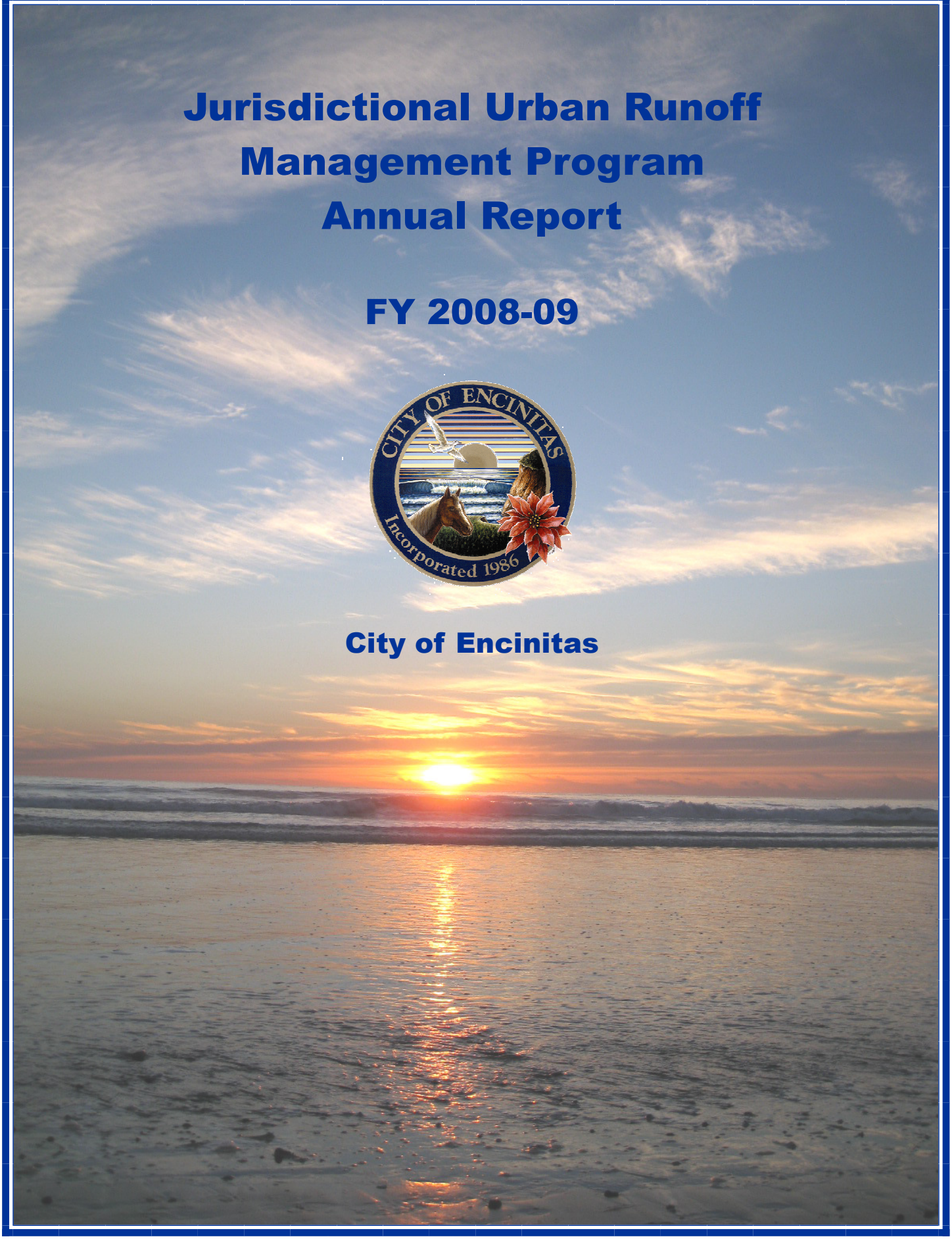
Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	**Location in Report**
Meets applicable standard monitoring and reporting requirements listed in Municipal Permit Attachment B.	Appendix C
c. (1) Determining Sampling Frequency: Dry weather field screening and analytical monitoring shall be conducted at each identified station at least once between May 1st and September 30th of each year or as often as the Copermittee determines is necessary to comply with the requirements of section D.4 of Order No. R9-2007-0001.	Appendix C
c. (2) If flow or ponded runoff is observed at a dry weather field screening or analytical monitoring station and there has been at least seventy-two (72) hours of dry weather, make observations and collect at least one (1) grab sample. Record general information such as time since last rain, quantity of last rain, site descriptions (i.e., conveyance type, dominant watershed land uses), flow estimation (i.e., width of water surface, approximate depth of water, approximate flow velocity, flow rate), and visual observations (i.e., odor, color, clarity, floatables, deposits/stains, vegetation condition, structural condition, and biology).	Appendix C (Section 3.0), Appendix C-2
c. (3) At a minimum, collect samples for analytical laboratory analysis of the following constituents for at least twenty five percent (25%) of the dry weather monitoring stations where water is present: (a) Total Hardness, (b) Oil and Grease, (c) Diazinon and Chlorpyrifos, (d) Cadmium (Dissolved), (e) Lead (Dissolved), (f) Zinc (Dissolved), (g) Copper (Dissolved), (h) Enterococcus bacteria, (i) Total Coliform bacteria, (j) Fecal Coliform bacteria	Appendix C (Section 3.0)
c.(4) At a minimum, conduct field screening analysis of the following constituents at all dry weather monitoring stations where water is present:	Appendix C, Appendix C-3
c. (a) Specific conductance (calculate estimated Total Dissolved Solids), (b) Turbidity, (c) pH, (d) Reactive Phosphorus, (e) Nitrate Nitrogen, (f) Ammonia Nitrogen, (g) Surfactants (MBAS)	Appendix C, Appendix C-3
c. (5) If the station is dry (no flowing or ponded runoff), make and record all applicable observations and select another station from the list of alternate stations for monitoring.	Appendix C
c. (6) Develop and/or update criteria for dry weather field screening and analytical monitoring results whereby exceedance of the criteria will require follow-up investigations to be conducted to identify and eliminate the source causing the exceedance of the criteria.	Appendix C

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	**Location in Report**
c. (7) Assess the presence of trash in receiving waters and urban runoff at each dry weather field screening or analytical monitoring station. Assessments of trash shall provide information on the spatial extent and amount of trash present, as well as the nature of the types of trash present.	Appendix C (Section 7.0), Appendix C-4
c. (8) Dry weather field screening and analytical monitoring stations identified to exceed dry weather monitoring criteria for any constituents shall continue to be screened in subsequent years.	Appendix C (Table 5.0)
c. (9) Develop and/or update procedures for source identification follow up investigations in the event of exceedance of dry weather field screening and analytical monitoring result criteria. These procedures shall be consistent with procedures required in section D.4.d of Order No. R9-2007-0001.	Appendix C (Section 3.0)
c. (10) Develop and/or update procedures to eliminate detected illicit discharges and connections. These procedures shall be consistent with each Copermittees Illicit Discharge and Elimination component of its Jurisdictional Urban Runoff Management Plan as discussed in section D.4 of Order No. R9-2007-0001.	7.5.2
d. The Copermittees shall commence implementation of dry weather field screening and analytical monitoring under the requirements of this Order by May 1, 2008. Each Copermittee shall conduct dry weather analytical and field screening monitoring in accordance with its storm water conveyance system map and dry weather analytical and field screening monitoring procedures as described in section II.B.3 above. If monitoring indicates an illicit connection or illegal discharge, conduct the follow-up investigation and elimination activities as described in submitted dry weather field screening and analytical monitoring procedures and sections D.4.d and D.4.e of Order No. R9-2007-0001. Until the dry weather field screening and analytical monitoring program is implemented under the requirements of this Order, each Copermittee shall continue to implement dry weather field screening and analytical monitoring as it was most recently implemented pursuant to Order No. 2001-01.	Appendix C (Section 1.0)

Jurisdictional Urban Runoff Management Program Annual Report

FY 2008-09



City of Encinitas

Photograph by Kristy Rygiel



CITY OF ENCINITAS

Jurisdictional Urban Runoff Management Program Annual Report FY 2008-2009

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EXECUTIVE SUMMARY

Section J.3 of Water Quality Order No. R9-2007-0001, adopted January 24, 2007, requires the City of Encinitas to prepare a JURMP Annual Report describing all activities conducted by the City to comply with the provisions of the Order. The following report covers the implementation period for Fiscal Year 2008-2009 with a defined reporting period from July 1, 2008 through June 30, 2009. This reporting period is marked by the application and refinement of newly developed program elements, and the assimilation of core components for a broadly effective and efficient set of actions. Reporting for this annual report has been prepared in compliance with standards established in Water Quality Order No. 2007-0001, and is based upon the most current information available at the time of document preparation. This report is presented in the standardized annual reporting format developed collectively by the San Diego Region Municipal Stormwater Copermittees.

On March 24, 2008, the City of Encinitas submitted, as required by Order No. 2007-0001, an updated JURMP. The JURMP was prepared as a foundational program document to detail programs, process, procedure, and implementation strategies employed by the City to improve and protect the quality of local surface and receiving waters. As part of the JURMP update process, the following list of objectives was established to set baseline guidance for overall program success:

- Develop programmatic elements to ensure compliance with regulatory standards and provisions mandated in Order No. R9-2007-001.
- Establish management processes and procedures to ensure accountability for program actions and activities.
- Establish and support a set of effective and efficient strategies to address Encinitas water quality concerns.
- Build program elements around integrated assessment approaches in order to evaluate overall performance and effectiveness of program components.

Programmatic reporting, represented in this document, serves as a critical self assessment tool in consideration of the objectives outlined above. However, it should be noted that the value added outcomes, both to the program and to the community of Encinitas, of each program area are in constant review as local, regional, and discipline specific technical and scientific knowledge advances. It is important to recognize the iterative nature of stormwater and surface water quality management, as such programs are comprehensive in nature, and each individual component contributes to the overall effectiveness of program actions. The information presented in this report captures the development and implementation of program components within the defined reporting period, and represents the state of program elements as defined by that period. Future reporting years will provide opportunity to express refinement and acuity of program

features and the City's overall progression in the field of stormwater and surface water quality management.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Phil Cotton, City Manager
City of Encinitas

9-21-09
Date

1.0 INTRODUCTION

The Clean Water Act of 1972 established the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the discharge of pollutants from point sources to the waters of the United States. In 1987, the Clean Water Act was amended to include non-point source pollution such as urban runoff, and established a framework for regulating urban storm water runoff and other non-point source pollutants through establishment of various general and individual permits issued to local governments and other agencies.

In 2002, the City of Encinitas (City) developed a Jurisdictional Urban Runoff Management Program (JURMP) document as required by the San Diego Regional Water Quality Control Board (RWCQB) Order No. 2001-01 (2001 Permit). On January 24, 2007, Order No. R9-2007-0001 (Order, Permit, 2007 Permit or Municipal Stormwater Permit), was adopted by the RWQCB, regulating the discharge of urban runoff from municipal separate storm sewer systems (MS4) draining the watersheds of the County of San Diego, the San Diego Unified Port District, the San Diego County Regional Airport Authority, and the incorporated cities of San Diego County, including the City of Encinitas (Copermittees). Under the requirements of Order No. R9-2007-0001, the City prepared and submitted on March 24, 2008 an updated JURMP document describing enhancements to existing programs, as well as newly developed programmatic elements to meet the provisions of the adopted permit.

Section J.3 of Water Quality Order No. R9-2007-0001, requires the City to prepare a JURMP Annual Report describing all activities conducted by the City to comply with the provisions of the Order. The following report covers the implementation period for Fiscal Year 2008-2009 with a defined reporting period from July 1, 2008 through June 30, 2009 (FY 2008-09).

1.1 BACKGROUND

The City of Encinitas encompasses an overall area of nearly 20 square miles and is located along six miles of Pacific coastline in northern San Diego County. The City is characterized by coastal beaches, cliffs, flat-topped coastal areas, steep mesa bluffs and rolling hills. Incorporated in 1986, drawing together the communities of New Encinitas, Old Encinitas, Cardiff-by-the-Sea, Olivenhain and Leucadia, the City has an approximate population of 60,000. Encinitas is bordered by the Pacific Ocean to the west, Batiquitos Lagoon to the north, and the San Elijo Lagoon to the south.

The City of Encinitas is situated entirely within the Carlsbad Hydrologic Unit and is split between the San Marcos Watershed to the north and the Escondido Creek Watershed to the south. The City is naturally divided by eight (8) distinct drainage areas (sub-basins): Cardiff, Lower Escondido, La Orilla, La Costa South, Leucadia, Encinitas, Rancho Santa Fe, and Lux Canyon sub-basins. Encinitas receives an average annual rainfall of approximately ten (10) inches.

The City owns and maintains improved and open storm water channels, underground pipes of varying material, storm water detention basins, catch basins and a variety of other MS4 facilities.

In general, the City drains to three blue-line creeks: Cottonwood Creek, Encinitas Creek and Escondido Creek. Cottonwood Creek drains the heart of Encinitas and discharges to the Pacific Ocean at Moonlight Beach. In 2006, Cottonwood Creek was 303(d) listed for DDT, phosphorous, and sediment toxicity stressors. Further, the Pacific Ocean is listed as a 303(d) impaired water body at Moonlight Beach for bacteria indicators due to urban runoff from Cottonwood Creek. Encinitas Creek drains the north-central portion of the City, and drains into Batiquitos Lagoon, which is designated as a Critical Coastal Area in the State of California 2002 Critical Coastal Areas Strategic Plan. In 2006, Encinitas Creek was 303(d) listed for phosphorous impairments. Escondido Creek, listed in 2006 for DDT, phosphorous, sediment toxicity, manganese, phosphate, selenium, sulfates, and total dissolved solids, drains the southern and northwest (Olivenhain) portion of the City and drains into San Elijo Lagoon. San Elijo Lagoon is 303(d) listed as an impaired water body for sediment/siltation, bacteria indicators, and eutrophic conditions.

1.2 PURPOSE AND OBJECTIVES

The purpose of the 2008-2009 JURMP Annual Report is to provide a comprehensive account of programmatic activities conducted by the City of Encinitas to meet the requirements of the Order No. 2007-0001. Additionally, the annual reporting process is used to evaluate the overall effectiveness and efficiency of program elements. Notably, a comprehensive program update occurred through the JURMP update process in 2008; therefore, only significant augmentation of program elements or planned changes will be captured in the following annual report. Any program modifications will be for the advancement of the City's program and will comply with all regulations as presented in the Municipal Permit.

On December 4, 2008, City of Encinitas and California Regional Water Quality Control Board, San Diego Region staff met to discuss the City of Encinitas 2008 JURMP and 2007-2008 JURMP Annual Report. Specific comments received by RWQCB staff focused on reporting consistencies and techniques, and have been appropriately addressed in the preparation of the following annual report.

2.0 DEVELOPMENT PLANNING

2.1 INTRODUCTION

Being a coastal community, environmental protection and water quality is of utmost importance to the City of Encinitas. As a result, the City has established strong water quality protection policies which are reflected in development planning documents and procedures. Through the implementation of the Development Planning Component of the City's JURMP and other related planning documents, the City aims to reduce the discharge of pollutants from development projects to the Maximum Extent Practicable (MEP) to protect receiving water bodies, and manage increases in runoff and erosion from development projects.

This section describes the City's actions during FY 2008-09 which contributed to the successful implementation of the City's Development Planning Component. Included in this section is a summary of recent updates made to land use policies and procedures, a description of the ongoing development of the Standard Urban Stormwater Mitigation Plan (SUSMP), the development of the San Diego region Hydromodification Management Plan, a review of the development projects approved in the reporting year, and a summary of the first complete year of implementation of the new BMP installation, verification, and inspection programs.

2.2 LAND USE PLANNING

The City's land use planning process facilitates (1) the reduction of development project discharges of pollutants from the MS4 to the MEP, (2) the prevention of development project discharges from the MS4 from causing or contributing to a violation of water quality standards, and (3) management of increases in runoff discharge volumes, rates, and durations from development projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force.

The City's land use planning process fundamentally structured around the following planning, guidance, and enforcement documents:

- General Plan
- Jurisdictional Urban Runoff Management Plan
- Watercourse Protection, Storm Water Management and Discharge Control Ordinance (Municipal Code Chapter 20.08)
- Storm Water Best Management Practices Manual II (Local SUSMP)

The consistent application and regular update, as required or necessary, of each of these documents enables the City to successfully conform to the requirements of section D.1 of the Municipal Permit. The following sections will describe the City's land use planning process and the four core documents in more detail.

2.2.1 BACKGROUND

The City of Encinitas was incorporated in 1986, drawing together the towns of Cardiff-By-The-Sea, Leucadia, Olivenhain, and old and new Encinitas. The City's General Plan was adopted in 1989 and is amended on a limited, as needed basis. The City's JURMP, the Storm Water Ordinance, and the Storm Water BMP Manual II were each originally developed in 2002 as required by Order 2001-01. Each of these documents were reviewed and updated as needed in fiscal year 2007-08 as part of the JURMP update process and as required by the new Municipal Permit.

2.2.2 SOURCE CHARACTERIZATION

The City addresses seven major land use categories in its General Plan: residential, office professional, commercial, industrial, public / semi-public, transportation, and ecological / open space / parks. Each of these land uses is associated with different combinations of pollutants and activities that have the potential to negatively affect the surrounding environment. A detailed discussion of the potential threats to water quality associated with existing residential, commercial, industrial, and municipal land uses can be found in their designated sections within this document.

Through the implementation of the land use planning policies, procedures, and requirements established in the General Plan, JURMP, Storm Water Ordinance, Grading Ordinance, and BMP Manual II, the City aims to reduce the potential for pollutant discharges from all planned development and redevelopment land use sources.

2.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

During FY 2007-08, the City of Encinitas updated its land use planning BMPs as required by Order 2007-0001. As part of the 2008 JURMP update process, these BMPs were incorporated into Storm Water BMP Manual II (the City's local interim Standard Urban Stormwater Mitigation Plan (SUSMP)). The most current version of the City's BMP Manual II can be accessed through the Clean Water Program webpage at: http://cwp.ci.encinitas.ca.us. Over the past two years, the City has actively participated in the review and update of the region's Model SUSMP. In FY 2008-09, Clean Water Program staff began the process of updating our local SUSMP to meet the minimum standards established in the newly approved regional Model SUSMP. For more detail regarding the development and adoption of the City's interim SUSMP and the regional Model SUSMP refer to Section 2.2.4.4 and 2.4.4.1.

2.2.4 PROGRAM IMPLEMENTATION

2.2.4.1 GENERAL PLAN

The City of Encinitas General Plan addresses multiple water quality and watershed protection principles. Included within the General Plan are a number of proactive policies that pertain to water pollution and land use decisions. Many of the policies directly specify preservation and acquisition of riparian corridors, wetlands, and buffer zones providing important water quality benefits. The policies place limits on disturbances to natural bodies of water and drainage systems caused by developments and strive to avoid developing in areas susceptible to erosion and sediment loss. The General Plan also discourages the use of large amounts of impervious surfaces in new development areas, minimizing the transport of urban runoff and pollutants. The breadth of the City's General Plan policies are such that they cross reference each other and have been determined to comprehensively comply with the Municipal Permit.

The City's General Plan document serves as the blueprint for the long-range, orderly, physical development of the City and contains stated community goals and policies designed to protect its environmental, social, cultural and economic resources as the City develops. The General Plan consists of an integrated and internally-consistent set of goals, policies and standards that address a number of issue areas which include land use, circulation, housing, noise, safety, recreation, conservation and open space.

Portions of the General Plan also encompass the City's Local Coastal Program (LCP) Land Use Plan, which guides development in the City's Coastal Zone pursuant to the Coastal Act. As a result, the City's General Plan and LCP are a combined single document.

The City implements the policies in the General Plan using a variety of resources including: the JURMP, Municipal Code, the Storm Water BMP Manual II, Development Agreements, and other various land use plans and permits. Section 2.4 of this document describes how the water quality and watershed policies are implemented through the City's development planning process.

As a component of the 2008 JURMP update (conducted during FY 2007-08) an assessment of the City of Encinitas General Plan was conducted to determine the City's consistency with the watershed protection policies and principles found in the Municipal Permit. The analysis found that the City's General Plan goals and policies are consistent with the Municipal Permit, and no amendments to the General Plan were required as a part of the JURMP update.

Notably, in FY 2008-09 the City of Encinitas initiated a Comprehensive General Plan (CGPU) Update process that is anticipated to take approximately 2-3 years. In February 2009, the City released a request for proposal (RFP), inviting proposals from professional planning and design firms to provide services associated with the General Plan Update. The scope of the RFP included direction to address new policy issues such as sustainable communities, healthy communities, climate change, green building, surface water quality,

and stormwater management. As part of the selection process, and to represent water quality, stormwater management, and interrelated disciplines, the Clean Water Program Manager was invited to participate as an interview panel member. This effort is significant both to the City of Encinitas and the Clean Water Division, as it will provide opportunity to shape and marry citywide policy as it directly relates to water quality and stormwater management in the City of Encinitas.

2.2.4.2 JURMP

In compliance with the new Municipal Permit, the City's JURMP document underwent a major update during FY 2007-08. The JURMP document serves as the City's foundational storm water program management tool, capturing the development process, procedure, and implementation strategies for described elements. The purpose of this document is to present an integrated approach to reducing the discharge of pollutants from the MS4 to the MEP, and to protect and improve the quality of water bodies in Encinitas.

2.2.4.3 WATERCOURSE PROTECTION, STORM WATER MANAGEMENT AND DISCHARGE CONTROL ORDINANCE (STORM WATER ORDINANCE)

As required by section J.a.(3)(b)iii of the Municipal Permit, the City's Watercourse Protection, Stormwater Management and Discharge Control Ordinance *(EMC Chapter 20.08)* was updated during FY 2007-08 to comply with the Municipal Permit. The Storm Water Ordinance sets up the legal framework which enables the City to enforce the water quality and watershed protection principles established in the General Plan and the JURMP. The Storm Water Ordinance also references the City's Storm Water BMP Manual II and enables the City to enforce the minimum BMPs and SUSMP requirements that are outlined in the manual. The ordinance is periodically reviewed and updated on an as needed basis to ensure that potential discharges of pollutants may be addressed appropriately.

In addition, the grading ordinance was thoroughly reviewed and updated in the last fiscal year and approved by City Council on February 25, 2009. The update largely addressed engineering related revisions, but also included some updates which serve to further strengthen the City's legal authority in meeting the provisions of the Municipal Permit. Specifically, the grading ordinance was updated to require that all Priority Projects acquire a grading permit, and that any project proposing 500 square feet or more of impervious surface is reviewed for conformance with City stormwater regulations.

2.2.4.4 STORM WATER BMP MANUAL II (LOCAL SUSMP)

As part of the 2008 JURMP update, Storm Water BMP Manual II was also updated; the City's revised SUSMP and regionally adopted Interim Hydromodification Criteria were incorporated into the Storm Water BMP Manual II as required by the Municipal Permit, during FY 2007-08. The City has also integrated the interim SUSMP provisions into local

land use planning and development process and procedure as outlined in the updated BMP Manual II.

Notably, BMP Manual II updates incorporated during FY 2007-08 were driven by both the Stormwater Ordinance and Grading Ordinance amendment processes. As such, the City's BMP Manual II, as it relates to the Grading Ordinance, is contained in the City's Local Coastal Program (LCP), and must receive Coastal Commission approval of any changes. As part of this broader update of associated ordinances and manuals, the City has worked with the Coastal Commission to ensure adequate inclusions in the LCP.

The City originally created the Storm Water BMP Manual II in 2002 to be used by individuals involved with development projects within the City. The Storm Water BMP Manual II is a compilation of all requirements related to water quality with respect to development projects, including the City's SUSMP requirements, permanent BMP requirements, construction BMP requirements (which are further discussed in Section 3), implementation requirements, and maintenance requirements. The Storm Water BMP Manual II also includes various tables to help identify which requirements are applicable to each unique development project.

Standard Urban Storm Water Mitigation Plan (SUSMP) Update

Within the defined reporting period of this report, the City of Encinitas actively participated in the collective review and update of the San Diego regional Model SUSMP. The revised Model SUSMP was developed to address post-construction urban runoff pollution from development projects and defines the minimum required Low Impact Development (LID), source control and treatment control BMPs. Details about the completed update to the Model SUSMP and planned Local SUSMP updates can be found in Section 2.4.4.1. As required by Order No. 2007-001, all new updates to the San Diego Regional Model SUSMP will be incorporated into the City's local SUSMP and land development process and procedures by March 24, 2010.

2.3 ENVIRONMENTAL REVIEW PROCESS

As part of the 2008 JURMP update, the City's environmental review staff evaluated the City's environmental review process and confirmed that the current process accurately evaluates water quality and cumulative impacts and identifies appropriate measures to avoid, minimize and mitigate those impacts for all development projects.

The California Environmental Quality Act (CEQA) requires environmental review of discretionary applications for development projects. Environmental initial studies are conducted to determine whether the project may have a significant impact on the environment. This review process evaluates a project's potential for significant impacts on water quality. In compliance with the Municipal Permit, additional questions have been provided in the initial study checklist, a tool utilized to evaluate the environmental effects of a project. To evaluate potential water quality impacts of projects requiring discretionary review, the following questions have been included as part of the initial study checklist:

Would the project:

- *Substantially conflict with city-adopted water quality standards or waste discharge requirements?*
- *Substantially alter the existing drainage pattern* of *the site or area, including the alteration* of a *stream or river course, in* a *manner which would result in substantial erosion or siltation on- or offsite?*
- *Result in* a *substantial degradation of receiving water quality during construction activities?*
- *Propose* a *land use or an on-site activity that would substantially degrade receiving water quality?*
- *Substantially increase any pollutant for which* a *tributary water body is listed on the Clean Water Act Section 303(d) list?*
- *Substantially degrade surface water quality within wetland, fresh, marine, or recreational waters?*
- *Substantially degrade groundwater quality?*

The environmental review process ensures that a project's impact on water quality is addressed early in the planning process. If a project is determined to have a significant environmental effect, mitigation measures are required under CEQA to avoid or reduce the effect to below a level of significance. The mitigation measures will normally take the form of adopted permanent Best Management Practices to be incorporated into project plans prior to discretionary approval.

2.4 DEVELOPMENT PROJECT APPROVAL AND VERIFICATION PROCESS

2.4.1 BACKGROUND

As discussed in the previous sections, the City of Encinitas has an established multi-departmental review process for all new development and redevelopment projects. Through the application of the City's Storm Water Ordinance, Storm Water BMP Manual II and development project review process, the City aims to mitigate the negative impacts of urban runoff from development projects to the MEP.

Each proposed discretionary and ministerial project is subject to the City's Development Project Approval and Verification Process. The following sections describe this process in detail.

2.4.2 SOURCE CHARACTERIZATION

As discussed in Section 2.2.2, development projects have the potential to discharge different types and amounts of pollutants based on the project's size and intended land use. Pollutants such as trash and debris are anticipated from all developments, regardless of land use; however, pollutants like bacteria and viruses are more likely to originate from restaurants and residential developments rather than from parking lots and automotive

repair shops. Since the potential for a site to discharge pollutants is unique to each development, the City's design requirements for development projects vary according to size, project characteristics, and anticipated land use.

The City's SUSMP (Storm water BMP Manual II), which was updated as required during FY 2007-08, describes specific categories for Priority Projects and indicates common pollutants associated with each category (see Table 2-1). A Priority Project must identify the potential pollutants anticipated from its development and implement design concepts and other BMPs to address these pollutants.

In the City of Encinitas, all development projects, including standard projects (projects not subject to SUSMP standards), are required to meet the minimum BMP requirements, which are discussed in the following Section 2.4.3.

2.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City's minimum BMP requirements for all development projects are summarized here and are included in the City's Storm Water BMP Manual II. All development projects are required to implement the following principles, where applicable:

- Source control BMPs that reduce storm water pollutants of concern in urban runoff, including storm drain stenciling and signage, properly designed material and trash storage areas, and use of efficient irrigation systems.
- LID BMPs that maximize infiltration, provide retention, slow runoff, minimize impervious footprint, direct runoff from impervious areas into landscaping, and construct impervious surfaces to minimum widths necessary.
- Provide buffer zones or other buffers for natural water bodies.
- Grading and construction activities must implement all requirements outlined in Section 5 (Construction) of the City's 2008 JURMP.
- Submittal of proof of a mechanism for ongoing long-term maintenance of all structural post-construction BMPs.

SUSMP Priority Projects must submit a grading plan, which includes identification of potential pollutants from the projects proposed LID, source control and treatment control BMPs, calculations for sizing the treatment control BMPs, and an attached maintenance agreement. The grading plan must also address how the project will manage increases in runoff discharge rates and durations associated with the project, where such increases could cause erosion downstream of the project.

Table 2-1
Anticipated and Potential Pollutants Generated by Land Use Type

	General Pollutant Categories								
Priority Project Categories	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P(1)	P(2)	P	X
Commercial Development >1 acre	P(1)	P(1)		P(2)	X	P(5)	X	P(3)	P(5)
Heavy Industry /Industrial Development	X		X	X	X	X	X		
Automotive Repair Shops			X	X(4)(5)	X		X		
Restaurants					X	X	X	X	
Hillside Development >5,000 ft²	X	X			X	X	X		X
Parking Lots	P(1)	P(1)	X		X	P(1)	X		P(1)
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P(1)	X	X(4)	X	P(5)	X		

X = anticipated
P = potential
(1) A potential pollutant if landscaping exists on-site
(2) A potential pollutant if the project includes uncovered parking areas
(3) A potential pollutant if land use involves food or animal waste products
(4) Including petroleum hydrocarbons
(5) Including solvents

2.4.3.1 HYDROMODIFICATION MANAGEMENT PLAN AND INTERIM HYDROMODIFICATION CRITERIA

To reduce the negative impacts to beneficial uses and stream habitats that are attributed to increased runoff rates and in compliance with Order No. 2007-0001 the City is currently collaborating with the other Copermittees to adopt a detailed Hydromodification Management Plan (HMP).

In FY 2007-08 and FY 2008-09 the Copermittees—in cooperation with a Technical Advisory Committee, the Southern California Coastal Water Research Project and the Regional Board—were actively involved in conducting scientific research and gathering the necessary data in order to prepare the final HMP. The final draft HMP will be submitted to the Regional Board for review and approval in December 2009. However, in FY 2007-08 the City established Interim Hydromodification Criteria that will be in effect until the final HMP is approved. The City requires all Priority Projects disturbing 50 or more acres to comply with the Interim Hydromodification Criteria, except for those sites that are considered exempt as described in Section D.1.(g)(6) of the Municipal Permit. The details of the Interim Hydromodification Criteria are presented in the City's Storm Water BMP Manual II, and are consistent with the regionally adopted interim Hydromodification standards. A time table for development of the final HMP can be found in Section 2.4.4.1 and Table 2-2.

The City does not issue permits to development projects until all minimum BMP requirements are met. Any changes made to a development project's proposed storm water BMPs during project construction must be approved by the City before being implemented.

2.4.4 PROGRAM IMPLEMENTATION

As required by the Municipal Permit, the City of Encinitas has implemented a program to ensure that development and redevelopment projects comply with post-construction Best Management Practice (BMP) requirements, including Low Impact Development, source control, and treatment control BMPs. The Municipal Permit further requires that the City ensure proper installation of treatment control BMPs and their maintenance into perpetuity through such procedures as BMP verification, maintenance agreements, and annual inspections.

The following section provides an overview of the City's SUSMP implementation (including project tracking) during FY 2008-09.

2.4.4.1 MODEL AND LOCAL SUSMP UPDATES

As a part of the 2008 JURMP update process, the City updated its current SUSMP document to meet the interim requirements outlined in the new Municipal Permit. The City's update followed the recommended language developed by the regional SUSMP update group. All required interim SUSMP updates were incorporated into Storm Water BMP Manual II (see Section 2.2.4.4). In compliance with the interim SUSMP update

standards established in Order No. 2007-0001, the following tasks were performed during the review and interim update of the SUSMP:

- Priority Project categories were updated.
- The document was reviewed to ensure no obsolete or ineffective BMPs were retained.
- LID requirements and additional source control requirements were added to meet or exceed Municipal Permit requirements.
- LID BMPs that can be used as treatment control BMPs were added to appropriate tables and discussions of treatment control options were updated accordingly.
- Pollution removal efficiencies of treatment control BMPs were reviewed and updated where necessary.

In addition to the changes discussed above, a comprehensive regional Model SUSMP update was completed by the copermittees during FY 2008-09 and submitted to the Regional Board for approval on January 26, 2009. After incorporation of revisions based on Regional Board comments the Model SUSMP was approved by the Regional Board on March 24, 2009. The comprehensive Model SUSMP update includes the following as required by the Municipal Permit:

- Inclusion of LID, source control, and treatment control BMPs that meet or exceed the minimum requirements of the Municipal Permit.
- Establishment of site, design, and maintenance criteria for each LID and treatment control BMP listed in the Model SUSMP.
- Addition of criteria to help determine conditions where implementation of each LID BMP included in the Model SUSMP is applicable and feasible.
- Addition of a requirement for Priority Projects with low traffic areas and appropriate soil conditions to use permeable surfaces.
- Addition of any necessary restrictions for infiltration BMPs from Priority Projects that generate high levels of pollutants.

The City is in the process of updating its Local SUSMP to meet the requirements established in the regional Model SUSMP. The local update will be completed no later than March 24, 2010, one year after the adoption of the Model SUSMP. The City's Local SUSMP will include a review process to verify all proposed BMPs for Priority Projects meet the criteria designated in the updated Local SUSMP.

As required by Order No. 2007-0001 the City will also incorporate a Hydromodification Management Plan (HMP) into the City's Local SUSMP. The final HMP is currently being developed regionally by a consultant and regional workgroup and is projected to be completed and submitted to the Regional Board for approval in December 2009.

All necessary SUSMP updates described above and their projected completion dates are presented in Table 2-2.

Table 2-2
Time Schedule for Model and Local SUSMP Updates

SUSMP Update	Time Schedule	Status
Final Model SUSMP update	January 2009 (submitted) March 2009 (RB Approved)	Completed
Local SUSMP update	March 2010	In Process
HMP Progress Report	July 2008	Completed
Draft HMP	January 2009	Completed
Final HMP	December 2009	In Process
Adoption of HMP into Local SUSMP	180 days after RWQCB approval of the final HMP	--

2.4.4.2 DEVELOPMENT PROJECT APPROVAL PROCESS

The following section includes a summary of the City's current development review process.

DISCRETIONARY PROJECTS

Projects requiring a discretionary permit are subject to a three-tier review process that includes an initial predevelopment review prior to submittal to the City, a written self-certification of the BMP requirements for the project, and the application of project conditions of approval to meet storm water pollution control requirements. Those projects requiring an additional, ministerial permit are also subject to engineering plancheck review as described in the Ministerial Project section.

Predevelopment Process

The stormwater element of the predevelopment process is geared toward disseminating information on stormwater pollution control and the City's SUSMP requirements. During this preliminary design phase, engineers and applicants are guided by City staff to provide adequate post-construction BMP facilities in conceptual form and to document those facilities on the site plans upon the initial discretionary permit application submittal. This process results in better designed and integrated post-construction BMPs, since the facilities are included in the project design even in the earliest phases of the project.

Priority Projects (defined by the City of Encinitas as those projects subject to SUSMP requirements), which require more stringent stormwater pollution control methods, are first identified during the predevelopment process. The categories of development falling under the Priority Project classification can be found in the City's Storm Water BMP Manual II and are consistent with the requirements of the Municipal Permit. During the predevelopment meeting, applicants proposing Priority Projects learn that they must implement LID and source control BMPs and must install treatment control BMPs which

meet the numeric sizing criteria required by the Municipal Permit. City staff also inform applicants at the predevelopment meeting that installed post-construction BMP facilities must be maintained in good working order into perpetuity. City staff and the applicant and/or engineer discuss options for meeting the numerical post-construction treatment requirements, including volume-based systems and flow-based systems. In Encinitas, mechanical treatment systems are discouraged and when accepted may only account for a maximum of 50% of the treatment requirement, with the remainder of the treatment being provided by a natural system.

Stormwater Pollution Control Checklist and Certification

All development project applicants are required to complete a written self-certification of the post-construction BMPs proposed with their project. This certification is required to accompany the initial submittal of each discretionary permit application. The checklist briefly describes the Clean Water Program and the City's storm water regulations. Applicants are required to:

- Classify their projects as Priority, Standard, or Exempt from SUSMP
- Present the LID, source control and treatment control BMPs that will be installed or implemented on site to comply to the SUSMP requirements, and
- Certify that they understand and will implement post-construction BMPs on their site as appropriate for their project's priority.

This checklist must be completed by the party responsible for the development project and submitted with the project's permit applications. A copy of the checklist is provided in the Storm Water BMP Manual II.

The Development Review Process

The Engineering Department has established specific Conditions of Development Approval to assure compliance with the City's stormwater pollution control standards. These conditions include construction requirements as well as post-construction BMP standards for effective stormwater pollution control facilities. Once the predevelopment meetings are conducted and the self-certification checklist has been completed, the Engineering Department reviews the adequacy of the project's proposed facilities shown on the site plan and issues Conditions of Approval to ensure implementation of satisfactory LID, source control and treatment control BMP measures. The Conditions of Approval take into account the nature of each project site and the work proposed. The Conditions of Approval are then recorded in a covenant against the property.

Applicants not showing adequate construction or post-construction BMP measures on their initial development review submittals are asked to revise their plans and resubmit prior to approval. Stormwater pollution control facilities for Standard projects must meet the minimum requirements established in the City's Storm Water BMP Manual II. Priority Projects must additionally show LID, source control and treatment control BMPs on the project plans. Their project plans must also show a feasible solution for numerically-sized treatment control BMPs. Projects with treatment areas that appear to be inadequate are

asked to resubmit with substantiating calculations for the proposed treatment control BMPs. These numeric treatment requirements are listed in the City's Storm Water BMP Manual II and available to all applicants through the City website.

MINISTERIAL PROJECTS

Projects requiring a ministerial permit such as a grading, improvement, or building permit are also required to include post-construction stormwater pollution control facilities in the project design. These BMP facilities must be considered adequate before the project's plans are approved by Engineering staff. Often the project has been scrutinized at the discretionary permit level and the project is already conditioned to provide specific treatment facilities. For those projects not requiring a discretionary permit, the review of the storm water pollution control treatment facilities begins at the Engineering plancheck stage.

The Plancheck Process

City plancheck engineers are trained in the design of stormwater pollution control facilities and serve as resources to the general public and to design engineers. During the plancheck process, every project is reviewed for stormwater construction and post-construction BMPs. City plancheck engineers emphasize to applicants the variety of natural solutions that may be used in providing stormwater pollution control. All landscape areas used as post-construction BMPs must be clearly marked on the project plans along with the following associated note, "Landscape area for Best Management Practice to be privately maintained and not to be modified without a permit from City". The permitted drawing will become public record; therefore documentation of the designated treatment areas is maintained. Engineers are also required to provide stormwater pollution control notes on the plans addressing stormwater education, materials storage, erosion control, and waste management in order to meet the minimum SUSMP requirements.

Every plan in plancheck is also reviewed to determine if it meets the City's definition of a Priority Project. In addition to meeting standard BMP requirements, Priority Projects must provide LID, source control and numerically-sized treatment control BMPs as required by the Municipal Permit and the City's SUSMP. These requirements are discussed in detail in the City's Storm Water BMP Manual II.

All Priority Projects must comply with the numeric sizing criteria for treatment control BMPs in order to be approved by the City Engineer. Plancheck engineers review the project's hydrology calculations to determine the adequacy of the treatment system proposed. The project applicant is required to assume the maintenance responsibility or to identify the maintenance mechanism for the treatment system prior to project approval. A covenant ensuring adequate maintenance into perpetuity is recorded against the property. Those projects with the potential for substantial erosion are often required to provide an additional plan for permanent landscaping and irrigation and to place bonds with the City

to guarantee successful implementation of the measures shown thereon. Such bonds are retained until the landscaping has become fully established.

During the plancheck process, erosion control plans are also carefully reviewed to ensure compliance with construction BMP measures. Gravel bags, silt fences, stabilized construction entrances, and other methods must be provided where appropriate. Inlets to drainage facilities must be protected from sediment. Additionally, all exposed slopes need to be protected by a combination of hydroseed, permanent landscaping, and other erosion control measures. For more information regarding temporary construction BMPs, refer to Section 3 of this document.

Post-Construction BMP Maintenance Agreements

All Priority Projects under review for ministerial permits must execute a stormwater maintenance agreement guaranteeing the maintenance and/or replacement of permanent BMPs as necessary into perpetuity. The maintenance agreement or covenant includes an attachment depicting the specific project BMPs, so that the required facilities and their location on the project site are easily identified. The agreement is then recorded against and runs with the property. In a few cases the maintenance requirements are outlined on the plans themselves and a recorded agreement is not required.

CAPITAL IMPROVEMENT PROJECTS

The City's Capital Improvement Projects (CIP) are subject to the same post-construction BMP requirements as private development. Because many projects are redevelopment, linear, or repair projects, often only construction BMPs are necessary. However, SUSMP qualifying projects must also install post-construction BMPs. Priority CIP Projects are designed to incorporate the City's SUSMP requirements and LID, source control and treatment control BMPs will be implemented. The City takes responsibility for long-term maintenance and regular inspection of any installed permanent BMPs. Section 4 of this document provides a description of the City's MS4 maintenance and inspection program.

2.4.4.3 SUSMP PROJECT APPROVAL

During the planning process and prior to project review, the six projects listed in Table 2-3 were identified as Priority SUSMP Projects and approved during FY 2008-09. All applicable SUSMP BMP requirements specified in the City's local SUSMP were applied to each of the projects in Table 2-3. Under no circumstances was any priority project permitted to implement treatment control BMPs with low pollutant removal efficiency ratings. In addition, all of the development projects approved in FY 2008-09 were less than fifty acres in size; therefore none of the projects were required to meet Interim Hydromodification Criteria. All treatment control BMPs met the treatment control BMP sizing requirements outlined in the City's local SUSMP; therefore, the City did not initiate a waiver mitigation program and did not issue any waivers of infeasibility during FY 2008-09.

Table 2-3
SUSMP Priority Projects approved in FY 2008-09

Permit No.	Location	Approval Date
718 G	687 South Coast Hwy	8/28/2008
883 G	1076 Hymettus Ave	10/22/2008
983 G	1320 Encinitas Blvd	10/28/2008
943 G	211 Saxony Rd	1/14/2009
947 G	Bella Vista Ct	5/26/2009
10187 G	1603 Crest Dr	5/27/2009

The four-lot subdivision at 1076 Hymettus Ave provides a good example of the typical Priority SUSMP projects that are permitted by the City of Encinitas. The proposed project consisted of the construction of three single family homes (with one existing home to remain). The proposed development will add more than 5,000 square feet of impervious paved surface used for vehicular access to the new homes and therefore was identified as a priority project, and subject to SUSMP requirements. As a result, two infiltration basins (each 8 feet wide by 15 feet long by 5 feet deep) were designed to treat runoff from roofs and driveways in the proposed development. Eight smaller bioswales were also proposed on the lots to treat and direct runoff to the infiltration basins. In addition, pervious drivable surfaces were proposed in-lieu of traditional pavement for parallel parking in the right of way along Hymettus Ave and a portion of the driveway leading to the rear homes.

2.4.4.4 SUSMP PROJECT AND TREATMENT CONTROL BMP TRACKING

Over the past fiscal year, Clean Water Program staff worked with GIS staff to implement a comprehensive watershed-based SUSMP tracking system. The GIS data management system was designed to track the SUSMP Priority Projects and the long-term maintenance of all approved treatment control BMPs installed at development sites. As required by the Municipal Permit, the database is capable of tracking the following information:

- Type of treatment control BMP
- Location of the BMP
- Watershed within which the BMP is located[1]
- Date of construction of the BMP
- The party responsible for maintenance of the BMP
- Maintenance certifications or verifications
- Inspection findings
- Any corrective actions issued

[1] The entire City of Encinitas is within the Carlsbad watershed.

During FY 2007-08 a beta version of the GIS tracking system was put into use. Since the initial introduction, the City has been working to continually refine this database and new projects with treatment control BMPS are added to the database on a routine basis. Database improvements are a result of a thorough review of plans for proposed and built projects, a quality check of the existing data, and coordination with the GIS department. A hardcopy version of the most current inventory of treatment Control BMPs in the City's SUSMP Project and Treatment Control BMP Database is available in Appendix A-1. The inventory includes all operational treatment control BMPs installed at SUSMP priority projects. For a map of all the SUSMP Priority Development Projects approved within the City of Encinitas, refer to Appendix A-2.

With the aid of the City's Treatment Control BMP Inspection Priority flowchart (see Appendix A-3), all development projects with approved treatment control BMPs were prioritized as high, medium, or low Threat to Water Quality (TTWQ) during the 2008 JURMP update, as required by the Permit. In addition, prioritization of each BMP was further refined during FY 07-08 Operation and Maintenance Inspections. For new projects with treatment control BMPs that are added to the inventory, prioritization of the project occurs during the first treatment control BMP inspection. When the construction of a new project with treatment control BMPs is completed, the City requires that the treatment control BMP(s) are inspected within the first year, and prior to the next rainy season in order to determine prioritization for future inspection frequency. This allows the City to determine TTWQ based on a visual inspection of the project as well as the following criteria:

- Type of project
- Sensitivity of the receiving water body
- Proximity to ESAs
- Size of the BMP
- Recommended maintenance frequency
- Likelihood of operational and maintenance issues associated with the BMP(s)
- Location of the BMP(s)
- Other pertinent factors

The BMP Inspection Priority flow chart addresses basic site and treatment control BMP characteristics that can influence a site's TTWQ such as receiving water body sensitivity and the removal efficiencies of the installed treatment controls. Note that not all development projects and treatment control BMPs are the same; each may have unique water quality risks associated with it. The City considered additional relevant factors beyond those included in the flow chart as necessary.

2.4.4.5 BMP INSTALLATION VERIFICATION

Beginning in January 2008, the City of Encinitas began tracking the verification of post-construction BMPs that were installed on projects throughout the City. Upon project

completion, the engineering inspector now requires that the project engineer submit a grading certification letter to the City verifying that all the Low Impact Development, Source Control and Treatment Control Best Management Practices, as shown on the approved project plans and required by the Storm Water BMP Manual II, were constructed and are operational, together with the required maintenance covenant(s).

A sample grading certification letter is provided as Appendix A-4. Table 2-4 provides a list of the BMP verifications conducted for priority development projects completed in FY 2008-09.

Table 2-4
BMP Verifications for Priority Development Projects
Completed in FY 2008-09

Permit No.	Location	Construction Date
562 G	1302 Encinitas Blvd	8/4/2008
7628 G	215 La Costa Ave	11/4/2008
106 G	3358 Wildflower Valley Dr	11/18/2008
7300 G	760 Garden View Ct	12/22/2008
7791 G	1766 N Coast Hwy 101	12/30/2008
9367 G	781 Garden View Court	1/14/2009
789 G	2011-2089 San Elijo Ave	3/23/2009
181 G	3342 Wildflower Valley Dr	4/6/2009
462 G	70 thru 90 N Coast Hwy 101	4/6/2009
386 G	3535 Manchester Ave	4/9/2009
9301 G	187 Halcyon Rd	4/14/2009
9180 G	1610 Neptune Avenue	5/21/2009

Subsequent to the submittal of the grading certification letter, engineering inspection staff inspect the project site to verify that LID, source control, and treatment control BMPs proposed for the project were constructed in compliance with all approved plans, City permits and ordinances. Inspections of Priority Project sites prior to occupancy allow the City to verify that all BMPs are in place before any anticipated pollutants associated with the occupied site are generated. Engineering inspectors also check to ensure that BMPs have been built according to plans before signing off on each stage of construction. The inspectors use the project's grading plans to identify any missing or incorrectly installed BMPs and deny approval for sites with observed problems. If the engineering inspector is satisfied that the post-construction BMPs were installed as required, the inspector verifies the project engineer's letter with their signature and a date and takes photos of the

completed BMP installation. Hardcopies of these signed and certified verification letters and the photos of the BMPs are retained by the Clean Water Program.

2.4.4.6 ANNUAL TREATMENT CONTROL BMP OPERATION AND MAINTENANCE VERIFICATION

As required by the new Municipal Permit, all treatment control BMPs installed at development projects must be self inspected annually and maintained in perpetuity by a responsible party. As part of the JURMP update, the City of Encinitas established a Treatment Control BMP Operation and Maintenance Verification Program.

During FY 2007-08, Clean Water Program staff prepared the essential elements of the Treatment Control BMP Operation and Maintenance Verification Program. First, a comprehensive list of mailing addresses for completed projects with treatment control BMPs was pulled from the newly developed SUSMP Project and Treatment Control BMP GIS Database. Then, a formal letter was developed to notify property owners of their verification responsibility. An informative Treatment Control BMP brochure was also created to help property owners identify the BMPs that were installed as a part of their development project. Finally, a self verification form was developed for responsible parties to use to report annual verification of Operation and Maintenance of their treatment control BMPs. An example of the verification letter, brochure, and form can be found in Appendices A-5a, A-6, and A-7, respectively. In some cases additional notifications were required; with these letters, finaled grading plans were also included in order to assist responsible parties in identifying the location of BMPs.

Beginning in FY 2008-09, the City initiated its Treatment Control BMP Operation and Maintenance Self Verification Program and required annual verification of proper maintenance of all treatment control BMPs by the party responsible for maintenance prior to the start of the rainy season. The City mailed annual self verification notifications to each party responsible for the maintenance of treatment control BMPs constructed within the City of Encinitas. The notification package included a letter informing the responsible party of their inspection and maintenance obligation, a brochure explaining the new program and providing examples of common BMPs, a blank inspection / maintenance verification form (to be completed and returned to the City), and a self addressed stamped envelope.

Self-Verification Results and Findings

In the first year of implementation, the City anticipated a significant amount of information gathering and validation. The goal of initial contacts with responsible parties was to refine the City's BMP inventory based on information gathered as well as better define methodologies to effectively assure proper maintenance and management of BMPs. Since this was the first year of implementation, for a large number of facilities, it took several notification attempts for self-verifications to be returned (see Table 2-5). Copies of the three BMP Operation and Maintenance notifications issued to responsible parties in FY 08-09 may be found in Appendix A-5a, A-5b and A-5c.

Table 2-5
Summary of Notifications Sent and Self-Verification Forms Returned

Number of forms returned after **1 notification**[2]**:**	41
Number of forms returned after **2 notifications**[3]**:**	22
Number of forms returned after **3 notifications**[4]**:**	9
Number of Forms **Not** Returned (even after 3 notification attempts):	(10)
Notifications Sent to Undeliverable Addresses:	(8)
Total Number of Self-Verification Forms Returned:	72

Upon receipt of a self-verification packet from responsible parties, City staff reviewed the completed form and the required photos and maintenance documentation (if any). Staff determined whether the information was complete or if any further maintenance was required. Of the self-verifications forms returned, several included incomplete or incorrect information. In some cases BMPs were not identified correctly or were not noted on the self-inspection form at all. In addition, several self-verification packets were returned without the accompaniment of photo documentation. In order to assure BMPs were inspected and maintained as required, City staff either requested additional information or conducted a formal inspection by City staff (see Table 2-6). Depending on the potential threat to water quality, inspections were either immediately conducted after receipt of an incomplete self-verification form or recommended to be conducted in the next fiscal year as part of the City's required annual Treatment Control BMP Operation and Maintenance Inspections (see Section 2.4.4.7). For a detailed summary of the results and findings of FY 2008-09 treatment control BMP inspections see Appendix A-8. Appendix A-8 includes more detailed information about each project, such as, project location, inspection dates, inspection results and additional City action. As a result of the Self-verification program and in combination with the Operation and Maintenance Inspection Program (Section 2.4.4.7) a total of three properties with treatment control BMPs warranted enforcement action. For a summary of enforcement action, refer to section 2.4.4.8.

The defined reporting period of this report represents the initial implementation year of the permanent BMP self verification program. As described in Tables 2-5 and 2-6, the City's implementation process was generally successful. However, in efforts to continually

[2] The first notification included a letter (Appendix A-5a), the BMP Operation and Maintenance Brochure, the Self-Verification Form, and a self addressed, stamped envelope (SASE).

[3] The second notification included a letter (Appendix A-5b), a copy of the first notification letter, a copy of the grading plan which identified the location and detail of the required BMP, the BMP Operation and Maintenance Brochure, the Self-Verification Form and a SASE.

[4] The final notice included a letter (Appendix A-5c) explaining that since this was the third notification attempt, the responsible party's BMPs would be inspected by City staff in FY 2009-10.

improve process and procedure related to this program area, it is anticipated that future implementation of this program will be improved by providing responsible parties with additional mechanisms for supplying required information to the City, such as an electronic data submittal form through the City's website. Further, communication between responsible parties and the City will be improved as BMP inventories and contact information are validated and responsible party knowledge and awareness of operation, maintenance, and data submittal requirements is enhanced.

Table 2-6
Summary of Self-Verification Results and City Actions

Self-Verification Results	**Frequency**
Unresponsive Owner	10
Verification Received	72
Contact Info Invalid	8

City Actions	**Frequency**
City Inspected	11
Information Validated	48
Incomplete Submittal. FY 09-10 Inspection Recommended.	20
Maintenance Required. Enforcement action taken.	3
Validate Contact Info. FY 09-10 Inspection Recommended.	7

2.4.4.7 TREATMENT CONTROL BMP OPERATION AND MAINTENANCE INSPECTIONS

During FY 2007-08, Clean Water Program staff developed the City's new Treatment Control BMP Operation and Maintenance Inspection Program. New inspection forms were created and the Treatment Control BMP inventory database was designed and quality checked. For a detailed description of the development of the GIS-based Treatment Control BMP Inventory and Tracking system refer to Section 2.4.4.4. In FY 07-08, City staff also conducted cursory inspections to assess the new inspection form and get an idea of the general condition of some of the existing BMPs. Notably, unique to the City of Encinitas and the development dynamic of the City, a large number of inventoried BMPs exist on private single-family residential lots. Therefore, the City of Encinitas Treatment Control BMP Operation and Maintenance Inspection program was developed with these conditions in mind.

In FY 2008-09 implementation of the City's BMP Inspection Program was closely aligned with the implementation of the Self-Verification Program. Since this was the first year of implementation, validating the City's current BMP inventory was the primary focus of

inspections and self-verification tracking. In light of this goal, in FY 2008-09, all properties with treatment control BMPs were required to complete the self-verification process as well as undergo a City inspection. In combination, the inspection and self-verification programs allowed City stormwater staff to individually assess each treatment control BMP in detail to establish prioritization and identify potential threats to water quality. As required by the new Municipal Permit, all treatment control BMPs installed at development projects were inspected by the City's inspection staff prior to the rainy season. As the program progressed, each BMP was verified and given a priority status of either "High", "Medium" or "Low".

In an effort to validate and characterize the City's permanent BMP inventory, and establish baseline programmatic needs, City staff inspected all projects with treatment control BMPs in FY 2008-09. A total of 39 projects (34 private and 5 municipal) with approved and constructed treatment control BMPs were inspected. As of July 1, 2008 there were a total of 39 constructed projects on the City's treatment control inventory (See Appendix A-1). An annual average of 10.75 projects with treatment control BMPs were completed since permanent BMPs were first required on Priority Development Projects in 2003 (see Table 2-7). Therefore, as required by Order No. 2007-0001, **100%** of the total number of projects with approved treatment controls and **363%** of the average number of projects treatment control BMPs approved per year were inspected in FY 2008-09. In addition, **100%** of the projects with drainage inserts were inspected in FY 2008-09.

Table 2-7
Average Number of Constructed Projects with Treatment Control BMPs

Fiscal Year	Completed Projects
2004-05	6
2005-06	8
2006-07	14
2007-08	15
Average	10.75

When inspections are conducted in future years, inspection frequencies will be based on the project's assigned TTWQ priority as determined by City staff in FY 2008-09, and the criteria outlined in Section 2.4.4.4 of this document. In addition to the established criteria, staff will apply baseline data gathered through initial inspection actions taken in 2008-2009. Table 2-8 below presents treatment control BMP TTWQ priorities and their corresponding inspection frequencies.

Table 2-8
Treatment Control BMP Inspection Frequencies

Development Project with Treatment Control BMPs TTWQ	Inspection Frequency
High	Annually (prior to start of rainy season)
Medium*	50% annually
Low	As needed

*Drainage insert controls are considered medium priority BMPs

As required by the Municipal Permit, a minimum of 20% of the total number of projects with approved treatment controls and a maximum of 200% of the average number of projects with treatment control BMPs approved per year will be inspected annually.

FY 2008-09 inspections included an examination of all treatment control BMPs at the site to verify that each treatment control BMP was working, being maintained properly, and was in compliance with all applicable City ordinances and permits. Inspection findings were documented by the inspector using the Treatment Control BMP Inspection Form (Appendix A-9). If any deficiencies in operation and maintenance were noted during the inspection, the responsible party was notified and appropriate enforcement actions were taken (as described in Section 2.4.4.8 of this document) to achieve compliance.

Because the majority of the treatment control BMPs installed in the City of Encinitas are on single-family residential lots, during implementation of the first year of this program, great care was taken to educate homeowners of their maintenance, inspection and self verification obligations. As noted in section 2.4.4.6, packages mailed to responsible parties included information detailing the new BMP operation and maintenance program and the location and type of treatment control BMPs that were installed on their property.

In the process of conducting inspections and issuing self-verification notices, it became quite apparent that homeowners were often unaware that treatment control BMPs existed on their property that must be preserved in place and maintained as necessary in order to protect water quality. When working with homeowners, City stormwater staff devoted personal, specialized assistance as warranted in order to improve knowledge and awareness and achieve compliance. As a result, in FY 2008-09 a significant amount of staff time was dedicated to reviewing the results of inspections and self-verifications and addressing the operation and maintenance concerns that posed the greatest potential threat to downstream water quality.

For a detailed summary of the results and findings of the FY 2008-09 treatment control BMP inspections see Appendix A-10. Appendix A-10 includes more detailed information about each project, such as, project location, inspection dates, inspection results and additional City action. Depending on the findings during the course of initial inspections, follow-up inspections were conducted and enforcement action was taken as necessary. For a detailed summary of enforcement action taken as part of the treatment control BMP inspection program, refer to section 2.4.4.8.

Treatment control BMPs that are operated and maintained by the City are considered part of the City's MS4 and are maintained and inspected by Public Works staff on an annual basis. BMPs that are located in specialized public facilities such as parks and libraries may be inspected by City stormwater staff and maintained as necessary by Public Works staff. For more information regarding the maintenance and inspection of the City's MS4 refer to Section 4 of this document.

2.4.4.8 ENFORCEMENT MEASURES FOR DEVELOPMENT SITES

As required by the Municipal Permit, and depending on the severity of the violation, the City enforces its storm water ordinance for all development projects and permanent BMPs as necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. A more detailed description of the different enforcement measures used by the City to enforce its storm water regulations and their legal basis can be found in Section 2 of the 2008 JURMP update document.

As a result of post-construction treatment BMP verification inspections and self-verification results, the City determined that **four** out of 39 inspected projects were partially or totally deficient in the installation and or maintenance of post-construction BMPs. By the date of writing this report and as a result of communication with the responsible persons, all four projects were brought into compliance through a combination of written orders to correct and/or verbal warnings.

3.0 CONSTRUCTION COMPONENT

3.1 INTRODUCTION

The purpose of the City's construction component is to maintain an updated inventory of all construction projects, identify pollutant sources from construction projects, educate the construction community, implement construction site Best Management Practices (BMPs), inspect construction sites, provide proper enforcement of violations, and implement all of the requirements of the Municipal Permit as outlined in Section D.2.

3.2 SOURCE CHARACTERIZATION

3.2.1 SITE INVENTORY

Within the defined reporting period of this report, the City of Encinitas has compiled, maintained, and updated a watershed-based inventory of all construction sites within its jurisdiction. The construction inventory for FY 2008-09 included a total of **140** construction sites. During this period, there were **21** high priority sites that were inspected biweekly, **45** medium priority sites that were inspected monthly and **74** low priority sites that were inspected on a biannual basis. The City utilizes an industry standard Geographic Information System (GIS) to maintain an accurate and up-to-date inventory of all construction projects. The GIS inventory includes details on each construction site, including project name, location, sub-basin, type of construction permit, date of permit issuance, inspection prioritization, and the assigned storm water inspector. Beginning January 24, 2008, the City's Clean Water Program staff in coordination with the City's IT department designed a technical solution in GIS to inventory and prioritize all construction projects as permits are approved. A more detailed description of the prioritization process is provided below in section 3.2.2. A fully prioritized construction inventory can be found in Appendix B-1 in addition to a map of all active construction sites located in Appendix B-2.

3.2.2 INVENTORY UPDATES

As required by Section D.2.b of the Municipal Permit the City's watershed-based inventory of construction sites is updated weekly by the Engineering department as new grading permits are approved. The Engineering department shares all approved permit information with the City's IT Department which also maintains an updated inventory of all active construction projects in a GIS database. As part of the 2008 JURMP update process, and to ensure monthly construction inventory management, a construction specific GIS script was developed by the City's GIS staff in ESRI's ArcMap for prioritizing approved construction permits. This mechanism is accessible via desktop to Clean Water Program staff to execute the GIS script and review the prioritization on a monthly basis. Regular updates to the inventory include the addition of new construction projects, the removal of completed construction projects, and re-assignment of inspection frequencies of active construction sites as determined by the City's Clean Water Program staff.

A flow-chart that outlines the process by which the inspection frequency of construction projects is determined in GIS can be found in Appendix B-3.

3.3 ORDINANCE UPDATES

As required by Section D.2.a of the Municipal Permit, applicable City documents and ordinances were updated on March 12, 2008 by the City of Encinitas City Council to establish adequate legal authority to enforce applicable storm water requirements. As part of the comprehensive Jurisdictional Urban Runoff Management Plan (JURMP) update completed in March 2008, the City also updated Municipal Code Section 20.08, the Watercourse Protection, Stormwater Management and Discharge Control Ordinance, including construction specific provisions. Within the defined reporting period of this report, it is also notable that the City Grading Ordinance, EMC Section 23.24, was approved by the California Coastal Commission and adopted by City Council on February 25, 2009. The following provisions for storm water pollution control have been incorporated into the City's updated grading ordinance:

- All grading permits shall comply with the provisions of the City's Best Management Practices (BMP) Manual Part II which provides design, construction, and operation requirements for minimizing storm water pollution (§ 23.24.071).

- Any removal of BMPs that were required for a priority project will require a grading permit for corrective or other action. A requirement may be imposed to replace the BMP with equivalent water quality protection (§ 23.24.080).

- Priority projects for storm water pollution control cannot be exempted from obtaining a grading permit (§ 23.24.090.I).

- Any project creating over 500 square feet of new impervious area has to obtain a construction permit and adhere to all standards in the City's BMP Manual Part II (§ 23.24.105).

- All grading plans shall contain the location, design, detail, and cross section of all erosion control and post construction BMPs (§ 23.24.140).

- If the approved grading plan does not show post construction BMPs in sufficient detail, a precise grading plan for development projects is required to include and accurately depict post construction BMPs for review and approval of the City Engineer. (§ 23.24.126).

- Both Interim and Final Erosion and Sediment Control Plans are required (§ 23.24.150, 23.24.160).

- A waste management plan is required to be submitted with all interim erosion control plans. The management of the waste on the construction site must be graphically and verbally described on the grading plan (§ 23.24.150F).

3.4 BEST MANAGEMENT PRACTICE REQUIREMENTS

3.4.1 UPDATED BMP REQUIREMENTS

Through the JURMP Update process completed in March 2008, the City reviewed and updated a set of minimum BMPs that must be implemented at all construction sites. Every construction site within the City's jurisdiction is required to implement general site management BMPs and erosion and sediment control BMPs to reduce, retain, and manage pollutant discharges to the Maximum Extent Practicable (MEP). Construction BMP requirements are presented in the Encinitas Municipal Code Chapter 20.08, the City's Storm water Best Management Practices Manual, Part I and II, and the City of Encinitas' 2008 JURMP Update.

3.4.1.1 SEASONAL SITE MANAGEMENT REQUIREMENTS

Construction sites are required to implement minimum construction BMPs to prevent pollution discharges to the MEP regardless of the season. However, the City also maintains requirements for erosion and sediment control BMPs that are different for the wet season (October 1st – April 30th) than they are for the dry season (May 1st – September 30th). The City's Storm Water Manual Parts I and II provide a detailed list of dry and wet season requirements for all construction sites. Prior to the beginning of the wet season, in September 2008, the City sent 76 Erosion Control letters (See Appendix B-5) to all property owners with active and inactive construction sites reminding them of the City's minimum BMP requirements. Additionally, the City also included a copy of the letter dated August 25, 2008, from the Executive Officer of the San Diego Regional Water Quality Control Board (RWQCB) titled *Regional Preparation for San Diego Rain Season* was to reinforce regional stormwater management requirements as they relate to construction activities.

3.5 PROGRAM IMPLEMENTATION

3.5.1 CONSTRUCTION AND GRADING APPROVAL PROCESS

The City has an established and thorough interdepartmental review and approval process for local construction and grading permits. When a construction project comes to the City for approval, it is required to obtain a building permit, a grading permit, or both. A grading permit is required prior to any activity where the total volume of material disturbed, stored, disposed, or used as fill exceeds 50 cubic yards, obstructs a waterway, or occurs over an area of 10,000 square feet. All other projects require a building permit. Both permits require that plans be submitted and approved by the City. The City's grading ordinance

requires that all projects, whether subject to a grading plan or not, are required to minimize site runoff, erosion, and sedimentation. In addition, all projects requiring a grading permit are required to prepare an erosion and sediment control plan. All permits that go through the City's review and approval process are tracked within a citywide data management system called, "HTE".

The grading permit outlines the regulatory (Federal, State, and City) conditions for new construction. The grading permit requires that grading plans be prepared, reviewed, approved, and signed by the City Engineer. As a part of this approval process, the City's Clean Water Program staff also review the grading plans to ensure compliance with applicable construction specific regulations.

The grading plan approval process consists of a series of plan checks, revisions, and final approvals. Plans are checked by both the Engineering and Clean Water Program staff. Engineering staff reviews the plans for overall compliance with the grading ordinance. Clean Water Program staff checks the plans for specific compliance with the Storm Water Management Ordinance and Federal and State regulations. If the site falls under jurisdiction of the State's General Construction Permit, staff follows up with the developer to ensure that a Storm Water Pollution Prevention Plan (SWPPP) is properly prepared and submitted. In addition, the SWPPP is reviewed and approved by the Clean Water Program staff prior to final approval of the project grading plans. The City also requires proof that a Notice of Intent (NOI) has been submitted for sites that are subject to the General Construction Permit.

Prior to issuing construction and grading permits, the City's Engineering Department verifies that the proposed construction project plans to implement all applicable required BMPs to reduce pollutant discharges to the MEP.

3.5.2 BMP IMPLEMENTATION

Clean Water Program staff spends a significant amount of time coordinating storm water management and BMP implementation at construction sites with the help of the City Engineering Inspectors. Construction BMP requirements are presented in the Encinitas Municipal Code Chapter 20.08 and the City's Storm Water Best Management Practices Manual, Parts I & II.

Clean Water Program staff constantly monitor weather patterns and storms in the Pacific through the National Weather Service. Weather reports and forecasts are emailed to all Engineering Inspectors to inform them of the possibility of incoming rain. When the forecast exceeds 40% over the coming five-day period, inspectors inform contractors that additional BMP implementation, maintenance, or replacement should take place, and where necessary, they require responsible parties to have additional BMPs in place at the end of each work day.

It is notable that the general notes for the building plans have been amended to include erosion control, sediment control, and materials management practices. The Clean Water Program also

reviews SWPPPs for all projects greater than five acres and sensitive projects between one and five acres. Staff reviewed and commented on SWPPPs for three projects between July 1, 2008 and June 30, 2009. See Table 3-1 below for a summary of SWPPP reviews.

Table 3-1 Storm Water Pollution Prevention Plan Reviews, 2008-09

Site Name	Address	Size (acres)	Notice of Intent	Review Date
Walgreens	1320 Encinitas Blvd.	2.20	Yes	9/26/08
Private Residence	3645 Copper Crest Rd.	1.15	Yes	11/12/08
La Costa Slope Repair	Corner of La Costa Ave. and Vulcan Ave.	< 1 acre	Yes	4/21/09

Through the review and plancheck process, and supported by the Watercourse Protection, Stormwater Management and Discharge Control Ordinance, staff maintains the authority to require additional or alternative BMPs to be implemented on individual projects as determined necessary. This allows the Clean Water Program to ensure that the proper sediment control, erosion control, and materials management BMPs are shown on the plans and are to be implemented on-site.

3.5.3 CONSTRUCTION SITES REQUIRING ADVANCED TREATMENT

There were no sites in FY 2008-09 that required advanced treatment. For the majority of the construction sites within the City's jurisdiction, the minimum required BMPs, if correctly installed and maintained, adequately control sediment discharges from the site. If it is determined that a project site possesses characteristics that could result in standard construction BMPs being ineffective in the treatment of sediment, resulting in an exceptional Threat To Water Quality (TTWQ), advanced treatment will be required. Standard criteria for determining projects that pose an exceptional TTWQ and a description of advanced treatment methods are included in the City's Storm Water BMP Manual II.

3.5.4 INSPECTIONS & BMP VERIFICATION

The City has an established inspection program to evaluate compliance with storm water regulations at all construction sites within the City's jurisdiction. The City of Encinitas' Engineering Department employs six Engineering Inspectors who are responsible for inspections at all construction sites in the city. Storm water issues such as compliance with the grading and storm water ordinances in the Municipal Code have become one of their main focuses, especially during the wet season.

On January 24, 2008, the RWQCB adopted the 2007 Municipal Permit. Inspection activities for the construction program were updated and implemented at that time to meet the new Municipal Permit requirements as outlined in Order No. R9-2007-0001. During Fiscal Year 2008-09, consistent with required inspection frequencies as outlined in Sections 2.d.1-3 of the Municipal Permit, City staff conducted a total of **440** storm water inspections. Appendix B-1 details the complete Construction Inventory for FY 2008-09, the construction site prioritizations, and the number of inspections conducted at each site.

As part of the 2008 JURMP update process, and codified through BMP Manual II, the City of Encinitas established a maximum disturbed area for grading at 50 acres. Additionally, through this process, the City established advanced treatment criteria for construction activities. Within the defined reporting period of this report, no construction projects in the City of Encinitas were subject to maximum disturbed area or advanced treatment requirements, and therefore no required inspections related to this standard were completed.

The Engineering Inspectors captured all construction inspections on a form titled "Storm Water Quality Inspection for Construction Activities", included in Appendix B-4. The inspection form contains questions to ensure all the inspection components required by Section D.2.d.6 of the Municipal Permit are addressed. The form lists the minimum construction BMPs required by the City and includes boxes to document if BMPs are adequate or inadequate and/or require maintenance. If required BMPs are missing or found to be improperly implemented, appropriate enforcement actions, as described in Section 3.5.5 below were taken.

3.5.5 COMPLIANCE AND ENFORCEMENT ACTIONS

3.5.5.1 GENERAL ENFORCEMENT

The City is responsible for enforcement of local ordinances and applicable local permits at all construction sites within its jurisdiction. Inspection and enforcement for construction projects is administered by the Engineering Inspectors and other City staff with inspection and enforcement authority.

The City typically employs a tiered, escalating enforcement system which includes verbal warnings and education, written warnings, and administrative citations. However, the City reserves the right to determine the most appropriate enforcement course for a given situation, as dictated by the specifics of each case. For example, a stricter initial enforcement measure

may be applied where significant noncompliance is noted or when a potential rain event increases the potential for the violation to have a negative impact on water quality.

Verbal warnings and education will typically be the initial enforcement methods employed, assuming that a) the site or individual does not have a history of non-compliance with storm water regulations, and b) there has not been an observed illegal discharge to the MS4. The inspector will educate the violator on what actions need to be taken to prevent a violation from occurring or to correct the violation and document the violation and verbal warning in the inspection file. A time frame will be given for an identified violation to be corrected, and a follow-up inspection date will be scheduled, which will also be documented.

A written warning is typically issued to violators that are already aware of the City's storm water regulations or to those who have not corrected their actions after being given a verbal warning. Written warnings can be given using a variety of methods, including the issuance of a Notice of Violation (NOV) or Stop / Correct Work Notice. The NOV and Correct Work Notice provide a description of the violation to be corrected, the time frame for correction, and a follow-up inspection date. All Stop Work Notices issued by the City are reported to the RWQCB per the reporting requirements of the Municipal Permit.

Civil penalties for violations of the Encinitas Municipal Code (EMC) are established in EMC Chapter 1.08, and determined violations of storm water regulations may be subject to administrative citations and associated administrative fines, including those at construction sites. Administrative citations and fines are used in addition to other legal remedies as described in the paragraphs above.

All inspection personnel have the authority to take immediate enforcement actions when necessary. This facilitates timely correction of inadequate BMP implementation, reducing the risk of pollutants discharging from the site. City inspectors conduct follow-up inspections to determine if corrective actions have been taken to comply with City ordinances and minimum BMP requirements. The time frame for a violator to correct a documented violation is determined on a case-by-case basis at the discretion of the inspector.

3.5.5.2 REPORTING AND NON COMPLIANCE

During the FY 2008-09, **41** construction related complaint calls were received through the City's Clean Water hotline. A total of 40 complaints were investigated and one call was referred to another department for further action. Of the 40 complaints investigated by Clean Water Program Staff, there were **31** violations. This resulted in **27** instances in which educational information was disseminated, **7** instances in which Correct Work notices were issued, **3** instances in which citations were issued. A complete summary of all construction related complaints can be found in Appendix H-1.

There were an additional **62** correct work notices as a result of the routine City inspections at construction sites throughout the fiscal year. With immediate oversight from the City's Engineering Inspectors, contractors were quick to address all complaints and implement the appropriate BMPs to achieve compliance and avoid further enforcement. Appendix B-6 features

a summary of all violations and enforcement actions for all regularly inspected construction sites in FY 2008-09.

4.0 MUNICIPAL

4.1 INTRODUCTION

The municipal component of the City's Clean Water Program includes proper management of facilities owned and operated by the City of Encinitas to eliminate or reduce the amount of pollutants that enter the storm drain system. The City maintains streets, the storm drain system, and municipally owned facilities, which includes 18 public parks, 6 beach access areas, 4 beach parking lots, 5 fire stations, 5 public works yards, 4 administration buildings, 1 golf course, and 4 open space areas. The updated municipal facilities inventory is included as Appendix C-1. The City also conducts high Threat to Water Quality (TTWQ) activities, as defined by the Municipal Stormwater Permit, such as power washing and other mobile activities including street and sidewalk repair, building cleaning, painting, graffiti cleaning, and fleet vehicle maintenance. Other prominent water quality related activities include street sweeping, inspections of municipal facilities, educational efforts geared toward municipal personnel and landscaping contractors, annual Municipal Separate Storm Sewer System (MS4) maintenance, and regular upkeep of the sanitary sewer system to prevent overflows.

Due to the large expanse of municipal areas, activities, and functions, City staff must carefully manage pollution prevention measures and Best Management Practices (BMPs) to reduce or potentially eliminate the discharge of pollutants into the MS4 from municipal areas and activities. To comply with the Municipal Stormwater Permit, the City has developed a comprehensive program designed to reduce the amount of pollutants that are transported in urban runoff from municipal areas, activities, and functions

4.2 ROADS, STREETS, HIGHWAYS, AND PARKING FACILITIES

4.2.1 BACKGROUND

Roads, streets, highways, and parking facilities can collect a variety of pollutants due to routine vehicle use and have a tendency to collect litter and debris from neighboring areas and activities. Regular maintenance is necessary to control pollutants such as sediment, metals, litter, and debris on roads, streets, highways, and parking facilities.

4.2.2 SOURCE CHARACTERIZATION

The City of Encinitas maintains approximately 145 miles of roads, streets, and highways and 11 City owned and operated parking facilities. Roads, streets, highways, and parking facilities are included in the City's municipal inventory, which is included in Appendix C-1.

4.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

Both pollution prevention methods and BMPs are implemented for roads, streets, highways, and parking facilities throughout the City. The City utilizes both the City's BMP Manual Part I and the California Stormwater Quality Association (CASQA) Municipal Handbook to choose applicable BMPs to implement for roads, streets, highways, and parking facilities within the City. Street sweeping and cleaning is the main BMP that is implemented for road, street, highway, and parking facilities (both stand-alone and those associated with a municipal facility) maintenance. Treatment control BMPs are used for all roadway projects determined to be priority projects and subject to Standard Urban Storm Water Mitigation Plan (SUSMP) standards, described in more detail in Section 2.0. The City implements additional controls for roads, streets, highways, and parking facilities adjacent to or tributary to Environmentally Sensitive Areas (ESAs) when determined to be necessary.

4.2.4 PROGRAM IMPLEMENTATION

This section describes the steps that were taken in FY 2008-09 to require and verify the implementation of designated BMPs for all City maintained roads, streets, highways, parking areas, and related activities as outlined in the Municipal Permit Section D.3.a.(5)(a-c).

In compliance with street sweeping standards established in Order 2007-0001, the City implemented an aggressive sweeping schedule for roads, streets, highways, and parking facilities.

The frequency of street sweeping is as follows:

- All arterial roads, streets, highways, and parking facilities identified as consistently generating the highest volumes of trash and/or debris are swept weekly.
- All collector streets and parking facilities identified as consistently generating moderate volumes of trash and/or debris are swept bi-monthly.
- All residential (publicly owned) and parking facilities identified as generating low volumes of trash and/or debris are swept annually.

The City also maintains parking facilities at six local parks, four local beaches and the Encinitas Community Center. Four parking facilities at the local parks have been identified as generating low volumes of trash, sediment, and debris and are swept monthly from March through September. The remaining parking lots have been identified as generating moderate volumes of trash, sediment, and debris, and have been assigned a sweeping prioritization of medium priority. Each of these facilities is swept on a monthly basis throughout the year. The parking facilities at the beaches are swept every week from April through September to address the increased traffic, and monthly from October through March. In FY 2008-09, a total of **70.9 tons** of debris was collected from all City maintained parking lots.

In FY 2008-09, a total distance of **9,936 curb miles** was swept, and a total of **1,449 tons of debris** was collected.

Additionally, in FY 2008-09, the City's Public Works Department through coordinated efforts with Partners with Industry (PWI) collected and removed **447** 30-gallon bags of litter from all of

the City's bus stops. The City also partnered with San Diego County probation crews to collect and remove **8,661** 30-gallon bags of over-grown vegetation from City right-of-ways based on visual observations and citizen complaints.

4.3 FIXED FACILITIES

4.3.1 BACKGROUND

The City owns and operates a variety of municipal fixed facilities that have been grouped in this section because these facilities receive formal inspections as part of the municipal program. Therefore, the program implementation for these facilities is generally the same. Municipal fixed facilities include the following:

- Parks and Recreational Facilities
- Public Works Facilities
- Potable Water Facilities
- Fire Stations
- Other Fixed Facilities

4.3.2 SOURCE CHARACTERIZATION

The Municipal Permit requires Copermittees to inspect high priority municipal areas and activities annually according to D.3.a.(7)(a). High priority facilities include parks and recreational facilities and other municipal areas and activities that the City determines may contribute a significant pollutant load to the MS4.

As part of the JURMP Update process in March 2008, all municipal facilities were assigned an inspection priority based on the Municipal Permit requirements and an evaluation of their threat to water quality. Each site and activity has been evaluated based on a variety of site-specific factors including size, location, type of activity, waste generated, pollutant discharge potential, non-storm water discharges, proximity to receiving water bodies, and any other relevant factors deemed appropriate. Using these criteria, a complete prioritized, watershed based inventory was developed and is included in Appendix C-1.

The City of Encinitas owns, operates, and maintains 50 fixed facilities within the City. Of these facilities, 28 have been designated with a high priority inspection priority and 21 were designated a low inspection priority. All high priority facilities are formally inspected on an annual basis and described further in Section 4.3.4. Both high and low priority facilities are visually inspected on a routine basis by City staff. Any illicit discharges or illegal connections are immediately referred to the Clean Water Program. All fixed municipal facilities are included in the City's inventory located in Appendix C-1. Figure 4.1 illustrates the various municipal fixed facilities and their associated activities within the City of Encinitas.

Parks and Recreation Facilities

The City maintains 21 parks, 7 beach access areas, 7 viewpoints, 40 miles of trails, and 70 acres of open space. All landscape maintenance activities are performed through the use of private

contractors. Parks Division Supervisors are responsible for monitoring contract activities for landscaping; implementing BMPs for pesticide, herbicide, and fertilizer usage; waste removal and control; and maintenance at all municipal parks and recreation facilities.

Public Works Operations Facilities

Public Works operations facilities are important in maintaining the functionality of many publicly offered services. The City of Encinitas maintains a total of four public works facilities, including two public works yards, a vehicle maintenance facility, and a wastewater collection facility (Appendix C-1).

Potable Water Facilities

The means to provide residents of the City with potable water is an essential activity conducted by the City of Encinitas' San Dieguito Water District. The City maintains several underground fixed facilities which include pressure regulating stations as well as two water reservoir/water storage facilities. The City also maintains an above ground water recycling reservoir.

Fire Stations

Fire fighting capability is an essential element of municipal activities conducted in the City. The City of Encinitas maintains five fire stations, which are included in the municipal inventory (Appendix C-1). Two fire stations within the City, stations #3 and #4, have fueling stations on site.

Other Fixed Facilities

Other fixed municipal facilities include a community center, an administrative building, a sewage pump station, and an Ultra Violet Urban Runoff Treatment Facility (UV Facility). All of these facilities are considered a low priority because many of the activities at these facilities are conducted indoors and do not correspond with activities that are considered a high threat to water quality.

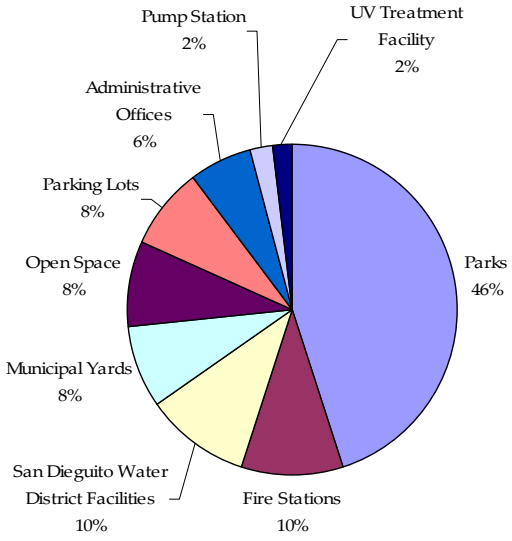


Figure 4.1 City of Encinitas Fixed Facilities

4.3.3 BEST MANAGEMENT PRACTICES

4.3.3.1 UPDATED BMPS

In FY 2007-08, the City established minimum BMPs for various municipal activities at all fixed municipal facilities. The BMPs are outlined in the City's 2008 JURMP Update and the City's BMP Manual Part I. The City also references the CASQA Municipal BMP Handbook when choosing appropriate BMPs for various fixed facility types. More detailed information about BMP implementation at specific facility types is included in the following sub-sections. The City implements additional BMPs as deemed necessary, and implements equivalent BMPs when it is determined that a specific BMP is not feasible at a particular site. In addition to implementing BMPs, the City utilizes pollution prevention measures to reduce or eliminate the amount of pollutants generated from City-owned fixed facilities.

Parks and Recreation Facilities

In FY 2008-09, the City implemented a variety of BMPs to reduce or eliminate the amount of pollutants entering the MS4 from municipal parks and recreation facilities and other open landscaped areas. City personnel implemented general waste management BMPs, and patrons of the facilities were encouraged to recycle and properly dispose of trash and pet waste. Notable activities during the fiscal year included the maintenance of 17 doggie bag dispensers at three public parks and along several trails.

City staff continued operation and maintenance of post-construction BMPs at Cottonwood Creek Park. The park is a prime example of low impact development and includes the following post-construction BMPs: 90 feet of day lighting Cottonwood Creek, porous pavement

for all parking areas and driveways, pervious walkways, surface drainage through earthen-bottom open channels, and drought tolerant plants in landscaping areas.

Due to their widespread outdoor use, pesticides, herbicides, and fertilizers can be common pollutants discharged to MS4s. Transport of these pollutants is often a result of the following: (1) runoff from improper irrigation after application; (2) application of chemicals during or prior to storm events; (3) use of chemicals that do not properly absorb to soil or plants; and (4) overspray from chemical applications that may eventually enter the MS4. The City of Encinitas Parks and Recreation Department has prepared and adopted a Policy and Procedures Manual for integrated pest management. Implementation of the policy includes:

- educating and training of staff and contractors on the policy,
- implementing a process of identifying pests and/or problems by site,
- monitoring and record keeping,
- establishing thresholds for pest problems,
- selecting a less toxic treatment, and
- evaluating the success of the treatment.

The Federal Pesticide, Fungicide, and Rodenticide Act and California Title 3, Division 6, Pesticides and Pest Control Operations place strict controls over pesticide application and handling. This Act also specifies training, annual refresher, and testing requirements. The regulations generally include: a list of approved pesticides and selected uses, updated regularly; general application information; equipment use and maintenance procedures; and record keeping. The California Department of Pesticide Regulations and the County Agricultural Commission coordinate and maintain the licensing and certification programs.

In FY 2008-09, the following BMPs were implemented at all municipal parks and recreation facilities, public streets, channels, and right of ways to reduce pollution from pesticides, herbicides, and fertilizers:

- Whenever practicable, integrated pest management techniques that rely on non-chemical solutions are implemented.
- City personnel who participate in the application of pesticides are properly trained, maintain Qualified Applicator Certifications and follow guidelines set by the California Department of Pesticide Regulations and the County Agricultural Commission.
- City staff records the applications of all chemical agents by noting the locations, types, and quantities of chemicals used. Records are reported monthly to the Department of Agriculture.
- Pesticide, fertilizer, and herbicide handling and safety refresher sessions are provided to City personnel involved with application.
- The use of fertilizers is minimized as much as possible; compost and soil amendments are used in place of fertilizer, where applicable.
- Employees are trained to handle pesticides, herbicides, and fertilizers properly.

- All federal, state, and local regulations are followed in the use of pesticides, herbicides, and fertilizers.
- Pesticides, herbicides, and fertilizers are applied only when necessary (typically during growing seasons) and not during or prior to anticipated storm events.
- Pesticides are not sprayed when there is a high possibility of the spray drifting into non-target areas or onto non-target vegetation, insects, or animals.
- The City maintains compliance with federal and state reporting law for pesticide use.
- Weeds, grass, and brush are cleared from building perimeters and fence lines to reduce the need for pesticides and herbicide use, when applicable.
- Native plants are used in landscaping, where applicable.
- Diseased plants are removed, and infected parts of plants are removed to minimize the need for pesticide and herbicide use, where applicable.
- Several evapotranspiration gauges located throughout the City are used to monitor microclimates to properly set irrigation systems for different areas of the City and reduce the potential of over-irrigation.
- Flow sensors and master valves prevent water loss in the event of a break in any of the main lines.
- One bilingual training session for the City's private landscaping contractors was conducted by Clean Water Program staff during the fiscal year. There were 25 participants at the training session on June 11, 2009.

Public Works Operations Facilities

City personnel implement appropriate BMPs for all activities that take place at public works facilities. Storm Water Pollution Prevention Plans (SWPPPs) have been developed for all four of the City's main operations facilities, which include the San Elijo Wastewater Division Collections Facility, Requeza Street Facility, the "A" Tank Site, and the newly established Calle Magdalena Public Works Facility. The SWPPPs include a site description, a description of potential sources of pollutants, a summary of existing BMPs, a description of BMPs to be implemented, and a monitoring and record keeping plan. The SWPPPs are maintained at each facility, and all of the facilities are inspected by City staff on an annual basis. Additionally, all Public Works employees are annually trained in storm water management by the Clean Water Program.

Potable Water Facilities

City personnel implement appropriate BMPs for all activities that take place at potable water facilities when deemed appropriate. San Dieguito Water District employees are trained in storm water management on an annual basis.

Fire Stations

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by fire fighting activities both at fire stations in the City and locations throughout the City. Two fire stations (#3 and #5) have permanent treatment control BMPs in place to treat any runoff which may be discharged from washing activities. The remaining stations utilize source control BMPs to minimize and control discharges related to

washing activities. All fire fighting training activities which include aqueous film forming foam are conducted at a fire station outside of the City of Encinitas. In addition to implementing structural BMPs at the fire stations, all City of Encinitas Fire Department employees are trained in storm water management on an annual basis. More detailed information regarding non-emergency fire fighting flows can be found in Section 13 of this document.

Other Fixed Facilities

The City implements pollution prevention methods and BMPs to reduce or eliminate the amount of pollutants generated by the management of public buildings, other fixed facilities, and surrounding areas. The City implements BMPs to control erosion and sediment, during landscaping maintenance, and for waste management, as discussed in the City's BMP Manual Part I and the CASQA Municipal Handbook.

The City employs a number of pollution prevention practices at City Hall. These practices have been expanded in recent years to include:

- roof replacement and an energy efficiency improvement project which consists of installation of solar photo voltaic panels, a high efficiency air conditioning system, and day lighting the building in certain areas.
- the use of recycled paper (30%) for all copiers and printers,
- installation of an Automated Logic System (ALS) which controls the heating and ventilation
- implementing a 9-80 work week so that City Hall is closed every other Friday,
- installing lighting controls and timers that time lights in specific areas of the building based on specific needs and maximizes the time when lights are out,
- implementing a battery collection and recycling program at City Hall,
- replacing large trash receptacles at each individual desk with mini size trash receptacles and providing large recycling containers for mixed paper and cans/bottles,
- placing recycling centers in conference rooms that include mixed paper, cans/plastic, and trash compartments,
- the use of seven alternative fuel vehicles.

4.3.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

Fertilizers which are used on landscaped areas in municipal parks and public right of way areas are considered a pollutant of concern for the San Elijo Lagoon and its larger drainage area. To mitigate potential discharges of nutrients to the Lagoon from Municipal activities, the City requires that the City's landscaping contractors implement an extensive fertilizer management program as described earlier in section 4.3.3.1. In FY 2008-09, Clean Water staff conducted their annual bilingual storm water management training for all City landscaping contractors. The City will continue to monitor the fertilizer management program, and if the existing measures are found to be deficient, the City will adjust the BMP implementation to achieve a higher level of pollutant reduction.

Similarly, if the City identifies any potential sources of other constituents for which water bodies in the City are 303(d) listed that could be the result of activities at fixed municipal facilities, additional controls will be required to be implemented where applicable. The City will implement additional controls for municipal areas and activities adjacent to or tributary to ESAs when determined to be necessary. Presently, there are no other municipal fixed facilities that have been determined to be a source of pollutants for which water bodies within the City are on the 2006 Clean Water Act (CWA) 303(d) list.

4.3.4 PROGRAM IMPLEMENTATION

The City implements the municipal program using a variety of different processes, including maintenance, training and education, inspections, and if necessary, enforcement actions. Program implementation also includes the continuous assessment of municipal programs to ensure that they are designed and executed in a manner that is most effective to reducing, and potentially eliminating, the threat of pollution from fixed municipal facilities.

4.3.4.1 MAINTENANCE

In FY 2008-09, the City continued to conduct regular maintenance activities at fixed facilities, which included landscape maintenance, building maintenance, parking lot, and sidewalk repair, when necessary. Sweeping of the parking facilities associated with the municipal facility is conducted at these facilities during regular maintenance activities.

The City maintains a regular maintenance schedule for fixed facilities in the City. As previously discussed, City personnel are trained to implement the proper BMPs when at municipal facilities and when engaging in specific activities at those facilities. City personnel are also trained to dispose of any waste properly, and to report illegal discharges/illicit connections as they may come across them during normal work activities.

4.3.4.2 TRAINING AND EDUCATION

Municipal personnel are trained in implementing appropriate BMPs and preventing non-storm water discharges. In FY 2008-09, Clean Water Program staff conducted training for the following municipal departments: Building, Code Enforcement, Engineering, Fire, Parks and Recreation, Planning, Public Works and the San Dieguito Water District. Additionally, the Streets Division of the Public Works Department discussed storm water issues at regular staff meetings throughout the reporting period. A detailed description of the municipal education program can be found in Section 8.0 of this document.

4.3.4.3 MUNICIPAL INSPECTIONS

City staff performs annual inspections at all of the high priority municipal facilities in the City of Encinitas. As part of the FY 2008-09 program City staff performed a total of **28** high priority inspections. The fixed facility inspection locations and inspection dates are summarized in Table 4-1 below.

Table 4-1
Fixed Facility Inspections

No.	Facility Name	Inspection Date
1.	"A" Tank Site Public Works Yard	4/20/09
2.	Calle Magdalena Public Works Yard	4/20/09
3.	Requeza Street Public Works Yard	4/20/09
4.	San Elijo Wastewater Division Facility	4/20/09
5.	Beacon's Beach	6/17/09
6.	Cardiff Sports Park	6/10/09
7.	Cardiff Sports Park Expansion	6/10/09
8.	Cottonwood Creek Park	5/20/09
9.	Encinitas Viewpoint Park	6/8/09
10.	Glen Park	6/10/09
11.	Grandview Beach	6/17/09
12.	H St. Viewpoint	6/16/09
13.	Hawkview Park	6/23/09
14.	J St. Viewpoint	6/16/09
15.	Las Verdes Park	6/15/09
16.	Leo Mullen Sports Park	6/8/09
17.	Leucadia Oaks Park	6/23/09
18.	Leucadia Roadside Park	6/10/09
19.	Little Oaks Equestrian	6/3/09
20.	Mildred Macpherson Park	6/11/09
21.	Moonlight Beach	6/16/09
22.	Oakcrest Community Park	6/8/09
23.	Orpheus Park	6/10/09
24.	Paul Ecke Sports Park	6/3/09
25.	Scott Valley Park	6/15/09
26.	Sun Vista Park	6/3/09
27.	Swami's Beach	6/11/09

No.	Facility Name	Inspection Date
28.	Wiro Park	6/3/09

The recommended Best Management Practices and corrective actions are summarized in the City's Routine Inspection Summary located in Appendix C-6. Of the 28 sites inspected, a total of **3** facilities required corrective actions and follow-up inspections. As a result, all **3** facilities have implemented appropriate BMPs, and the Public Works and Parks and Recreations Departments have verified that the corrective actions have been completed. There were no enforcement actions for any of the Municipal fixed facilities during the FY 2008-09.

Potable Water Facilities

All of these facilities are considered a low priority and do not receive formal inspections because the activities associated with these facilities are located underground and do not involve any other activities on site.

4.4 MS4

4.4.1 BACKGROUND

The primary functions of municipal separate storm sewer systems are to collect and transport surface runoff to receiving waters during storms in order to prevent flooding. The entire MS4 system is considered a high priority due to its tendency to collect and convey pollutants to receiving waters. The City's MS4 consist of streets, curbs, catch basins, inlets, pipes of varying materials, natural creeks and streams, natural channels, concrete channels, culverts, desilting basins, and detention basins. The City also maintains a number of treatment control BMPs such as storm drain filter inserts and a UV treatment facility, which are included in the regular maintenance of the MS4. In order to reduce the transportation of pollutants into receiving water bodies, the City of Encinitas regularly maintains its MS4 to ensure that it remains both fully functional and free of pollutants to the Maximum Extent Practicable (MEP).

4.4.2 SOURCE CHARACTERIZATION

The City maintains a variety of MS4 facilities which includes 1,632 catch basins and inlets, 61 miles of storm drain pipe, 3.35 miles of open channels, 14 desilting basins, and one UV Urban Runoff Treatment Facility located throughout its jurisdiction. The MS4, as one complete entity, is included in the municipal inventory located in Appendix C-1.

The City utilizes an industry standard Geographic Information System (GIS) to maintain an accurate and up-to-date inventory of the MS4. The GIS MS4 inventory includes inlets (i.e. catch basins, curb inlets, grate/inlet combos, etc.), outlets (i.e. curb outlets, headwalls, etc.), manholes, pumps, ditches, channels, storm drain pipes, and detention basins. To ensure that the City's GIS inventory is current and accurate, the MS4 inventory continually undergoes data (feature and attribute) review, quality control and validation by City staff from multiple departments.

GIS staff also maintains storm infrastructure data by mapping new infrastructure through a combination of field work and Engineering Plans.

In support of ongoing efforts to validate the MS4 inventory of facilities, within the defined reporting period of this report, the City established funding and initiated the first phase of the Channel Maintenance and Environmental Permitting project. This effort has been prioritized by the City in order to validate the city's inventory of basins, channels, and ditches, and to acquire required permits to support ongoing and critical maintenance of these facilities.

4.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.4.3.1 UPDATED BMP REQUIREMENTS

The City has created and maintains a BMP Manual Part I which establishes the City's minimum BMP requirements for the following components: municipal, residential, industrial/commercial, construction, and new development. In March 2008, the City prepared a JURMP Update which directs city staff to utilize the CASQA Municipal Handbook in addition to the BMP Manual to choose applicable BMPs for municipal areas and activities, including MS4 maintenance. All of these BMPs are designed to prevent waste from entering the MS4 system as well as ensuring that waste which is collected during maintenance of the City's MS4 does not re-enter the system.

The 2007 Municipal Permit requires that retrofitting flood management facilities be evaluated to determine the feasibility of providing additional pollutant removal from urban runoff and should only be conducted where determined to be effective. The City of Encinitas does not own or operate any flood management projects or flood control devices that may be retrofitted. However, in FY 2008-09 the City did maintain 14 detention basins throughout the City that serve pollutant removal, particularly for sediment and associated pollutants bound to the sediment. These facilities are inspected on an annual basis and cleaned of debris and sediment as needed. A Municipal BMP map that depicts all of the City's structural BMPs, detention basins and storm drain filter locations can be found in Appendix C-3.

4.4.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS/ACTIVITIES

The City will implement additional controls for MS4 facilities adjacent to or tributary to ESAs when determined to be necessary.

4.4.4 PROGRAM IMPLEMENTATION

The City's MS4 management program includes responding to complaints received by the City's Clean Water Hotline {(760) 633-2787}; detecting and ceasing IC/IDs; inspecting and maintaining MS4s by cleaning, removing sediment, debris, and excessive vegetation, and by flushing the pipes; by repairing and/or replacing damaged or failing MS4 structures; and by stenciling signs on storm drain inlets warning of effects of illegal dumping. The City trains field staff on

implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance, emergency maintenance, and/or discharge control. The City utilizes a vactor truck during MS4 maintenance to collect both dry and liquid debris from catch basins and inlets. Applicable BMPs are used during routine and emergency maintenance. City staff report on the maintenance of the MS4 through an industry standard asset inventory and a work management system that integrates with the City's GIS system. Maintenance is performed on the storm drain infrastructure and captured through work orders that are attached to the storm drain features represented in GIS. Any changes or updates to the MS4 inventory will be reported in future JURMP Annual Reports.

All maintenance activities this fiscal year met the Municipal Permit requirements as outlined in Order No. R9-2007-0001. The FY 2008-09 annual results for all municipal activities are summarized below and reported in detail in Appendix C-2.

4.4.4.1 MAINTENANCE

A summary of the City's MS4 operation and maintenance activities that occurred throughout the fiscal year is included below:

- Within the defined reporting period of this report, approximately **290 tons** of waste and litter were removed from the entire MS4. This included the removal of **64.4 tons** from the catch basins and inlets, **2.8 tons** from the City's storm drain filter inserts, and **223.02 tons** from open channels. All MS4 facilities observed to be collecting relatively high volumes of trash were cleaned between May 1 and September 30.

- Within the defined reporting period of this report, **223.02 tons** of litter and vegetation were removed from open channels by hand. Cleaning the open channels is conducted annually/year round or more often when necessary. The City responds to observations or reports of anthropogenic litter in channels in a timely manner.

- Within the defined reporting period of this report the City inspected and cleaned **1,547** catch basins and inlets and removed a total of **64.4** tons of waste and litter. Storm drain inlets and catch basins that City personnel have identified as gathering a greater amount of trash and debris as compared to other areas of the City are inspected throughout the year and cleaned if necessary. The City's inspection and cleaning activities are sufficient in ensuring the catch basins do not reach one-third of capacity and that self-cleaning facilities remain free of trash and debris. Inspection and cleaning schedules are subject to change based on observations and records of City personnel.

- The City maintains a total of 57 storm drain filter inserts in 35 inlets (some larger inlets may contain more than one filter insert) located throughout its jurisdiction to remove sediment, debris, oil, and grease from the MS4. From July 1, 2008 through June 30, 2009, **2.8 tons** of sediment and litter were removed from all 35 inlets. These inserts are maintained on a quarterly basis by a specialty contractor. Table 4-2 below outlines the

complete filter insert inventory. A Municipal BMP map that depicts all of the City's storm drain filter locations can be found in Appendix C-3.

- The City of Encinitas has a formal maintenance agreement with the San Elijo Joint Powers Authority to maintain the UV Facility. The scope of the agreement ensures daily monitoring and inspection, startup and shutdown of the facility as dictated by rain events, and preventative and regular maintenance. In FY 2008-09, $5,300 was spent on the preventative and regular maintenance of the facility including, pump replacement, control screen and software updates, and other electronic equipment and parts. The UV Facility provides the City with a vital treatment function, and ongoing operations and maintenance activities are critical to ensure optimum performance and pollutant removal.

A complete report of all MS4 operation and maintenance activities can be found in Appendix C-2.

Table 4-2
Storm Drain Filter Inserts Inventory

Inlet No.	Size (Inches)	Size (Feet)	Location	Inlet Type
2	24" X 45"		1470 Neptune Ave. in driveway apron	Grate
4	24" X 40"		1638 Neptune in grass shoulder	Grate
5		9'	1786 1/2 Highway 101	Curb
6	24" X 41"		1650 Highway 101	Grate
7	23" X 40"		970 Hwy 101 in alley, north of Jasper	Grate
8	24" X 41"		918 N. Hwy 101 in alley	Grate
10	24" X 41"		914 Hwy 101 in alley @ Leucadia Blvd. north of the park	Grate
12	23" X 40"		828 Hwy 101 in alley, behind building	Grate
13	23" X 40"		802 Hwy 101 in alley, west of Europa St.	Grate
14	23" X 40"		129 Cadmus	Grate
15	23" X 40"		149 Basil St.	Grate
16		10'	130 Basil St.	Curb
17	23" X 40"		130 Athena	Grate
18		9'	170 Athena	Curb

Inlet No.	Size (Inches)	Size (Feet)	Location	Inlet Type
19	23" X 40"		577 N. Vulcan	Grate
21	23" X 40"		208 Cereus across from Hygeia St.	Grate
22	23" X 40"		321 Union	Grate
23	23" X 40"		321 Union across from Hygeia St.	Grate
24		7'	1750 Hwy 101	Curb
25	24" X 40"		750 G St. @ Second St. Alley	Grate
26	36" X 64"		364 2nd St.	Grate
27		10'	247 Hwy 101 NE corner of Encinitas Blvd.	Curb
28		11'	102 Encinitas Blvd.	Curb
29		7'	485 Santa Fe Dr., west of I-5.	Curb
30		8'	485 Santa Fe Dr., north side of street, west of I-5	Curb
31	24" X 40"		2560 Manchester	Grate
32	24" X 40"		2582 Manchester	Grate
ECR-1			194 El Camino Real @ Via Molena	Curb
ECR-2			245 El Camino Real @ Mountain Vista	Grate
ECR-3			337 El Camino Real, in front of Circuit City Mall	Curb
ECR-4			501 El Camino Real, east side @ Garden View Rd.	Combo
ECR-33			499 El Camino Real, SE corner @ Garden View Rd.	Curb
ECR-34			398 El Camino Real, SW Corner @ Garden View Rd.	Curb
ECR-35			398 El Camino Real, across from Circuit City mall	Grate
ECR-9			204 El Camino Real, in front of Block Buster Video	Curb

In FY 2008-2009, the Engineering Department was instrumental in conceptualizing and designing numerous drainage related capital improvement projects. These projects are outlined in Table 4-3 below.

Table 4-3
Storm Drain CIP Projects

Project Title	Budget	Goal	Status
Stratford Knoll Drainage Improvements	$1 M	Replace existing storm drain channel and increase capacity.	In Design Phase
Urania Ave. and Windsor Dr. Storm Drain Improvements	$ 200,000	Replace old pipe with new reinforced concrete pipe and add new catch basins to eliminate future flooding.	Complete
Cardiff Alley Improvements	$200,000	Build a perforated sub-drain to improve drainage in area.	Under Construction
Parking Lot B	$1,200,000	Implement Low Impact Designs (LIDs) including dry wells and flow through planters to treat storm water.	In Design Phase

4.5 SANITARY SEWER SYSTEM

4.5.1 BACKGROUND

Spills and/or leaks caused by a malfunction or failure of a component of the City's sanitary sewer system have the potential to introduce a significant volume of untreated sewage into receiving water bodies. Untreated sewage can contain high concentrations of bacteria, viruses, and parasites, all of which have the potential to negatively impact the environment and pose a significant threat to human health. Untreated sewage also has the potential to contain a variety of hazardous chemicals, which also pose threats to environmental and human health. The City of Encinitas conducts routine inspections and maintenance of the sanitary sewer system to ensure that the system is functioning properly. Routine inspections and maintenance of the sanitary sewer system reduces the potential for an overflow and helps prevent and eliminate infiltration of seepage to the MS4. The City also responds to sanitary sewer overflows to reduce

or eliminate the amount of untreated sewage that reaches nearby portals to the MS4 and aids in cleaning up and disposing of overflow residue.

4.5.2 SOURCE CHARACTERIZATION

The City of Encinitas Public Works Wastewater Division maintains approximately 120 miles of public sanitary sewer collection pipes.

4.5.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.5.3.1 UPDATED BMP REQUIREMENTS

The City has created and maintains a BMP Manual Part I which establishes the City's minimum BMP requirements for the following components: municipal, residential, industrial/commercial, construction and new development. In March 2008, the City prepared a JURMP Update which directs city staff to utilize the CASQA Municipal Handbook in addition to the BMP Manual to choose applicable BMPs for municipal areas and activities, including maintenance of the sanitary sewer system.

Similar to the MS4 maintenance program, the City trains field staff on implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance and emergency maintenance and/or discharge control. Structural BMPs are used during routine and emergency maintenance, where applicable.

4.5.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City implements additional controls for sanitary sewer facilities adjacent to or tributary to ESAs, if applicable and when determined to be necessary. The City has a regular sanitary sewer maintenance program that minimizes sanitary sewer overflows (SSO) and is described in more detail below.

4.5.4 PROGRAM IMPLEMENTATION

The City's sanitary sewer management program includes responding to overflows and spills as necessary, identifying spills and leaks, containing and controlling spilled materials, repairing damaged and leaking sewer lines, remediating existing sewer lines as necessary and proper disposal of hazardous waste.

4.5.4.1 MAINTENANCE

The City maintains a routine maintenance schedule for the sanitary sewer system. In FY 2008-09, the entire sewer system was cleaned, and known trouble spots were cleaned on a more frequent basis. The City seeks to reduce and eliminate the amount of seepage from the sanitary sewer system to the MS4 through routine preventative maintenance of both the sanitary sewer

and the MS4 systems. Preventative maintenance of both systems allows City officials to detect and eliminate active seepage points before they become a larger problem, and also to repair areas of the system that have a high possibility of becoming a seepage point.

In FY 2008-2009, the Engineering Department was instrumental in conceptualizing and designing capital improvement projects to prevent sewage spills by improving the wastewater collection system. Sewer and emergency repair projects initiated during FY 2008-09 are shown below in Table 4-4.

Table 4-4
Wastewater CIP Projects

Project Title	Budget	Goal	Status
Olivenhain Sewer Pump Station	$ 4.5 M	Reduce sewage spills and increase capacity	In Design Phase

In FY 2008-09, the City took the following measures to reduce the seepage from the sanitary sewer system to the MS4:

- Over 13 miles of the sewer system was televised to check pipe conditions,
- 207 miles of sewer lines were cleaned,
- 15 upgrades and repairs were made to aging sewer pipes.

City staff report on the maintenance of the sewer system through an industry standard asset inventory and work order management system that integrates with the City's GIS system. Maintenance is performed on the sewer infrastructure and captured through work orders that are attached to the features represented in GIS. Any changes or updates to the sewer system inventory will be reported in future JURMP Annual Reports.

Other notable activities during this fiscal year included the development and implementation of a Sewer System Management Plan (SSMP). The SSMP is a program that ensures that the sewer system is functioning properly, and that necessary maintenance is conducted. Full implementation of the SSMP occurred on August 8, 2009. The SSMP includes a spill response plan that establishes standard procedures for immediate response to all sanitary sewer system overflows (SSOs). City personnel are continually trained in detecting, reporting, and responding to SSOs.

4.6 MOBILE MUNICIPAL ACTIVITIES, INCLUDING POWER WASHING

4.6.1 BACKGROUND

The City conducts a number of activities, which are not confined to any specific locations. Due to the nature of these mobile activities, temporary structural and source control BMPs are implemented as necessary.

4.6.2 SOURCE CHARACTERIZATION

The City conducts a number of activities that are not designated to a specific location. Such activities include, but are not limited to, the following:

- Power washing, including graffiti removal
- Street and sidewalk repair and maintenance
    - Street striping/painting
    - Pothole repair
- Landscape maintenance

4.6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.6.3.1 UPDATED BMP REQUIREMENTS

The City implements good housekeeping and general pollution prevention measures during municipal maintenance activities, including the mobile activities discussed above. In March 2008, the City established minimum BMPs which were described in the City's 2008 JURMP Update. The JURMP Update directs city staff to utilize the City's BMP Manual Part I and the CASQA Municipal Handbook to choose applicable BMPs to implement for municipal areas and activities, including mobile activities. BMPs similar to those implemented for the management and maintenance of parks and landscaped areas are implemented for landscape maintenance in landscaped City right-of-way areas such as medians.

4.6.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City implements additional controls for municipal mobile activities adjacent to or tributary to ESAs when determined to be necessary. Presently, City related mobile activities have not been determined to be a source of pollutants for which water bodies within the City are on the 2006 CWA 303(d) list. Present BMP implementation activities have been evaluated as effectively reducing pollutant discharge to all receiving waters in the City to the MEP.

4.6.4 PROGRAM IMPLEMENTATION

In FY 2008-09, City field crews were trained to implement BMPs during all mobile activities. On July 9, 2008, the Public Works Department received training from the Clean Water staff on storm water BMPs as they relate to mobile cleaning activities. City field crews were trained to properly contain, control, and capture any discharge that was generated by a mobile activity. City field crews were also trained to use mobile equipment properly to ensure all wastewater is collected and that the equipment continues to function properly.

4.7 SPECIAL EVENTS

4.7.1 BACKGROUND

The City of Encinitas hosts a variety of special events throughout the city. These events may include, but are not limited to, festivals, fairs, events for charitable causes, and special occasions. The City recognizes that many special events have the potential to generate significant trash and litter caused by the patrons and the associated activities that occur at the special events. The City has considered the controls that are described in the Municipal Permit and has chosen the BMPs listed in Section 4.7.3.1 below as most effective and efficient for the City's needs. These BMPs are implemented during and/or after special events, where applicable.

4.7.2 SOURCE CHARACTERIZATION

The City of Encinitas hosts a variety of special events at various locations throughout the city; including City sanctioned events and venues, as well as privately managed events. According to the Encinitas Municipal Code Chapter 6.12, any organized event coordinated for 25 people or more requires an Operations Permit (Special Events Permit). For the purpose of Special Event source characterization, events that require an Operations Permit (as defined by Encinitas Municipal Code Section 6.12) by the City have been identified as priority events.

4.7.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.7.3.1 UPDATED BMP REQUIREMENTS

The City has considered many of the controls specific to special events listed in the Municipal Permit. Before any special event permits are approved, applicants must fill out the City's "Special Events Permit P2 Questionnaire" (Appendix C-4) to assess the most appropriate BMPs for their event, and all applications must be reviewed by Clean Water Program Staff. Applications are evaluated to ensure that event organizers select an effective combination of BMPs to prevent trash or other pollutants from entering the storm drain system. The City has chosen the following BMPs as most effective and efficient for City needs. Notably, the City may require additional, event specific BMPs at any time as determined necessary.

Inlet Protection:

- Identify all storm drain inlets with appropriate signage and prohibitive language to deter illegal dumping and / or discharge.
- Protect all storm drains identified on their site plans. Fabric filters, gravel bags, or other approved inlet protection device over the drain opening are recommended.
- Visually inspect and clean, if necessary, all identified storm drain inlets impacted by the Special Event activities.

Trash and Debris:

- Adequate trash and recycling containers must be provided throughout the event venue, including at the exit and entry points.
- Regular collection of loose trash and debris must be applied as needed.
- Temporary fencing will be required to be put into place if the event, or any portion thereof, is determined to pose a threat of wind blown debris into any water bodies.
- Post event sweeping of the entire venue area and related staging areas is required.

Temporary Portable Restrooms:

- All temporary portable restrooms will be placed away from all storm drain inlets, drainage swales, water bodies, and any other locations that have the potential to impact the storm drain system.
- All temporary portable restrooms are required to have a secondary containment pan or additional BMPs in place around the stations for possible overflows.
- The contact information for the company responsible for the restrooms clearly marked on or around the restrooms.

In addition to the BMPs that are implemented by the applicant, The City of Encinitas implements the following during and/or after special events, where applicable.

- Proper management of trash and litter, including temporary trash receptacles for trash
- Street sweeping following the special event
- Other BMPs, as included in the Municipal Permit, when deemed necessary by City personnel
- Other post clean-up activities, such as catch basin cleaning, when necessary

The City may also set up storm water informational booths with educational handouts and watershed maps, which demonstrate the impacts of pollution on a watershed. The City will consider implementing additional BMPs depending on the site location, site conditions, and/or type of special event.

4.7.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City will implement additional controls for municipal special events adjacent to or tributary to ESAs when determined to be necessary. Presently, special events have not been determined to be a significant source of pollutants for which water bodies within the City are on the 2006 CWA 303(d) list. Present BMP implementation activities have been evaluated for effectiveness in reducing pollutant discharge to all receiving waters in the City to the MEP.

4.7.4 PROGRAM IMPLEMENTATION

Events which require a discretionary Special Events Permit from the City, and completion of the BMP specific Special Events Permit P2 Questionnaire (Appendix C-4), must meet minimum pollution control standards as described above, and receive permit approval from the Clean Water Program. More refined event characterization as defined in Section 4.7.2 above, and

improved event tracking enhanced the overall efficiency and effectiveness of Special Event oversight. In FY 2008-09, there were **46** special event applications processed by the Clean Water Program (see Appendix C-5).

The Clean Water Hotline is advertised on all Special Events Permit Applications and can be used to report spills during normal business hours. Additionally, the City has an after hours phone number that can be used to report any large or hazardous spills during special events that may occur on weekends or when the City offices are closed. City personnel are on call to respond to any emergency situations that may arise. During City sponsored events, trained City personnel are on hand to ensure that the event remains free of illegal discharges and/or illicit connections to the MS4.

In addition, the City maintains the authority to charge the applicant a Clean-up Fee and Deposit, depending on the size, location, and type of event. Following permitted events, post-event inspections are conducted by City staff, and the location of the event must be returned to pre-event conditions in order for the applicant to receive a full refund of deposited monies. If the City determines that more clean-up is necessary, the deposit will be used as reimbursement for City time and cleanup efforts including street and parking lot sweeping, and the event sponsors or organizers may be charged any excess clean-up fees the City may encounter beyond the amount of the deposit. In FY 2008-09, the City collected $900.00 in clean-up deposits (see Appendix C-5).

5.0 INDUSTRIAL AND COMMERCIAL

5.1 INTRODUCTION

Activities associated with industrial and commercial businesses can contribute pollutants to the City's MS4. The City of Encinitas has implemented a program that aims to reduce industrial and commercial pollution discharges from the MS4 to the MEP, prevent industrial and commercial discharges from the MS4 from causing or contributing to a violation of water quality standards, protect local receiving water bodies, and to comply with the Municipal Permit.

Commercial facilities within the City of Encinitas include a wide range of service oriented businesses from restaurants to nurseries. There are five main commercial areas within the City. The largest areas are downtown Old Encinitas and the Leucadia business district, along Highway 101 from Swami's Beach to La Costa Boulevard. This area contains many different commercial businesses ranging from restaurants to automotive outlets and is the oldest portion of Encinitas. Three industrial facilities are also located in the City: the San Dieguito Union School District school bus terminal, the San Elijo JPA Water Reclamation Facility, and the inactive Encinitas Landfill.

Within the defined reporting period of this report, Clean Water staff worked diligently to fulfill the requirements of the Order 2007-0001 related to commercial and industrial sectors. The City's GIS-based commercial inventory was updated and prioritized based on the new requirements of Order 2007-0001 and the guidelines established in the City's 2008 JURMP. FY 2008-09 commercial and industrial facility inspections were based on this prioritization scheme and the new inspection frequencies outlined in Order 2007-0001. Inspections, follow-up, and enforcement actions were tracked using CityWorks, the City's existing GIS-based Work Order tracking system. In addition, the City participated in the regional industrial/commercial workgroup and subgroups, and helped to shape the mobile commercial businesses database and inspection standards. The following section demonstrates the City's successful implementation of required programmatic activities related to the Industrial and Commercial Section of Order 2007-0001 (Section D.3.b) during FY 2008-09.

5.2 INDUSTRIAL AND COMMERCIAL SITES/SOURCES ELEMENT

5.2.1 BACKGROUND

Each stationary industrial and commercial facility has the potential to discharge pollutants into the MS4 and consequently degrade local water quality. Often, the most cost effective and simple solution to reducing pollution is to implement pollution prevention techniques at the source. The Clean Water Program emphasizes the use of pollution prevention methods as a primary mechanism for reducing commercial discharges of pollutants into the City's MS4. Further, the City requires minimum site and activity specific BMPs to be implemented, and inspections and enforcement procedures will be conducted where necessary, to comply with the Municipal Permit.

For the rest of Section 5.2, "commercial facilities" will be used to refer to stationary commercial facilities that are not mobile. The mobile commercial site/sources component is described in Section 5.3.

5.2.2 SOURCE CHARACTERIZATION

A watershed-based inventory of the industrial and commercial sites/sources within the City's jurisdiction was compiled as part of the 2008 JURMP update. As required by the Municipal Permit, the inventory includes the following information for each site/source: facility name; address; pollutants potentially generated by the site/source (and identification of whether the site/source is tributary to a Clean Water Act section 303(d) water body segment and generates pollutants for which the water body segment is impaired); and a narrative description including SIC codes which best reflects the principal products or services provided by each facility. Inventories of industrial and commercial facilities within the City of Encinitas are included in Appendix D-1 and D-2. Mobile commercial businesses do not have a fixed address at which they operate; they are tracked within a separate, non-spatial database (refer to Section 5.3).

The commercial inventory is continually updated as facilities go out of business and new facilities are opened. The GIS department and the Clean Water Program both receive a monthly summary of new and renewed business registrations from the City Clerk's Department. Upon receipt of the monthly summary, a GIS Analyst updates the spatial facility database, and a Clean Water Program staff member updates the storm water inspection information for each business. In addition, Clean Water staff identifies businesses that are not on the facility inventory when complaints are filed about businesses that are not registered with the City. When this occurs, these facilities are added to the inventory. Additionally, when Clean Water staff conducts annual commercial and industrial inspections, they have the opportunity to identify new or closed businesses and update the inventory with these findings.

In FY 2007-08 commercial facility inspection priorities were established in consideration of inspection frequencies and prioritization standards outlined in Order 2007-0001. As part of the JURMP update and transition to complying with the current Municipal Permit, a new process to determine high priority facilities was formalized using GIS and put into effect in FY 2008-09. Section 5.2.4.1 provides a detailed description of the City's prioritization process for commercial facilities. As a result of this process, there were **114** commercial facilities identified as high priority and inspected in FY 2008-09. High priority facilities identified in FY 2008-09 included: (2) animal facilities, (8) auto repair shops, (83) eating/drinking establishments, (9) gas stations, (5) nurseries/greenhouses/landscapers, (3) industrial facilities, (2) masonry businesses, (1) building material supplier and (1) golf course. Notably, the City of Encinitas' commercial inventory is dominated by eating/drinking facilities. As such, it is worth noting that the commercial businesses inventory in the City is dynamic, with considerable business turnover. Consequently, the City is constantly working to maintain and prioritize the commercial facilities inventory to dictate effective and efficient commercial inspection actions citywide.

Three industrial facilities are located in the City of Encinitas—the San Elijo JPA Water Reclamation Facility, San Dieguito Union High School District (SDUHSD) Transportation Cooperative, and the Encinitas Landfill. All three facilities are covered under the Industrial

Storm Water General Permit Order 97-03-DWQ. The industrial inventory is included as Appendix D-2. The San Elijo JPA Water Reclamation Facility is a wastewater treatment plant located at 2695 Manchester Avenue. The plant treats approximately 5.25 million gallons of raw sewage per day. The SDUHSD Transportation Cooperative is located at 1142 Bonita Drive and functions as the maintenance shop for the SDUHSD bus fleet as well as the parking area for the buses. The Encinitas Landfill is owned and operated by the County of San Diego. This facility is located at 2099 Encinitas Boulevard and is now closed. The JPA and SDUHSD are inspected by the City of Encinitas, and the Encinitas Landfill is inspected by the County of San Diego. Completed industrial facility inspection forms are available upon request.

As part of the 2008 JURMP update and the development of the SUSMP, the City collaborated with copermittees to identify the pollutant loading potentials of industrial and commercial sources. Table 5-1 lists the pollutants that may be generated by each category of business. The pollutants that may be generated by each individual business can be determined by matching the category of business noted for each of the businesses in the commercial inventory in Appendix D-1 with the category in Table 5-1 and its corresponding pollutants. Waste Discharge Identification Number (WDID) is also included for sites that are covered under the State of California Industrial General Permit (General Industrial Permit). The TTWQ prioritization of each facility is also included in the inventories. Prioritization was assigned via the process described in Section 5.2.4.1.

As required by Section D.3.b(1) of the Permit, all industrial and commercial facilities that meet at least one of the following criteria are included in the inventory:

Industrial Facilities

- Industrial Facilities, as defined at 40 CFR § 122.26(b)(14)
- Facilities subject to the statewide General Industrial Permit or other individual NPDES permit
- Operating and closed landfills
- Facilities subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)
- Hazardous waste treatment, disposal, storage, and recovery facilities

Commercial Facilities

- Automobile repair, maintenance, fueling, or cleaning
- Airplane repair, maintenance, fueling, or cleaning
- Boat repair, maintenance, fueling, or cleaning
- Equipment repair, maintenance, fueling, or cleaning
- Automobile and other vehicle body repair, or painting
- Mobile automobile or other vehicle washing[1]
- Automobile (or other vehicle) parking lots and storage facilities
- Retail or wholesale fueling

[1] Mobile commercial businesses are discussed in more detail in Section 5.3.

Table 5-1
Pollutant Loading Potentials of Industrial and Commercial Sources

Site/Source Type	Heavy Metals*	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash
Airplane Repair	L	L	L	PO	UL	UL	PO	UL	PO
Animal Facilities	UL	UL	UL	PO	UL	L	L	L	PO
Auto Body Repair	L	L	PO	PO	UL	UL	PO	UL	PO
Auto Repair/Maintenance	L	L	L	PO	UL	UL	PO	UL	PO
Boat Repair	L	L	L	PO	UL	UL	PO	UL	PO
Botanical Garden	UL	PO	UL	PO	L	L	PO	L	PO
Building Materials	PO	UL	PO	L	PO	PO	PO	UL	L
Mobile Cleaning	UL	PO	UL	PO	UL	UL	PO	UL	PO
Cement Mixing/Cutting	UL	UL	PO	L	UL	UL	PO	UL	PO
Cemeteries	UL	UL	UL	PO	L	L	PO	PO	PO
Eating/Drinking Establishments	UL	UL	L	PO	UL	UL	L	L	L
Equipment Repair	L	L	L	PO	UL	UL	PO	UL	PO
Fueling	L	L	L	PO	UL	UL	PO	UL	PO
Golf Courses/Parks	UL	UL	UL	PO	L	L	PO	PO	PO
Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO
Marinas	L	PO	L	PO	UL	UL	PO	PO	PO
Masonry	UL	UL	PO	L	UL	UL	PO	UL	PO
Nursery/Greenhouses	UL	PO	UL	L	L	L	PO	PO	PO
Painting/Coating	PO	PO	PO	PO	UL	UL	PO	UL	PO
Pest Control	PO	PO	UL	PO	L	UL	PO	UL	PO
Pool/Fountain Cleaning	UL	UL	UL	PO	UL	UL	UL	UL	UL
Portable Sanitation	UL	PO	PO	PO	UL	L	PO	L	PO
Power Washing	PO	PO	PO	PO	UL	UL	UL	UL	UL
Auto Parking/Storage	L	L	L	L	UL	UL	PO	UL	PO
Mobile Auto Washing	PO	L	PO	PO	UL	UL	PO	UL	PO
Contractor (Mobile)	PO	PO	PO	PO	UL	UL	PO	UL	PO
Handyman (Mobile)	UL	PO	PO	UP	UL	UL	PO	UL	PO
Landfill	PO	PO	PO	L	PO	PO	L	L	L
Wastewater Treatment	UL	UL	L	PO	UL	L	L	L	PO

Notes

L = Likely, PO = Possible, UL= Unlikely

* Heavy metals are a possible pollutant for any facility that has a parking lot.

This table is based on the field experience of D-MAX Engineering and on tables in the Copermittees' Baseline LTEA. D-MAX has conducted more than 1,000 industrial and commercial inspections during which it assessed the pollutant discharge potentials of the inspected facilities.

- Pest control services
- Eating or drinking establishments, including food markets
- Mobile carpet, drape, or furniture cleaning[1]
- Cement mixing or cutting[1]
- Masonry[1]
- Painting and coating[1]
- Botanical or zoological gardens and exhibits
- Landscaping[1]
- Nurseries and greenhouses
- Golf courses, parks, and other recreational areas/facilities
- Cemeteries
- Pool and fountain cleaning[1]
- Marinas
- Portable sanitary services
- Building material retailers and storage
- Animal facilities
- Power washing services[1]

Both Industrial and Commercial facilities

- All other commercial or industrial sites/sources tributary to a CWA Section 303(d) impaired water body segment, where the site/source generates pollutants for which the water body segment is impaired
- All other commercial or industrial sites/sources within or directly adjacent to (i.e., within 200 feet of) or discharging directly to coastal lagoons or other receiving waters within an Environmentally Sensitive Area (ESA).
- All other commercial or industrial sites/sources that the City determines may contribute a significant pollutant load to the MS4.

5.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.2.3.1 UPDATED BMP REQUIREMENTS

As required by section D.3.b.(2) of the Permit, during the 2008 JURMP update, the City established a set of minimum BMPs for all industrial and commercial sites and incorporated these into the City's BMP Manual I. The list of minimum BMPs includes both structural and non-structural BMPs and is itemized specific to pollutant-generating activity. The City's set of minimum BMPs for industrial and commercial sites/sources also includes pollution prevention methods, where appropriate. A complete list of the City's minimum BMPs for industrial and commercial facilities can be found in the City's BMP Manual I. The BMP Manual I can be accessed through the Clean Water Program webpage at: http://cwp.ci.encinitas.ca.us.

Industrial Facility Specific BMPs

Industries subject to the General Industrial Permit are required to prepare a SWPPP and

implement the BMPs prescribed therein. At a minimum, the SWPPP should include sections which describe the significant materials present on site, areas and activities that are potential sources of pollutants, and BMPs to address the identified pollutants' sources onsite. In addition, because of the small scale of the City's industrial program, the City is able to require site-specific BMPs at its industrial sites. These BMPs are determined based upon a review of the site's SWPPP and site inspections.

5.2.3.2 ADDITIONAL CONTROLS

As required by section D.3.b.(2)(e), the City of Encinitas requires the implementation of additional controls for industrial and commercial sites and sources that are 1) tributary to CWA Section 303(d) impaired water body segments (where a site/source generates pollutants for which the water body segment is impaired) or 2) directly adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas.

Clean Water Program staff utilizes a geographic information system (GIS) to maintain the commercial and industrial inventory and has the ability to spatially locate facilities relative to receiving waters and ESAs. Clean Water inspection staff is provided a hard copy map to use as a field reference to make appropriate determinations in consideration of these factors. Clean Water Program staff may prescribe additional controls during inspections of commercial and industrial facilities, as needed, in consideration of the proximity of the facility to the water body and the observed potential of the site to be a significant source of pollutants that may threaten the downstream water body as necessary and appropriate.

5.2.4 PROGRAM IMPLEMENTATION

This section describes the steps employed by Clean Water Program staff to require and verify the implementation of required designated BMPs for industrial and commercial sources. During FY 2008-09, the City of Encinitas implemented the following industrial and commercial program elements:

- provided education and outreach through inspection actions so that regulated businesses were aware of the City's storm water requirements;
- inspected inventoried businesses to evaluate compliance with established minimum BMP requirements and the local stormwater ordinance;
- conducted follow-up inspections as necessary to ensure facility compliance with minimum BMP standards;
- and took enforcement action as necessary to bring violators into compliance.

5.2.4.1 INVENTORY PRIORITIZATION

As required by section D.3.b(1)(b), when evaluating threat to water quality, the City of Encinitas considered the following attributes of each industrial and commercial business to determine priority status (high or low):

i. Type of activity (SIC code);
ii. Materials used at the facility;

iii. Wastes generated;
iv. Pollutant discharge potential;
v. Non-storm water discharges;
vi. Size of facility;
vii. Proximity to receiving water bodies;
viii. Sensitivity of receiving water bodies;
ix. Whether the facility is subject to the General Industrial Permit or an individual NPDES permit;
x. Whether the facility has filed a No Exposure Certification/Notice of Non-Applicability;
xi. Facility design;
xii. Total area of the site, area of the site where industrial or commercial activities occur, and area of the site exposed to rainfall and runoff;
xiii. The facility's compliance history; and
xiv. Any other relevant factors.

Although not specifically required by the Municipal Permit, the City will continue to classify industrial facilities that have obtained coverage under the General Industrial Permit as high priority. The City's GIS data management system was used to prioritize commercial businesses based upon the following spatially referenced TTWQ criteria:

- proximity to a 303(d) listed water body
- pollutant potential of the facility type
- stormwater violation history

If a facility was identified as having a potential threat based on two or more of these criteria, the facility was determined to be a high priority commercial facility. For example, if the facility is tributary to the San Elijo Lagoon and received a Notice of Violation from the City in the past the facility would be considered high priority based upon the additional criteria that the City has established in determining TTWQ. In addition, if during the City's commercial inspection process or based on institutional knowledge, it was determined that additional sites that would otherwise have a low priority should be classified as high priority industrial or commercial facilities and they were added to the inventory and were inspected.

The City's commercial inventory was updated and prioritized during the defined reporting period of this report and will be prioritized a least once per year prior to conducting annual inspections.

As a result of the City's threat to water quality analysis during FY 08-09, **26%** of the industrial and commercial facilities were identified as high priority. The identified high priority facilities included all three industrial facilities and many of the City's restaurants and auto repair shops. For a complete list of prioritized facilities refer to Appendices D-1 and D-2.

5.2.4.2 INSPECTION FREQUENCY

FY 2008-09 commercial facility inspection priorities were established in consideration of inspection frequencies and prioritization standards outlined in Order 2007-0001. As part of the

2008 JURMP update and transition to complying with the current Municipal Permit a new process to determine high priority facilities was formalized using GIS and put into effect in FY 2008-09. The following steps were taken to determine which industrial and commercial sites were inspected:

1. Confirm that the current industrial and commercial inventories are up-to-date
2. Prioritize each facility based on the prioritization process described in section 5.2.4.1 of this document
3. Review the list of facilities that were inspected the previous year
4. Determine the facilities that will be inspected in the current year based on each site's prioritization and inspection history and other relevant factors, such as TMDLs and 303(d) listings.

In compliance with standards established in section D.3.b.(3)(b) & (c) of the Permit, in FY 2008-09, the City inspected 100% of the industrial and commercial facilities inventoried as high TTWQ and over 25% of all inventoried sites. Consistent with the Permit, mobile businesses are not included when determining the inspection requirements based on percentages of the inventory. The City tracked completed inspections throughout the reporting period to ensure that the minimum inspection frequencies required by the Municipal Permit were met.

In FY 2008-09, the City's industrial and stationary commercial inventories included a total of **439** facilities, of which **114** facilities were identified as having a high TTWQ (**111** stationary commercial facilities and **three** industrial facilities[2]). Rounding to the nearest whole number, 25% of the stationary industrial/commercial inventory would be 110 sites, and 100 percent of the high TTWQ facilities would be 114 sites.

During FY 2008-09, the City completed inspections for all high priority facilities identified on the industrial/commercial facility inventory. City of Encinitas stormwater specialists conducted **two** industrial and **116** commercial site inspections, of which **two** were high priority industrial facilities and **111** were high priority commercial facilities. Therefore, the City of Encinitas met the minimum inspection requirements established in Order 2007-0001 and inspected **100%** of all the high TTWQ facilities and **26%** of all facilities in the industrial and commercial stationary facility inventories.

[2] The Encinitas Landfill is regulated and inspected by the County of San Diego.

Table 5-2
Summary of Facility Prioritization and Inspections Conducted in FY 2008-09

TTWQ Prioritization	Number of Facilities	Order 2007-0001 Inspection Requirements	Inspections Completed	
			Total	Percent
High priority	114	100% (114)	114	100%
Low priority	325	as needed	5	1%
Total	439	25% (110)	119*	26%

*Total includes one industrial inspection conducted by the County of San Diego.

5.2.4.3 ROUTINE FACILITY INSPECTIONS

As required by section D.3.b.(3) of the Permit, commercial and industrial facilities in Encinitas are routinely inspected by the City's Clean Water Program staff. Inspections are intended to:

- identify facilities that are not in compliance with the City's Storm Water Management Ordinance and the Municipal Permit;
- provide facilities with information regarding the City's Clean Water Program;
- provide guidance in complying with storm water regulations (City's Storm Water Management Ordinance, Municipal Permit, etc.); and
- validate and manage the inventory.

During FY 2008-09 City of Encinitas stormwater specialists conducted **2** industrial and **116** commercial site inspections for compliance with its ordinances, permits, manuals and this Order. All inspections included, as applicable:

i. Review of BMP implementation plans, if the site uses or is required to use such a plan;
ii. Review of facility monitoring data, if the site monitors its runoff;
iii. Check for coverage under the General Industrial Permit (Notice of Intent (NOI) and/or Waste Discharge Identification No.), if applicable;
iv. Assessment of compliance with Copermittee ordinances and permits related to urban runoff;
v. Assessment of BMP implementation, maintenance and effectiveness;
vi. Visual observations for non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff; and
vii. Education and training on storm water pollution prevention, as conditions warrant.

Specialists use two Storm Water Quality Inspection Forms to document inspection activities--one detailed form that is specific to industrial activities (see Appendix D-3) and one detailed form for commercial inspections (see Appendix D-4). The specialized forms allow the staff to document the above listed inspection steps, as applicable, to determine full compliance for each type of facility. In FY 2008-09 staff designed a new triplicate form called Commercial and Industrial Stormwater Quality Inspection Summary form, which is used in addition to the

detailed industrial and commercial inspection forms. The new form summarizes the corrective actions that are required as a result of the detailed inspection and acts as the responsible party's record of receipt upon completion of the inspection. This customer friendly form more effectively summarizes the inspection results, making corrective action requirements very clear to the business operation owner/manager. The form lists the most common corrective actions and requires a completion date to be met via the signature of the manager/owner. Further, the form effectively aids in the owner's understanding of stormwater regulations and compliance with current and future inspection actions. A copy of this new form is included in Appendix D-7. When conducting inspections, specialists worked with site contacts to provide examples of BMP solutions that could be implemented when corrective actions were necessary to minimize threat to water quality. Effective, low-cost solutions were sought whenever possible, although in some cases more expensive BMPs were needed to reduce pollutant discharges to the MEP. For example a restaurant may be required to provide overhead coverage and secondary containment for outdoor grease storage. Each business was also evaluated for staff training procedures and the stormwater quality awareness of the contact person; educational information was provided as appropriate. Whenever possible, the findings of the inspection and related corrective actions were discussed with the responsible party while the specialist was at the site. The responsible party was always provided a copy of the inspection summary form, and a complete copy of the detailed inspection report are always available upon request.

For a complete summary and confirmation that the designated BMPs were implemented (or required to be implemented) for industrial and commercial sites inspected in FY 2008-09 see the routine inspections summary in Appendix D-5. This Appendix describes, in detail, actions taken by specialists to confirm or require that BMPs were implemented at each industrial and commercial site inspected. Appendix D-5 and the associated inspection forms completed for each routine inspection confirms that all inspections conducted in FY 2008-09 addressed all the required inspection steps. Completed forms are available upon request.

Inspection Tracking

Complaint and inspection documentation is filed in the City's GIS database and is kept up-to-date on a daily basis. The GIS database is also used to track the number of inspections conducted for the inventoried industrial and commercial sites/sources throughout the reporting period to verify that sites/sources are inspected at the minimum frequencies listed in section D.3.b.(3)(b)& (c) of the Municipal Permit. Clean Water Program staff reference the inspection data in the GIS to assist in preparing for annual inspections, follow-up inspections, or IDDE investigations.

Third Party Inspections

All commercial inspections conducted in FY 2008-09 were completed by City of Encinitas Clean Water Program staff. The City has one full-time stormwater specialist (and three backup specialists) dedicated to conducting routine commercial and industrial inspections and following up on stormwater complaint calls. A third party was not employed to conduct commercial and industrial inspections during this fiscal year. Therefore, verification of third party inspection effectiveness was not necessary.

City staffs responsible for conducting storm water compliance inspections and enforcement of industrial and commercial facilities are trained regularly on inspection and enforcement procedures, BMP implementation, and assessment of monitoring data. Clean Water specialists attend available workshops, and regularly receive training through staff meetings and direction from the Clean Water Program Manager. Further, Clean Water staffs actively collaborate with inspection staff throughout the San Diego region to share methodologies and approaches that may be beneficial to each jurisdiction.

Inspection Follow-up and Enforcement

Clean Water Program staff conducted follow-up inspections at all facilities where deficiencies were identified and corrective actions were required. Follow-up investigations are conducted to ensure that the required BMPs were implemented and confirm full compliance of the facility. A total of **52** follow-up investigations were conducted as part of the FY 2008-09 routine inspection program. Depending on the severity of the infraction requiring corrective action, inspectors may elect to issue a Notice of Violation and/or monetary citation. In FY 2008-09, **five** Notices of Violation (NOVs) were issued to obtain compliance after the follow up inspections. Appendix D-5 demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the appendix, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

5.2.4.4 NOTIFICATION

As required by section D.3.b.(2)(c) of the Permit, the City of Encinitas will notify each inventoried industrial or commercial business of the City's updated BMP requirements that are applicable to the site/source. Notification will occur within the first three years of implementation of the updated JURMP. During FY 2007-08, the City continued notification efforts as part of routine facility inspections. All industrial and commercial facilities inspected in FY 2008-09 were notified of the BMP requirements applicable to their site/source. City of Encinitas stormwater specialists conduct thorough inspections with the owner/operator of each facility. During each inspection the stormwater specialist discusses the applicable BMP requirements in detail with the owner/operators.

5.2.4.5 COMPLAINT INVESTIGATIONS (VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE)

When a complaint is registered with the Clean Water Hotline, NPDES email, or when staff directly observes an illicit discharge involving a commercial facility, a complaint investigation is conducted. All complaints are investigated by City personnel with enforcement authority within a reasonable timeframe. Investigations typically include stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

As required by the Municipal Permit, and depending on the severity of the violation, the City enforces its storm water ordinance for all commercial and industrial facilities as necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's GIS work order database (CityWorks).

In FY 2008-09, there were **54** stationary commercial and **zero** industrial ICID complaint investigations. Of those investigations, **29** required follow-up assessments, **12** NOVs and **three** monetary citations were issued in order to achieve compliance. A summary of the commercial complaints, violations, and enforcement actions occurring in FY 2008-09 is available for review in Appendix H-1. As a component of complaint investigations, educational information is commonly provided to the owner/operator of commercial facilities to improve knowledge and awareness of stormwater regulations. Materials typically distributed included general storm water education, BMP requirements, pollution prevention tips, as well as specific municipal code and clean water regulations. During **43** investigations educational information was provided to the business owner/operator by the Clean Water specialist.

Appendix H-1 demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the appendix, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

Complaint investigation procedures will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report that will be completed and submitted the RWQCB as required by December 15, 2009.

Reporting of Industrial Non-Filers

The City of Encinitas did not identify any industrial sites that may require coverage under the General Industrial Permit but which, to the City's knowledge, did not file NOIs.

5.3 MOBILE SOURCES

5.3.1 BACKGROUND

Illegal discharges tend to be the major area of concern with mobile businesses. Mobile businesses can be difficult to inventory because they may not be based in the City of Encinitas and do not maintain a permanent address. Additionally, new mobile businesses are started, and previously existing mobile businesses go out of business on a relatively regular basis. For the reasons listed, and also simply because they are not consistently present at a fixed location, regular inspections of mobile businesses are not a feasible option.

5.3.2 SOURCE CHARACTERIZATION OF MOBILE SOURCES

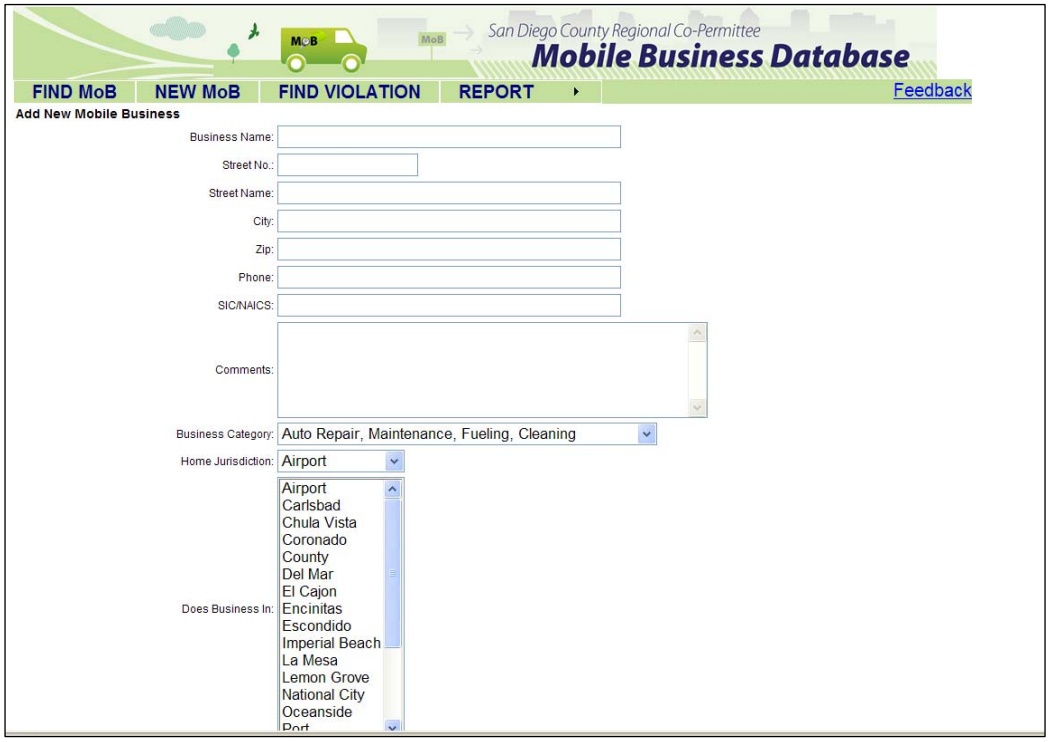
The mobile businesses known to operate within the City's jurisdiction are listed on an inventory separate from the stationary commercial inventory in Appendix D-6. This inventory was comprehensively reviewed and updated during FY 2008-09 as a part of the update of the City's JURMP. The following business types are addressed by the mobile sources element of the City's industrial and commercial program.

- Mobile automobile or other vehicle washing
- Mobile carpet, drape, or furniture cleaning
- Mobile construction trades
  - Cement mixing or cutting
  - Masonry
  - Painting and coating
- Landscaping
- Pool and fountain cleaning
- Power washing services

In addition to the types of businesses listed above, any other mobile business that the City determines to have a significant threat to water quality will be added to the inventory. Because not all mobile businesses have obtained a City of Encinitas business registration certificate or have a base of operations outside the City of Encinitas, Clean Water Program staff is continually refining and updating the mobile commercial inventory. Sources for such inventory updates include reported incidents, general observations by City staff, and available business registration certificates.

Within the defined reporting period of this report, the City participated in the development of a regional inventory and tracking system for mobile businesses. The industrial/commercial workgroup worked with a consultant who specializes in database design to create and maintain a mobile businesses database for the region. Figure 5-1 depicts the online form used by copermittees to enter a new business into the regional mobile business database. It is anticipated that this regionally updated and shared database will aid in collaborative enforcement of stormwater violations caused by mobile businesses.

Figure 5-1
Mobile Business Database New Business Entry Form



5.3.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.3.3.1 UPDATED BMP REQUIREMENTS FOR MOBILE SOURCES

All BMPs required for stationary sources, described in Section 5.2.3.1 of this document and listed in detail in the City's BMP Manual, are also required for mobile businesses, where applicable. The most important BMPs for most mobile businesses are typically those that address non-storm water discharge control and spill prevention, control, and cleanup.

5.3.3.2 ADDITIONAL CONTROLS FOR MOBILE SOURCES

Regardless of where the activity occurs, the City categorically prohibits illegal discharges from mobile businesses. If the City finds that the activities of a mobile business are contributing pollutants of concern to a CWA section 303(d) impaired water body segment or are negatively impacting ESAs, additional controls will be required for those activities as applicable. Further, if the City has reason to believe that any mobile business is generating significant illegal discharges in a given area of the City that is tributary to a 303(d) listed water body (and the discharges contain pollutants causing the impairment) or is within, directly adjacent to, or directly discharges to a water body within an ESA, City staff may more frequently visit those areas and/or take other actions to address the illegal discharges.

5.3.4 PROGRAM IMPLEMENTATION

5.3.4.1 EDUCATION/OUTREACH AND NOTIFICATION OF MOBILE SOURCES

In FY 2008-09 the City of Encinitas provided information and outreach regarding storm water quality to mobile business owners and operators that were contacted as a result of a complaint call *(See Section 5.3.4.4 below for a summary or complaint calls related to mobile business activities)*. Contacted businesses were given educational materials with detailed pollution prevention methods and other related BMPs to aid in their compliance with the City's storm water ordinance and the Municipal Permit.

Because the mobile businesses program is a new element of the industrial and commercial program for this revised JURMP, it is anticipated that some mobile businesses are not aware of storm water requirements and that education will be a significant portion of the program.

The City of Encinitas will coordinate with the regional Industrial and Commercial Workgroup to notify the owner/operator of each inventoried mobile business of applicable BMP requirements within the first three (3) years of implementation of the updated JURMP.

5.3.4.2 INTER-JURISDICTIONAL COORDINATION

During FY 2007-08, the City of Encinitas participated with other Copermittees in a Mobile Business Subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the Copermittees have chosen to collaborate on a regional mobile business outreach and education strategy, which addresses the following elements:

- Inventory Development and Maintenance;
- Establishment of Minimum BMP Requirements; and
- Outreach and Education (Including Business Notifications).

As described above, in FY 2008-09 a consultant was obtained to develop and launch a mobile business database to assist with the implementation of this Mobile Business Program. Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this strategy. See Appendix F-1 for the complete Regional Mobile Business Strategy.

5.3.4.3 INSPECTIONS

The inspections for mobile businesses generally follow the same procedure described in Section 5.2.4.3 of this document. The main focus of most mobile business inspections is on discharge control BMPs. After thorough investigation, enforcement, and follow-up as needed, none of the mobile businesses investigated warranted a formal inspection. Notably, as part of standard response actions, Clean Water staff work directly with mobile business owners and employees to ensure that their business practices meet the City's minimum BMP standards.

5.3.4.4 COMPLAINT INVESTIGATIONS, VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE

Complaint response, follow-up investigation, and compliance of mobile commercial businesses are handled in the same fashion as stationary commercial facilities. For a general description of the City's complaint response procedures, refer to section 5.2.4.5.

In FY 2008-09, there were **37** mobile complaint investigations conducted. Thirty-two resulted in dissemination of educational information to the business owner/operator; **14** Notices of Violation and **seven** citations were issued. Refer to Table 5-3 for a summary of the mobile commercial complaints and associated enforcement actions. This table includes complaint response to discharges from mobile businesses, and discusses each violation and the follow-up actions taken. The table demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the table, Clean Water staff aims to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance. Appendix H-1 also includes a summary of violations and enforcement actions resulting from complaints about mobile businesses occurring in FY 2008-09.

Complaint investigation procedures, including those related to mobile business operations, will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report, which will be completed and submitted the RWQCB as required by December 15, 2009.

Table 5-3
FY 2008-09 Mobile Commercial Complaints and Enforcement Actions

WO#	Complaint Location	Mobile Business Type	Enforcement Action(s)
79941	425 Villa Blanca Ct	Pool	Education
79909	2211 Newcastle	Mobile Auto Detailer	Education
79350	1302 Encinitas Blvd	Mobile Auto Detailer	NOV
79585	2533 S Coast Hwy 101	Mobile Auto Detailer	No Violation
79879	503 Forrest Bluff	Landscapers	Education
79862	160 Jupiter	Trash Hauler	None
80127	1401 Bella Azul Ct	Trash Hauler	None
80175	505 S Vulcan Ave	Power Washing	None
80254	160 Calle Magdalena	Power Washing	Education
81147	548 Fourth St	Contractor	Education, Citation
81141	1750 N Coast Hwy 101	Contractor	Education, NOV, Citation
81093	448 Zarina	Landscaping	Education, NOV
81144	110 Hillcrest Dr	Contractor	Education
81439	1549 N Vulcan Ave	Plumber	Education, NOV
81682	1754 Lake Dr	Utility Provider	Education
81678	1041 Monterey Vista Wy	Landscapers	Education, NOV, Citation
82113	161 Townwood Wy	Painters	Education, NOV
82419	1190 Encinitas Blvd	Carpet Cleaners	Education, NOV, Citation
82947	275 Mangano Cir	Trash Hauler	Education
83825	1327 Encinitas Blvd	Vehicle Towing	Education
83001	267 Dublin Dr	Mobile Auto Detailer	Education
83823	327 West I St	Contractor	Education, Citation
83994	951 Via Cantebria	Contractor	Education, NOV
84332	2217 Coolngreen Wy	Pool	Education
84669	222 Cerro St	Pool	Education, NOV
84726	190 Athena	Carpet Cleaners	Education
88289	1742 Aspen Glow	Janitorial	Education
87931	517 Ocean Bluff Wy	Contractor	Education, Citation
88280	325 Encinitas Blvd	Power Washing	Education, NOV
88276	447 Encinitas Blvd	Carpet Cleaners	Education, NOV
88036	1349 Rainbow Ridge Dr	Utility Provider	Education
88246	160 Encinitas Blvd	Vehicle Towing	Education
88254	750 S Coast Hwy 101	Equipment Sales	Education, NOV
39393	1415 Pegaso	Landscapers	Education
92471	102 Leucadia Blvd	Power Washing	Education, NOV, Citation
88379	1750 N Coast Hwy 101	Landscapers	Education
88382	2227 Cambridge Ave	Carpet Cleaners	Education, NOV

6.0 RESIDENTIAL

6.1 INTRODUCTION

Approximately 80 percent of the City's 19.4 square mile area is designated as residential in the City's General Plan map. Residential land use comprises a large area of the City, and residential activities can have a considerable effect on the water quality of receiving waters. The City's residential component of the Clean Water Program aims to reduce pollutant runoff from residential areas and activities to the MEP, and prevent residential discharges from the MS4 from causing or contributing to a violation of water quality standards.

The overall goal of the program is to minimize the impact of discharges from residential areas on receiving waters in Encinitas and, where possible, to enhance the quality of these resources. The following sections will describe the program activities conducted during FY 2008-09 that contributed to the successful implementation of the City's Residential Component.

6.2 SOURCE CHARACTERIZATION

Residential high threat to water quality areas and activities within the City of Encinitas were identified during the 2008 JURMP update process and are described in detail in City's 2008 JURMP. The following section identifies the high threat to water quality residential areas and activities that were focused on during FY 2008-09. The Municipal Permit (Order R9-2007-0001) requires each Copermittee to identify and provide a list of the residential areas and activities within its jurisdiction that have been identified as having a high threat to water quality. The following section briefly summarizes this process.

6.2.1 HIGH THREAT TO WATER QUALITY ACTIVITIES

In consideration of the minimum required *high threat to water quality* residential activities listed in section D.3.c.(1) of Order No 2007-0001, the following residential activities were identified as residential activities that hold the greatest threat potential to local receiving water quality:

- Automobile Repair and Maintenance
- Automobile Washing
- Automobile Parking
- Home Improvement, Garden Care Activities, and Product Use
- Disposal of Trash, Pet Waste, Green Waste, and Household Hazardous Waste

6.2.2 HIGH THREAT TO WATER QUALITY AREAS

Section D.3.c.(1) of Order No 2007-001, requires that Copermittees identify all *high threat to water quality* residential areas. During the 2008 JURMP update, the City identified *high threat to water quality* residential areas using the following criteria (as defined in the Municipal Permit):

- Any residential areas tributary to a CWA section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired; and
- Any residential areas within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an environmentally sensitive area (as defined in Attachment C of the Municipal Permit).

The City of Encinitas has several Section 303(d) impaired water bodies and coastal lagoons within or directly adjacent to the City's jurisdictional boundary. The 303(d) impaired water bodies within the City of Encinitas include Cottonwood Creek, Encinitas Creek, Escondido Creek, San Elijo Lagoon, and the Pacific Ocean at Moonlight State Beach and the San Elijo Lagoon Outlet.

Based on the definition in Attachment C of the Order No 2007-0001, Environmentally Sensitive Areas within the City of Encinitas include those areas identified as Natural Resource Sensitive areas in the City's General Plan and the City's Wetland buffer layer. The City does not contain any Areas of Special Biological Significance, water bodies designated with the RARE beneficial use, or areas designated as preserves in the Multiple Species Conservation Program.

In the process of drafting the Regional Residential Education Program, the Regional Outreach Workgroup identified the major pollutants of concern from residential sources for the San Diego region. The major pollutants of concern for residential areas include: bacteria, nutrients, sediment, pesticides, and trash.

In consideration of identified 303(d) listed water bodies, the City's ESAs, and the primary pollutants of concern, Clean Water Program staff employed GIS analysis to determine the location of *high threat to water quality* residential areas. Based on this analysis the following residential areas within the City of Encinitas were identified as *high threat to water quality* residential areas:

- All residential areas within 500 feet of any 303(d) listed water body or lagoon
- All residential areas within, directly adjacent to, or discharging directly to a coastal lagoon or other receiving waters within an ESA
- The residential area to the west of Interstate 5 within the Cardiff sub-basin (drains to San Elijo Lagoon)
- The residential area south of Sylvia St, west of Second Street, and north of K Street (drains to Cottonwood Creek and Moonlight Beach)

Appendix E-1 includes a map of residential areas. The map was developed for Clean Water Program staff to utilize in the office and in the field to help identify residential discharges or

activities which could pose a threat to water quality due to their proximity to receiving water bodies and ESAs.

6.2.3 EVALUATION OF OVERSIGHT OF RESIDENTIAL AREAS AND ACTIVITIES

The City of Encinitas is planning to conduct a formal evaluation of the methods used for oversight of residential areas and activities during the permit cycle of Order No. 2007-0001. The evaluation will coincide with the City's effectiveness assessment for the Residential Component. Since the methods used for residential oversight were recently updated as part of the 2008 JURMP update, City staff determined that it would be most appropriate to evaluate the success of these methods in subsequent fiscal years. Through an evaluation of effectiveness assessment measures as part of this report, it has been reasoned that the City has achieved overall success as it related to the oversight of residential areas. Hotline complaint calls received, compliance achievement, and dry weather monitoring exceedances as they relate to residential sources all support this assessment. Continual evaluation in subsequent reporting years will be vital to assessing the overall efficacy of oversight related to residential activities.

6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

This section describes the updates made to the City's minimum BMPs that were implemented during FY 2007-08. The minimum BMPs for residential *high threat to water quality* activities were established in the City's 2002 JURMP. As part of the City's 2008 JURMP update, the minimum BMPs were reviewed and updated based on the requirements in Order No 2007-0001.

6.3.1 POLLUTION PREVENTION

Pollution prevention is the act of reducing or eliminating waste at the source by modifying production processes, promoting the use of non-toxic or less-toxic substances, implementing conservation techniques, and re-using materials rather than putting them into the waste stream. Pollution prevention methods have been integrated into the minimum BMPs established for *high threat to water quality* areas and activities.

6.3.2 LIST OF MINIMUM BMPS

As part of the City's 2008 JURMP update, the City designated the following minimum BMPs for *high threat to water quality* residential activities. The minimum BMPs are primarily nonstructural and are targeted at activities specified in Section 6.2 as having a *high threat to water quality*. Pollution prevention methods were incorporated into this set of BMPs, where appropriate. The list of minimum BMPs can also be found in the City's Storm Water BMP Manual I. The manual can be accessed through the City's Clean Water Program webpage at: http://cwp.ci.encinitas.ca.us.

(a) Automobile Repair and Maintenance

Pollution Prevention

(1) Employ routine preventative maintenance practices
(2) Reduce vehicle use, whenever possible
- Change driving habits
- Carpool
- Increase the use of public transportation
- Bike or walk for short trips

(3) Make timely vehicle repairs

Leaks and Spills

(1) Prevent leaks and spills from contacting stormwater
- Use drip pans, plastic sheeting, or other materials to contain spills
- Work indoors or under shelter
- If working outdoors, don't work in the rain
- Immediately contain and clean up leaks and spills when they occur
- Use absorbent materials to clean up spills
- Establish cleanup standards
- Require that tools and parts be cleaned only in contained areas

Materials and Waste Management

(1) Properly manage and dispose of automotive wastes and materials
- Properly drain fluids from automobiles
- Dispose of wastes properly and lawfully and recycle used oil and antifreeze
- Store materials and wastes indoors or under cover
- Use secure and watertight containers when storing materials and wastes

(b) Automobile Washing

Management / Reduction* of *Wash Water

(1) Whenever possible, use commercial self-serve or full-serve car washes that properly dispose or recycle their wash water
(2) When washing a vehicle at a residence:
- Wash vehicles over porous surfaces (grass, dirt, etc.) whenever possible
- Use dry cleaning methods to avoid the generation of wash and rinse water
- Turn off the water when not in use or use a controllable spray nozzle
- Encourage the establishment of neighborhood wash areas where wash water and contaminants can be properly managed

Materials and Waste Management

(1) Properly dispose of soapy water or bucket rinse water to the sanitary sewer or soak into a landscaped area
(2) Use dry methods to degrease or clean especially dirty parts prior to wet washing and rinsing (e.g., remove grease or brake dust using towels, etc.)

(3) Refrain from degreasing or cleaning of engine parts in areas other than those designated for such purposes

(c) Automobile Parking

(1) Use routine preventative maintenance practices and make timely vehicle repairs to prevent leaks of automotive fluids
(2) Design and construct parking areas to minimize storm water impacts; covered garages should be plumbed to the sewer system

***(d)* Home and Garden Care Activities and Product Use**

GARDEN AND YARD CARE

Pollution Prevention

(1) Use safe substitutes and alternative methods when gardening:
- Use integrated pest management techniques and biological controls
- Use native plants and drought tolerant species to reduce water use and green waste produced
- Implement planting techniques that attract beneficial insects
- Consider composting, vermiculture and yard waste recycling
- Recommend and encourage practical purchasing practices for pesticides and fertilizers
- Identify "pests" before attempting to eliminate them

(2) Always read label instructions and follow the instructions for garden care products
(3) Implement water conservation practices, whenever possible
(4) Consider xeriscape gardening, including: drip irrigation, soaker hoses, and micro-spray systems
(5) Repair and maintain irrigation systems to reduce excessive runoff
(6) Recycle lawn clippings and green waste through local programs
(7) Plant or mulch hillsides and slopes to prevent erosion

Leaks and Spills

(1) Immediately cleanup spills of gardening chemicals, fertilizers and soils
(2) Return spilled materials to the container for future use or proper disposal

Materials and Waste Management

(1) Store lawn care products in closed labeled containers and in covered areas
(2) Refrain from using hazardous materials during windy or rainy days
(3) Cover stockpiles of soil, compost, or fertilizers with plastic tarps to prevent dispersal by wind or rain
(4) Dispose of household chemicals to the household hazardous waste collection facility or scheduled drop-off events
(5) Utilize dry sweeping techniques for clean up

Restrictions on Activities

(1) Do not hose off paved surfaces to the street or gutter
(2) Do not dispose of hazardous waste to the trash, landfill or storm drain

HOME CARE AND MAINTENANCE

Pollution Prevention

(1) Utilize purchasing practices that reduce waste
(2) Use safe substitutes for home cleaning and maintenance
(3) Read and follow product labels
(4) Recycle unused or unwanted products
(5) Use water based paints when possible
(6) Recycle unwanted appliances and household equipment

Leaks and Spills

(1) Clean up hazardous materials spills immediately
(2) Properly dispose of waste from spill cleanup materials

Materials and Waste Management

(1) Store household hazardous materials in closed labeled containers and in a covered area
(2) Recycle latex paint through community programs
(3) Dispose of unwanted household hazardous waste through household hazardous waste collection facilities
(4) Dispose of trash in provided trash cans or shared dumpsters and keep dumpster and trash can lids closed when not in use

Restrictions

(1) Do not dispose of wash waters (carpet cleaning, mop water, paint wash-up, etc.) to the street, gutter or storm drain

(e) **Disposal of Pet Waste**

Pollution Prevention

(1) Spay or neuter pets to reduce feral populations

Waste Management / Disposal

(1) Clean up after pets when walking them in public places
(2) If pets are allowed to defecate outside, clean up feces from yards
(3) Properly dispose of pet feces in the toilet or trash

Pet Management (Dogs and Cats)

(1) Whenever possible, do not allow pets to run free in residential neighborhoods

Manure Management (Horses and Other Large Animals)

(1) Properly manage manure (including the preparation of manure management plans when appropriate)
(2) Compost or properly dispose of manure
(3) Cover manure stockpiles with plastic tarp to prevent contact with rain

6.4 PROGRAM IMPLEMENTATION

This section describes the steps that were taken in FY 2008-09 to require and verify the implementation of designated BMPs for residential areas and activities.

6.4.1 OUTREACH AND TRAINING

The City has a comprehensive set of Education and Public Participation Programs, which are a component of the City's jurisdictional program. A significant element of these programs consists of educating and engaging residents about ways in which they can minimize their impact on local waterways. Education of the citizens who reside in the City of Encinitas contributes to the implementation of the Residential Component of the City's Clean Water Program. Outreach messages that are relayed to the public include, but are not limited to:

- Impacts of urban runoff on receiving waters
- Distinction between MS4s and sanitary sewers
- Pollution prevention and safe alternatives
- Household hazardous waste collection and recycling
- BMP implementation and BMP maintenance
- Pet and animal waste disposal
- Equipment and vehicle maintenance and repair
- Spill response, containment, and recovery
- Water conservation

During FY 2008-09, Clean Water program staff conveyed these messages to the public through a variety of mechanisms, including:

- Clean Water Program website
- Production and distribution of brochures and promotional items
- Public participation in community events, workshops, and trainings
- Presentations at local schools
- Media coverage
- Response to residential complaints (Clean Water Hotline or email)

Implementation of these mechanisms by the Clean Water Program helps to make the public aware of the types of activities that have the potential to impact water quality and the BMPs that can be implemented to reduce this impact. Awareness is the first step in the process towards behavioral change. A detailed description of the educational activities implemented by the Clean Water Program can be found in the Section 8.

6.4.2 USED OIL AND HHW COLLECTION SERVICES

The City of Encinitas facilitates the proper management and disposal of used oil, toxic chemicals, and other household hazardous wastes (HHW) through various mechanisms. The City offers its residents door-to-door home collection, two permanent collection facilities, and periodic, temporary collection events for all HHW. In addition, the City requires weekly curbside garbage, recycling, and yard waste pick-up for all residents. The various components of the solid waste and hazardous waste collection services provided by the City are described in detail below.

HHW Home Collection Program - Door-to-door home collection service is available to all residents of the City of Encinitas. Qualifying homebound, elderly, and disabled citizens may request pickup at no charge. Residents not qualifying for free pickup service are charged a nominal fee of $10 for home collection. Materials accepted via the HHW Home Collection Program include:

- **Household Cleaners:** Drain openers, oven cleaners, wood and metal polish / cleaners, toilet bowl cleaners, and disinfectants
- **Automotive Products:** Oil and fuel additives, grease and rust solvents, carburetor and fuel injector cleaners, air conditioning refrigerants, starter fluid, lubricating fluids, radiator fluids and additives, waxes, polishes, cleaners, and transmission additives
- **Home Maintenance and Improvement Products:** Paint thinners, paint strippers, adhesives, paints, stains, varnishes, sealants, and wood preservatives
- **Lawn and Garden Products:** Pesticides, herbicides, and fungicides (poisons)
- **Miscellaneous:** Batteries, fingernail polish removers, pool and photo chemicals

Poway and Vista Permanent HHW Collection Facilities - In an agreement with the Cities of Vista and Poway, residents of the City of Encinitas may also drop off household hazardous waste at the Vista or Poway collection centers. The Vista collection center is located at 1145 East Taylor Street, at Laguna Lane. The Poway collection center is located in the South Poway Business Park, at 12325 Crosthwaite Circle off of Stowe Drive. These regional, permanent collection centers are open every Saturday (except holiday weekends) from 9:00am to 3:00pm. No fee is charged to Encinitas residents and no appointments are necessary. Waste collected is separated, packaged, secured, and temporarily stored at the permanent facilities. It is then removed on a regular basis for proper recycling or disposal. Material accepted at the Poway and Vista facilities are the same as those accepted through the Home Collection Program.

Used Oil Recycling Program - The City's used oil recycling program consists of a network of certified automotive waste recycling centers throughout the city. These facilities accept a range of used automobile products including used oil, oil filters, batteries, and antifreeze. A significant part of this program is the dissemination of educational information regarding the benefits of, and opportunities for, pollution prevention. This program is specifically for the residents of Encinitas and is funded through grants from the California Integrated Waste Management Board (CIWMB). A list of the participating oil recycling sites is provided in all oil recycling printed material and on the City's website. Residents may also opt to use the City's door-to-door HHW collection service to recycle their used oil and oil filters. However, most

residents are accustomed to taking their used oil and oil filters to the certified centers and the permanent HHW facilities.

Trash and Recycling Services - For public health purposes, the City of Encinitas requires that all residents participate in the City's solid waste collection service. All residents and businesses are liable for payment of fees for the mandatory service (see Municipal Code section 11.20.010, paragraph A). Residential service includes curbside green waste collection and recyclable materials collection in addition to regular garbage collection. The City of Encinitas has an exclusive franchise agreement with EDCO Waste Recycling Services to provide solid waste collection services in Encinitas for both residential and commercial customers.

Detailed information regarding used oil, HHW, and solid waste disposal is made available to residents through the City's website, ECDO's website, and other various environmental websites. In addition, brochures about household hazardous waste disposal options are available at outreach events staffed by the Clean Water Program, the Solana Center, and EDCO Waste Recycling Services. Brochures and information regarding HHW disposal are also available upon request at the City's main office.

Table 6-1 provides a summary of the used oil collected via the City's used oil recycling program. Table 6-2 identifies types and amounts of household hazardous waste collected from residents in Encinitas during this reporting period.

Table 6-1
Used Oil Collected in FY 2008-09

Collection Type	Quantity of Oil (Gallons)	Quantity of Filters (# of Filters)
Certified Centers	13,894	1,344
Permanent HHW Centers	479	69
Total	**14,373**	**1,413**

Table 6-2
Household Hazardous Waste Collected in FY 2008-09

Material Type	Description	HHW Collection Facilities*	Door-to-Door Program*
Flammable	Flammable solid/liquid	8,269	15,528
& Poison	Bulked flammable liquids	1,992	0
	Oil-base paint	7,880	11,618
	Poison (excl. aerosols)	939	11
	Reactive and explosive	8	4
	Subtotal	**19,088**	**27,161**
Acid	Inorganic & Organic acid	691	1,431
Base	Inorganic & Organic base	591	1,038
Oxidizer	Neutral oxidizers, Organic peroxides	262	209
	Subtotal	**1,544**	**2,678**
PCB-containing	PCB-containing paint	0	0
	Other PCB waste	21	0
	Subtotal	**21**	**0**
Reclaimable	Antifreeze	823	44
	Car batteries	2,683	944
	Latex paint	11,595	34,775
	Motor oil/oil products	4,071	55
	Oil filters	103	2
	Subtotal	**19,275**	**35,820**
Asbestos		**54**	**165**
Universal Waste (UW)	Mercury containing waste	0	16
	Thermostats/switches/thermometers	7	4
	Fluorescent Lamps	632	864
	Rechargeable batteries	267	134
	Household batteries	1,154	1,400
	Subtotal	*2,060*	*2,418*
Electronic Waste (UW)	SB20/50 video display devices	11,258	8,820
	Non SB20/50 video display devices	0	0
	Consumer electronic devices	10,435	6,026
	Subtotal	*21,693*	*14,846*
Aerosols (UW)	Non-empty aerosol containers	172	3,715
	Other	0	0
	All UW Subtotal	**23,925**	**20,979**
Other HHW	Home-generated sharps	180	0
	Pharmaceutical waste	0	0
	Compressed gas cylinder	935	241
	Non-UW aerosol containers	1,655	0
	Treated Wood	0	0
	Other	2,873	0
	Subtotal	**5,643**	**241**
Grand Total		**69,550**	**87,044**

*Waste measured in pounds.

6.4.3 COMPLAINT INVESTIGATIONS, VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE

When a complaint is registered with the Clean Water Hotline, NPDES email, or when staff directly observes an illicit discharge, a complaint investigation is conducted. All complaints are investigated by City personnel with enforcement authority within a reasonable timeframe. Investigation typically includes stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

As required by section D.3.c.(3) of Order No 2007-0001, and depending on the severity of the violation, the City enforces its storm water ordinance for all residential areas and activities as necessary to maintain compliance. Enforcement may include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's GIS work order database (CityWorks).

In FY 2008-09 there were **126** residential ICID complaint calls. Of these calls, **25** were either issues that were referred to other departments/agencies or requests for information only (requests for information may include car washing regulations, power washing requirements, etc). Of the **101** residential complaint investigations conducted, **78** resulted in dissemination of educational information to the homeowner or resident. Materials typically distributed included general storm water education, BMP requirements, pollution prevention tips, as well as specific municipal code and clean water regulations. In addition to education, FY 2008-09 complaint investigations resulted in **19** Notices of Violation and **four** monetary citations.

A summary of the residential violations and enforcement actions occurring in FY 2008-09 is available for review in Appendix H-1. The tabular summary includes a brief discussion, which includes the follow-up actions taken, for each violation. The table demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the table, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

Complaint investigation procedures will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report that will be completed and submitted the RWQCB as required by December 15, 2009.

6.4.4 REGIONAL RESIDENTIAL EDUCATION PROGRAM

The City of Encinitas collaborated with other jurisdictions in the Education and Residential Sources Workgroup to develop the Regional Residential Education Plan. This Plan contains recommended strategies for the development and implementation of the Regional Residential

Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale. The complete Regional Residential Education Plan can be found in Appendix F-7.

The first major collaboration on a regional level was promotion of residential storm water BMPs at the San Diego County Fair. The Copermittees combined funds to pay for a Fair sponsorship, which included a booth display, materials distribution, signage, and advertisements at several locations in the fairgrounds throughout the duration of the fair. Booth staffers promoted the Think Blue message and presented storm water educational materials to all Fair attendees. Details of the educational messages and materials distributed at the Fair can be found in Section 8.3.4 of this annual report.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

In accordance with the September 10, 2008 Regional Water Quality Control Board adoption of Addendum No. 2 to Order No. R9-2007-0001, the City of Encinitas will submit the entire FY 2008-09 Illicit Discharge Detection and Elimination Component and attachments no later than December 15, 2009.

8.0 EDUCATION

8.1 INTRODUCTION

The City's outreach program includes an education component and a public participation component. The education component is focused on disseminating educational information to increase public knowledge of stormwater issues, while the public participation component, discussed in Section 9, provides opportunities for the public to become involved in the process of reducing pollutants of concern in stormwater and urban runoff. The education component is primarily implemented by the Engineering Services Department, Clean Water Division.

The Municipal Permit establishes the following five target communities which must be addressed by the education program:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The overall goal of the education element is to provide an education program that will:

(1) Measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience.

(2) Measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment.

The City conducted or participated in a wide variety of stormwater education activities during the FY 2008-09 reporting period. Education and outreach activities and opportunities are organized and implemented on three levels—Jurisdictional, Watershed, and Regional. For ease of reporting, activities occurring on all levels have been captured below.

8.2 MUNICIPAL STAFF TRAINING

As required by Municipal Permit section 5.b.1(d), activity specific training opportunities were provided to City staff. The summary below outlines departmental training activities conducted during the defined reporting period of this report.

Notably, in FY 2007-08, the Clean Water Division developed the "Clean Water Challenge" stormwater training game. This training element was created to address topics specifically identified in the Municipal Stormwater Permit, as well as activity and department specific topics. In FY 2008-09, the Clean Water Challenge was utilized extensively for municipal training activities as described below. The Clean Water Challenge has been well received by City staff and provides a competitive and informative format for training various departments on a wide range of topics including low impact development, SUSMP standards, activity

specific BMPs, impaired water bodies, stormwater code violations, potential sources of pollutants, and other department specific concepts.

Public Works, Streets Division. FY 2008-09 stormwater training was provided to the Streets Division during regular weekly staff meetings on the following dates:

- September 11, 2008; Best Management Practices for Street Sweeping, Litter Control, Roadway and Bridge Maintenance, Parking Surface Cleaning, and Housekeeping Practices; 13 attendees
- September 25, 2008; Road and Street Maintenance SC-70, 13 attendees
- October 9, 2008; Plaza and Sidewalk Cleaning SC-71; 12 attendees
- October 23, 2008; Landscape Maintenance SC-73; 13 attendees
- November 6, 2008; Drainage System Maintenance SC-74; 13 attendees
- January 15, 2009; Building and Grounds Maintenance SC-41; 11 attendees

Public Works, Wastewater Division. The Clean Water Program works closely with the Wastewater division to prevent illegal discharges from entering the City's waterways. Seven staff members from the Wastewater division were trained by Clean Water Program staff on July 9, 2008 using the Clean Water Challenge stormwater training game.

City of Encinitas Fire Department. Within the defined reporting period of this report, stormwater training workshops were given to the Fire Department on three separate occasions using the Clean Water Challenge stormwater training game. On June 11, 2009, 17 fire personnel were in attendance; 10 fire personnel attended the training on June 15; and 9 fire personnel were at the June 23 training.

City of Encinitas Landscape Contractors. The City contracts with multiple landscaping companies to maintain our parks, beaches, and other public landscaped areas. In collaboration with the City's Parks and Recreation Department, training was given in Spanish to 25 staff from the City's landscape contractors on June 11, 2009. Topics of this training included activity specific BMPs, City Stormwater regulations, and proper materials management.

Engineering Department. Staff from the Clean Water Program and other divisions of the Engineering Department attended trainings in the following areas:

- Model SUSMP – June 1, 2009
- Hydrological Simulation Program-Fortran – June 8-10, 2009

The Model SUSMP training was open to all copermittees and was designed to inform attendees about the details of the recently updated and RWQCB approved San Diego Regional Model SUSMP. The training was hosted by Brown and Caldwell and Dan Cloak and Associates, the two consultants who assisted in the drafting of the Model SUSMP. The training was well attended by all copermittees. The City of Encinitas staff in attendance included two development review engineers, one CIP engineer, two stormwater division staff, and one construction inspector.

The Hydrological Simulation Program-Fortran (HSPF) training included a 1-day lecture and 2-day computer lab, "hands on" training. Two stormwater staff attended the 1-day lecture and 2 development plan check engineers attended the 1-day lecture and the 2-day lab. The lecture consisted of a detailed summary and design of the HSPF software, including appropriate application of the software for Hydromodification Management design and calculation and TMDL development and implementation. The lab consisted of step-by-step computer tutorial and simulation of real-world examples.

Clean Water Program, Engineering Department. Clean Water Program staff regularly attend trainings, workshops, and conferences related to stormwater management. This fiscal year staff attended the following:

- 8-hour HAZWOPER Refresher Course – July 25, 2008
- National Beach Conference (EPA) – April 20-22, 2009

In addition to formal training, Clean Water Program staff are regularly informed of new water resources regulations and stormwater science and technology through regional meetings and coordination, subscription to relevant scientific journals, and individual research.

Multiple City Departments. Greywater Action (formerly the Greywater Guerrillas) is an organization dedicated to educating people about greywater system design and construction. The group gave a presentation on February 19, 2009, that included information on greywater regulations, installation, and maintenance to staff from Engineering, Planning, Wastewater, San Dieguito Water District, and the Environmental Commission. This training opportunity was coordinated in response to increased public inquiry on the viability of installing greywater systems in order to comply with water conservation restrictions.

Also, two Permanent BMP Preservation trainings were given by the Engineering Department to staff from Engineering, Planning, Building, Public Works, San Dieguito Water District, Fire, Parks and Recreation, and Code Enforcement. The trainings were on April 30 and May 18, 2009, and a total of 46 people were in attendance. There were three primary objectives engineering staff focused on during these training sessions. First, fundamental, scientific reasoning for requiring and implementing permanent BMPs was explained to the trainees. Watershed processes and the benefits of Low-Impact Development were key components of this discussion. Second, proper design of stormwater treatment facilities was detailed through engineering schematics and examples of BMPs implemented throughout the city. Finally, the importance of gaining assistance from all departments to preserve these BMPs in place was emphasized. For this last objective, the City's GIS-based BMP tracking system was introduced to staff in the trainings. Training presenters showed how using the BMP tracking system would eliminate the potential of BMPs being modified or removed through the approval of additional building or other City permits where existing BMPs are located.

8.3 EDUCATIONAL OUTREACH

The following section describes education efforts conducted for each target community, as identified in the Permit and summarized above, during FY 2008-09.

8.3.1 UNDERSERVED TARGET AUDIENCES, HIGH-RISK BEHAVIORS, AND "ALLOWABLE" BEHAVIORS AND DISCHARGES

Underserved Target Audiences - Bilingual Education

For those that work in the City, and for segments of the community that do not speak English as their first language, the City provided bilingual (English/Spanish) brochures at all outreach events. The Clean Water Program utilized the bilingual brochures produced by the City that are targeted at specific trade groups/activities. These brochures include information about Best Management Practices for Yard and Garden Care, Restaurants, Home Improvement, Pesticides, Developers, and Automotive Care. Further, a bilingual Clean Water Program staff resource provided training and responded to complaint calls as needed in various community sectors.

High Risk Behaviors - Regional Mobile Business Outreach and Education Plan

During FY 2007-08, the City of Encinitas participated with other copermittees in a Mobile Business Subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. The Industrial/Commercial Workgroup will be overseeing the implementation of that Strategy throughout the permit cycle. A complete description of the education and outreach of mobile businesses and inter-jurisdictional coordination of notifications can be found in section 5.3. See Appendix F-1 for the complete Regional Mobile Business Outreach and Education Strategy.

8.3.2 NEW DEVELOPMENT AND CONSTRUCTION COMMUNITIES

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to the new development and construction communities.

- "A Pollution Prevention Guide for the Construction Industry" was distributed at public events, to engineering construction inspectors, the building department, and displayed at the City of Encinitas Engineering counter for the public. One hundred and thirty were disseminated during the 2008-09 fiscal year. This brochure was developed as part of the Carlsbad Watershed Urban Runoff Management Plan workgroup (Appendix F-2).
- Announcements at pre-construction meetings. Pre-construction meetings are attended by Engineering Department inspectors and Clean Water staff as determined necessary. For all projects, stormwater topics including required construction site BMPs, general site management, post-development BMP construction, and other relevant SUSMP requirements are discussed.
- Construction inspector stormwater coordination. Staff from the Clean Water Program attended inspector staff meetings to provide support and information to the City's construction inspectors.

- Printed materials were provided to contractors and developers in the form of the City's brochure, "Developers – Simple and Cost Effective Ways to Comply with Stormwater Regulations" (Appendix F-3). The brochure is available in Spanish and English.
- Special mailings of information (i.e., wet season erosion control letter). In September 2008, the City mailed 76 letters to local developers and contractors regarding BMP requirements for the upcoming rainy season (Appendix B-5). "A Pollution Prevention Guide for the Construction Industry" brochure was inserted into the annual Erosion Control letter that went to contractors, developers, and job superintendents.

8.3.3 COMMERCIAL/INDUSTRIAL OWNERS AND OPERATORS

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to commercial and industrial sectors of the community:

- The ninth annual Integrated Pest Management training for landscape professionals was held at the Port of San Diego on May 19, 2009. The IPM Training Seminar offered insight into identification of landscape pests and diseases and cultural practices for improved plant health. There were also presentations on water quality and irrigation. City staff and one Encinitas business were in attendance.

- The San Dieguito Water District hosted a Professional Landscape Series every Wednesday from February 4 - 25 and March 24, 2009. Topics included irrigation systems and scheduling, plant identification, and water use requirements. Approximately 35-40 people attended each class.

- A compliance workshop for restaurant operators was held in Escondido on March 10, 2009. Stormwater regulations and green business requirements were discussed. One Encinitas restaurant was in attendance.

- Commercial inspections were performed at 116 commercial facilities and two industrial facilities during the FY 2008-09 reporting period. During these inspections individual one-on-one education was presented to each facility manager/owner. Information presented included general stormwater quality information and BMP requirements.

8.3.4 RESIDENTIAL COMMUNITY, GENERAL PUBLIC, AND SCHOOL CHILDREN

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to various residential, community, and school audiences:

a. Residential Community and General Public

- A California Friendly Landscape Training was held on Thursday, October 2, 2008, and addressed water efficient landscaping, irrigation systems, fertilizers, and turf replacement. There were approximately 30 attendees.
- A four week Home Landscaping Workshop was hosted by the San Dieguito Water District at the Rancho Santa Fe Garden Club on October 10, 18, and 25, and November 1. Twenty-five to thirty people attended each class. A free Water-Wise Landscaping Workshop was also hosted by SDWD at the Encinitas Community Center on March 8, 2008. There were 31 people in attendance. The two workshops each covered four topics: landscape design basics; California friendly plants; landscape sprinkler systems; and soils, water, and fertilizers.
- A mini residential landscape workshop took place on Saturday, March 7, 2009, and covered garden design, California-friendly and native plants, and irrigation systems. The class was held at the Rancho Santa Fe Garden Club and sponsored by the San Dieguito Water District. There were approximately 50 attendees.
- A City of Encinitas Environmental Services Guide was created in FY 2006-07. It continues to be handed out at all public events throughout the City. It is a compilation of information regarding trash and recycling, HHW, electronics disposal and recycling, stormwater management, home composting, and general environmental contacts. The brochure is printed on 100% post-consumer recycled paper (Appendix F-4).
- The City of Encinitas Parks and Recreation Department hosted "A Day with Dad on the Trail" on June 20, 2009, at Las Verdes Park. Families were encouraged to participate in the 20-question scavenger hunt along the trail. There were five stormwater related questions, including information on pet waste, low impact development, erosion control, water runoff, and pollutants. Ten completed forms were turned in at the end of the event.
- The Solana Center for Environmental Innovation continued to sell compost bins and worm bins to residents of Encinitas throughout FY 2008-09. All of the bins were subsidized by the City and sold to residents at discounted rates. Bins could be purchased at the Solana Center or at composting events and workshops throughout the City. Bin sales in FY 2008-09 increased by 40.7% from FY 2007-08. (486 bins sold in 07-08, 684 bins sold in 08-09).
- Individual Communication. There were 126 residential ICID complaint calls in FY 2008-09. Twenty-five of those calls were either issues that were referred to other departments/agencies or requests for information only (requests for information may include car washing regulations, power washing requirements, etc). Of the 101 residential complaint investigations conducted, 78 resulted in education. During these inspections educational information was distributed to each homeowner/resident. Materials distributed included general stormwater education, BMP requirements,

pollution prevention education, as well as specific municipal code and clean water regulations.

- Media Coverage (newspaper articles, press releases, etc.): See Table 8-1 below.

Table 8-1
Summary of Media Coverage in FY 2008-09

No.	Title	Date	Source
1	Study finds lowest beach sand since 2001	July 7, 2008	North County Times
2	Sands shift for funding beach effort	July 13, 2008	North County Times
3	Report says county beaches less contaminated in 2007	July 29, 2008	North County Times
4	Encinitas prepares ban on plastic bags	September 19, 2008	The Coast News
5	Program to check beaches curtailed	September 25, 2008	SD Union Tribune
6	Encinitas beaches earn high water quality	Fall 2008	Encinitas Now! Newsletter
7	Stopgap funding OD'd to monitor water quality	November 5, 2008	SignonSanDiego.com
8	Sand gift will help replenish beaches	January 9, 2009	SignonSanDiego.com
9	Encinitas mayor delivers State of the City	February 12, 2009	SignonSanDiego.com
10	Water testing left high and dry	February 22, 2009	SignonSanDiego.com
11	A drop in the bucket	March 15, 2009	SignonSanDiego.com
12	City to celebrate 'earth month'	March 23, 2009	North County Times
13	County finds way to fund coastal-water testing	March 24, 2009	SignonSanDiego.com
14	Greening community is intent of programs	March 28, 2009	SignonSanDiego.com
15	Budget threatens coast water testing	April 4, 2009	SignonSanDiego.com
16	BioBlitz to tally San Elijo Lagoon's diversity	May 10, 2009	North County Times
17	Report card: S.D. beaches not so great in wet weather	May 20, 2009	SignonSanDiego.com
18	Local beaches get good grades	May 20, 2009	North County Times
19	Cleanup efforts make difference at beaches	May 21, 2009	SignonSanDiego.com
20	Multiple headlines	May 21, 2009	BC Water News
21	Trash cans are MIA, so beach users asked to keep area clean	June 10, 2009	SignonSanDiego.com

Workshops and events attended/hosted by the City of Encinitas and/or the Solana Center in FY 2008-09:

1. San Diego County Fair – June 14 through July 6, 2008
2. Fall Master Composter Training Course – Thursdays, September 11-October 16, 2008
3. Coastal Clean-up Day @ Swami's – September 20, 2008
4. Encinitas Poinsettia Festival - November 23, 2008
5. Cardiff Green Awareness Expo - December 7, 2008
6. Creek to Bay Beach Clean-up @ Moonlight Beach – April 25, 2009
7. Encinitas Garden Festival – April 25, 2009
8. Encinitas Street Fair – April 26, 2009
9. San Elijo Lagoon Day – May 16, 2009
10. Public Works Week @ Cardiff Elementary – May 22, 2009
11. Encinitas Environment Day – June 7, 2009
12. A Day with Dad on the Trail – June 20, 2009
13. San Diego County Fair Enviro Fair Day – June 20, 2009

b. School Children

- The Green Machine presentation was given by the San Diego County Office of Education at Capri Elementary School in Encinitas on April 21, 2009. Four classrooms, with a total of 95 students, were in attendance.
- School Worm Bin Composting- Solana Center provided large worm bins in FY 08-09 to Ocean Knoll Elementary and Encinitas Country Day School. Each school paid for their bin and worms. Solana Center provided composting assemblies and operating education and support. They have ongoing master composter support at Ocean Knoll and have added master composter support for Flora Vista Elementary. Flora Vista is composting garden and lunch waste with Biostacks. Solana Center trained the custodian at Capri Elementary to compost lunch room scraps in the school's worm bin and Biostack. Solana continues to monitor and provide support for Capri, Paul Ecke, Olivenhain Pioneer, and Mission Estancia.
- The Solana Center for Environmental Innovation also participated in school based educational programs where stormwater awareness was taught. See Table 8-2 for details.

Table 8-2
Watershed Presentations in FY 2008-09

School/Group Name	Date of Presentation	Number of Presentations	# of Students in Attendance
Boys and Girl Club- Solana Beach	7/23/08	2	49
Encinitas Country Day School- Encinitas	7/25/08	1	12
Magdalena Ecke YMCA- Encinitas	8/5/08	1	15

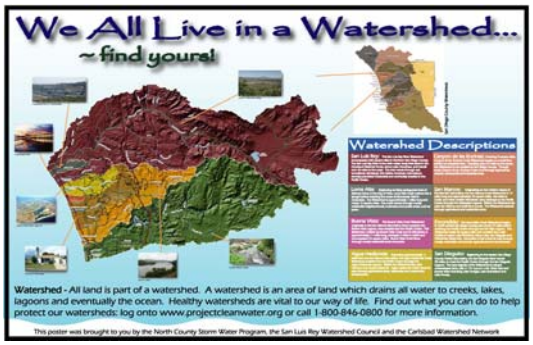
School/Group Name	Date of Presentation	Number of Presentations	# of Students in Attendance
Del Mar Library- Del Mar	8/27/08	1	15
Paul Ecke Central- Encinitas	9/16/08	5	100
Tipp Academy- Encinitas	9/23/08	1	25
Encinitas Country Day School- Encinitas	10/17/08	1	21
Girl Scouts at Solana Center- Encinitas	10/18/08	4	69
Encinitas Country Day School- Encinitas	10/21/08	1	31
Encinitas Country Day School- Encinitas	10/30/08	1	16
Solana Beach Library- Solana Beach	11/4/08	1	8
Brownie Troop at Encinitas Library- Encinitas	11/7/08	1	10
Paul Ecke Central- Encinitas	12/16/08	1	40
Torrey Hills School- Del Mar	1/8/09	3	94
Solana Beach Library- Solana Beach	1/13/09	1	23
Solana Vista Elementary School- Solana Beach	2/3/09	1	21
St. John's School- Encinitas	2/19/09	1	9
Fletcher Cove- Solana Beach	2/27/09	4	150
Innovation Centre Charter School- Encinitas	3/16/09	2	18
Torrey Hills School- Del Mar	3/23/09	3	57
Cardiff Elementary School- Encinitas	3/31/09	5	150
Ada Harris Elementary School- Encinitas	4/1/09	3	56
Sycamore Ridge Elementary School- San Diego	4/13/09	3	53
Ocean Air School- San Diego	4/16/09	4	82
Torrey Hills School- Del Mar	4/20/09	2	40
Santa Fe Montessori School- Solana Beach	4/28/09	1	20
Sandy Hill Preschool- Solana Beach	5/1/09	2	31
San Diego United Methodist Youth Group	5/17/09	1	25
Oak Crest School Career Day	5/19/09	6	180
Public Works Week @ Cardiff Elementary	5/22/09	1	375
Santa Fe Montessori School- Solana Beach	5/27/09	1	24
Rancho Encinitas Academy- Encinitas	6/1/09	1	85
Kids Kore Camp- Solana Beach	6/24/09	1	37
Cardiff Extended Day Care- Encinitas	6/30/09	2	60
	Total	**69**	**2001**

c. Watershed Educational Activities

Important components of the City's education program include activities generated on a watershed basis through the North County Stormwater Program, the educational arm of the Carlsbad Watershed URMP. Materials and activities are developed on a watershed basis to address the high priority water quality problems in the watershed. These materials and activities are then implemented or disseminated on a jurisdictional basis. Below is a description of the educational materials and activities that were performed on a watershed basis and implemented on a jurisdictional basis. A more detailed description of watershed activities will be provided in the FY 2008-09 Carlsbad WURMP Annual Report.

- **Public Opinion Surveys**- The North County Stormwater Program created a pet waste survey to be given out at public events throughout the Carlsbad watershed. The six-question pet waste survey asked those surveyed their view on picking up pet waste. Results of the survey estimate the percentage of people who actually understand what happens to waste that is not disposed of properly. This survey was given out at five events throughout Encinitas during FY 2008-09. Appendix F-6 includes a copy of the survey and a summary of the results.

- **Watershed Map**- A 36"x 24" "We all Live in a Watershed" poster was developed giving information about the San Luis Rey, Carlsbad, and San Dieguito Watersheds. This educational poster includes a topographic map of the watershed, information on individual watersheds and sub-watersheds, photos of various land-uses, as well as general information about water quality. The City of Encinitas used the poster in presentations and public displays throughout the reporting year.



- **Watershed Collaboration**- The City of Encinitas collaborated with other outside organizations, including the Carlsbad Watershed Network, Solana Center, and Escondido Creek Watershed Alliance to enhance public educational efforts and understand watershed issues. The City of Encinitas participated in public outreach events throughout the watershed in an effort to provide watershed support and extend the watershed message beyond jurisdictional boundaries. In FY 2008-09, the City participated in the following watershed outreach events:
  - Coastal Cleanup Day – 9/20/08
  - Creek to Bay Beach Cleanup – 4/25/09

- **Watershed Educational Materials**- The City continues to distribute materials developed by the North County Stormwater Program in previous reporting periods, including the

restaurant posters, automotive posters, "Storm Drains Lead to the Ocean" posters, general stormwater brochures, and the door hangers.

d. Regional Residential Education Plan

The City of Encinitas collaborated with other jurisdictions in the Education and Residential Sources Workgroup to develop the Regional Residential Education Plan in FY 07-08. This plan contains recommended strategies for the development and implementation of the Regional Residential Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale. The complete Regional Residential Education Plan can be found in Appendix F-7.

The first major collaboration on a regional level was the San Diego County Fair. The San Diego Regional Stormwater Copermittees sponsored the San Diego County Fair (Fair) in 2008 as an education and outreach activity. The sponsorship was a joint effort between the City of San Diego's Think Blue program and the regional Copermittees, with each entity contributing a portion of the overall cost. The Fair was selected as a regional event due to its unique ability to potentially reach more than one million San Diegans and convey a strong environmental message. The Education and Residential Sources (ERS) Workgroup was responsible for overseeing sponsorship activities and the City of San Diego lead coordination and implementation efforts.

The 2008 Fair was held June 14th through July 6th, 2008, spanning two fiscal years. The attendance for the fair was estimated at 1,235,698 people over the 21 days the event occurred. Sponsorship for the Fair included staffing an outreach booth for 11 days, in which the majority of the jurisdictions provided staffing support. The outreach booth served as the primary method for educating the public about watershed protection and pollution prevention. The ERS Workgroup elected to promote Integrated Pest Management (IPM) as the primary theme and collaborated on the distribution of IPM materials in both English and Spanish. Individual jurisdictions were invited to distribute their own materials in addition to the IPM materials. The Copermittees received credit as both a Flower & Garden Show sponsor and an Enviro-Fair sponsor.

Think Blue was used as the branding label for the copermittees during the event and signage demarking the symbol included banners, planter box displays, and recycle bin stickers. Signage was visible at over 500 locations throughout the fairgrounds. Media exposure included TV, radio, and press releases. The sponsorship was printed in both the Fair program and included on the Fair map. Other promotions included newspaper advertisements, electronic messaging over the Jumbo-tron, website logos and links, and PA system announcements in both English and Spanish.

The City of San Diego developed an event survey in order to assess the effectiveness of the copermittees' Fair participation. Over 1,200 survey cards were completed during the 11 days the booth was staffed. The questions focused on understanding the public's

general stormwater knowledge and awareness. The results are being tabulated and will be reported in the FY 08-09 Regional URMP Annual Report.

The ERS Workgroup also participated in the Enviro Fair Day at the San Diego County Fair on June 20, 2009. Eight Copermittees were represented at the event, with a total of 11 staff members throughout the day. The outreach booth was located at the entrance to the Flower and Garden Pavilion in O'Brien Hall. Copermittees were able to supply their own giveaways and literature during their individual shifts, but the main Regional giveaways were IPM Tip Card Packets, Think Blue towels, and regional pet waste bag dispensers. There were 218 Think Blue surveys completed; results will be reported in the FY 08-09 Regional URMP. Total Fair attendance for the day was 58,045.

Educational Outreach Materials Distributed. In FY 2008-09, a total of 2,290 outreach materials were distributed by the Clean Water Program. This includes BMP brochures for Automotive Facilities (English and Spanish), Developers (English and Spanish), Diazinon (English and Spanish), "Hiring A Handyman" (English and Spanish), Restaurants (English and Spanish), and Yard & Garden (English and Spanish). The Program also distributed pencils, magnets, "Bags on Board" dispensers, construction brochures, posters, door hangers, eating establishment guides ("What's Cooking"), automotive guides ("Green Wrench"), flyers printed from the Project Clean Water Toolbox, and other informational guides. These guides related to Integrated Pest Management (UCSD Cooperative Extension), water conservation brochures from local water districts and the County Water Authority, invasive species brochures ("Don't Plant A Pest" and "NIMBY-No Invasives In My Back Yard"), "How to Hire A Landscaper"-UCSD Cooperative Extension/Scott Parker, County of San Diego Household Hazardous Waste Guides, miscellaneous stormwater educational worksheets for children, and lastly, "10 Simple Ways You Can Help Protect the Ocean" from the Encina Wastewater Authority.

9.0 PUBLIC PARTICIPATION

9.1 INTRODUCTION

Public participation is one of the components of the City's outreach program. The goal of the education component, discussed in Section 8, is geared primarily towards disseminating educational material to increase public knowledge of storm water issues. The goal of the public participation component is to provide opportunities for the public to become involved in the process of education and reducing pollutants in storm water and urban runoff.

Public participation activities provide opportunities for the public to interact and become involved with water pollution issues. When the public has the opportunity to become involved there are several positive outcomes. First, those involved become more knowledgeable about storm water issues. Second, they become educators and stewards for the Clean Water Program. Finally, they provide important feedback to the Clean Water Program regarding the concerns of the public and issues that may be overlooked. Ultimately, public participation help makes the education process more effective.

The constituency of Encinitas has a generally high level of awareness of water pollution issues and is actively involved in protecting the quality of our waterways. This is evident by the attendance and participation at community events and workshops and the number of complaints reported to the storm water hotline (discussed in more detail in Section 9.3.5 below and also in Section 8.3.4(a)). Following is a description of the City's public participation approach and the opportunities that were made available in Encinitas in the FY 2008-09 reporting period.

9.2 PUBLIC PARTICIPATION APPROACH

The City's approach for the outreach program is to develop an understanding among its residents and businesses of fundamental storm water and pollution prevention concepts. These include:

- The difference between the sanitary sewer and the storm drain system (sanitary waste gets treated, but discharges into the storm drain system flow directly to our waterways and beaches, untreated).
- The economic value of our beaches and the importance of protecting them.
- An understanding of illegal discharges, i.e. sidewalk and street wash water runoff, vehicle fluid (antifreeze and oil), landscape debris, sediment, etc.
- How to report a storm water violation (Clean Water Hotline or website).
- The fact that we all live in a watershed and that the watershed is integral to wildlife, public health, and to the water quality of the rivers, streams, and ocean.
- Reducing pollutants of concern.

- Responsibility of citizens to participate in the cleaning and maintaining of the community (i.e. beaches and parks) and not be part of the pollution problem (littering, illegal dumping of toxic chemicals, etc.).

Within the defined reporting period of this report, the tools that have been used by the City to implement the public participation activities include:

- Workshops/Training Sessions
- City of Encinitas Environmental Advisory Commission
- Public Outreach Events
- Public Opinion Survey
- Public Reporting Methods
- Pet Waste Dispensers
- Household Hazardous Waste Collection and Used Oil Recycling
- Permanent Best Management Practices (BMP) Self Verification & Inspection Programs

9.3 PROGRAM IMPLEMENTATION

This section describes the specific public participation tools used during the FY 2008-09 reporting period.

9.3.1 WORKSHOPS/TRAINING SESSIONS

Workshops and training sessions are effective tools for providing specific information to targeted audiences and obtaining direct feedback. These workshops/training sessions consisted of storm water education and/or water conservation and provided an opportunity for the Clean Water Program to explain the complex issues of each target audience related to compliance with the storm water regulations. Table 9-1 provides a summary of the FY 2008-09 workshops/training sessions conducted.

Table 9-1
City of Encinitas Workshops/Training Sessions FY 2008-09

Workshop/Training Session	Target Audience	Date	Attendance
Public Works- Streets Division	City Staff	9/11/08, 9/25/08, 10/9/08, 10/23/08, 11/6/08, 1/15/09	75
Public Works- Wastewater	City Staff	7/9/08	7
Fire Department	City Staff	6/11/09, 6/15/09, 6/23/09	36
Spanish-speaking Landscapers	City Staff and Contractors	6/11/09	25

Workshop/Training Session	Target Audience	Date	Attendance
Permanent BMP Preservation	City Staff	4/30/09, 5/18/09	46
		Total	**189**

9.3.2 CITY OF ENCINITAS ENVIRONMENTAL ADVISORY COMMISSION

The Environmental Advisory Commission (EAC) provides policy advice and recommendations to the City Council on issues related to environmental stewardship and sustainability. The Commission assesses the City's current environmental efforts in relation to specified areas of interest and creates and recommends strategies to enhance City activities that promote conservation and sustainable practices. The Clean Water Program staff provide technical expertise to the commission on matters related to water quality, pollution prevention, and stormwater regulations.

During the defined reporting period, the EAC presented their first "Greening Our Community" series of community outreach activities, which included the following presentations: Impacts of Plastics in Our Waterways and Oceans (by noted North Pacific Gyre researcher Captain Charles Moore, Algalita Marine Research Foundation); Climate Change in Our Local Community; a Film Documentary on Water – "FLOW"; a Tree Stewardship Walk and Talk; and Reusable Bag Reminder Promotions. The Commission is also drafting an Environmental Action Plan (EAP) that will include short- to long-term action item recommendations. The EAP includes a variety of areas, such as waste prevention, water and energy conservation, green house gas emissions reductions, green building, habitat preservation, walk-ability, clean air, and clean water.

9.3.3 PUBLIC OUTREACH EVENTS

The Clean Water Program participated in the following outreach events during FY 2008-09:

1. San Diego County Fair- June 14 – July 6, 2008
2. Coastal Clean-up Day- September 20, 2008; 263 volunteers
3. Cardiff Green Awareness Expo- December 7, 2008; 65 booth visitors
4. Creek to Bay Beach Clean-up- April 25, 2009; 178 volunteers at two sites
5. Encinitas Garden Festival- April 25, 2009; 1,000 attendees
6. San Elijo Lagoon Day- May 16, 2009; 100 booth visitors
7. Public Works Week @ Cardiff Elementary- May 22, 2009; 375 students
8. Encinitas Environment Day @ Cottonwood Creek Park- June 7, 2009; 121 booth visitors
9. Enviro Fair Day at the San Diego County Fair- June 20, 2009; 58,045 Fair attendees
10. A Day with Dad on the Trail, June 20, 2009; 50 attendees

Solana Center for Environmental Innovation. Outreach to the general public and school children is also provided through the Solana Center for Environmental Innovation via workshops and presentations involving storm water, household hazardous waste, composting, and recycling. The Solana Center works closely with the City for many of these workshops and

presentations. See the tables below for a description of Solana Center's attended events and workshops.

Table 9-2
Composting Workshops/Presentations FY 2008-09

Workshop schedule	Location	Attendance
7/26/08	Quail Botanical Gardens	66
Master Composter Training Course, Thursdays, September 11 - October 16, 2008	Quail Botanical Gardens	23
9/18/08	Paul Ecke Central School	35
9/20/08	Quail Botanical Gardens	20
10/4/08	Yoga Swami Studio and Garden	21
11/15/08	Quail Botanical Gardens	17
1/24/09	Quail Botanical Gardens	44
2/21/09	Quail Botanical Gardens	29
4/22/09	Bethlehem Community EC Center	58
5/30/09	Quail Botanical Gardens	60
	Total	**373**

Table 9-3
Household Hazardous Waste Presentations FY 2008-09

School/Group Name and Address	Date of Presentation	Number of Presentations	Total number of students reached
Encinitas YMCA	9/17/2008	1	25
Cardiff Elementary	10/16/08	1	26
	Totals	**2**	**51**

Table 9-4
Used Oil Collection Events FY 2008-09

Encinitas Used Oil Events	Date	Total Attendance
Used Oil Filter Event, Kragen Auto Parts Encinitas	2/28/09	67
	Total	**67**

Table 9-5
Watershed Presentations FY 2008-09

School/Group Name	Date of Presentation	Number of Presentations	# of Students in Attendance
Boys and Girl Club- Solana Beach	7/23/08	2	49
Encinitas Country Day School- Encinitas	7/25/08	1	12
Magdalena Ecke YMCA- Encinitas	8/5/08	1	15
Del Mar Library- Del Mar	8/27/08	1	15
Paul Ecke Central- Encinitas	9/16/08	5	100
Tipp Academy- Encinitas	9/23/08	1	25
Encinitas Country Day School- Encinitas	10/17/08	1	21
Girl Scouts at Solana Center- Encinitas	10/18/08	4	69
Encinitas Country Day School- Encinitas	10/21/08	1	31
Encinitas Country Day School- Encinitas	10/30/08	1	16
Solana Beach Library- Solana Beach	11/4/08	1	8
Brownie Troop at Encinitas Library- Encinitas	11/7/08	1	10
Paul Ecke Central- Encinitas	12/16/08	1	40
Torrey Hills School- Del Mar	1/8/09	3	94
Solana Beach Library- Solana Beach	1/13/09	1	23
Solana Vista Elementary School- Solana Beach	2/3/09	1	21
St. John's School- Encinitas	2/19/09	1	9
Fletcher Cove- Solana Beach	2/27/09	4	150
Innovation Centre Charter School- Encinitas	3/16/09	2	18
Torrey Hills School- Del Mar	3/23/09	3	57
Cardiff Elementary School- Encinitas	3/31/09	5	150
Ada Harris Elementary School- Encinitas	4/1/09	3	56
Sycamore Ridge Elementary School- San Diego	4/13/09	3	53
Ocean Air School- San Diego	4/16/09	4	82
Torrey Hills School- Del Mar	4/20/09	2	40
Santa Fe Montessori School- Solana Beach	4/28/09	1	20
Sandy Hill Preschool- Solana Beach	5/1/09	2	31
San Diego United Methodist Youth Group	5/17/09	1	25
Oak Crest School Career Day	5/19/09	6	180
Public Works Week @ Cardiff Elementary	5/22/09	1	375
Santa Fe Montessori School- Solana Beach	5/27/09	1	24
Rancho Encinitas Academy- Encinitas	6/1/09	1	85
Kids Kore Camp- Solana Beach	6/24/09	1	37

School/Group Name	Date of Presentation	Number of Presentations	# of Students in Attendance
Cardiff Extended Day Care- Encinitas	6/30/09	2	60
	Total	**69**	**2001**

Table 9-6
Other Outreach Events FY 2008-09

Event	Date	Booth Visitors
Encinitas Poinsettia Festival	11/23/08	100
Encinitas Street Fair	4/26/09	375
	Total	**475**

9.3.4 PUBLIC OPINION SURVEY

The North County Storm Water Program created a pet waste survey in FY 2006-07 to be given out at public events throughout the Carlsbad watershed. The six question pet waste survey asks about the public's view on picking up pet waste and shows us how many people actually know what happens to waste that is not picked up. This survey was given out at multiple events throughout Encinitas in FY 2008-09. See Appendix F-6 for the pet waste survey and results specific to Encinitas. Results gathered from throughput the Carlsbad Watershed are assimilated and presented in the Carlsbad Watershed Urban Runoff Management Plan (WURMP) annual report.

9.3.5 PUBLIC REPORTING METHODS

The City has a local Clean Water Hotline that connects the caller directly to the staff in the Clean Water Program. The number is (760) 633-2787. An after-hours number [(760) 633-2922] is available for after-hours emergencies and connects the caller with the City's external answering service which takes in calls and contacts the appropriate City staff to determine appropriate response actions. There are also currently two regional storm water hotline numbers promoted within San Diego County: a toll-free Regional Storm Water Hotline, 1-888-846-0800, and the Think Blue Hotline, 1-888-THINK BLUE (1-888-844-6525). Both of these hotlines are staffed by the County of San Diego Monday through Friday, 8:00 a.m. - 5:00 p.m. In addition to personal service at these hotlines during regular business hours, the hotlines provide a voicemail message for 24-hour public access.

The Encinitas Clean Water Hotline has been in service for over 9 years. In FY 2008-09, the Clean Water Hotline received **289** calls. The hotline is advertised in newsletters and on the City's website, in brochures, on product giveaways, and at all Clean Water Program presentations. A summary of the types of calls, follow-ups, and enforcement actions related to the hotline are presented in Appendix H-1.

The Clean Water Program has a specific website URL (http://cwp.ci.encinitas.ca.us) that provides information, as well as the general NPDES email address which can also be used to report storm water violations. Each method of contact can also be used for general questions relating to storm water.

9.3.6 PET WASTE DISPENSERS

Residents are encouraged to protect our creeks, lagoons, and ocean by cleaning up after their pets. To make this easier, 17 doggie bag dispensers are located at parks and trails throughout the City. Trash cans are also available in these areas. Both the trash cans and bag dispensers are maintained by the City's Parks and Recreation Department. In addition, individual Bags on Board pet waste bag dispensers were developed in FY 2007-08 and continued to be distributed at all jurisdictional events during FY 2008-09 (Appendix F-5).

9.3.7 HOUSEHOLD HAZARDOUS WASTE COLLECTION AND USED OIL RECYCLING

City of Encinitas residents can bring their HHW and Electronic Waste to drop off facilities in Vista and Poway, free of charge. There is also a home pick up available for a small fee; however, the fee is waived for elderly and disabled residents. Used oil collection events were organized through the Solana Center at local automotive supply stores, and free used oil containers were available for pick up from the Center to encourage oil recycling. Please refer to Section 6.4 and Tables 9-3 and 9-4 in Section 9.3.3 for a detailed description of HHW and Used Oil events and collection totals.

9.3.8 PERMANENT BEST MANAGEMENT PRACTICE (BMP) SELF-VERIFICATION AND INSPECTION PROGRAMS

FY 2008-09 was the first year of implementation of the Permanent BMP Self-Verification and Inspection Programs. These programs provide a valuable opportunity for residents and business owners to be actively involved in protecting stormwater quality. Residents and business owners with treatment control BMPs on their private property are responsible for the successful operation and routine maintenance of these facilities. The City's Self-Verification and Inspection Programs aim to make residents and owners aware of their operation and maintenance obligations through formal notification campaigns and one-on-one communication. Notification campaigns consisted of three rounds of notices mailed to the residents and business owners responsible for BMP maintenance. The notification packages consisted of a combination of the following materials: notification/program introduction letter, Treatment Control BMP brochure, grading plan identifying the location of BMPs, and forms and self addressed stamped envelopes necessary to complete self-verifications. As part of the self-verification and inspection processes, City staff also offered one-on-one assistance with identifying BMPs, conducting BMP inspections, and determining maintenance needs. City staff were available to answer questions regarding the self-verification and inspection programs both over the phone and on-site as requested by the responsible party. As the programs progress in

future years, it is anticipated that public knowledge and awareness of permanent BMPs and required operation and maintenance activities will continually improve. For more information regarding the Permanent BMP Self-Verification and Inspection Programs refer to Section 2 of this report.

10.0 FISCAL ANALYSIS

The Clean Water Program and associated functions and activities in the City of Encinitas are organizationally shared by two departments: Engineering Services and Public Works. Engineering Services is responsible for the overall administration of the Clean Water Program and develops and implements core program elements including water quality monitoring; development oversight (SUSMP implementation); inspection and enforcement; and education, outreach and training related to stormwater and water quality. Public Works performs the operations and maintenance of the municipal separate storm sewer system (MS4) including channel maintenance, sewer maintenance, street sweeping, facility inventories, and facility inspections. This section outlines the expenditures for the defined reporting period and associated fiscal year, FY 2008-09, and the FY 09-10 budgets for these two departments to perform Clean Water functions.

On January 29, 2009, the San Diego Region Stormwater Copermittees submitted the *Standardized Fiscal Analysis Method and Format* as required by municipal permit Sections G, J.1.a(3)(k), and J.1.c(1)(d). Although the application of fiscal analysis methodologies presented in the referenced document are not required until 2010, it is important to recognize that the regional standardized methodologies were prepared as a theoretical approach and the application of described process and procedure will require integration through future reporting years. The following information has been prepared in anticipation of future application of these methodologies, but also to test the practical application of a standardized reporting approach.

10.1 ENGINEERING SERVICES DEPARTMENT

The City of Encinitas Clean Water Program FY 2008-2009 expenditure and FY 2009-2010 budget summaries are presented below in Table 10-1. In FY 2008-2009 the City's Clean Water Program's Coastal Storm Drain Monitoring, Dry Weather Monitoring, IDDE, Construction, Residential and Commercial program elements were accomplished primarily through the use of internal staff resources. FY 2008-2009 expenditures include 5 full-time Clean Water Program staff representing the bulk of labor related costs. Consultant service costs in FY 2008-2009 were reduced overall; however, consultant services needed to support construction and permanent BMP inspection activities were incurred. Programmatic costs captured below are primarily non-labor costs including materials, supplies, equipment and services in support of various program elements. Also included in Table 10-1 are special project costs associated with the Carlsbad Watershed Lagoon TMDL and the City's Programmatic Environmental Permit Project.

The FY 2009-2010 Clean Water Program budget has been prepared in consideration of Order No. 2007-0001 as well as other regulatory mandates placed upon the City of Encinitas. Despite significant budget constraints due to widespread economic downturns, the FY 2009-2010 budget supports the historic level of service provided by the Clean Water Program in addressing water quality concerns specific to Encinitas

through response to citizen complaints, education, inspection, enforcement, monitoring and development oversight. FY 2009-2010 budgeting represents the City's ongoing commitment to this program and the community that it serves.

TABLE 10-1 – Engineering / Clean Water Program FY 2008-2009 Expenditure and FY 2009-2010 Budget Summary

OUTLAY CATEGORY	FY 08-09 EXPENDITURES	FY 09-10 BUDGET
JURISDICTIONAL PROGRAM		
Labor Costs *(Staff Salaries)*		
Engineering Services *(5 Full-Time Staff)*	$ 317,634	$ 335,410
Programmatic Costs *(Non-Labor, Including Materials, Supplies, Equipment & Services*		
Water Quality Monitoring *(Equipment & Analysis)**	$ 17,189	$ 25,000
Education & Public Participation	$ 455	$ 5,000
Field Operations *(Supplies, Equipment, Forms, Apparel, Fuel, Phone)*	$ 6,097	$ 7,500
Contract Services		
GIS Mapping & Data Management Services	$ 4,550	$ 21,500
Construction and Post Construction BMP Inspection Services	$ 110,767	$ 110,312
TMDL & Special Projects		
Lagoon TMDL	$ 69,565	$ 80,000
Citywide Channel Maintenance & Environmental Permitting Project	$ 5,545	$ 151,000
Permits & Fees		
State Water Resources Control Board (SWRCB) Discharge Permit Fee	$ 13,499	$ 13,499
WATERSHED PROGRAM		
Carlsbad Watershed Cost Share	$ 2,947	$ 6,500
REGIONAL PROGRAM		
San Diego Regional Stormwater Shared Costs	$ 51,687	$ 52,000
TOTAL FY 07- 08 EXPENDITURE & BUDGET DATA	$ 599,935	$ 807,721

10.2 PUBLIC WORKS DEPARTMENT

The City of Encinitas Public Works Department FY 2008-2009 expenditures and FY 2009-2010 budget are presented below in Table 10-2. As previously mentioned, the Public Works Department performs essential operations and maintenance functions of the City's municipal separate stormwater conveyance system, drainage facilities, and channels. Additionally, recycling, solid waste, and hazardous waste disposal programs are all managed by the Public Works Department.

TABLE 10-2 – Public Works / Clean Water Program FY 2008-09 Expenditure and FY 2009-2010 Budget Summary

OUTLAY CATEGORY - PUBLIC WORKS	FY07-08 Expenditures	FY08-09 Budget
Staff Salary	$ 239,472	$ 374,385
Materials & Supplies	$ 16,267	$ 30,936
Contracts & Services	$ 175,297	$ 226,398
Fleet Maintenance	$ 15,910	$ 14,280
Capital Outlay	$ -	$ -
Lease Payments	$ 40,000	$ 40,000
Recycling/Solid Waste & Household Hazardous Waste Fund	$ 449,629	$ 449,629
Flood Control	$ 193,452	$ 190,776
TOTAL COST	$ 1,130,027	$ 1,326,404

In response to program enhancements required by Order No. 2007-0001, expenditures for associated Public Works functions were augmented, and in subsequent years have remained somewhat consistent as reflected in Table 10-2.

10.3 CLEAN WATER PROGRAM SUMMARY

The total FY 2008-2009 combined expenditures for the Clean Water Program (Engineering & Public Works Departments) was **$1,729,962**. The FY 2009-2010 combined budget for the Clean Water Program (Engineering & Public Works) is **$2,134,125**.

10.4 PROGRAM FUNDING

In FY 2003-2004, the City Council attempted to pass a Clean Water Fee, which charged $5.00 per month per water meter to the residents and businesses in the City of Encinitas. The Howard Jarvis Taxpayers Associated challenged the fee based upon Proposition 218 requirements. Subsequently, the City was required to add this item to the ballot in March 2006 which was defeated by voters. As a result, the City of Encinitas must completely subsidize the Clean Water Program through the General Fund.

11.0 EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

The City of Encinitas began applying baseline program effectiveness assessment methodologies soon after they were developed by the San Diego region stormwater Copermittees during the last permit cycle as described in the document titled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" dated October 16, 2003. The City has also actively participated in regional efforts to develop a standardized assessment approach and associated metrics from summer 2007 through winter 2008. The original goal of that group was to produce assessment work products that all Copermittees could use in their JURMPs to evaluate program effectiveness. Due to a variety of complications on a regional level, that standardization process could not be completed prior to the submittal of the City's JURMP, so the City prepared its own effectiveness assessment approach and measures modeled after conventionalized strategies and calibrated to evaluate "significant" program activities as required in Order No. 2007-0001.

Since the submittal of the JURMP in March 2008, no additional progress has been made on regionally standardized approaches to program effectiveness assessment. It is anticipated that the Copermittees' Fiscal, Reporting, and Assessment Workgroup will undertake the issue of standardized assessment metrics and procedures in the near future. The City is committed to engaging in the process of developing such regional standards and incorporating resulting work products into its own local program effectiveness assessment system. It is in consideration of the evolving and ongoing regional standardization process that the City has endeavored upon fine tuning its local effectiveness assessment approach as presented in the subsequent paragraphs and tables. Further, it is recognized that these methodologies and strategies must be adaptable as regionally developed procedures are solidified in the future.

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The core structure of the City's storm water program is composed of three primary drivers:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The programmatic process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next the program elements developed during the planning step are implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

As part of the JURMP update process, the City has identified a variety of significant activities unique to each program element and metrics (numeric and/or narrative) to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP. The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The new Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the storm water program as a whole. Level 1, Level 5, and Level 6 outcomes are discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 OUTCOME LEVEL ASSESSMENTS

Level 1

A requirements checklist, which includes a directory of permit compliance elements and where each is described within the JURMP Annual Report, can be found in Appendix G-1.

Levels 2 and 3

Tables 11-3 through 11-10 at the end of this section include discussions of Level 2 and Level 3 outcomes for activities identified as significant by the City of Encinitas within each program component. Note that only a Level 1 assessment applies to fiscal analysis, so a table for fiscal analysis is not included.

Level 4

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs, reliable load reduction estimation methods have not yet been or cannot be developed.

Level 5

On September 10, 2008, the San Diego Regional Water Quality Control Board adopted Addendum 2 to Order No. 2007-0001, effectively extending the annual due date of the Illicit Discharge Detection and Elimination reporting requirements to December 15. It is anticipated, consistent with previous Dry Weather Monitoring reports prepared by the City of Encinitas that baseline trend analysis will be provided for a number of constituents evaluated through the Dry Weather Monitoring Program. This information is further spatially correlated with sub-basins or drainage areas within the City of Encinitas, and evaluated against land-use areas and potential source areas.

Level 6

It has been determined, through ongoing development and discourse over long-term effectiveness assessment methodologies that relationships between programmatic activities and changes in receiving water quality are difficult to establish on an annual basis or a jurisdictional scale. As such, the City will point to future regionally coordinated efforts including Report of Waste Discharge (ROWD) and Long Term Effectiveness Assessment (LTEA) development to more holistically evaluate changes in receiving water quality. It is anticipated that such efforts will be further refined and supported by ongoing data gathering efforts both locally and regionally.

11.2.2 OVERALL COMPONENT ASSESSMENTS

Development Planning

The City's review process for development projects is effectively requiring higher removal efficiency treatment control BMPs. Further, two new significant program elements were in the first year of implementation within the defined reporting period of this report; initial assessment indicates a generally successful first year. Continued refinement of this program area will support long term effectiveness assessment measures for development planning. *(See Table 11-3)*

Construction

The City's review and approval process for construction related plans and documents is effectively verifying proposed construction specific BMPs. BMP implementation and maintenance is being effectively managed through construction site inspection activities, and validated through associated assessment measures *(See Table 11-4).* It is anticipated that in response to increased inspection frequencies and refined data gathering practices that this trend will continue.

Municipal

Enhanced stormwater conveyance, drainage facility, channel maintenance and inspection and street sweeping activities, were developed and implemented, equating to the removal of salient volumes of debris in FY 2008-09. Effective operations and maintenance activities are demonstrated in the Table 11-5 below, and it is anticipated that this continued level of service as

well as enhancements in data gathering methods will support the efficacy of municipal activities.

Industrial and Commercial

Clean Water Program activities and actions related to industrial and commercial entities have exhibited positive trends within the defined reporting period. The City of Encinitas has identified inspection activities coupled with complaint response and enforcement as the significant activities by which to evaluate program effectiveness. During the defined reporting period, the City has been able to evaluate effectiveness on a number of levels (*See Table 11-6)* through the gathering of critical statistics, including a knowledge and BMP assessment scoring system presented in Tables 11-1 and 11-2. Data gathered and evaluated during the defined reporting period indicate that identified significant program activities targeting industrial and commercial sources have been effective.

Residential

Residential BMP implementation has been identified as the significant activity by which effectiveness has been assessed. Residential complaint response and enforcement constitute the core of residential BMP implementation assurance actions. Based upon an evaluation of data associated with these elements, including the number of incidents responded to and the ultimate resolution of these events, the City has demonstrated a notably effective program and level of service to the community of Encinitas.

Education

Education effectiveness is assessed for a variety of program elements as presented in the Table 11-9 below. In terms of education opportunities provided to the various community sectors and City staff and contractors, identified as the significant metric by which to evaluate education activities, the City has achieved a high level of success.

Public Participation

The City of Encinitas provides a variety of venues and outlets in support of public participation. The City has identified a number of measures to evaluate the effective implementation of this program element. As with education, public participation translates across a number of program areas; however, the assessment measures identified in Table 11-10 are focused on success of the venues and outlets supported by the City. From the measures identified and quantified, community partnerships, event attendance, Clean Water Hotline calls, and volumes of debris and hazardous materials collected through public participation, the City has established exceptional trends.

11.3 PROGRAM REVIEW AND MODIFICATION

While no significant changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document, Clean Water Staff have met periodically throughout the reporting period of this report to evaluate effectiveness assessment measures as they relate to specific program elements. The purpose of this effort has been to keep the issue of effectiveness assessment in the forefront of program implementation

strategies, and to conduct ongoing effectiveness assessment, and augment program areas as deemed necessary. While effectiveness assessments conducted on an annual basis are helpful, a critical first step in the process is to identify significant activities and to evaluate value added benefits both to the program and to the community of Encinitas throughout the implementation period.

Table 11-3
Development Planning Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Verify High Efficiency Treatment BMPs are Approved	Internal The City's Engineering Department staff is well versed in treatment BMPs and pollutant removal efficiencies.	Percent of approved projects implementing BMPs with high or medium removal efficiencies for key pollutants of concern	100%	N/A, addressed through other significant activities for this component
Verify Proposed BMPs are Implemented	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal The City contracts with a qualified consultant to perform treatment control BMP inspections.	Percent of projects installing / implementing proposed BMPs	100%	BMP implementation is likely to have reduced pollutant loads.
		Resolution status of enforcement actions	N/A	
Verify BMPs are Properly Maintained	External N/A, verification letters were not sent out until 2008/2009. Internal N/A, verification letters were prepared by the City's consultant.	Percent of responsible parties submitting complete verification documentation	67%	Additional load reduction could be achieved through improved BMP maintenance.
		Number of responsible parties that did not submit self-verification documentation	10	
		Number of sites with BMPs requiring repair or maintenance	4	
		Resolution status of repair/maintenance	All Complete	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-4
Construction Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Verify Planned BMP Implementation - Review Proposed Plans and BMPs	External Projects submit plans for construction BMP implementation for their projects; the level of awareness of construction BMP requirements is fairly high. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs.	BMPs proposed for construction projects must meet minimum requirements; no significant problems have been noted.		Proper pre-project planning is likely to have reduced pollutant loading.
Verify Proposed BMPs are Implemented	External Grading projects implement BMPs as required by their permits, and contractors are familiar with the City's requirements. Internal Training for City staff is described in Section 8. City inspectors are familiar with relevant construction BMPs.	Percent of projects implementing required BMPs.	100%	Proper BMP implementation is likely to have reduced pollutant loading.
		Percent of inspection actions resulting in Corrective Action.	14%	
		Percent of inspection actions resulting in a Notice of Violation (NOV).	< 1%	
		Number of dry weather monitoring exceedances traced to construction sources.	0	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-5
Municipal Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Verify Proposed BMPs are Implemented at Facilities	City staff is regularly trained on BMP implementation; see sections 4 and 8.	Percent of inspected facilities/activities in compliance with BMP requirements	100%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of sites requiring follow-up inspections	See Section 4		
		Number of dry weather monitoring exceedances traced to municipal sites	0		
Sweep Streets and Parking Facilities		N/A, streets and parking facilities are swept as determined necessary and in compliance with Municipal Stormwater Permit standards.		Amount of sediment and debris removed per length of street swept (weight or volume per curb mile).	1,449 tons/ 11,380 curb mi (0.13 tons/mi)
Maintain and Clean the MS4 (catch basins, inlets and open channels).		N/A, MS4 structures are maintained as often as directed by management.		Amount of sediment and debris removed (weight or volume).	290 tons
Maintain Sanitary Sewer System		N/A, the sanitary sewer system is maintained as often as directed by management.		Total volume of SSO discharge to MS4 (gallons).	Data will be included in Section 7.0 for the 12/15/09 submittal.
Maintain Municipal Treatment Control BMPs		N/A, treatment control BMPs are maintained as often as directed by management.		Amount of sediment and debris removed from storm drain filter inserts.	2.8 tons
				BMP effectiveness studies	N/A
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-6
Industrial and Commercial Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Require BMP Implementation	External Knowledge assessment scores indicated a slightly low level of understanding of relevant storm water concepts. See Figure 11-1 on the following page for a score distribution. See Section 8 for more detail on educational materials and other outreach efforts. Internal City inspectors are well versed in Stormwater compliance and minimum BMP standards.	Percent of inspected sites in compliance with BMP requirements (inspections that did NOT require follow-up actions)	62%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of inspection related enforcement actions	98%		
		Number of dry weather monitoring exceedances traced to industrial or commercial sources	To Be Determined	Number of IC/IDs eliminated through enforcement actions taken as a result of routine inspection OR complaint investigations. (NOVs & Citations)	41
		Based on the results of individual facility assessment surveys, most facilities inspected have a good general understanding of BMPs and implement BMPs as required. See Figure 11-1 and 11-2.			
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-1
Knowledge Assessment Scores, FY 2008-2009 Inspections

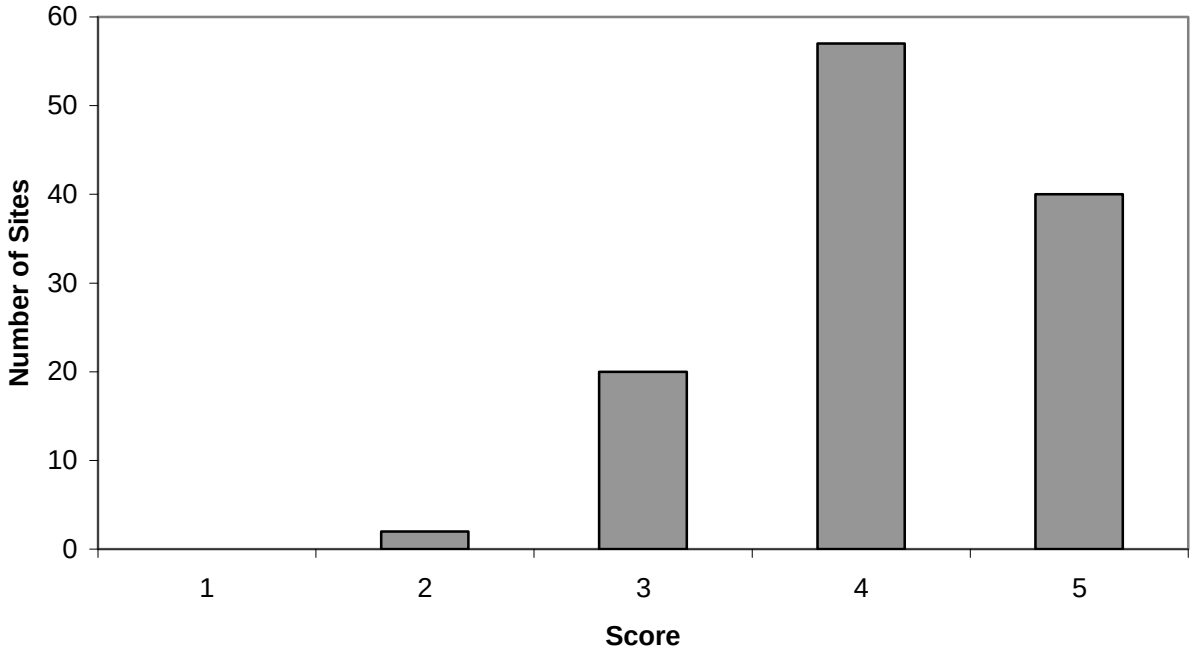


Figure 11-2
BMP Assessment Scores, FY 2008-2009 Inspections

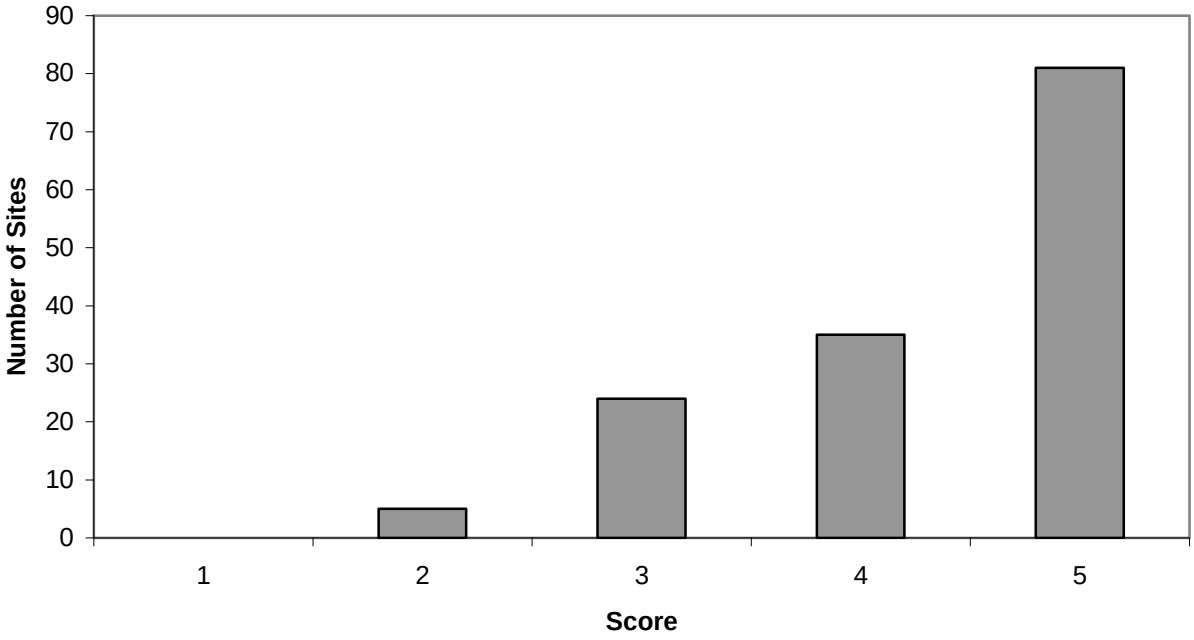


Table 11-7
Residential Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Require BMP Implementation	External Residents were educated in variety of ways in 2008/2009; see sections 6 and 8 for details. Internal City inspectors are well versed in Stormwater compliance and minimum BMP standards.	Number of residential incidents reported to storm water hotline	126	Resolution of residential incidents reported to the hotline likely resulted in a decrease in pollutant loading through improved BMP implementation.
		Resolution status of residential related enforcement actions	100%	
		Number of dry weather monitoring exceedances traced to residential sources	0	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-8
Illicit Discharge Detection and Elimination Component Assessment Measures

Significant Activity	Level 2	Level 3	Level 4
Conduct Dry Weather Monitoring Program	Clean Water Program staff executes the City's Dry Weather Monitoring Program.	N/A, personnel conduct monitoring as directed by management.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2009.
Respond to Incidents Reported to Clean Water Hotline	Dedicated Engineering and Public Works staffs are trained to respond to reported incidents.	N/A, personnel respond to incidents as directed by management.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2009.
Respond To and Clean up SSOs	Dedicated Public Works staffs are trained to respond to reported SSO incidents.	The City conducts additional preventative inspections and maintenance in areas with a higher history of problems.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2009.

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-9
Education Component Assessment Measures

Significant Activity	Level 2		Level 3	Level 4
Provide storm water education to the public	External The City actively educates the various audiences in its jurisdiction. See Sections 8 and 9 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for FY 2008-09.
	Estimated number of impressions made*	5,052		
	Estimated number of educational materials distributed to various community sectors	2,290		
Provide storm water education to City staff & contractors	Internal The City provides staff and contractors w/ regular stormwater training. See Sections 8 and 9 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for FY 2008-09.
	Number of Staff and Contractors trained	189		

Notes:
Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
*Impressions are based upon the number of interactions with public at education events.

Table 11-10
Public Participation Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Involve the public in activities that relate to storm water protection	External The City and City partners put on a number of opportunities for the public to participate. See section 9 for details.	Estimated number of attendees at events	2,694	Amount of trash, recycling, and debris collected at cleanup events	538.9 lbs
		Number of calls received to the Clean Water Hotline*	289	Amount of HHW collected	156,594 lbs of HHW 1,413 oil filters 14,373 gal of oil

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
* The sum total of calls to the Clean Water Hotline related to all Community Sectors.

12.0 SPECIAL INVESTIGATIONS

The City of Encinitas is currently engaged in a variety of ongoing and long-term investigations to support reasoned and informed management actions to address local water quality concerns and threats.

12.1 SAN ELIJO LAGOON RESTORATION PROJECT

For a number of years, the City of Encinitas along with numerous agencies including the Army Corps of Engineers, San Elijo Lagoon Conservancy, Caltrans, SANDAG, SDRWQCB, California Coastal Commission, Department of Fish & Game and NCTD, have been analyzing possible enhancement opportunities for the San Elijo Lagoon. Artificial constrictions have hindered the natural ability of the estuary to open to the ocean. The Interstate 5 (1-5) North Coast Freeway widening project will further impact the lagoon. A study was completed by the Army Corps of Engineers to investigate potential mitigation opportunities for the I-5 North Coast project.

The goal of the study and ultimate project is to optimize the openings at the three major transportation passageways across the San Elijo Lagoon. Related studies have looked specifically into the effects of varying channel widths at each opening: inlet and PCH Bridge, the SDNR system, and the I-5 freeway. Various alternatives have been identified based upon complex system simulations and evaluated on effects to reduce tidal muting, increase circulation, improve water quality in the lagoon, and ultimately on whether or not any improvements to the habitat distribution in the lagoon would be likely to occur.

Work on this project continued throughout the defined reporting period of this report, most significantly with efforts to formalize agency agreements, initiate environmental review, conduct hydraulic modeling, and start initial design. Notably, this is a multi-agency effort, and far-reaching coordination has been critical and remains key to the long-term success of this effort.

12.2 CARLSBAD HYDROLOGIC UNIT LAGOON TMDL MONITORING

The San Diego Regional Water Quality Control Board (RWQCB) issued Investigation Order (IO) No. R9-2006-076 to the dischargers to the creeks and lagoons in San Diego County that are 303(d) listed for bacteria, total dissolved solids (TDS), sediment, and nutrients. The IO required collection of monitoring data for the development of Total Maximum Daily Loads (TMDLs) as authorized by the Clean Water Act (CWA). According to the IO, the coastal lagoons in Southern California are heavily influenced by their urbanized watersheds. Runoff from these watersheds, coupled with reduced tidal influence from restricted inlets, has resulted in beneficial use impairments within Agua

Hedionda Lagoon, Buena Vista Lagoon, Loma Alta Slough, and San Elijo Lagoon. All four lagoons and Agua Hedionda Creek are listed as impaired water bodies (303(d) list) for at least one of the following constituents: indicator bacteria, nutrients, sediment/siltation, TDS (Agua Hedionda Creek only), and/or eutrophic conditions. Pursuant to CWA section 303(d), TMDLs must be developed for the critical constituents in each of the lagoons.

To comply with the IO, from January 2008 to October 2008 the Carlsbad Hydrologic Unit's dischargers collected data in four lagoons: Aqua Hedionda Lagoon, Buena Vista Lagoon, Loma Alta Slough, and San Elijo Lagoon. The data were collected to support the development of TMDLs in one or more of these lagoons for bacteria, eutrophic conditions, and sedimentation. Additionally, data for TDS were collected for Aqua Hedionda Creek. Data collected during this monitoring program may be utilized in future efforts to develop TMDLs for these lagoons. A final data report was submitted to the RWQCB on June 30, 2009.

13.0 NON-EMERGENCY FIRE FIGHTING

13.1 INTRODUCTION

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by fire fighting activities both at fire stations in the City and locations throughout the City. Two fire stations (No. 3 and No. 5) have treatment control BMPs in place to treat any runoff which may be discharged from washing activities. The remaining stations utilize source control BMPs to minimize and control discharges related to washing activities. All fire fighting training activities which include aqueous film forming foam are conducted at a fire station outside of the City of Encinitas. In addition to implementing structural BMPs at the fire stations, all City of Encinitas Fire Department employees are trained in storm water management on an annual basis by Clean Water Staff. Following is a detailed description of the program developed by the City to reduce pollutants from non-emergency fire fighting flows.

13.2 PROGRAM FOR NON-EMERGENCY FIRE FIGHTING FLOWS

The City of Encinitas has identified a number of potential discharge sources including maintenance of fire and emergency vehicles and equipment, training exercises, and facility maintenance. It is important to recognize and make provision for the post-emergency rehabilitation of response equipment including tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency, as this equipment must be restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for subsequent response actions. As such, the use of water that could contribute to storm water discharges may be used unless another practical and immediately available method is identified and will be performed in a manner that minimizes discharges to the MEP. In consideration of the non-emergency activities listed above, the City's fire personnel utilized the following BMPs to address discharge generated from such activities during fiscal year 2008-09:

- Whenever possible, practice drills were performed in areas where runoff was contained. When practice drills were performed in an area where runoff could potentially leave the site, the site was surveyed by the officer-in-charge prior to training activities to ensure that debris would not enter the storm drain system as a result of the drill.
- As determined feasible, runoff from training drills or other non-emergency activities, was directed to landscaped areas.
- Areas that have debris that could potentially enter the storm drain system as a result of the drill activities were not used for training until the debris had been removed.
- Live fire training activities were pre-planned to allow integration of structural BMP barriers to control runoff as deemed necessary.
- Runoff from live fire training activities was contained and recovered with the City's Vac-con truck so that runoff did not discharge to the storm drain system or receiving waters.
- Good housekeeping and dry cleanup practices were utilized as part of standard facility maintenance procedures.

13.2.1 EDUCATIONAL METHODS

Details of the City's educational programs, including fire fighting personnel education, are provided in Section 8 of this document.

14.0 JURMP REVISIONS

The City's JURMP was rewritten in the spring of 2008 as required by Water Quality Order No. 2007-0001. Section 14 of the updated JURMP document includes a list of the changes made to the JURMP at that time. Any other changes made to the JURMP since the comprehensive JURMP update in the spring of 2008 would be detailed in the preceding sections of this JURMP Annual Report. Revisions include, but are not limited to, required inventory updates, necessary process and procedure changes, and programmatic modifications to improve efficiency and effectiveness.

15.0 CONCLUSIONS & RECOMMENDATIONS

During the 2007-2008 reporting period, the City of Encinitas updated its JURMP, which was finalized and submitted to the RWQCB on March 24, 2008. As captured in the preceding FY 2008-2009 JURMP Annual Report, the City of Encinitas has continued to refine newly developed program elements, and standardize core program components. Further, the City has and will continue to participate and collaborate with other Copermittees in the collective development and implementation of regional programs. As compliance standards evolve based upon defined timeframes in Order No. 2007-0001, the City of Encinitas will continue to augment and update programs as necessary to comply with regulatory requirements, and evaluate the overall efficacy of program elements against value added outcomes to assure focused and refined implementation protocols.

Appendix A

Development Planning

A-1 **Treatment Control BMP Inventory**

A-2 **SUSMP Priority Project Map**

A-3 **Treatment Control BMP Inspection Priority Flowchart**

A-4 **Sample Grading Certification / BMP Installation Verification Letter**

A-5 **Treatment Control BMP Operation and Maintenance Self-Verification Letter**

A-6 **Treatment Control BMP Operation and Maintenance Brochure**

A-7 **Treatment Control BMP Operation and Maintenance Self-Verification Form**

A-8 **Treatment Control BMP Operation and Maintenance Self-Verification Results and Findings**

A-9 **Treatment Control BMP Operation and Maintenance Inspection Form**

A-10 **Treatment Control BMP Operation and Maintenance City Inspection Results and Findings**

Appendix A-1: Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
55	I	540 Cornish Dr	TC-30 Vegetated Swale		9/27/2005	PRP/UC	Encinitas Other		Low
55	I	540 Cornish Dr	TC-30 Vegetated Swale		9/27/2005	PRP/UC	Encinitas Other		Low
60	G	3275 Poppy Hills Ln	Other	rock-lined swale	1/1/2003	1/15/2008	Private		Medium
60	G	3275 Poppy Hills Ln	TC-22 Extended Detention Basin	detention basin	1/1/2003	1/15/2008	Private		Medium
61	CN	801 Orpheus Ave	Other	flow-through planter "bio-swale"	10/15/2007	PRP/UC			TBD
61	CN	801 Orpheus Ave	Other	flow-through planter "bio-swale"	10/15/2007	PRP/UC	Encinitas Other		TBD
61	CN	801 Orpheus Ave	SD-20 Pervious Pavement	gravel parking area	10/15/2007	PRP/UC			TBD
87	G	354 Santa Fe Dr	MP-52 Drain Inserts	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	MP-52 Drain Inserts	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	MP-52 Drain Inserts	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	MP-52 Drain Inserts	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	TC-22 Extended Detention Basin	detention basin	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	TC-30 Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	TC-30 Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	TC-30 Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
106	G	3358 Wildflower Valley Dr	TC-30 Vegetated Swale	min. 100' long priority stormwater BMP grass swale	6/19/2006	11/18/2008	Private	2008-0582295	Medium
106	G	3358 Wildflower Valley Dr	TC-30 Vegetated Swale	treatment swale	6/19/2006	11/18/2008	Private	2008-0582295	Medium
153	I	125 Chesterfield	Interceptor (sewer)	traffic rated oil seperator	8/31/2006	2/13/2007	Private		Medium
153	I	125 Chesterfield Dr	MP-52 Drain Inserts	Flo-Gard FF-RF24D	8/31/2006	2/13/2007	Private		Medium
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
181	G	3342 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	TBD
183	G	3234 Olivenhain Farms Rd	Other	rock-lined swale	11/1/2006	5/13/2008	Private	2006-0764616	Low
183	G	3234 Olivenhain Farms Rd	Other	rock-lined swale	11/1/2006	5/13/2008	Private	2006-0764616	Low
183	G	3234 Olivenhain Farms Rd	TC-30 Vegetated Swale	bio-swale for post BMP treatment	11/1/2006	5/13/2008	Private	2006-0764616	Low
187	G	1060 Urania Ave	TC-11 Infiltration Basin	mechanical/detention pit	3/22/2007	PRP/UC	Private		Medium
187	G	1060 Urania Ave	TC-30 Vegetated Swale	mechanical/detention pit	3/22/2007	PRP/UC	Private		Medium
276	G	Phoebe St & Hwy 101	MP-50 Wet Vault	stormwater collection vault	4/19/2007	6/19/2008	Private		High
276	G	Phoebe St. & Hwy 101	MP-52 Drain Inserts	stormfilter chamber by contech	4/19/2007	6/19/2008	Private		High
325	G	APN: 264-173-21 Lone Jack Road	TC-30 Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	Medium
325	G	APN: 264-173-21 Lone Jack Road	TC-30 Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	Medium
325	G	APN: 264-173-21 Lone Jack Road	TC-30 Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	Medium
325	G	APN: 264-173-21 Lone Jack Road	TC-30 Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	Medium
325	G	APN: 264-173-21 Lone Jack Road	TC-30 Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	Medium
325	G	APN: 264-173-21 Lone Jack Road	TC-30 Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	Medium
325	G	APN: 264-173-21 Lone Jack Road	TC-30 Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	Medium
369	G	1415 Rainbow Ridge Ln	TC-10 Infiltration Trench	60'x5'x9' underground infiltration system	9/11/2007	PRP/UC	Private	2007-0598506	Medium
369	G	1415 Rainbow Ridge Ln	TC-22 Extended Detention Basin		9/11/2007	PRP/UC	Private	2007-0598506	Medium
369	G	1415 Rainbow Ridge Ln	TC-22 Extended Detention Basin		9/11/2007	PRP/UC	Private	2007-0598506	Medium
369	G	1415 Rainbow Ridge Ln	TC-30 Vegetated Swale		9/11/2007	PRP/UC	Private	2007-0598506	Medium
369	G	1415 Rainbow Ridge Ln	TC-30 Vegetated Swale		9/11/2007	PRP/UC	Private	2007-0598506	Medium
369	G	1415 Rainbow Ridge Ln	TC-30 Vegetated Swale		9/11/2007	PRP/UC	Private	2007-0598506	Medium
369	G	1415 Rainbow Ridge Ln	TC-30 Vegetated Swale		9/11/2007	PRP/UC	Private	2007-0598506	Medium
369	G	1415 Rainbow Ridge Ln	TC-30 Vegetated Swale		9/11/2007	PRP/UC	Private	2007-0598506	Medium

Appendix A-1: Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
369	G	1415 Rainbow Ridge Ln	TC-30 Vegetated Swale		9/11/2007	PRP/UC	Private	2007-0598506	Medium
369	G	1415 Rainbow Ridge Ln	TC-30 Vegetated Swale		9/11/2007	PRP/UC	Private	2007-0598506	Medium
372	G	1657 N Vulcan Ave	TC-11 Infiltration Basin	"grassy swale"	8/9/2007	PRP/UC	Private	2007-0615430	Medium
372	G	1657 N Vulcan Ave	TC-22 Extended Detention Basin	detention basin, grass swales	8/9/2007	PRP/UC	Private		Medium
372	G	1657 N Vulcan Ave	TC-30 Vegetated Swale	detention basin, grass swales	8/9/2007	PRP/UC	Private		Medium
385	G	1555 Crest Dr	Other	gravel/sand filter	8/31/2007	7/13/2009	Private	2007-0611836	Low
385	G	1555 Crest Dr	TC-30 Vegetated Swale	BMP landscape swale	8/31/2007	7/13/2009	Private	2007-0611836	Low
386	G	3535 Manchester Ave	MP-52 Drain Inserts	biofilter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	MP-52 Drain Inserts	biofilter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	MP-52 Drain Inserts	katchall curb outlet filter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	TC-11 Infiltration Basin	detention system	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	TC-11 Infiltration Basin	stormtech detention	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	TC-22 Extended Detention Basin	deterntion system	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	TC-30 Vegetated Swale	flow-based system for BMP	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	TC-50 Water Quality Inlet	bio-clean continuous basket	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 manchester Ave	TC-50 Water Quality Inlet	bio-clean continuous basket	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
388	G	1435 Lake Dr	TC-30 Vegetated Swale	6' X 28'L Bioswale	12/17/2007	PRP/UC	Private		Medium
388	G	1435 Lake Dr	TC-30 Vegetated Swale	203' long grass-lined swale	12/17/2007	PRP/UC	Private		Medium
388	G	1435 Lake Dr	TC-30 Vegetated Swale	6'W X 20'L Bioswale	12/17/2007	PRP/UC	Private		Medium
414	G	4455 Manchester Ave	MP-52 Drain Inserts	'storm filter' (Contech Stormwater Solutions)	5/10/2007	2/20/2008	Private	2007-0317169	Medium
414	G	4455 Manchester Ave	TC-30 Vegetated Swale	grassy swale	5/10/2007	2/20/2008	Private	2007-0317169	Medium
437	G	200 to 52 El Camino Real	TC-50 Water Quality Inlet	Storm Screen Unit	8/31/2007	5/22/2008	Private	2007-0571994	Medium
462	G	70 thru 90 N Coast Hwy 101	MP-52 Drain Inserts	kristar inlet filter	7/6/2007	4/6/2009	Private	2007-0447115	Medium
462	G	70 thru 90 N Coast Hwy 101	MP-52 Drain Inserts	kristar inlet filter	7/6/2007	4/6/2009	Private	2007-0447115	Medium
462	G	70 thru 90 N Coast Hwy 101	TC-10 Infiltration Trench	flow well stormwater leaching system	7/6/2007	4/6/2009	Private	2007-0447115	Medium
462	G	70 thru 90 N Coast Hwy 101	TC-10 Infiltration Trench	flow well stormwater leaching system	7/6/2007	4/6/2009	Private	2007-0447115	Medium
462	G	70 thru 90 N Coast Hwy 101	TC-30 Vegetated Swale	bmp swale	7/6/2007	4/6/2009	Private	2007-0447115	Medium
462	G	70 thru 90 N Coast Hwy 101	TC-30 Vegetated Swale	mechaical/bioswales	7/6/2007	4/6/2009	Private		Medium
462	G	70 thru 90 N Coast Hwy 101	TC-30 Vegetated Swale	bmp swale	7/6/2007	4/6/2009	Private	2007-0447115	Medium
462	G	70 thru 90 N Coast Hwy 101	TC-30 Vegetated Swale	bmp swale	7/6/2007	4/6/2009	Private	2007-0447115	Medium
462	G	70 thru 90 N Coast Hwy 101	TC-30 Vegetated Swale	3' wide grass crete bmp swale	7/6/2007	4/6/2009	Private	2007-0447115	Medium
462	G	70 thru 90 N Coast Hwy 101	TC-50 Water Quality Inlet	mechaical/bioswales	7/6/2007	4/6/2009	Private		Medium
482	G	1864 Crest Dr	TC-22 Extended Detention Basin	Detention basin	3/28/2008	PRP/UC	Private	2007-0495449	TBD
482	G	1864 Crest Dr	TC-30 Vegetated Swale	4' wide grass lined treatment swale w/ rip-rap entrance	3/28/2008	PRP/UC	Private	2007-0495449	TBD
482	G	1864 Crest Dr	TC-30 Vegetated Swale	4' wide grass lined treatment swale w/ rip-rap entrance	3/28/2008	PRP/UC	Private	2007-0495449	TBD
483	G	540 La Costa Ave	Interceptor (sewer)	wastewater sump	9/10/2007	PRP/UC	Private	2007-0637421	Medium
483	G	540 La Costa Ave	MP-52 Drain Inserts	filter insert	9/10/2007	PRP/UC	Private	2007-0637421	Medium
483	G	540 La Costa Ave	MP-52 Drain Inserts	filter insert	9/10/2007	PRP/UC	Private	2007-0637421	Medium
483	G	540 La Costa Ave	TC-30 Vegetated Swale	bio-swale	9/10/2007	PRP/UC	Private	2007-0637421	Medium
562	G	1302 Encinitas Blvd	MP-52 Drain Inserts	flogard lopro hydrocarbon absorbant filter	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	TC-11 Infiltration Basin	infiltration basin	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	TC-30 Vegetated Swale	4' wide landscaped swale	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	TC-30 Vegetated Swale	8' wide treatment swale with 6' wide bottom	8/21/2007	8/4/2008	Private		Medium
570	G	489 Latigo Row	TC-10 Infiltration Trench		11/20/2007	PRP/UC	Private		TBD
570	G	489 Latigo Row	TC-10 Infiltration Trench		11/20/2007	PRP/UC	Private		TBD
692	G	1435 Rainbow Ridge	TC-30 Vegetated Swale	6' BMP treatment swale	3/27/2008	PRP/UC	Private	2008-0029728	TBD
704	G	230 Quail Gardens Dr	TC-30 Vegetated Swale	Vegetated BMP swale and 2 energy dissipators	4/17/2008	PRP/UC	Private	2008-0162733	TBD
705	G	3354 Wildflower Valley Dr	Other	rock-lined swale	1/14/2008	PRP/UC	Private	2008-0106026	TBD
705	G	3354 Wildflower Valley Dr	Other	rock-lined swale	1/14/2008	PRP/UC	Private	2008-0106026	TBD
705	G	3354 Wildflower Valley Dr	TC-30 Vegetated Swale	grass-lined swale	1/14/2008	PRP/UC	Private	2008-0106026	TBD
716	G	662 Encinitas Blvd	MP-52 Drain Inserts	stormfilter catch basin by contech	6/2/2008	PRP/UC	Private	2008-0243901	TBD
716	G	662 Encinitas Blvd	SD-20 Pervious Pavement	grasspave2 by Invisible Structures, Inc.	6/2/2008	PRP/UC	Private	2008-0243901	TBD
716	G	662 Encinitas Blvd	TC-30 Vegetated Swale	3' wide grass lined treatment swale	6/2/2008	PRP/UC	Private	2008-0243901	TBD
718	G	687 South Coast Hwy	Interceptor (sewer)	320 gal. sand-oil interceptor	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy	MP-52 Drain Inserts	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy	MP-52 Drain Inserts	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD

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Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
718	G	687 South Coast Hwy	MP-52 Drain Inserts	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy	MP-52 Drain Inserts	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy	MP-52 Drain Inserts	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy	MP-52 Drain Inserts	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy	MP-52 Drain Inserts	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy	MP-52 Drain Inserts	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy	TC-50 Water Quality Inlet	6' X 12' precast stormfilter by Contech	8/28/2008	PRP/UC	Private	2008-0440635	TBD
765	G	2234 Encinitas Blvd	MP-52 Drain Inserts	stormfilter	4/1/2008	PRP/UC	Private		TBD
765	G	2234 Encinitas Blvd	TC-30 Vegetated Swale	biofilter swale	4/1/2008	PRP/UC	Private		TBD
765	G	2234 Encinitas Blvd	TC-30 Vegetated Swale	biofilter swale	4/1/2008	PRP/UC	Private		TBD
765	G	2234 Encinitas Blvd	TC-30 Vegetated Swale	biofilter swale	4/1/2008	PRP/UC	Private		TBD
765	G	2234 Encinitas Blvd	TC-30 Vegetated Swale	biofilter swale	4/1/2008	PRP/UC	Private		TBD
765	G	2234 Encinitas Blvd	TC-50 Water Quality Inlet	1-cartridge stormfilter per Contech	4/1/2008	PRP/UC	Private		TBD
789	G	2011-2089 San Elijo Ave	Interceptor (sewer)	grease interceptor	1/9/2008	3/23/2009	Private	2008-0609543	TBD
789	G	2011-2089 San Elijo Ave	SD-20 Pervious Pavement	porous concrete	1/9/2008	3/23/2009	Private	2008-0609543	TBD
883	G	1076 Hymettus Ave	SD-20 Pervious Pavement	modular concrete-reinforced turf area	10/22/2008	PRP/UC	Private		TBD
883	G	1058 Hymettus Ave	SD-20 Pervious Pavement	modular concrete-reinforced turf area	10/22/2008	PRP/UC	Private		TBD
883	G	1058 Hymettus Ave	SD-20 Pervious Pavement	modular reinforced turf area	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	TC-10 Infiltration Trench	15' X 8' X 5' infiltration basin	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1058 Hymettus Ave	TC-10 Infiltration Trench	15' X 8' X 5' infiltration basin	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	TC-30 Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	TC-30 Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1058 Hymettus Ave	TC-30 Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1058 Hymettus Ave	TC-30 Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	TC-30 Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	TC-30 Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	TC-30 Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	TC-30 Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	TC-30 Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	TC-30 Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
943	G	211 Saxony Rd	TC-30 Vegetated Swale	vegetated swale	1/14/2009	PRP/UC	Private	2009-0016310	TBD
943	G	211 Saxony Rd	TC-50 Water Quality Inlet	6' X 12' Filterra unit	1/14/2009	PRP/UC	Private	2009-0016310	TBD
947	G	Bella Vista Ct	MP-52 Drain Inserts	Kristar Lo-pro drain filter	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	Bella Vista Ct	MP-52 Drain Inserts	Kristar Lo-pro drain filter	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	Bella Vista Ct	TC-30 Vegetated Swale	BMP bioinfiltration swale	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	Bella Vista Ct	TC-30 Vegetated Swale	BMP bioinfiltration swale	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	Bella Vista Ct	TC-30 Vegetated Swale	BMP bioinfiltration swale	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	Bella Vista Ct	TC-30 Vegetated Swale	BMP bioinfiltration swale	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	Bella Vista Ct	TC-30 Vegetated Swale	BMP bioinfiltration swale	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	Bella Vista Ct	TC-30 Vegetated Swale	BMP bioinfiltration swale w/ some rock-lined portions	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	Bella Vista Ct	TC-30 Vegetated Swale	BMP bioinfiltration swale w/ some rock-lined portions	5/26/2009	PRP/UC	Private	2009-0134165	TBD
983	G	1320 Encinitas Blvd	TC-50 Water Quality Inlet	Contech Stormfilter	10/28/2008	PRP/UC	Private	2008-0522122	TBD
1365	G	311, 310, 314 and 318 Hana Ct	Other	gravel swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1365	G	315 and 311 Hana Ct	Other	rock swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1365	G	311, 315, 319, 323, and 327 Hana Ct	TC-30 Vegetated Swale	vegetated swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1389	G	Requeza St and Beach St	TC-22 Extended Detention Basin	stormwater detention treatment basin	1/5/2004	8/2/2005	Private	2003-1503915	High
1457	G	200 Saxony Rd	TC-30 Vegetated Swale	grass-lined swale	5/6/2004	4/6/2006	Private		TBD
1469	G	1414 Bella Azul Ct	TC-30 Vegetated Swale	Grass Swale	11/17/2005	PRP/UC	Private	2004-0874708	TBD
1469	G	1401 Bella Azul Ct	TC-30 Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	TBD
1469	G	1414 Bella Azul Ct	TC-30 Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	TBD
1469	G	1428 Bella Vista Ct	TC-30 Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	TBD
1469	G	1428 Bella Azul Ct	TC-30 Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	TBD
1469	G	1442 Bella Azul Ct	TC-30 Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	TBD
1469	G	Bella Azul Ct	TC-30 Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	TBD
1469	G	1401 Bella Azul Ct	TC-30 Vegetated Swale	Grass Swale	11/17/2005	PRP/UC	Private	2004-0874708	TBD
1509	G	521 Ocean View Ave	TC-30 Vegetated Swale	vegetation stabilization, vegetated swale	7/7/2004	PRP/UC	Private		Low
1519	G	200 Saxony Rd	MP-52 Drain Inserts	flogard+plus model 'FGP-36CI' catch basin filter insert	3/1/2004	7/12/2005	Private		Medium
1519	G	200 Saxony Rd	MP-52 Drain Inserts	flogard+plus model 'FGP-36CI' catch basin filter insert	3/1/2004	7/12/2005	Private		Medium

Appendix A-1: Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
1532	GR	1320 Summit Ave	TC-22 Extended Detention Basin	detention basin	4/28/2004	PRP/UC	Private		Low
1532	GR	1320 Summit Ave	TC-30 Vegetated Swale	grass swale	4/28/2004	PRP/UC	Private		Low
1563	G	3701 Fortuna Ranch Rd	TC-30 Vegetated Swale	grass swale	10/11/2004	6/11/2008	Private		TBD
1563	G	3701 Fortuna Ranch Rd	TC-30 Vegetated Swale	grass swale	10/11/2004	6/11/2008	Private		TBD
1600	G	1588-1590 Leucadia Blvd	Interceptor (sewer)	grease trap	6/14/2004	7/6/2005	Private		Medium
1600	G	1588 Leucadia Blvd	TC-22 Extended Detention Basin	Detention Basin	6/14/2004	7/6/2005	Encinitas Street Maintenance		Medium
5814	G	2112 Oxford Ave	TC-30 Vegetated Swale	grass swale	12/4/2002	4/1/2004	Private		Low
5814	G	2108 Oxford Ave	TC-30 Vegetated Swale	grass swale	12/4/2002	4/1/2004	Private		Low
6402	G	311 Princehouse Lane	TC-30 Vegetated Swale	Grass Swale 275 feet by 4 feet wide	7/18/2005	12/8/2006	Private	2004-0576710	Medium
6442	G	3616 Manchaster Ave	MP-52 Drain Inserts	Fossil Filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchaster Ave	MP-52 Drain Inserts	Fossil Filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester	TC-22 Extended Detention Basin	Football field is a detention basin with a filtration sytem under it There are two 2000 gallon sand-oil interceptors	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	TC-50 Water Quality Inlet	2000-gal Jenson Sand-Oil Interceptor	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	TC-50 Water Quality Inlet	2000-gal Jenson Sand-Oil Interceptor	9/17/2004	10/17/2006	Private		High
6813	G	155 Saxony Rd	Other	drain inlet with seepage pit	9/5/2003	7/23/2009	Private		Low
6813	G	155 Saxony Rd	TC-30 Vegetated Swale	grass swale/infiltration basin	9/5/2003	7/23/2009	Private		Low
6813	G	155 Saxony Rd	TC-30 Vegetated Swale	grass swale	9/5/2003	7/23/2009	Private		Low
6816	G	Piraeus St & Sparta Drive	TC-22 Extended Detention Basin	water quality basin	5/3/2001	4/21/2004	Encinitas Street Maintenance		Medium
6816	G	Piraeus St & Sparta Dr	TC-22 Extended Detention Basin	water quality basin	5/3/2001	4/21/2004	Encinitas Street Maintenance		Medium
7005	G	510 Camino De Orchidia	TC-30 Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	507 Ocean Bluff Way	TC-30 Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	509 Ocean Bluff Way	TC-30 Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	517 Ocean Bluff Way	TC-30 Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	521 Ocean Bluff Way	TC-30 Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	525 Ocean Bluff Way	TC-30 Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	513 Ocean Bluff Way	TC-30 Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	558 Camino De Orchidia	TC-30 Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	532 Camino De Orchidia	TC-30 Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	526 Camino De Orchidia	TC-30 Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	518 Camino De Orchidia	TC-30 Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	503 Ocean Bluff Way	TC-30 Vegetated Swale	vegetated swale around the home	9/4/2002	4/30/2007	Private		Medium
7054	G	645 Via Cantebria	MP-52 Drain Inserts	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	MP-52 Drain Inserts	fossil filter insert	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	MP-52 Drain Inserts	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	MP-52 Drain Inserts	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium
7300	G	760 Garden View Ct	TC-30 Vegetated Swale	grass swale for stormwater treatment	2/22/2002	12/22/2008	Private		TBD
7300	G	740 Garden View Ct	TC-30 Vegetated Swale	grass swale for stormwater treatment	2/22/2002	12/22/2008	Private		TBD
7305	G	131 Princehouse Ln	Other	3-ft wide gravel swale	1/10/2003	4/7/2004	Private		Low
7305	G	131 Princehouse Ln	TC-10 Infiltration Trench	3-ft diameter absorption pit, 4-ft deep w/ 3/4" rock	1/10/2003	4/7/2004	Private		Low
7374	I	Vulcan Ave & Encinitas Blvd	Other	rock lined swale	1/30/2003	10/16/2006	Encinitas Parks		TBD
7374	I	Vulcan Ave & Encinitas Blvd	Other	grass pavers	1/30/2003	10/16/2006	Encinitas Parks		TBD
7374	I	Vulcan Ave & Encinitas Blvd	SD-20 Pervious Pavement	pervious pavement parking lot	1/30/2003	10/16/2006	Encinitas Parks		TBD
7374	I	Vulcan Ave & Encinitas Blvd	SD-20 Pervious Pavement	pervious pavement walkway	1/30/2003	10/16/2006	Encinitas Parks		TBD
7374	I	Vulcan Ave & Encinitas Blvd	SD-20 Pervious Pavement	pervious pavement walkway	1/30/2003	10/16/2006	Encinitas Parks		TBD
7374	I	Vulcan Ave & Encinitas Blvd	TC-22 Extended Detention Basin	detention basin	1/30/2003	10/16/2006	Encinitas Street Maintenance		TBD
7588	G	1200 Garden View Rd	MP-52 Drain Inserts	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	TBD
7588	G	1200 Garden View Rd	MP-52 Drain Inserts	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	TBD
7588	G	1200 Garden View Rd	MP-52 Drain Inserts	4120-M Filter	12/9/2002	4/1/2004	Private	2002-1125937	TBD
7588	G	1200 Garden View Rd	MP-52 Drain Inserts	4130-M Filter	12/9/2002	4/1/2004	Private	2002-1125937	TBD
7588	G	1200 Garden View Rd	MP-52 Drain Inserts	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	TBD
7588	G	1200 Garden View Rd	MP-52 Drain Inserts	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	TBD

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Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
7588	G	1200 Garden View Rd	MP-52 Drain Inserts	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	TBD
7588	G	1200 Garden View Rd	MP-52 Drain Inserts	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	TBD
7588	G	1200 Garden View Rd	TC-30 Vegetated Swale	grass lined swale	12/9/2002	4/1/2004	Private	2002-1125937	TBD
7588	G	1200 Garden View Rd	TC-30 Vegetated Swale	grassy swale	12/9/2002	4/1/2004	Private	2002-1125937	TBD
7588	G	1200 Garden View Rd	TC-30 Vegetated Swale	grassy swale	12/9/2002	4/1/2004	Private	2002-1125937	TBD
7628	G	215 La Costa Ave	TC-30 Vegetated Swale	Grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	221-223 La Costa Ave	TC-30 Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	199 La Costa Ave	TC-30 Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	199 La Costa Ave	TC-30 Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	207 La Costa Ave	TC-30 Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	207 La Costa Ave	TC-30 Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7702	G	Chopin Way and Rubenstein Ave	TC-22 Extended Detention Basin	stormwater detention vault	8/6/2003	1/23/2006	Private		Medium
7702	G	Rubenstein Ave and Chopin Way	TC-30 Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	315 Chopin Way	TC-30 Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	329 Chopin Way	TC-30 Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	Rubenstein Ave and Chopin Way	TC-30 Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	322 and 336 Chopin Way	TC-30 Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	301 Chopin Way	TC-30 Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7732	G	175 La Costa Ave	Other	DG-lined swale	12/30/2003	5/15/2006	Private		Medium
7732	G	175 La Costa Ave	TC-22 Extended Detention Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	183 La Costa Ave	TC-22 Extended Detention Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	191 La Costa Ave	TC-22 Extended Detention Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	191 La Costa Ave	TC-22 Extended Detention Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7771	G	1550 S El Camino Real	SD-20 Pervious Pavement	pervious pavemnet "gravel pave" by Invisible Structures	10/28/2003	2/4/2008	Private		TBD
7771	G	1550 S El Camino Real	TC-22 Extended Detention Basin	desiltation basin	10/28/2003	2/4/2008	Private		TBD
7780	G	133 Rosebay Dr	TC-10 Infiltration Trench	rock-lined infiltration trench	8/4/2003	4/29/2005	Private		Low
7780	G	133 Rosebay Dr	TC-30 Vegetated Swale	vegetated swale, terraced drain	8/4/2003	4/29/2005	Private		Low
7780	G	133 Rosebay Dr	TC-32 Bioretention	terraced stormwater drainage area	8/4/2003	4/29/2005	Private		Low
7791	G	1766 N Coast Hwy 101	Interceptor (sewer)	grease interceptor	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7791	G	1766 N Coast Hwy 101	MP-52 Drain Inserts	fossil filter insert	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7791	G	1766 N Coast Hwy 101	MP-52 Drain Inserts	fossil filter insert	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7791	G	1766 N Coast Hwy 101	TC-11 Infiltration Basin	vegetated detention basin	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7791	G	1766 N Coast Hwy 101	TC-11 Infiltration Basin	vegetated detention basin	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7791	G	1766 N Coast Hwy 101	TC-30 Vegetated Swale	vegetated swale	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7791	G	1766 N Coast Hwy 101	TC-30 Vegetated Swale	vegetated swale	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7791	G	1766 N Coast Hwy 101	TC-32 Bioretention	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7791	G	1766 N Coast Hwy 101	TC-32 Bioretention	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7791	G	1766 N Coast Hwy 101	TC-32 Bioretention	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7791	G	1766 N Coast Hwy 101	TC-32 Bioretention	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7791	G	1766 N Coast Hwy 101	TC-50 Water Quality Inlet	sand/oil interceptor	8/4/2004	12/30/2008	Private	2004-0733519	TBD
7828	G	Lake Dr and Crestview Dr	MP-52 Drain Inserts	catch basin filter insert	11/13/2003	12/21/2006	Private		Medium
7828	G	Lake Dr and Crestview Dr	MP-52 Drain Inserts	catch basin filter insert	11/13/2003	12/21/2006	Private		Medium
7828	G	1223 Crestview Dr	TC-11 Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1219 Crestview Dr	TC-11 Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1207 Crestview Dr	TC-11 Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1945 Lake Dr	TC-11 Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1223 Crestview Dr	TC-11 Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1216 Crestview Dr	TC-11 Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1208 Crestview Dr	TC-11 Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1200 Crestview Dr	TC-11 Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7847	G	2300 8th St	TC-11 Infiltration Basin	filtration/desiltation pond	8/12/2003	7/23/2009	Private		Low
7852	G	3430 Via Monte verde	TC-11 Infiltration Basin	rip rap lined infiltration basin (does not conform to plan)	1/1/2003	10/24/2005	Private		Medium
7852	G	3430 Via Monte Verde	TC-30 Vegetated Swale	Grass lined Swale	1/1/2003	10/24/2005	Private		Medium
7852	G	3445 Via Monte Verde	TC-30 Vegetated Swale	landscape area for BMP	1/1/2003	10/24/2005	Private		Medium
7852	G	3445 Via Monte Verde	TC-30 Vegetated Swale	grass lined vegetation area	1/1/2003	10/24/2005	Private		Medium
7852	G	3411 Via Monte Verde	TC-30 Vegetated Swale	grass lined vegation cleansing area	1/1/2003	10/24/2005	Private		Medium

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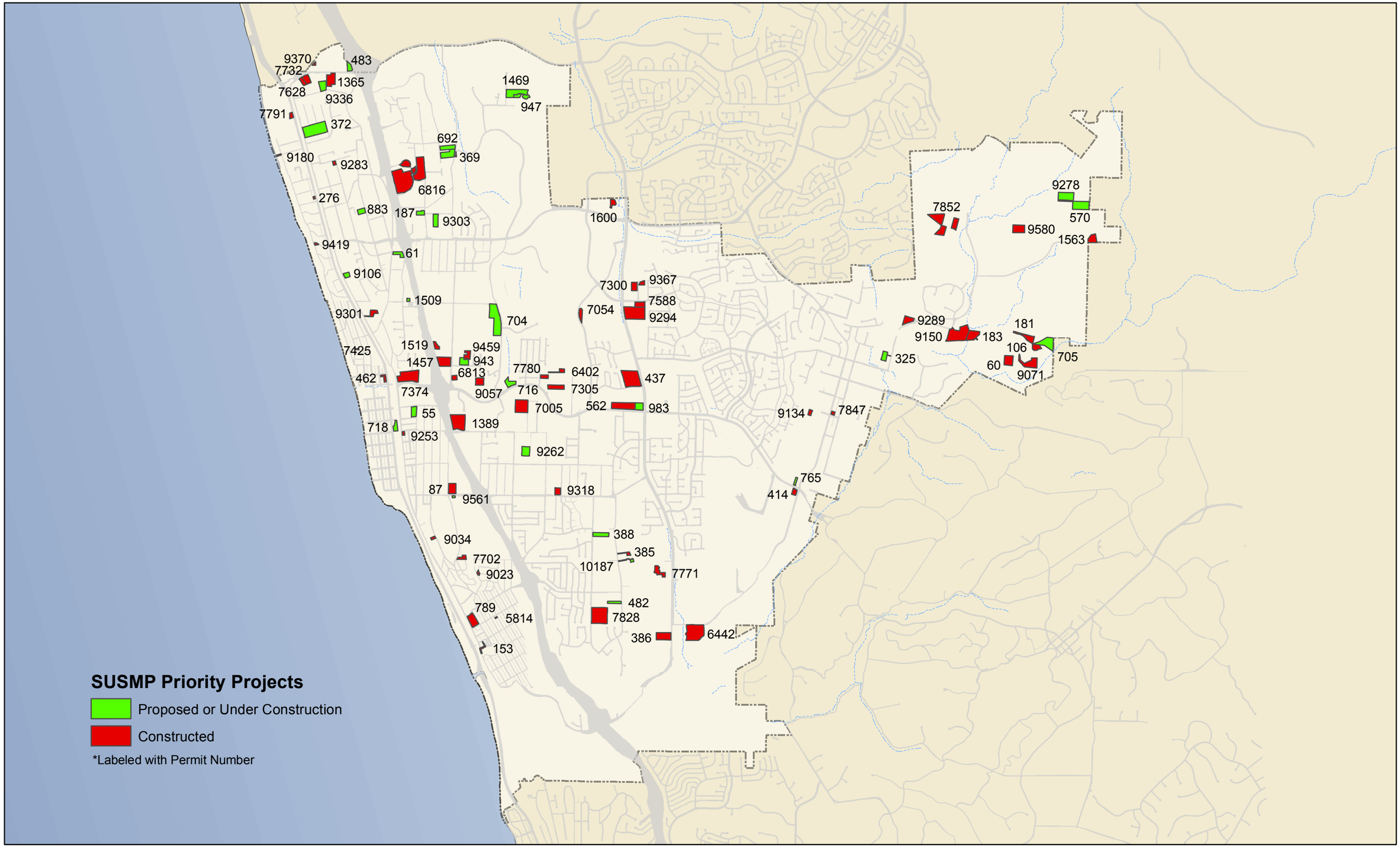
Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
7852	G	3411 Via Monte Verde	TC-30 Vegetated Swale	grass lined vegetation area	1/1/2003	10/24/2005	Private		Medium
7852	G	3411 Via Monte Verde	TC-30 Vegetated Swale	landscaped area for BMP	1/1/2003	10/24/2005	Private		Medium
9023	G	427 Bristol Ave	SD-20 Pervious Pavement	pathway filtration	10/20/2004	10/5/2006	Private		Low
9034	G	1470 Summit Avenue	Other	DG Swale	12/21/2004	12/3/2007	Private		Medium
9034	G	1462 & 1462 Summit Avenue	TC-22 Extended Detention Basin	detention filtration basin	12/21/2004	12/3/2007	Private		Medium
9057	G	192 Pacific View Ln	TC-30 Vegetated Swale	7.8 ft wide terraced treatment swale	1/26/2005	1/22/2007	Private		Medium
9071	G	3317 Poppy Hills Ln	Other	rock swale	11/9/2004	7/3/2006	Private	2004-0955312	TBD
9071	G	3317 Poppy Hills Ln	TC-30 Vegetated Swale	vegetated swale	11/9/2004	7/3/2006	Private	2004-0955312	TBD
9106	G	vacant lot N Vulcan Ave	TC-11 Infiltration Basin	vegetated infiltration basin w/ gravel pit	12/21/2006	PRP/UC	Private		High
9106	G	vacant lot N Vulcan Ave	TC-30 Vegetated Swale	vegetated swale	12/21/2006	PRP/UC	Private		High
9134	G	0 Block 94 of Map 326	TC-30 Vegetated Swale	Priority Project in 2002-03	11/23/2004	4/6/2006	Private		Low
9150	G	3113 Camino Del Rancho	Other	Rock lined swale	3/24/2005	9/11/2007	Private		Medium
9150	G	3113 Camino Del Rancho	Other	Rock lined swale	3/24/2005	9/11/2007	Private		Medium
9150	G	3113 Camino Del Rancho	TC-32 Bioretention	flat area for stormwater treatment covered with grass	3/24/2005	9/11/2007	Private		Medium
9245	GR	3140 Dusty Trail	TC-30 Vegetated Swale	Grass Swale, Drainage Easement	3/2/2004	PRP/UC	Private		TBD
9253	G	701 S Vulcan Ave	TC-30 Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	703 S Vulcan Ave	TC-30 Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	719 S Vulcan Ave	TC-30 Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	721 N Vulcan Ave	TC-30 Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	717 S Vulcan Ave	TC-30 Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	715 S Vulcan Ave	TC-30 Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9262	G	860 Bracero Rd	MP-52 Drain Inserts	trench drain with skimmer box	12/1/2005	PRP/UC	Private	2005-0972175	Medium
9262	G	886 Bracero Rd	MP-52 Drain Inserts	trench drain with skimmer box	12/1/2005	PRP/UC	Private	2005-0972175	Medium
9262	G	890 Bracero Rd	MP-52 Drain Inserts	trench drain with skimmer box	12/1/2005	PRP/UC	Private	2005-0972175	Medium
9262	G	904 Bracero Rd	MP-52 Drain Inserts	trench drain with skimmer box	12/1/2005	PRP/UC	Private	2005-0972175	Medium
9262	G	874, 896 & 900 Bracero Road	TC-30 Vegetated Swale	7' wide grass lined treatment channel	12/1/2005	PRP/UC	Private	2005-0972175	Medium
9278	G	0 Lone Hill Lane	TC-22 Extended Detention Basin	Detention areas on each parcel, Rip Rap	12/27/2005	PRP/UC	Private		Medium
9278	G	Lone Hill Ln	TC-22 Extended Detention Basin	detention area	12/27/2005	PRP/UC	Private		Medium
9283	G	267 Sanford St & 1440 Hygeia Ave	Other	rock swale	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9283	G	265 Sanford Street	TC-11 Infiltration Basin	Infiltration basin	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9283	G	267 Sanford St	TC-11 Infiltration Basin	infiltration basin	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9283	G	1440 Hygeia Ave	TC-11 Infiltration Basin	infiltration basin	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9289	G	2934 Lone Jack Road	TC-30 Vegetated Swale	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Road	TC-30 Vegetated Swale	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Road	TC-30 Vegetated Swale	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2944 Lone Jack Road	TC-30 Vegetated Swale	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2944 Lone Jack Road	TC-30 Vegetated Swale	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2944 Lone Jack Road	TC-30 Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Road	TC-30 Vegetated Swale	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Road	TC-30 Vegetated Swale	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Road	TC-30 Vegetated Swale	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Road	TC-30 Vegetated Swale	turf reinforced mat drainage swale	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Road	TC-30 Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Road	TC-30 Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 & 2934 Lone Jack Road	TC-30 Vegetated Swale	turf reinforced mat drainage swale	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9294	G	477 N El Camino Real	MP-52 Drain Inserts	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	MP-52 Drain Inserts	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	MP-52 Drain Inserts	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	MP-52 Drain Inserts	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	MP-52 Drain Inserts	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	MP-52 Drain Inserts	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	MP-52 Drain Inserts	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	TC-30 Vegetated Swale	grass-lined channel for BMP	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 El Camino Real	TC-50 Water Quality Inlet	ADS water quality unit	12/7/2005	12/3/2007	Private	2007-0114120	High
9301	G	189 Halcyon Rd	SD-20 Pervious Pavement	Grasscrete	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9301	G	187 Halcyon Rd	TC-30 Vegetated Swale	grass lined ditch	8/3/2005	4/14/2009	Private	2005-0679467	Medium

Appendix A-1: Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
9301	G	187 Halcyon Rd	TC-30 Vegetated Swale	grass lined ditch	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9303	G	869 Brittany Road	TC-22 Extended Detention Basin	40' +/- detention area	6/7/2005	PRP/UC	Private	2005-0496885	TBD
9303	G	869, 875, 881, 887 Brittany Road	TC-30 Vegetated Swale	landscape filtration strip	6/7/2005	PRP/UC	Private	2005-0496885	TBD
9318	G	1176 & 1173 Kava Ct	Other	6.5 ft wide gravel swale w/ 3" river rock	8/16/2005	2/16/2007	Private		Medium
9318	G	1169 & 1165 Kava Ct	Other	gravel Swale	8/16/2005	2/16/2007	Private		Medium
9318	G	1160, 1164, 1168, 1172, 1169, 1165 Kava Ct	TC-30 Vegetated Swale	vegetated swale along Kava Ct	8/16/2005	2/16/2007	Private		Medium
9336	I	290 Andrew Ave	Other	Landscaped Area, Gravel Pave Swale, Grass Pave Swale	6/19/2006	PRP/UC	Private		Low
9336	I	290 Andrew Ave	SD-20 Pervious Pavement	Gravel Pave and Grass Pave	6/19/2006	PRP/UC	Private		Low
9336	I	290 Andrew Ave	TC-30 Vegetated Swale	Landscaped Area, Gravel Pave Swale, Grass Pave Swale	6/19/2006	PRP/UC	Private		Low
9367	G	781 Garden View Ct	TC-30 Vegetated Swale	grass lined swale	7/10/2006	1/14/2009	Private		Medium
9370	G	406 La Costa Ave	Other	4 ft diameter dual pump lift station	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	Other	4 ft X 4ft X 2.5 ft Jenson precast sump station	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	SD-20 Pervious Pavement	Orco block pavers	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	TC-30 Vegetated Swale	4-ft wide grass swale	1/30/2006	8/14/2007	Private	2006-0071959	High
9419	G	871 Neptune	SD-20 Pervious Pavement	Grasscrete grass block	8/30/2005	2/6/2008	Private		Low
9459	G	211 Saxony Rd	SD-20 Pervious Pavement	Grass Pave	6/12/2006	9/10/2007	Private - HOA		Medium
9459	G	211 Saxony Rd	TC-22 Extended Detention Basin	Landscaped Area (detention basin)	6/12/2006	9/10/2007	Private - HOA		Medium
9561	G	303 Santa Fe Drive	TC-30 Vegetated Swale	landscaped area	9/18/2007	PRP/UC	Private	2007-0598500	TBD
9561	G	303 Santa Fe Drive	TC-30 Vegetated Swale	landscaped area	9/18/2007	PRP/UC	Private	2007-0598500	TBD
9561	G	303 Santa Fe Drive	TC-30 Vegetated Swale	landscaped area	9/18/2007	PRP/UC	Private	2007-0598500	TBD
9561	G	303 Santa Fe Drive	TC-30 Vegetated Swale	landscaped area	9/18/2007	PRP/UC	Private	2007-0598500	TBD
9561	G	303 Santa Fe Drive	TC-30 Vegetated Swale	landscaped area	9/18/2007	PRP/UC	Private	2007-0598500	TBD
9561	G	303 Santa Fe Drive	TC-40/MP-40 Media Filter	stormfilter system	9/18/2007	PRP/UC	Private	2007-0598500	TBD
9580	G	3451 Dove Hollow Lane	TC-10 Infiltration Trench	Dry Well Storm Water Retention	5/25/2006	2/6/2008	Private		Medium
9580	G	3451 Dove Hollow Lane	TC-30 Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Medium
9580	G	3451 Dove Hollow Lane	TC-30 Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Medium
9580	G	3451 Dove Hollow Lane	TC-30 Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Medium
9580	G	3451 Dove Hollow Lane	TC-30 Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Medium
10187	G	1603 Crest Dr	TC-10 Infiltration Trench	2' wide BMP gravel/sand filter	5/27/2009	PRP/UC	Private	2009-0280381	TBD

Definitions:
PRP/UC: Project proposed or under construction, BMP installation is not complete.
TBD: BMP inspection priority To Be Determinined. After construction is complete, all BMPs on the project are inspected prior to start of the next rainy season. BMP inspection priority is established during this initial Operation and Mainenance Inspection.
HOA: Homeowner's Association

Note:
Responsible party information is maintained within the City's data management systems specific to this program area. In consideration of the sensitivity of private property ownership information, this data is not included in the inventory presented.



Appendix A-2
SUSMP Priority Projects with Treatment Control BMPs

DISCLAIMER:

This map should not be used for Engineering, Survey, or Site-Specific Analysis.

Every reasonable effort has been made to assure the accuracy of the data provided; nevertheless, some information may not be accurate. The City of Encinitas assumes no liability or responsibility arising from the use of or reliance upon this information.

- Map Coordinates: Stateplane NAD83 Feet, CA Zone 6
- Parcel lines are not survey accurate, and some parcels can be positionally off up to +/- 40 feet
- Photo flight dates: April 2005. 3 inch pixel resolution.
- Orthophoto and Topo positional accuracy meet the precision adequate to support National Map Accuracy Standards for 1" = 100' mapping.

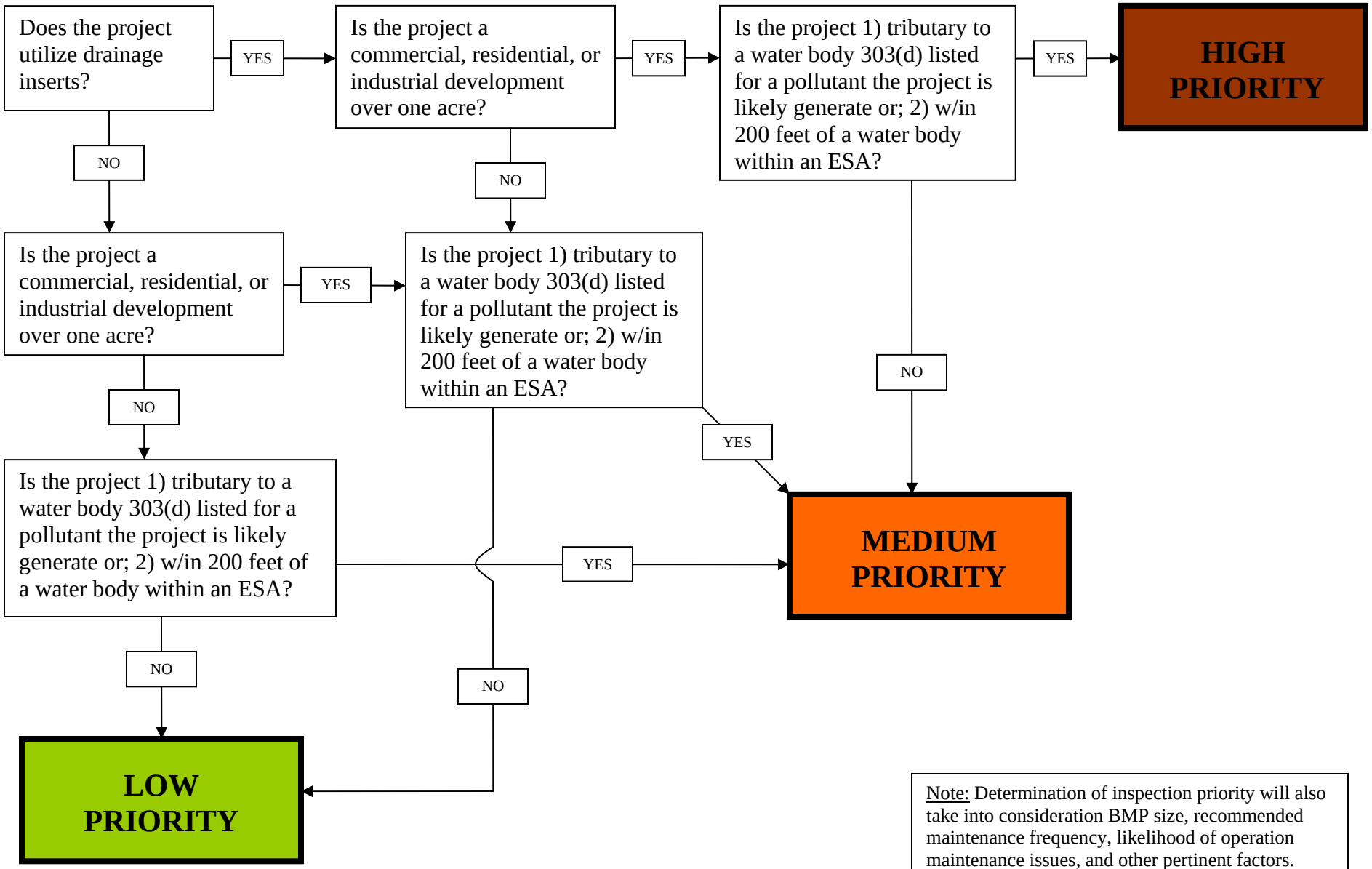
I:/GIS/SharedMXDs/CityGIS/CityGIS.mxd

N

0 5,900 Feet

1 inch = 3,700 feet

Treatment Control BMP Inspection Priority



Note: Determination of inspection priority will also take into consideration BMP size, recommended maintenance frequency, likelihood of operation maintenance issues, and other pertinent factors.

SAMPLE

Date: _____

City of Encinitas
Engineering Services Permits
505 South Vulcan Ave.
Encinitas, CA 92024

Re: **Engineer's Final Grading Certification for Project No. 99-001 TM and Grading Permit Number XXXX - G.**

The grading under permit number XXXX has been performed in substantial conformance with the approved grading plan or as shown on the attached 'As Graded' plan.

Final grading inspection has demonstrated that lot drainage conforms with the approved grading plan and that swales drain at a minimum of 1% to the street and/or an appropriate drainage system.

All the Low Impact Development, Source Control and Treatment Control Best Management Practices as shown on the drawing and required by the Best Management Practice Manual Part II were constructed and are operational, together with the required maintenance covenant(s).

Engineer of Record _____ (signed & sealed)

Dated _____

Verification by the Engineering Inspector of this fact is done by the Inspector's signature hereon and will take place only after the above is signed and stamped and will not relieve the Engineer of Record of the ultimate responsibility:

Engineering Inspector: _____

Dated:_____

The above information shall be on the Engineer of Record's letterhead and shall be signed and sealed by the Engineer of Record.

City of Encinitas

September 2, 2008

TO: City of Encinitas Property Owner

RE: Treatment Control Best Management Practices (BMP) Verification Program

The City of Encinitas, in response to requirements in the San Diego Municipal Stormwater Permit, as regulated by the San Diego Regional Water Quality Control (RWQCB), is undertaking a new program to protect our local waterways and beaches.

The purpose of this program is to verify the operation and maintenance of treatment control best management practices (BMPs) installed as a condition of development on projects constructed since January of 2003.

As you may be aware, specific projects within the City of Encinitas are required to install BMPs to treat and improve the quality of water discharged from a development site. It is important to recognize that the treatment control BMPs at your facility or on your property provide a critical function, and that ongoing maintenance and preservation of treatment control BMPs is necessary for proper operation and to maximize water quality benefit. The proper maintenance and operation of treatment control BMPs is required per City of Encinitas Municipal Code (EMC) Section 20.08 as well as property related legal agreements and/or covenants.

As the treatment control BMP operation and maintenance program is introduced, the City of Encinitas would like your cooperation to verify the following:

- ☑ Responsible Party Information *(HOA, Property Owner, Etc…)*
- ☑ Verification of the Type of Treatment Control BMPs *(See Enclosed Information)*
- ☑ Proper Operation and Maintenance of Treatment Control BMPs.

Enclosed with this letter, you will find information that will aid in gathering, documenting, and providing this information to the City of Encinitas. Please be advised that the City is also required to conduct assessments of a specific number of locations throughout the City to support this program.

Please Provide the Requested Information By: **October 1, 2008**

Your assistance in this effort is greatly appreciated. Please contact the City of Encinitas Clean Water Program at (760) 633-2787 or npdesmail@cityofencinitas.org for any questions or assistance.

Peter Cota-Robles, P.E
Director of Engineering

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

City of Encinitas

SECOND NOTICE

TO: <RESPONSIBLE PARTY>
<123 STREET>
<City, State, Zip>

January 13, 2009

RE: <ENCINITAS PROPERTY ADDRESS>

In response to provisions in the San Diego Municipal Stormwater Permit (administered by the San Diego Regional Water Quality Control Board), the City of Encinitas is required to verify the operation and maintenance of treatment control best management practices (BMPs) installed as a condition of development on projects constructed since January 2003.

In a letter dated September 2, 2008, the City of Encinitas requested your cooperation to verify and submit information relating to the BMPs on your property. In that letter (*copy included)* the City requested information regarding the responsible party (Property Owner, Manager, HOA etc.), verification of the type of BMPs on site, and verification that required maintenance has been conducted. To date, records indicate that the City has not received this information.

The intent of this second notice is to provide an additional opportunity to a) submit the required information or b) inform the City of updated / revised responsible party information (i.e. change in ownership) for future correspondence regarding the Treatment Control BMP Self Verification process.

The Treatment Control BMP Self Verification process has been developed to provide property owners with a simple mechanism to validate the proper maintenance and function of BMP facilities, and to help the City meet State mandated requirements. It is the goal of the City to minimize the burden on property owners to fulfill these requirements. However, please be advised that the City does maintain the authority to ensure the existence and proper maintenance and function of treatment facilities; failure to provide adequate information may constitute a violation of City ordinance (EMC Section 20.08) or breach of property related agreements or covenants.

Through attempts to solicit necessary information, this correspondence has been sent to the contact identified above. If the contact information above is **incorrect**, please indicate this on the enclosed self verification form. Otherwise, please validate the responsible party information and provide the required operation and maintenance verification information as described on the form.

Please Provide the Requested Information No Later Than: February 13, 2009

Your assistance in this effort is greatly appreciated. Please feel free to contact the Clean Water Program at (760) 633-2787 or npdesmail@cityofencinitas.org with any questions or assistance.

Sincerely,

Erik Steenblock
Clean Water Program Manager

Enc: Self Verification Form
Copy of Final Grading Plan (selected sheets)
Copy of Original Letter dated September 2, 2008
Operation and Maintenance Guide

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

City of Encinitas

FINAL NOTICE

TO: <RESPONSIBLE PARTY>
<123 STREET>
<City, State, Zip>

April 8, 2009

RE: <ENCINITAS PROPERTY ADDRESS>

In response to provisions in the San Diego Municipal Stormwater Permit (administered by the San Diego Regional Water Quality Control Board), the City of Encinitas is required to verify the operation and maintenance of treatment control best management practices (BMPs) installed as a condition of development on projects constructed since January 2003.

Since September 2008, the City of Encinitas has made multiple attempts to get your cooperation in verifying and submitting information related to the BMPs on your property. In letters, dated September 2, 2008, and January 13, 2009, the City requested information regarding the responsible party (Property Owner, Manager, HOA, etc.), verification of the type of BMPs on site, and verification that required maintenance has been conducted. To date, records indicate that the City has not received this information.

The intent of this final notice is to inform you that, in lieu of self-verification methods, City staff will pursue formal inspection actions to assess BMPs on your property as part of 2009-2010 compliance activities. This annual inspection will 1) verify the location of BMPs that were installed as part of the grading phase of your development project, and 2) determine whether any maintenance activities may be necessary. Inspection actions will take place between July 1, 2009, and September 30, 2009.

It is the goal of the City to minimize the burden on property owners to fulfill these requirements. However, please be advised that failure to provide adequate information may constitute a violation of City ordinance (EMC Section 20.08) or breach of property related agreements or covenants.

Through prior attempts to solicit necessary information, this correspondence has been sent to the contact listed above. If the contact information above is **incorrect**, please notify the Clean Water Program via email or in writing. Correspondence may be submitted to:

City of Encinitas
Clean Water Program
505 S Vulcan Ave
Encinitas, CA 92024

or emailed to: **npdesmail@cityofencinitas.org**

Your assistance in this effort is greatly appreciated. Please feel free to contact the Clean Water Program at (760) 633-2787 or npdesmail@cityofencinitas.org with any questions or for assistance.

Sincerely,

Erik Steenblock
Clean Water Program Manager

Frequently Asked Questions

1. Why does the City of Encinitas require that Treatment Control BMPs be maintained?

As stated in the Municipal Stormwater Permit (issued by the San Diego Regional Water Quality Control (RWQCB)), the City must verify that treatment control BMPs installed on private property are adequately maintained. Proper operation and regular maintenance of permanent treatment control BMPs ensures that the facility reduces the amount of pollutants which end up in our creeks, lagoons, and beaches. These BMPs help to improve water quality and minimize human and environmental health risks.

2. What should I do if I am unsure how to complete my self-inspection form or cannot locate the treatment control BMPs on my property?

Contact Clean Water Program staff as soon as possible. We can provide assistance in understanding the self-verification form, identifying the location of BMP(s) on your property, and determining operation and maintenance needs of your BMP(s). Staff can be reached via phone: 760-633-2787, or email: npdesmail@cityofencinitas.org

3. What happens during the City's inspection of Treatment Control BMPs on my property?

If requested or as required due to repudiation, a City inspector will visit the property to validate the existence, proper maintenance, and function of treatment control BMPs. Inspection actions will be documented with an inspection report form and photos of specific BMPs. If access is limited or located on private property, the City inspector will call the responsible party to schedule an inspection.

Appendix A-6

FAQs continued…

4. What happens if I don't certify that my Treatment Control BMP(s) have been maintained?

The Treatment Control BMP Self Verification process has been developed to provide property owners with a simple mechanism to validate the proper maintenance and function of these facilities, and to help the City meet State mandated requirements. The San Diego Regional Water Quality Control Board requires the City to verify the proper function of treatment control BMPs through a Municipal Stormwater Permit. It is the goal of the City to minimize the burden on property owners to fulfill these requirements. The City does maintain the authority to ensure the existence and proper maintenance and function of treatment facilities, and failure to provide adequate information may constitute a violation of the City ordinance as well as property related agreements or covenants.

City of Encinitas
Clean Water Program
505 S. Vulcan Avenue
Encinitas, CA 92024

For questions relating to
Treatment Control BMPs,
please call: 760-633-2787
or e-mail: npdesmail@cityofencinitas.org

Printed on recycled paper

City of Encinitas
Clean Water Program

Operation and Maintenance Guide

for your

Treatment Control Best Management Practices (BMPs)



Thanks for helping us keep our creeks, lagoons, and ocean clean!

What is a Treatment Control BMP?

Treatment Control BMPs are drainage devices, structures, or areas designed to remove pollutants from storm water runoff, or minimize the quantity of runoff ultimately discharged from a development site. These facilities are required to be incorporated into permitted development or redevelopment projects and serve a functional purpose to improve the quality of water that flows to our local creeks, lagoons, and beaches. They are also frequently referred to as Stormwater Best Management Practices or BMPs.

The following BMPs are commonly incorporated into development projects throughout the City of Encinitas:

Vegetated Swales / Grassy Swales are open, shallow channels or depressions with vegetation or grass covering the side slopes and bottom that collect, infiltrate, and slowly convey runoff water. Rock lined swales are also commonly used.



Bioretention Areas consist of a planted or vegetated depression area designed to pond during a rain event. It is common to find multiple bioretention areas located throughout a development area.



Infiltration Trenches or **Basins** temporarily store runoff in shallow basins or linear depressions lined with sandy soil or gravel to enhance infiltration of water into the ground.



Storm Drain Filter Inserts are manufactured filters or fabric placed in a storm drain inlet to remove sediment, debris, oil, or other pollutants.



Other BMPs include Rock-Lined Swales, Terraced Swales, Detention Basins, Subsurface Infiltration Systems, Constructed Wetlands, Media Filters, Storm Water Storage Systems, and Vortex Separators.

Please note that each of the BMPs may vary in design size, shape, or materials from the descriptions above. City staff is available to help you determine the location of BMPs located on your property.

For more information on Treatment Control BMPs, refer to the City's Storm Water Best Management Practices Manual, Part II which can be accessed via the Clean Water Program webpage:

http://cwp.ci.encinitas.ca.us

How to locate Treatment Control BMPs on your property:

1. Refer to your approved grading or improvement plans. The plans will show the location of Treatment Control BMPs.
2. Walk your property to look for defined drainage areas such as channels, depressions, or basins.
3. Typical treatment control BMPs may look similar to traditional landscaped areas. Look for areas that have been graded in a concave, swale, or linear shape to capture and infiltrate storm water.
4. Structural treatment control devices such as an inlet filter may be located within a curb inlet or underground. *Please contact the City of Encinitas if you have a structural control located on your property with limited access.

Minimum Operation and Maintenance Requirements:

As stated on approved grading or improvement plans and in the City's Stormwater Management and Discharge Control Ordinance (Municipal Code Chapter 20.08), stormwater treatment control BMPs are required to be maintained in perpetuity by a designated responsible party. The responsible party is most commonly the property owner or a Home Owners' Association (HOA).

Minimum Operation and Maintenance tasks:

- ☑ On an annual basis, or as needed, visually inspect all Treatment Controls for signs of malfunction or disrepair.
- ☑ Maintain/repair any damage to the BMP. Necessary maintenance may include removing accumulated sediment, stabilizing eroded areas, replanting dead vegetation, trimming / mowing overgrown vegetation, cleaning out closed or blocked inlets and outlets, etc.
- ☑ Remove any accumulated trash and debris.
- ☑ Take photos of all BMPs on the property.
- ☑ Complete Operation and Maintenance Self-Verification Form and submit the form to the City's Clean Water Program.

Return this form no later than:
October 1, 2008

CITY OF ENCINITAS

STORM WATER TREATMENT CONTROL BEST MANAGEMENT PRACTICES (BMPS)

OPERATION AND MAINTENANCE SELF-VERIFICATION FORM

Step 1 RECORDS VERIFICATION

Property Address:

Responsible Party and/or Property Owner:

Responsible Party Company or HOA (if applicable) Address, City, State, ZIP

Treatment Control BMPs on your property:
(Please Indicate the Quantity of Each BMP in the Applicable Box Below)

- ☐ **Grassy / Vegetated Swale**
- ☐ **Rock Lined Swale**
- ☐ **Infiltration Trench / Basin**
- ☐ **Proprietary Treatment Device**
- ☐ **Bioretention Area**
- ☐ **Storm Drain Filter Insert(s)**
- ☐ **Detention Basin**
- ☐ **Other (*Describe Below*)**

*If you require assistance with BMP identification, please contact City Staff at (760) 633-2787

Step 2 SELF-VERIFICATION OF BMPS

Date(s) that the BMP(s) were self-evaluated: _____

Self Evaluation Results (check the box that applies):

☐ A. All BMPs are maintained and in good working order
☐ B. All or some BMP(s) needed maintenance and/or cleaning
☐ C. Other results (explain):_____

If you checked B or C, please describe maintenance that was performed in order to maintain proper function of BMP(s):

_____

_____

Maintenance Date: _____ *(As applicable, include any maintenance records with your submittal)*

Number of photos taken: _____ **Date the photo(s) were taken:** _____
(Include all photos with your submittal)

Step 3 CERTIFICATION

I, _____, hereby certify that the above information is correct to the best of my knowledge.

Signature _____

Date_____

See reverse for Submittal options.

Step 4 SUBMITTAL OPTIONS

1. **Mail** completed form, copies of maintenance records, and photos to:

   City of Encinitas
   Clean Water Program
   505 S Vulcan Ave
   Encinitas, CA 92024

2. **Email** electronic copies of completed form, maintenance records, and photos to:

   npdesmail@cityofencinitas.org

3. Any combination of mail and email submission of the necessary documents will also be accepted. For example, you may **mail** the form and maintenance records and **email** photos.

Appendix A-8: FY 2008-09 Treatment Control BMP Operation and Maintenance Self Verification Results and Findings

Permit		Location	Notices Sent	Self-Verification Form Information - Provided by Responsible Party													Summary of Results/Findings	City Action
				Grass Swale	Rock Swale	Infilt Basin	Prop Treat	Bio-Ret	SD Filter	Det Basin	Other	BMP Eval Date	Self-Eval	Date of Maint	Certification Date	Photos		
60	G	3275 Poppy Hills Ln	3	2						1		4/9/2009	A	N/A	4/11/2009	4	Verification Received	Information Validated
87	G	354 Santa Fe Dr	1	3					3	1		12/5/2008	A	12/4/2008	12/5/2008	8	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
183	G	3234 Olivenhain Farms Rd	2	1	3							1/25/2009	A	N/A	1/27/2009	3	Verification Received	Information Validated
276	G	1218-1228 N Coast Hwy 101	3													0	Unresponsive Owner	City Inspected
414	G	4455 Manchester Ave	2	X								3/10/2009	A	N/A	3/12/2009	2	Verification Received	Information Validated
437	G	204-252 N El Camino Real	1									8/19/2008	A	8/6/2008	9/8/2008	0	Verification Received	Maintenance Required. Enforcement action taken.
562	G	1302 Encinitas Blvd	2	X		X	X	X	X	X		8/3/2009	A and B	8/3/2009	8/3/2009	0	Verification Received	Maintenance Required. Enforcement action taken.
1365	G	310 Hana Ct	1								no BMPs				9/29/2008	0	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
1365	G	311 Hana Ct	3													0	Unresponsive Owner	City Inspected
1365	G	314 Hana Ct	2	X								2/6/2009	A	N/A	2/6/2009	0	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
1365	G	315 Hana Ct	2	X								1/15/2009	A	N/A	1/15/2009	0	Verification Received	Information Validated
1365	G	318 Hana Ct	1								no BMPs	9/10/2008	A	N/A	9/10/2008	2	Verification Received	Information Validated
1365	G	319 Hana Ct	2	X								1/21/2009	A	N/A	1/21/2009	0	Verification Received	Information Validated
1365	G	323 Hana Ct	1	X								none listed	A	N/A	9/4/2008	3	Verification Received	Information Validated
1365	G	327 Hana Ct	3	X								2/10/2009	A	N/A	2/10/2009	0	Verification Received	Information Validated
1389	G	Beach St	3													0	Unresponsive Owner	City Inspected
5814	G	2108 Oxford Ave	3													0	Unresponsive Owner	City Inspected
5814	G	2112 Oxford Ave	2	X				X				3/26/2009	A and C	3/26/2009	3/26/2009	2	Verification Received	Information Validated
6402	G	311 Princehouse Ln	1	X							X	9/2/2008	A	11/1/2008	11/1/2008	5	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
6442	G	3616 Manchester Ave	2								sand interceptor	6/3/08, 1/22/09	A and B	6/3/2008, 1/22/2009	1/23/2009	2	Verification Received	Information Validated
7005	G	503 Ocean Bluff Way	1	X		X			X			9/15/2008	A	9/15/2008	9/29/2008	0	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
7005	G	507 Ocean Bluff Way	1													0	Verification Received	City Inspected
7005	G	509 Ocean Bluff Way	1	X								9/24/2008	A	weekly	9/25/2008	3	Verification Received	Information Validated
7005	G	510 Camino De Orchidia	1													0	Contact Info Invalid	Validate Contact Info. FY 09-10 Inspection Recommended.
7005	G	513 Ocean Bluff Way	1													0	Contact Info Invalid	Validate Contact Info. FY 09-10 Inspection Recommended.
7005	G	517 Ocean Bluff Way	1													0	Contact Info Invalid	Validate Contact Info. FY 09-10 Inspection Recommended.
7005	G	518 Camino De Orchidia	2									none listed	A		1/21/2009	0	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
7005	G	521 Ocean Bluff Way	3														Unresponsive Owner	City Inspected
7005	G	525 Ocean Bluff Way	2	1								2/10/2009	B	2/10/2009	2/10/2009	3	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
7005	G	526 Camino De Orchidia	1	X								9/3/2008	A		9/4/2008	0	Verification Received	Information Validated
7005	G	532 Camino De Orchidia	3	X				X					A		2/2/2009	0	Verification Received	Information Validated
7005	G	558 Camino De Orchidia	2	1								2/8/2009	A	2/8/2009	2/8/2009	3	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
7054	G	645 Via Cantebria	3														Unresponsive Owner	City Inspected
7305	G	131 Princehouse Ln	1	2	3	5		3				all the time	A		9/8/2008	0	Verification Received	Information Validated
7702	G	301 Chopin Way	3														Unresponsive Owner	City Inspected
7702	G	315 Chopin Way	3														Unresponsive Owner	City Inspected
7702	G	322 Chopin Way	1	X								9/11/2008	A		9/11/2008	0	Verification Received	Information Validated
7702	G	329 Chopin Way	1														Contact Info Invalid	Validate Contact Info. FY 09-10 Inspection Recommended.
7702	G	336 Chopin Way	1	X								9/21/2008	A		9/21/2008	0	Verification Received	Information Validated
7732	G	175 La Costa Ave	1							X		9/5/2008	A		9/6/2008		Verification Received	Information Validated
7732	G	183 La Costa Ave	1	X				X				"1 yr ago by	A		9/9/2008	3	Verification Received	Information Validated
7732	G	191 La Costa Ave	3								X- landscape	3/6/2009	A		4/1/2009	0	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
7780	G	121-153 Rosebay Dr	1	X (90	X (10%)							9/11/2008	A		9/11/2008	2	Verification Received	Information Validated
7828	G	1200 Crestview Dr	1	X	X	X				X		9/8/2008	B	9/8/2008	9/8/2008	5	Verification Received	Information Validated
7828	G	1207 Crestview Dr	2		1							1/21/2009	A	1/21/2009	1/21/2009	12	Verification Received	Information Validated
7828	G	1208 Crestview Dr	2													3	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
7828	G	1216 Crestview Dr	1		1							9/9/2008	A		9/7/2008	1	Verification Received	Information Validated
7828	G	1219 Crestview Dr	3			1						1/14/2009	A	1/14/2009	1/14/2009	3	Verification Received	Information Validated
7828	G	1223 Crestview Dr	1			X						not listed	A	6/1/2008	9/5/2008	0	Verification Received	Information Validated
7828	G	1945 Lake Dr	1			X						monthly	A		9/10/2008	2	Verification Received	Information Validated
7828	G	Lake Dr & Crestview Dr	1														Contact Info Invalid	Validate Contact Info. FY 09-10 Inspection Recommended.
7852	G	3411 Via Monte Verde	1	1	1							8/1/2008	A		9/12/2008	0	Verification Received	Information Validated
7852	G	3430 Via Monte Verde	2									1/21/2009			1/21/2009	0	Verification Received	Maintenance Required. Enforcement action taken.

Appendix A-8: FY 2008-09 Treatment Control BMP Operation and Maintenance Self Verification Results and Findings

Permit		Location	Notices Sent	Self-Verification Form Information - Provided by Responsible Party													Summary of Results/Findings	City Action
				Grass Swale	Rock Swale	Infilt Basin	Prop Treat	Bio-Ret	SD Filter	Det Basin	Other	BMP Eval Date	Self-Eval	Date of Maint	Certification Date	Photos		
7852	G	3445 Via Monte Verde	1	2	1						Planted slopes	9/15/2008	A	weekly	9/17/2008	0	Verification Received	Information Validated
9023	G	427 Bristol Ave	1								Infilt System	9/4/2008	A		9/5/2008	0	Verification Received	Information Validated
9034	G	1462 Summit Ave	3	2	1							6/1/2009	A		6/1/2009	14	Verification Received	Information Validated
9034	G	1464 Summit Ave	1	1						1		12/11/2008	A	none given	12/11/2008	8	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
9034	G	1470 Summit Ave	2		X							1/27/2009	A	1/23/2009	1/27/2009	3	Verification Received	Information Validated
9057	G	192 Pacific View Ln	1	1								9/1/2008	A				Verification Received	Information Validated
9134	G	2150 Whisper Wind Ln	1														Contact Info Invalid	Validate Contact Info. FY 09-10 Inspection Recommended.
9150	G	3113 Camino Del Rancho	1														Contact Info Invalid	Validate Contact Info. FY 09-10 Inspection Recommended.
9253	G	701 S. Vulcan Ave	2	X								none listed	A		did not date	0	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
9253	G	703 S. Vulcan Ave	3		X						X	1/18/2009	A		5/13/2009	3	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
9253	G	715 S Vulcan Ave	2	X								none listed	A		did not date	0	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
9253	G	717 S Vulcan Ave	2	X	X				X			10/25/2008	A	10/25/2008	2/8/2009	0	Verification Received	Information Validated
9253	G	719 S. Vulcan Ave	3														Unresponsive Owner	City Inspected
9253	G	721 S. Vulcan Ave	3	X	X							5/14/2009	A	5/9/2009	5/9/2009	2	Verification Received	Information Validated
9283	G	1440 Hygeia Ave	1			1						12/3/2008	A		12/3/2008	5	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
9283	G	265 Sanford St	1														Contact Info Invalid	Validate Contact Info. Recommend for BMP Inspection in
9283	G	267 Sanford St	1		(X)	X						11/24/2008	A		11/24/2008	10	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
9289	G	2914 Lone Jack Rd	3														Unresponsive Owner	City Inspected
9289	G	2932 Lone Jack Rd	2	X								3/1/2009	B		3/1/2009	0	Verification Received	Information Validated
9289	G	2934 Lone Jack Rd	2								1	2/4/2009	A		2/4/2009	0	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
9289	G	2944 Lone Jack Rd	1		X							9/6/2008	A		9/6/2008	2	Verification Received	Information Validated
9294	G	477 N El Camino Real	1	1					7		2 - ADS water quality units	12/6/2008	A and B	yes	12/6/2008	18	Verification Received	Information Validated
9318	G	1154 Evergreen Dr	1	X	X							9/4/2008	A		9/9/2008	2	Verification Received	Information Validated
9318	G	1156 Kava Ct	1	X								9/23/2008	A		9/24/2008	1	Verification Received	Information Validated
9318	G	1158 Evergreen Dr	1		2							9/3/2008	A		9/3/2008	4	Verification Received	Information Validated
9318	G	1160 Kava Ct	1	X	X			X				9/5/2008	A		9/5/2008	5	Verification Received	Information Validated
9318	G	1164 Kava Ct	1	X	X							9/5/2008	A		9/5/2008	4	Verification Received	Information Validated
9318	G	1165 Kava Ct	1	X	X							9/5/2008	A		9/5/2008	4	Verification Received	Information Validated
9318	G	1168 Kava Ct	3								X	4/13/2009	A		4/13/2009	1	Verification Received	Information Validated
9318	G	1169 Kava Ct	2	X								1/20/2009	A		1/20/2009	0	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
9318	G	1172 Kava Ct	1	X	X							9/4/2008	A		9/5/2008		Verification Received	Information Validated
9318	G	1173 Kava Ct	1	X	X							9/5/2008	A		9/5/2008	4	Verification Received	Information Validated
9318	G	1176 Kava Ct	1	X	X							no date	A		9/29/2008	4	Verification Received	Information Validated
9370	G	406 La Costa Ave	1	X	X						Dual sump lift station	10/1/2008	A		10/1/2008	5	Verification Received	Information Validated
9419	G	871 Neptune Ave	1	X	X							9/3/2008	A		9/4/2008	2	Verification Received	Information Validated
9459	GI	211 Saxony	1									no date	"N/A"		9/10/2008	0	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.
9580	G	3451 Dove Hollow Rd	2	3	2	1						1/1/2009	A		1/22/2009	0	Verification Received	Incomplete Submittal. FY 09-10 Inspection Recommended.

Appendix A-9

CITY OF ENCINITAS

Treatment Control BMP Inspection Form

Inspection Type: ☐ Annual ☐ Follow-Up ☐ Complaint ☐ Other:_____

Inspector Name:_____ Date: _____ Time: _____

A. PROJECT INFORMATION

Permit No. _____	Permit Type: _____			Property Address(es):_____
Project Type:	☐ Private	☐ City	☐ Other Public	_____
SUSMP Priority:	☐ Priority	☐ Standard		_____
Inspection Priority:	☐ High	☐ Medium	☐ Low ☐ Unknown	_____
Property Access:	☐ Open	☐ Limited	☐ None	_____

B. TREATMENT CONTROL BMP ASSESSMENT

Treatment Control BMP	Observations	Address / BMP Location	Comments
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		
	☐ good condition ☐ needs maintenance ☐ not visible from street ☐ missing		

Add additional BMPs on reverse side.

PHOTO(S) TAKEN? ☐ **YES** ☐ **NO**

ADDITIONAL COMMENTS:

_____

_____

C. FOLLOW UP NEEDED? ☐ Yes ☐ No **ACCESS REQUIRED FOR FOLLOW UP?** ☐ Yes ☐ No

Follow Up Actions:_____

_____

D. ENFORCEMENT ACTIONS ☐ None ☐ Warning ☐ Notice of Violation ☐ Citation

Corrective Actions:_____

_____

B. TREATMENT CONTROL BMP ASSESSMENT (CONTINUED)

ADDITIONAL BMPS:

Treatment Control BMP	Observations	Location Description	Comments
	□ good condition □ needs maintenance □ not visible from street □ missing		
	□ good condition □ needs maintenance □ not visible from street □ missing		
	□ good condition □ needs maintenance □ not visible from street □ missing		
	□ good condition □ needs maintenance □ not visible from street □ missing		
	□ good condition □ needs maintenance □ not visible from street □ missing		
	□ good condition □ needs maintenance □ not visible from street □ missing		
	□ good condition □ needs maintenance □ not visible from street □ missing		
	□ good condition □ needs maintenance □ not visible from street □ missing		
	□ good condition □ needs maintenance □ not visible from street □ missing		
	□ good condition □ needs maintenance □ not visible from street □ missing		
	□ good condition □ needs maintenance □ not visible from street □ missing		

ADDITIONAL COMMENTS:

_____

_____

_____

_____

Form Revised: 8/2008

Appendix A-10: FY 2008-09 Treatment Control BMP Operation and Maintenance City Inspection Results and Findings

Permit No.	Permit Type	Location	Inspection Date	Inspection Results/Findings	City Action
60	G	3275 Poppy Hills Ln	9/30/2008	Gated Community, need access code	Based on self-verification submittal BMPs are maintained and in compliance. Acquire access code for future inspections.
87	G	354 Santa Fe Dr	9/16/2008	fossil filters need to be cleaned, grass swales and detention basin in good condition	Follow-up inspection with RP conducted 6/2/2009
183	G	3234 Olivenhain Farms Rd	9/30/2008	BMPs in backyard, aceess permission needed	Based on self-verification submittal BMPs are maintained and in compliance. Acquire access code for future inspections.
276	G	1218-1228 N Coast Hwy 101	8/20/2008	stormwater collection vault in good condition, no maintenance necessary	None necessary
414	G	4455 Manchester Ave	8/27/2008	grass swale in good condition, no maintenance necessary	Filter insert overlooked, place on inspection list for FY 09-10
437	G	204-252 N El Camino Real	9/10/2008	StormScreen unit appears in good condtion, but need to have RP pull cover to inspect	RP provided maintenance invoices with self-verification documentation
562	G	1302 Encinitas Blvd	8/20/2008	flo-gard needs to be looked at, detention basin needs debris removal, grass swale needs to be vegetated	After numerous contacts/site visits with RP, BMP maint completed to City satisfaction on 8/3/2009
1365	G	310 Hana Ct	9/30/2008	All BMPs in good condition, no maintenance necessary	None necessary
1365	G	311 Hana Ct	9/30/2008	All BMPs in good condition, no maintenance necessary	None necessary
1365	G	314 Hana Ct	9/30/2008	All BMPs in good condition, no maintenance necessary	None necessary
1365	G	315 Hana Ct	9/30/2008	All BMPs in good condition, no maintenance necessary	None necessary
1365	G	318 Hana Ct	9/30/2008	All BMPs in good condition, no maintenance necessary	None necessary
1365	G	319 Hana Ct	9/30/2008	All BMPs in good condition, no maintenance necessary	None necessary
1365	G	323 Hana Ct	9/30/2008	All BMPs in good condition, no maintenance necessary	None necessary
1365	G	327 Hana Ct	9/30/2008	All BMPs in good condition, no maintenance necessary	None necessary
1389	G	Beach St	8/12/2008	BMP maint needed: remove sediment from detention basin, repair perforated riser flow restriction, re-install turf in swale, repair broken sprinkler	After numerous contacts/site visits with RP, BMP maint completed to City satisfaction on 5/11/2009. Self-Verification form never submitted
5814	G	2108 Oxford Ave	9/17/2008	Need yard access	Self-verification not submitted, place on inspection list for FY09-10 and gain access for inspection
5814	G	2112 Oxford Ave	9/17/2008	Need yard access	Worked with RP to replant vegetaed swale, self-verification photos show completed maintenance
6402	G	311 Princehouse Ln	9/18/2008	grass swale may need to be re-designed (slopes towards street)	Review plans construction inspection records. May have been designed or constructed. Educate plan checkers and construction inspectors.
6442	G	3616 Manchester Ave	9/24/2008	detention basin appears to be in good condition. RP needs to pull cover to conduct inspection.	Self-verification included maintenance records and photos. Facility maintained every 6 months.
7005	G	503 Ocean Bluff Way	9/30/2008	Backyard access needed	Photos not submitted with self-verification, place on inspection list for FY 09-10.
7005	G	507 Ocean Bluff Way	9/30/2008	Backyard access needed	Site inspection with homeowner on 12/3/2008. Pool permitted after grading permit. Existing BMPs OK.

Appendix A-10: FY 2008-09 Treatment Control BMP Operation and Maintenance City Inspection Results and Findings

Permit No.	Permit Type	Location	Inspection Date	Inspection Results/Findings	City Action
7005	G	509 Ocean Bluff Way	9/30/2008	Backyard access needed	Based on self-verification submittal BMPs are maintained and in compliance. Acquire backyard access for future inspections.
7005	G	510 Camino De Orchidia	9/30/2008	Backyard access needed	Letters returned to sender, home is possibly unoccupied, acquire correct RP contact information.
7005	G	513 Ocean Bluff Way	9/30/2008	Backyard access needed	Letters returned to sender, home is possibly unoccupied, acquire correct RP contact information.
7005	G	517 Ocean Bluff Way	9/30/2008	Backyard access needed	Letters returned to sender, home is possibly unoccupied, acquire correct RP contact information.
7005	G	518 Camino De Orchidia	9/30/2008	Backyard access needed	On self-verification RP claimed no BMPs. RP may be unsure of what to inspect. Consider placing property on FY 09-10 inspection list
7005	G	521 Ocean Bluff Way	9/30/2008	Backyard access needed	No self-verification received. Consider placing on FY 09-10 inspection list.
7005	G	525 Ocean Bluff Way	9/30/2008	Backyard access needed	Self-verification hand delivered, photos show swale with brown grass. Recommeneded irrigation of the swale
7005	G	526 Camino De Orchidia	9/30/2008	Backyard access needed	Photos not submitted with self-verification, consider placing on inspection list for FY 09-10.
7005	G	532 Camino De Orchidia	9/30/2008	Backyard access needed	Photos not submitted with self-verification, consider placing on inspection list for FY 09-10.
7005	G	558 Camino De Orchidia	9/30/2008	Backyard access needed	Based on self-verification submittal BMPs are maintained and in compliance. Acquire backyard access for future inspections.
7054	G	645 Via Cantebria	10/1/2008	Landscaped areas in good condition, filter inserts not inspected	Follow-up inspection with RP conducted 5/20/2009. Filter inserts need to be installed prior to the beginning of the next wet season.
7305	G	131 Princehouse Ln	7/21/2008	All BMPs in good condition, no maintenance necessary, additional infiltration features added by homeowner	None necessary
7702	G	301 Chopin Way	8/20/2008	Backyard access needed	Self-verification not returned, place on inspection list for FY 09-10
7702	G	315 Chopin Way	8/20/2008	Backyard access needed	Self-verification not returned, place on inspection list for FY 09-10
7702	G	322 Chopin Way	8/20/2008	Backyard access needed	Photos not submitted with self-verification, place on inspection list for FY 09-10.
7702	G	329 Chopin Way	8/20/2008	Backyard access needed	Self-verification letter returned, update RP contact information and place property on FY 09-10 inspection list
7702	G	336 Chopin Way	8/20/2008	Backyard access needed	Photos not submitted with self-verification, place on inspection list for FY 09-10.
7702	C	Chopin Way	8/20/2008	filter insert in good condition	None necessary
7732	G	175 La Costa Ave	7/31/2008	Detention basin in good condition. Need yard access to inspect DG-lined swale.	Photos not submitted with self-verification, place on inspection list for FY 09-10.
7732	G	183 La Costa Ave	7/31/2008	Backyard access needed	Photos of DG swale not submitted with self-verification, place on inspection list for FY 09-10.
7732	G	191 La Costa Ave		Backyard access needed	Photos not submitted with self-verification, place on inspection list for FY 09-10.

Appendix A-10: FY 2008-09 Treatment Control BMP Operation and Maintenance City Inspection Results and Findings

Permit No.	Permit Type	Location	Inspection Date	Inspection Results/Findings	City Action
7780	G	121-153 Rosebay Dr	7/21/2008	All BMPs in good condition	None necessary
7828	G	1200 Crestview Dr	7/31/2008	Backyard access needed	Based on self-verification submittal BMPs are maintained and in compliance. Acquire backyard access for future inspections.
7828	G	1207 Crestview Dr	7/31/2008	Backyard access needed	Based on self-verification, permeable deck covering BMP, OK. BMPs are maintained and in compliance. Acquire backyard access for future inspections.
7828	G	1208 Crestview Dr	7/31/2008	Infiltration basin in good condition, no maintenance needed	None necessary
7828	G	1216 Crestview Dr	7/31/2008	Infiltration basin in good condition, no maintenance needed	None necessary
7828	G	1219 Crestview Dr	7/31/2008	Infiltration basin in good condition, no maintenance needed	None necessary
7828	G	1223 Crestview Dr	7/31/2008	Backyard access needed	Based on self-verification submittal BMPs are maintained and in compliance. Acquire backyard access for future inspections.
7828	G	1945 Lake Dr	7/31/2008	Backyard access needed	Based on self-verification submittal BMPs are maintained and in compliance. Acquire backyard access for future inspections.
7852	G	3411 Via Monte Verde	9/30/2008	Gated Community, need access code	Photos not submitted with self-verification, place on inspection list for FY 09-10.
7852	G	3430 Via Monte Verde	9/30/2008	Gated Community, need access code	Inspected site with RP access on 2/11/2009, discovered aquestrian pollution potential. Required BMPs. RP solution: remove horses (source) from property.
7852	G	3445 Via Monte Verde	9/30/2008	Gated Community, need access code	Photos not submitted with self-verification, place on inspection list for FY 09-10.
9023	G	427 Bristol Ave	8/20/2008	Resident requested notification prior to inspection	Photos not submitted with self-verification, place on inspection list for FY 09-10.
9034	G	1462 Summit Ave	9/29/2008, 10/28/2008	Detention basin covered with permeable deck, in good condition, no maintenance necessary	None necessary
9034	G	1464 Summit Ave	9/29/2008, 10/28/2008	Detention basin temporarily removed for construction of deck.	Required RB to reinstall detention basin.
9034	G	1470 Summit Ave	9/29/2008, 10/28/2008	DG swale in good condition, no maintenance necessary	None necessary
9057	G	192 Pacific View Ln	9/30/2008	Vegetated infiltration area in good condition, no maintenance necessary	None necessary
9134	G	2150 Whisper Wind Ln	9/30/2008	Access needs to be requested from RP	Letters returned to sender, home is possibly unoccupied, acquire correct RP contact information.
9150	G	3113 Camino Del Rancho	9/30/2008	Access needs to be requested from RP	Letters returned to sender, home is possibly unoccupied, acquire correct RP contact information.
9253	G	701 S. Vulcan Ave	9/12/2008	All BMPs in good condition, per plan check engineer	None necessary
9253	G	703 S. Vulcan Ave	9/12/2008	All BMPs in good condition, per plan check engineer	None necessary
9253	G	715 S Vulcan Ave	9/12/2008	All BMPs in good condition, per plan check engineer	None necessary
9253	G	717 S Vulcan Ave	9/12/2008	All BMPs in good condition, per plan check engineer	None necessary

Appendix A-10: FY 2008-09 Treatment Control BMP Operation and Maintenance City Inspection Results and Findings

Permit No.	Permit Type	Location	Inspection Date	Inspection Results/Findings	City Action
9253	G	719 S. Vulcan Ave	9/12/2008	All BMPs in good condition, per plan check engineer	None necessary
9253	G	721 S. Vulcan Ave	9/12/2008	All BMPs in good condition, per plan check engineer	None necessary
9283	G	1440 Hygeia Ave	8/20/2008	Inspector could not locate infiltration basin	Based on self-verification submittal BMPs are maintained and in compliance. Acquire yard access for future inspections.
9283	G	265 Sanford St	8/20/2008	Inspector could not locate infiltration basin	Letters returned to sender, home is possibly unoccupied, acquire correct RP contact information.
9283	G	267 Sanford St	8/20/2008	Inspector could not locate infiltration basin	Based on self-verification submittal BMPs are maintained and in compliance. Acquire yard access for future inspections.
9289	G	2914 Lone Jack Rd	9/30/2008	All treatment swales are in good condition, no maintenance required	None necessary
9289	G	2932 Lone Jack Rd	9/30/2008	All treatment swales are in good condition, no maintenance required	None necessary
9289	G	2934 Lone Jack Rd	9/30/2008	1 swale missing	Self verification submitted without photos, plance on inspection list for FY 09-10
9289	G	2944 Lone Jack Rd	9/30/2008	All treatment swales are in good condition, no maintenance required	None necessary
9294	G	477 N El Camino Real	9/10/2008	Curb inlet filter full of debris, needs maintenance all other BMPs in good condition	Based on self-verification submittal (incl photos and maintenance invoice) BMPs are maintained and in compliance. Acquire yard access for future inspections.
9318	G	1154 Evergreen Dr	8/27/2008	Yard access needed	Based on self-verification submittal BMPs are maintained and in compliance. Acquire yard access for future inspections.
9318	G	1156 Kava Ct	8/27/2008	No BMPs	None necessary
9318	G	1158 Evergreen Dr	8/27/2008	Yard access needed	Based on self-verification submittal BMPs are maintained and in compliance. Acquire yard access for future inspections.
9318	G	1160 Kava Ct	8/27/2008	shared grass swale is shallow	Reviewed BMP design and construction criteria in Premanent BMP training for City Employees, 4/30/2009 and 5/18/2009
9318	G	1164 Kava Ct	8/27/2008	shared grass swale is shallow	Reviewed BMP design and construction criteria in Premanent BMP training for City Employees, 4/30/2009 and 5/18/2009
9318	G	1165 Kava Ct	8/27/2008	shared grass swale is shallow	Reviewed BMP design and construction criteria in Premanent BMP training for City Employees, 4/30/2009 and 5/18/2009
9318	G	1168 Kava Ct	8/27/2008	shared grass swale is shallow	Reviewed BMP design and construction criteria in Premanent BMP training for City Employees, 4/30/2009 and 5/18/2009
9318	G	1169 Kava Ct	8/27/2008	shared grass swale is shallow	Reviewed BMP design and construction criteria in Premanent BMP training for City Employees, 4/30/2009 and 5/18/2009

Appendix A-10: FY 2008-09 Treatment Control BMP Operation and Maintenance City Inspection Results and Findings

Permit No.	Permit Type	Location	Inspection Date	Inspection Results/Findings	City Action
9318	G	1172 Kava Ct	8/27/2008	shared grass swale is shallow	Reviewed BMP design and construction criteria in Premanent BMP training for City Employees, 4/30/2009 and 5/18/2009
9318	G	1173 Kava Ct	8/27/2008	rock swale in good condition	None necessary
9318	G	1176 Kava Ct	8/27/2008	rock swale in good condition	None necessary
9370	G	406 La Costa Ave	8/20/2008	Yard access needed	Based on self-verification submittal BMPs are maintained and in compliance.
9419	G	871 Neptune Ave	9/23/2008	Vegetated swale missing	Contact RP regarding missing BMP.
9459	GI	211 Saxony	10/6/2008	All BMPs in good condition, no maintenance necessary	None necessary
9580	G	3451 Dove Hollow Rd	9/29/2008	Gated drive, access needed	Self verification submitted without photos, plance on inspection list for FY 09-10

Note: Refer to Appendix A-1 (Permanent BMP Inventory) for a complete list of the BMP facilities at each inspection location.

Appendix B

Construction

B-1 **Construction Inventory**

B-2 **Prioritized Construction Sites**

B-3 **Flow Chart for Inspection Frequencies**

B-4 **Construction Inspection Form**

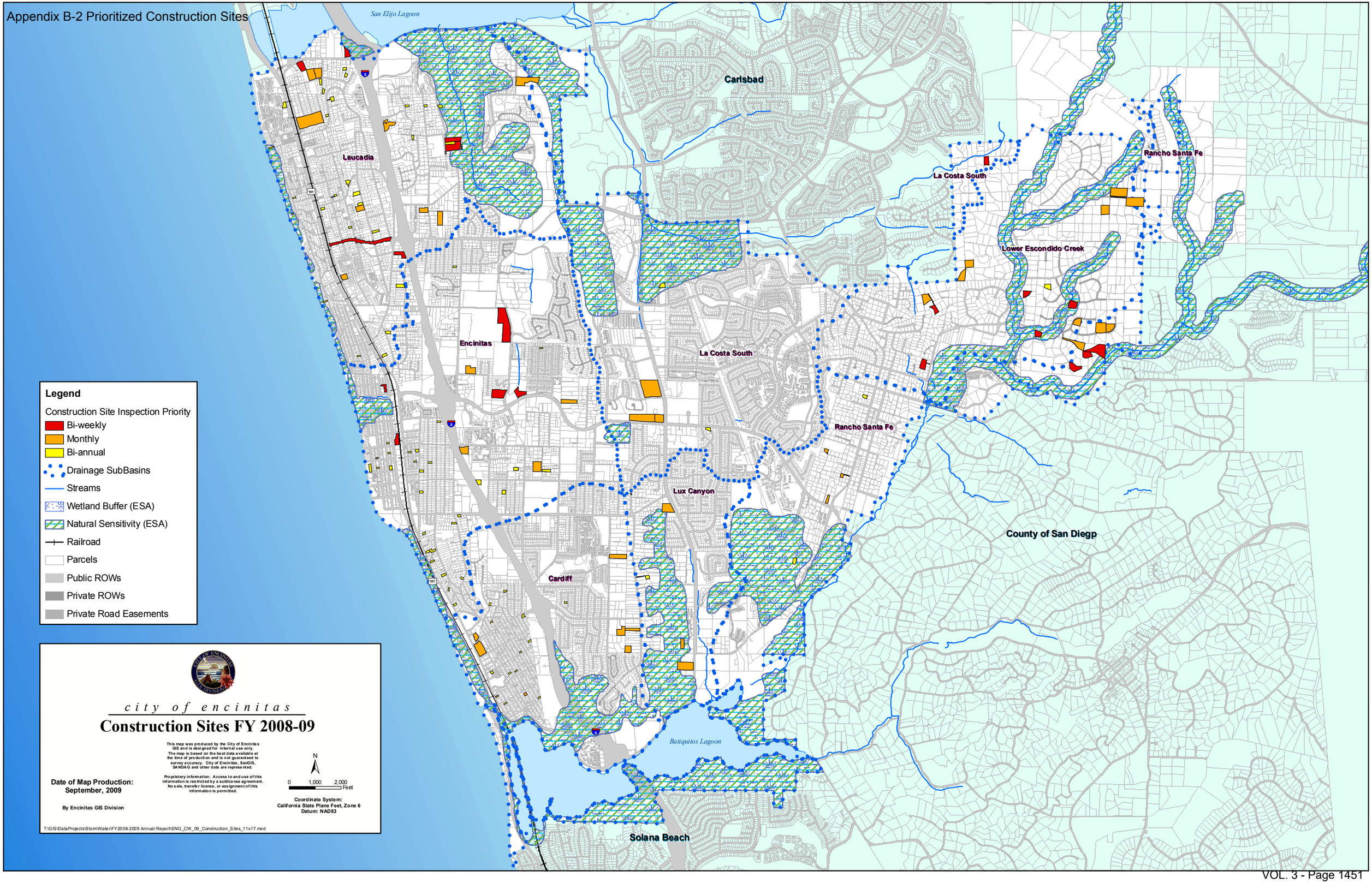
B-5 **Erosion Control Letter**

B-6 **Construction Enforcement Actions**

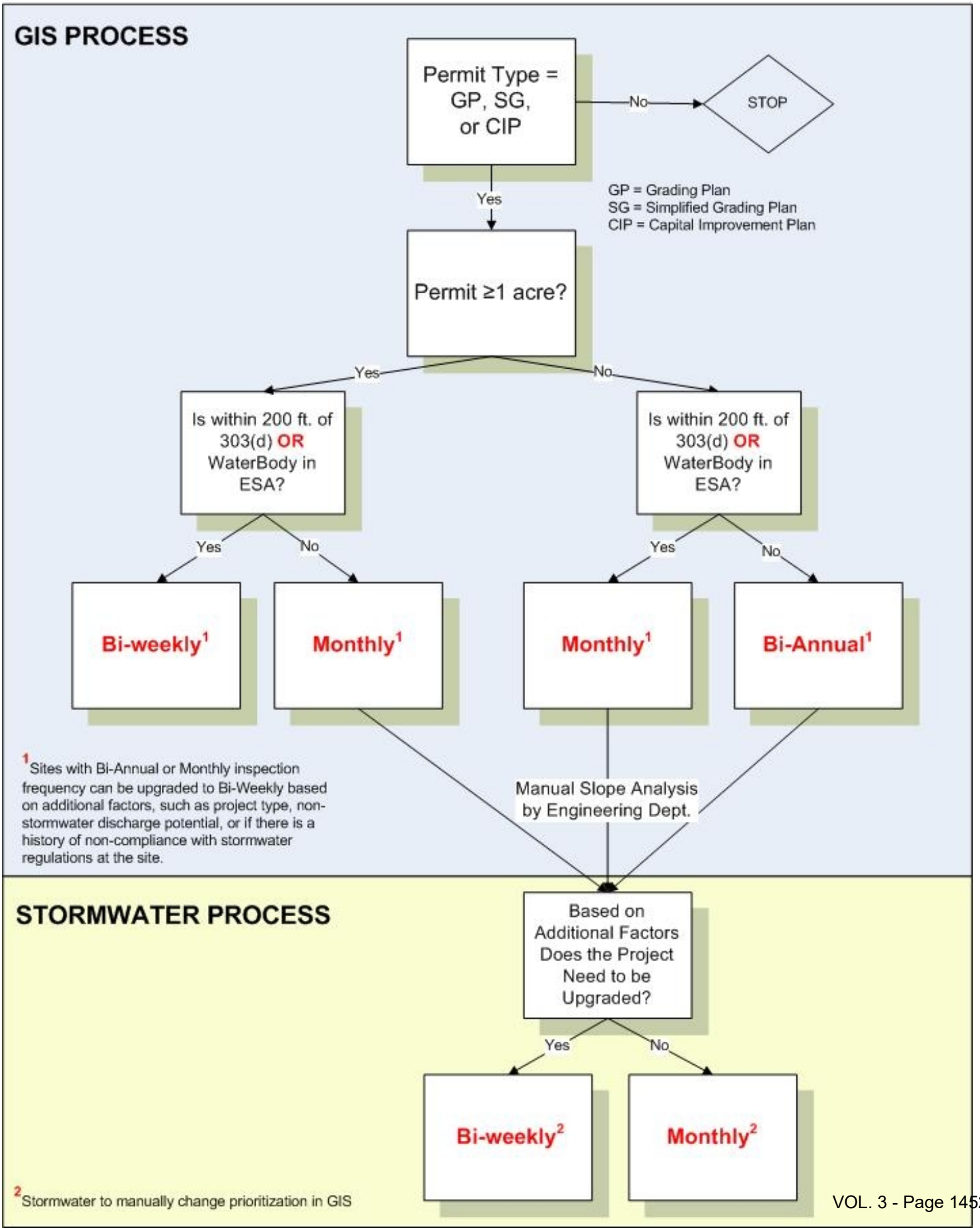
Permit #		Site Address	Site Street Name	Inspection priority	Total Number of Weeks Active During the Wet Season	Total Number of Inspections Conducted During the Wet Season	Total Number of Inspections Conducted During the Dry Season	Total Number of Inspections from July 1, 2008-June 30, 2009
17	GI	859-63	SECOND ST	Biannual	8	0	0	0
47	GI	1133	HERMES	Biannual	0	3	0	3
54	GI		BIRMINGHAM & MACKINNON	Biannual	0	1	0	1
58	GI	1638	EDILEE DR	Biannual	5	0	0	0
61	SI	801	ORPHEUS FIRE STA #3	Biweekly	12	8	0	8
61	SI	801	ORPHEUS FIRE STA #3	Monthly	31	6	0	6
61	GI	1552	SUMMIT AVE	Biannual	9	0	0	0
64	GI	1817	SHERIDAN	Biannual	8	1	0	1
73	GI	760	THIRD AVE	Monthly	0	0	0	0
100	GI	1646	SOMMERSET	Biannual	0	0	0	0
103	SG	1079	VULCAN	Biannual	31	2	0	2
106	GI	3358	WILDFLOWER VALLEY DR	Biweekly	6	3	0	3
112	SG	1174	HYMETTUS	Biannual	0	0	0	0
152	GI	1219	NEPTUNE AVE	Biannual	0	0	0	0
169	GI	510	ECR CHRISTIAN FELLOWSHIP	Monthly	13	3	0	3
181	GI	3342	WILDFLOWER VALLEY DR	Monthly	14	3	0	3
184	SG	2271	MONTGOMERY AVE	Biannual	31	4	0	4
185	SG	1423	RAINBOW RIDGE	Biannual	0	1	0	1
187	GI	1060	URANIA AVE	Monthly	20	6	0	6
215	GI	424	BRIGHTON AVE	Biannual	31	2	0	2
218	GI	640	RANCHO SANTA FE RD.	Biannual	0	0	0	0
220	GI	430	ANDREW	Biannual	15	0	0	0
226	GI	1319	LUX CANYON DR	Monthly	21	5	0	5
245	GI	3351	LILAC SUMMIT	Monthly	31	7	0	7
250	GI	271	DELPHINIUM ST	Biannual	31	2	0	2
266	G	735	DEL RIO	Biannual	31	3	0	3
269	SG	519	ARDEN DR.	Biannual	27	1	0	1
278	GI	3403	BUMANN RD.	Biweekly	31	15	0	15
280	GI	368	E. GLAUCUS STREET	Biannual	0	0	0	0
286	GI	2265	MANCHESTER AVE.	Biannual	0	0	0	0
302	GI	1405	SAN ELIJO AVE	Biannual	0	0	0	0
306	GI	2351	SAN ELIJO	Monthly	31	8	0	8
325	GI		LONE JACK RD	Biweekly	31	15	0	15
364	GI	115	PRINCEHOUSE LANE	Monthly	0	0	0	0
366	GI	742-744	DEWITT	Biannual	0	1	0	1
369	GI	1415	RAINBOW RIDGE	Biweekly	0	3	0	3
372	GI	1657	N. VULCAN AVE.	Monthly	0	1	0	1
385	GI	1555	CREST DRIVE	Biannual	31	2	0	2
386	GI	3535	MANCHESTER BELLMONT VILL.	Monthly	14	4	0	4
388	GI	1435	LAKE DR.	Monthly	31	8	0	8
396	GI	1408	SUMMIT AVE	Biannual	25	2	0	2
409	GI	3364	CALLE MARGARITA	Monthly	0	0	0	0
419	SG	1972	CREST	Monthly	31	7	0	7
423	GI	399	HILLCREST DRIVE	Biannual	31	2	0	2
437	GI	437	ECR - Promanade	Monthly	0	0	0	0
443	GI	1066	GARDENIA ROAD	Biannual	31	2	0	2
462	GI	70-90	A STREET	Biweekly	27	17	0	17
465	GI	1045	VIA DI FELICITA	Monthly	31	7	0	7
474	GI	763	SECOND STREET	Biannual	0	0	0	0
475	SG	986	HYGEIA	Biannual	0	1	0	1
482	GI	1864	CREST DRIVE	Monthly	31	7	0	7
483	GI	540	LA COSTA	Biweekly	0	1	0	1
493	GI	201	N. VULCAN AVE.	Biannual	0	0	0	0
497	GI	681	SECOND STREET	Biannual	31	2	0	2
501	GI	2159	GLASGOW	Biannual	0	0	0	0
538	GI	554	NEPTUNE AVE	Biannual	31	2	0	2
562	GI	1302	ENCINITAS BLVD	Monthly	0	0	0	0
563	GI	3637	COPPERCREST RD	Biweekly	18	10	0	10
570	GI	3557	LONE HILL LANE	Monthly	31	9	0	9
573	GI	408	CHESTERFIELD	Biannual	31	3	0	3
583	SG	2898	LONE JACK ROAD	Biweekly	0	3	0	3
590	GI	2126	WOODWIND Dr.	Monthly	31	8	0	8
624	GI	N / A	LONE HILL LANE	Monthly	31	7	0	7
632	GI	842	THIRD STREET	Biannual	31	5	0	5
635	GI	921	HYMETTUS	Biannual	17	1	0	1
653	SG	860	NARDO ROAD	Biannual	0	1	0	1
674	GI	3220	BELLA COLINA	Biweekly	31	15	0	15
675	GI	1719	SAN ELIJO	Biannual	31	2	0	2
679	SG	1627	CAUDOR	Biannual	31	2	0	2
692	GI	1435	RAINBOW RIDGE	Biweekly	0	3	0	3
698	GI	1075	CORNISH DRIVE	Biannual	31	5	0	5
704	GI	230	QUAIL GARDENS	Biweekly	31	19	0	19
705	GI	3354	WILDFLOWER VALLEY DR	Biweekly	31	15	0	15
713	GI	3003	WILDFLOWER VALLEY DR	Biweekly	31	15	0	15
716	GI	662	ENCINITAS BLVD. @ QUAIL GARDEN	Biweekly	30	19	0	19
718	GI	687	S. COAST HIGHWAY 101	Biweekly	31	16	0	16
719	GI	389	REQUEZA STREET	Monthly	7	1	0	1
726	SG	1596	AVE DE LOS LIRIOS	Biannual	26	1	0	1
760	GI	825	DEWITT	Biannual	0	0	0	0
762	II	1077	CREST DRIVE	Biannual	0	0	0	0

Permit #		Site Address	Site Street Name	Inspection priority	Total Number of Weeks Active During the Wet Season	Total Number of Inspections Conducted During the Wet Season	Total Number of Inspections Conducted During the Dry Season	Total Number of Inspections from July 1, 2008-June 30, 2009
765	GI	2234	ENCINITAS BLVD	Monthly	0	1	0	1
767	GI	911	CORNISH DRIVE	Biannual	31	3	0	3
779	SG	3180	NARCISSUS SUMMIT	Biweekly	0	0	0	0
789	GI	2011-89	SAN ELIJO AVE	Monthly	5	3	0	3
819	II	1349	RAINBOW RIDGE	Biannual	0	0	0	0
831	GI	365	SUNSET DRIVE	Biannual	31	2	0	2
842	GI	2416	MONTGOMERY AVE	Monthly	31	7	0	7
857	SG	1252	RUBENSTEIN	Biannual	31	2	0	2
877	GI	816	WOOD DR.	Biannual	31	2	0	2
883	GI	1058/1076	HYMETTUS	Monthly	31	6	0	6
886	GI	1084 & 1086	NEPTUNE AVE	Monthly	31	7	0	7
926	SG	234	RANCHO SANTA FE RD.	Monthly	0	2	0	2
927	GI	1566	RUBENSTEIN	Biannual	31	2	0	2
943	GI	211	SAXONY RD	Monthly	15	3	0	3
952	GI	1866	SHERIDAN	Biannual	31	2	0	2
973	SG	838	FOURTH STREET	Biannual	31	2	0	2
983	GI	1320	ENCINITAS BLVD	Monthly	31	7	0	7
1001	GI	342	HILLCREST DRIVE	Biannual	31	2	0	2
1015	SG	3255	FORTUNA RANCH ROAD	Biannual	31	2	0	2
1469	GI	1555	BELLA VISTA	Monthly	14	7	0	7
1533	GI	1098	HYMETTUS	Biannual	31	2	0	2
6391	GI	1365	TRABERT RANCH ROAD	Biannual	0	1	0	1
7601	GI	1255	BIRMINGHAM	Monthly	0	7	0	7
7604	GI	125	CHESTERFIELD	Biannual	0	0	0	0
7628	GI	235	LA COSTA	Biweekly	3	1	0	1
7791	GI	1769	ARCO GAS 1769 HWY 101	Biannual	14	0	0	0
7800	GI	3542	JASMINE CREST	Monthly	0	2	0	2
7893	GI	600	PIRAEUS &PLATO	Monthly	0	1	0	1
9028	GI	1050	REGAL RD	Biannual	0	0	0	0
9048	GI	235	LA COSTA	Monthly	7	1	0	1
9080	GI	1455	SAN ELIJO	Biannual	25	1	0	1
9103	GI	115	VERDI AVE	Biannual	31	2	0	2
9106	GI	Vacant lot	NORTH VULCAN AVE	Monthly	0	1	0	1
9117	GI	236/268	ANDREW	Monthly	0	2	0	2
9126	GI	3400	JASMINE CREST	Monthly	0	0	0	0
9128	GI	240	LA VETA	Biannual	0	0	0	0
9137	GI	907	BRACERO RD	Biannual	21	0	0	0
9156	GI	736	FOURTH	Monthly	0	0	0	0
9164	GI		HERITAGE - see 6287	Biweekly	0	0	0	0
9177	GI	740	CORNISH	Biannual	2	0	0	0
9180	GI	1610	NEPTUNE	Biannual	10	1	0	1
9262	GI	800	BLK BRACERO RD	Monthly	0	1	0	1
9263	GI	1655	BURGUNDY ROAD	Biannual	6	0	0	0
9267	GI	1926	OXFORD	Biannual	0	1	0	1
9278	GI		OFF LONE HILL LN	Monthly	31	7	0	7
9286	GI	2477 & 2483	OXFORD	Biannual	26	1	0	1
9300	GI	3373	CALLE MARGARITA	Monthly	7	3	0	3
9303	GI	887	BRITTANY	Monthly	0	1	0	1
9336	GI	290	ANDREW	Monthly	0	1	0	1
9367	GI	781	GARDENVIEW CT	Biannual	0	0	0	0
9435	GI	614	OCEAN VIEW AVE	Biannual	31	2	0	2
9481	GI	500	QUAIL GARDENS	Biweekly	0	2	0	2
9482	GI	1635	GASCONY	Biannual	31	3	0	3
9488	GI	2414/2416	NEWPORT	Monthly	0	0	0	0
9512	GI	422	ANDREW AVE.	Biannual	0	0	0	0
9561	GI	303	SANTA FE DR	Biannual	31	2	0	2
9576	GI	843	SAN DIEGUITO DRIVE	Biannual	0	2	0	2
10015	GI	1309-1311	CORNISH DRIVE	Biannual	31	2	0	2
10056	GI	2898	LONE JACK RD	Biannual	0	0	0	0
49-SI/CMS00D	CIP		LEUCADIA BLVD ROUNDABOUTS	Biweekly	0	0	0	0
			FY 2008-09 TOTAL INSPECTIONS			**440**	**0**	**440**

Appendix B-2 Prioritized Construction Sites



GIS Script Process for Determining Construction Project Inspection Frequencies



CITY OF ENCINITAS

INSPECTION REPORT

Appendix B-4

Storm Water Quality Inspection for Construction Activities

505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2770 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

Property Address: _____ Inspection Date: _____

Contact Person: _____ Permit No: _____

Phone Number: _____ Project Size: _____

Site Status: ❒ Active ❒ Inactive ❒ First Inspection ❒ Final Sign-Off Date ___/___/___

Inspection Frequency: ❒ Bi-Weekly ❒ Monthly ❒ Bi-Annual ❒ Post-Rain Event

State General Construction Permit? ❒ Yes ❒ No WDID # _____

Is Project SWPPP on Site? ❒ Yes ❒ No SWPPP Maintenance Required? ❒ Yes ❒ No

MINIMUM BEST MANAGEMENT PRACTICE (BMP) REQUIREMENTS		BMP INSTALLATION REQUIRED	BMP REQUIRES MAINTENANCE	OTHER CORRECTIVE ACTIONS REQUIRED
A. Erosion Control BMPs				
1	**Slope / Soil Stabilization**			
2	**Silt Fencing**			
3	**Check Dams / Rip Rap**			
4	**Fiber Rolls**			
5	**Permanent Landscaping**			
6	**Preserving Existing Vegetation**			
7	**Diversion Channel for Run-On**			
8	**Other:**			
B. Sediment Control BMPs				
1	**Storm Drain Inlet Protection**			
2	**Detention Basin / Desilting Basin**			
3	**Perimeter Protection**			
4	**Stabilized Construction Entrance / Exit**			
5	**Other:**			
C. Materials Management BMPs				
1	**Stockpile Management**			
2	**Material Washout Area**			
3	**Equipment Storage**			
4	**Trash, Litter, Debris Management**			
5	**Designated Washout Area(s)**			
6	**Sanitary Waste Area Management**			
7	**Fuel / Chemical Storage**			
8	**Other:**			

Corrective Actions: ❒ Correct Work (*See Comments*) ❒ No Follow-Up Actions Required

❒ Referred to the Clean Water Program ❒ Stop Work/NOV

Comments:_____

_____

_____

_____

Corrective Actions identified above must be addressed, to the satisfaction of the City Inspector, within _____ days from the date above OR prior to the next predicted rain event. Failure to comply by this date may result in further enforcement action by the City of Encinitas.

Inspector (Signature) _____ Date ___/___/___

Received By (Signature) _____ Date ___/___/___

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City of Encinitas

September 18, 2008

RE: **SEDIMENT AND EROSION CONTROL**

City of Encinitas Permit Holder:

Please be advised that starting October 1, 2008, and continuing through April 30, 2009, the City will enter into the official wet season as defined by the State Water Resources Control Board. As such, all construction projects (active or inactive) are required to implement sediment and erosion control Best Management Practices (BMPs) to prevent the discharge of sediment and non-stormwater into the stormwater conveyance system and local water bodies.

Attached please find a letter issued by the San Diego Regional Water Quality Control Board (SDRWQCB) which identifies the need for rainy season preparation through the installation of appropriate sediment and erosion control measures and general site cleanup. Further note the intent of this regulatory agency to enhance monitoring and evaluation of construction activities throughout the San Diego Region, including the City of Encinitas.

Ultimately, for permit holders within the City of Encinitas, the wet season brings with it a responsibility for erosion and sediment control pursuant to **Section 23.24.370 - Wet Season Work** of the City of Encinitas Municipal Code. This section states the following:

A. No grading permit shall be issued for work occurring between October 1st of any year and April 30th of the following year, unless the plans for such work include details of protective measures, including desilting basins or other temporary drainage or control measures, or both, as may be deemed necessary by the field inspector to protect adjoining public and private property from damage by erosion, flooding, or the deposition of mud or debris which may originate from the site or result from such grading operations.

B. If grading is begun prior to October 1st, all protective measures shall be installed prior to October 1st. If grading is begun on or after October 1st, all protective measures shall be installed before grading is begun. All protective measures shall be maintained in good working order until April 30th of the succeeding year, where grading is done between October 1st and December 31st, or until April 30th of the same year where grading is done between January 1st and April 30th, unless their removal at an earlier date is approved by the City Engineer.

C. Where a grading permit is issued and the work is commenced after April 30th and before September 15th of any year, and the permit was issued without an Interim Erosion and Sediment Control Plan, and it appears that the grading and installation of the permanent drainage devices as authorized by the permit will not be completed prior to October 1, then on or before September 15th, the owner of the site on which the grading is being performed shall file or cause to be filed with the City Engineer an Interim Erosion and Sediment Control Plan as provided for in this Chapter and shall implement the measures contained in the approved plan by October 1. The plan check fee for the Interim Erosion and Sediment Control Plan shall be paid at the time of plan submittal and shall be in the amount provided for in this Chapter.

D. For continuation of grading activities, other than installation, maintenance, or repair of measures on the Erosion Control Plans, during the wet season, Permittee must apply for and receive, every seven days, special permission to proceed.

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

E. The City Engineer shall grant permission under this section on the basis of weather forecasts, site conditions, experience, and other pertinent factors which indicate the activity may commence or continue without excessive erosion occurring.

F. Should the Permittee fail to submit the plans, fail to provide the protective measures, or fail to obtain permission for wet season activities as required by this Chapter by the dates specified therein, it shall be deemed that a default has occurred under the conditions of the grading permit security. Thereupon the City Engineer may enter the property for the purpose of installing, by City forces or by other means, the drainage and erosion control devices shown on the approved plans, or if there are not approved plans, as he may deem necessary to protect adjoining property from storm damage, or the City Engineer may cause the owner of the site to be prosecuted as a violator of this code, or he may take both actions.

G. The City Engineer shall have the authority to require implementation of all erosion control systems and requirements at any time of the year.

23.24.380 - Erosion Control System.

A. The faces of cut and fill slopes and project site shall be prepared and maintained to control against erosion in accordance with this Chapter. Where cut slopes are not subject to erosion due to the erosion-resistant character of the materials, such protection may be omitted upon approval by the City Engineer.

B. Paved streets, sidewalks, and other improvements shall be maintained in a neat and clean condition free of loose soil, construction debris and trash. Street sweeping or other equally effective means shall be used on a regular basis to prevent storm flows from carrying sediment and debris outside the project boundaries. Watering shall not be used to clean streets except for fine material not otherwise removed by sweeping or other mechanical means.

C. The registered civil engineer who prepared the grading plan and designed the erosion control devices shall be responsible for modification of the design of devices, as necessary, during the rainy season.

D. Desilting facilities shall be provided at drainage outlets from the graded site.

E. Desilting basins shall be designed in accordance with City standards. Permanent desilting facilities shall be designed and constructed as to be aesthetically compatible with the surrounding development and terrain.

F. Desilting basins constructed of compacted earth shall be compacted to a relative compaction of ninety (90) percent of maximum density. A soil engineering report, prepared by the soil engineer, which includes the type of field testing performed, location, and results of testing shall be submitted to the City Engineer for approval upon completion of the desilting basins.

G. Equipment and workers for emergency work shall be made available at all times during the rainy season. Necessary materials shall be available onsite and stockpiled at convenient locations to facilitate rapid construction of temporary device when rain is imminent.

H. Erosion protection shall consist of effective planting of all cut slopes in excess of five (5) feet high and fill slopes more than three (3) feet high unless otherwise approved by the City Engineer. Slopes exceeding five (5) feet high will require an approved sprinkler system, as determined by the City Engineer.

I. Protection for the slopes shall be installed as soon as practicable which may be prior to rough grade approval. Effective planting shall be installed, fully germinated, and effectively cover the required slopes prior to final approval unless otherwise approved by the City Engineer.

J. The erosion control provisions shall take into account drainage patterns during the current and future phases of grading throughout the rainy season.

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K. All removable protective devices shown shall be in place at the end of each working day when the five (5) day rain probability forecast exceeds forty (40) percent.

L. Unvegetated slopes shall be protected in accordance with the guidelines set forth by the Erosion and Sediment Control Manual or in accordance with other requirements set forth by the City Engineer.

23.24.390 - Erosion Control Maintenance.

A. After each rainstorm exceeding 1/4-inch in a 12 hour period, silt and debris shall be removed from all temporary check berms and desilting basins and the basins pumped dry. The requirement to clean and pump permanent desilting basins will be addressed on a case by case basis.

B. After each rainstorm, the performance of the erosion control system shall be evaluated and revised and repaired as necessary.

C. Devices shall not be moved or modified without the approval of the City Engineer.

D. The contractor shall be responsible and shall take necessary precautions to prevent public trespass onto areas where impounded water creates a threat to public health, safety, and welfare.

E. The contractor and Permittee or project owner shall be responsible for continual maintenance of the devices during the rainy season. In the event of failure or refusal by the contractor, Permittee, or project owner to properly maintain the devices, the City Engineer may cause emergency maintenance work to be done to protect adjacent private and public property. The cost shall be charged to the owner and shall include an initial mobilization cost plus the cost of doing the work as provided for in this Chapter.

F. In the event the City Engineer must cause emergency maintenance work to be done, he may revoke the grading permit in writing. The permit shall not be renewed until an erosion control system approved by the City Engineer is installed and a fee of one-half the amount required for the original permit paid by the owner. The City Engineer may waive installation of an erosion control system after April 30.

G. If any grading subject to the provisions of this Chapter has commenced on private property without a valid grading permit, the property owner will be required to prepare and implement an erosion control plan which has been approved by the City Engineer. In the event of failure by the property owner to install an approved erosion control system, the City Engineer may cause emergency work to be done to protect adjacent private and public property.

The full text of the Municipal Code can be accessed on the City's website at http://www.cityofencinitas.org.

Please address any questions regarding this work to your City of Encinitas Engineering Inspector.

Sincerely,

Greg Shields, P.E.
Sr. Civil Engineer
Field Operations

Cc: City of Encinitas Engineering Inspectors

Encl: SDRWQCB letter to all San Diego County Copermittees on August 25, 2008

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

Appendix B-6 Construction Enforcement Actions

Date	Site Address	Violation	Correct Work	Stop Work/ NOV	Citation-Warning	Citation-Fine	Citation Number	Cost Recovery	Routine Inspection	Complaint Inspection
10/7/08	1045 Via Di Felicita	BMP Maintenance Required	X						X	
10/7/08	1319 Lux Canyon	BMP Maintenance Required	X						X	
10/7/08	1972 Crest Dr.	BMP Installation Required	X						X	
10/7/08	2351 San Elijo Ave	BMP Installation & Maintenance Req	X						X	
10/7/08	Off Lone Jack Rd.	BMP Installation Required	X						X	
10/8/08	1415 Rainbow Ridge	BMP Installation Required	X						X	
10/8/08	1435 Rainbow Ridge	BMP Installation Required	X						X	
10/8/08	2126 Woodwind Dr	BMP Installation Required	X						X	
10/8/08	3220 Bella Colina	BMP Installation Required	X						X	
10/8/08	510 S El Camino Real	BMP Installation Required	X						X	
10/8/08	687 S Coast Hwy 101	BMP Installation Required	X						X	
10/13/08	1408 Summit	BMP Installation & Maintenance Req	X						X	
10/16/08	1435 Lake Dr.	BMP Installation Required	X						X	
10/21/08	3342 Wildflower Valley Dr	BMP Installation Required	X						X	
10/21/08	3351 Lilac Summit	BMP Installation Required	X						X	
10/22/08	3220 Bella Colina	BMP Installation Required	X						X	
10/22/08	3358 Wildflower Valley Dr	BMP Installation Required	X						X	
10/23/08	1084-1086 Neptune Ave	BMP Installation & Maintenance Req	X						X	
10/23/08	1555 Bella Vista	BMP Installation & Maintenance Req	X						X	
10/23/08	3535 Manchester Ave	BMP Maintenance Required	X						X	
10/24/08	2416-2424 Montgomery	BMP Installation Required	X						X	
11/6/08	1320 Encinitas Blvd	BMP Installation Required	X						X	
11/6/08	1415 Rainbow Ridge	BMP Installation Required	X						X	
11/6/08	1435 Rainbow Ridge	BMP Installation Required	X						X	
11/19/08	1555 Bella Vista	BMP Installation & Maintenance Req	X						X	
11/19/08	687 S Coast Hwy 101	BMP Installation Required	X						X	
11/24/08	2416-2424 Montgomery	BMP Maintenance Required	X						X	
11/25/08	1084-1086 Neptune Ave	BMP Maintenance Required	X						X	
11/25/08	408 Chesterfield Dr.	BMP Maintenance Required	X						X	
12/4/08	687 S Coast Hwy 101	BMP Maintenance Required	X						X	
12/17/08	816 Wood Dr	BMP Installation Required	X						X	
12/23/08	1320 Encinitas Blvd	BMP Maintenance Required	X						X	
12/29/08	742-744 Dewitt	BMP Installation Required	X						X	
12/30/08	3535 Manchester Ave	BMP Maintenance Required	X						X	
12/30/08	801 Orpheus Ave	BMP Installation Required	X						X	
1/13/09	2271 Montgomery Ave	BMP Maintenance Required	X						X	
1/21/09	2271 Montgomery Ave	BMP Installation & Maintenance Req	X						X	
1/29/09	1320 Encinitas Blvd	BMP Maintenance Required	X						X	
1/29/09	687 S Coast Hwy 101	BMP Maintenance Required	X						X	
2/3/09	1066 Gardena Rd.	BMP Maintenance Required	X						X	

Appendix B-6 Construction Enforcement Actions

Date	Site Address	Violation	Correct Work	Stop Work/ NOV	Citation-Warning	Citation-Fine	Citation Number	Cost Recovery	Routine Inspection	Complaint Inspection
2/4/09	271 Delphinium St.	BMP Installation Required	X						X	
2/5/09	1079 Vulcan Ave	BMP Installation Required	X						X	
2/5/09	801 Orpheus Ave	BMP Installation & Maintenance Req	X						X	
2/9/09	303 Santa Fe Dr	BMP Installation Required	X						X	
2/9/09	365 Sunset Dr	BMP Installation & Maintenance Req	X						X	
2/13/09	801 Orpheus Ave	BMP Installation Required	X						X	
2/18/09	687 S Coast Hwy 101	BMP Maintenance Required	X						X	
2/26/09	1320 Encinitas Blvd	BMP Maintenance Required	X						X	
2/26/09	801 Orpheus Ave	BMP Installation Required	X						X	
3/11/09	1320 Encinitas Blvd	BMP Maintenance Required	X						X	
3/12/09	687 S Coast Hwy 101	BMP Maintenance Required	X						X	
4/7/09	2416-2424 Montgomery	BMP Maintenance Required	X						X	
4/7/09	3220 Bella Colina	BMP Installation Required	X						X	
4/7/09	687 S Coast Hwy 101	BMP Installation Required	X						X	
4/8/09	1320 Encinitas Blvd	BMP Maintenance Required	X						X	
4/8/09	801 Orpheus Ave	BMP Installation Required	X						X	
4/23/09	1320 Encinitas Blvd	BMP Installation Required	X						X	
4/23/09	801 Orpheus Ave	BMP Maintenance Required	X						X	
4/27/09	1566 Rubenstein	BMP Maintenance Required	X						X	
12/18/09	3220 Bella Colina	BMP Maintenance Required	X						X	
12/30/09	Birmingham & Mackinnon	BMP Installation Required	X						X	
2/19/09	687 S Coast Hwy 101	BMP Maintenance Required	X						X	
7/1/08	820 Birmingham	BMP Maintenance Required	X							X
11/26/08	1307 Cornish Dr.	BMP Installation Required	X							X
11/26/08	408 Chesterfield Dr.	BMP Installation Required	X			X	CW112608			X
12/15/08	801 Orpheus Ave	BMP Installation Required	X							X
1/7/09	90 N Coast Hwy 101	BMP Installation Required	X							X
1/22/09	2271 Montgomery Ave	BMP Maintenance Required	X							X
2/27/09	801 Orpheus Ave	BMP Installation Required	X			X	CW022709			X
12/17/08	801 Orpheus Ave	BMP Installation Required				X	CW121708			X
		Totals	**69**			**3**			**62**	**8**

Appendix C

Municipal

C-1 **Municipal Inventory**

C-2 **Municipal Activities Report**

C-3 **Municipal BMP Map**

C-4 **Special Events Permit P2 Questionnaire**

C-5 **Approved Special Events in FY 08-09**

C-6 **Routine Inspections Summary Table**

	Facility Name	Address	Land Use/Activities	Tributary to a 303(d) Impaired Water Body	Inspection Priority	Sub-basin
1	"A" TANK SITE	355 SANTA FE	Tank storage site/municipal yard	NOT TRIBUTARY	High Priority	Encinitas
2	BEACON'S BEACH	700 NEPTUNE	Beach access/parking lot	NOT TRIBUTARY	High Priority	Leucadia
3	CALLE MAGDALENA PUBLIC WORKS FACILITY	160 CALLE MAGDALENA	Administrative offices/municipal yard/vehicle maintenance/materials storage	NOT TRIBUTARY	High Priority	Encinitas
4	CARDIFF SPORTS PARK	1623 LAKE	Recreational facilities/landscaped areas	NOT TRIBUTARY	High Priority	Cardiff
5	CARDIFF SPORTS PARK EXPANSION	1623 LAKE	Recreational facilities/landscaped areas	NOT TRIBUTARY	High Priority	Cardiff
6	COTTONWOOD CREEK PARK	95 N. VULCAN	Park/landscaped areas	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
7	ENCINITAS RANCH GOLF COURSE	1275 QUAIL GARDENS DR	Golf course	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
8	ENCINITAS VIEWPOINT	CORNISH DRIVE & D STREET	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
9	GLEN PARK	2149 ORINDA	Park/landscaped areas	NOT TRIBUTARY	High Priority	Cardiff
10	GRANDVIEW BEACH	1700 NEPTUNE AVE.	Beach access/parking lot	NOT TRIBUTARY	High Priority	Leucadia
11	H STREET VIEWPOINT	498 H STREET	Vista point	NOT TRIBUTARY	High Priority	Encinitas
12	HAWK VIEW PARK	1309 BLUE HERON DRIVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
13	J STREET VIEWPOINT	398 J STREET	Vista point/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
14	LAS VERDES PARK	PASEO DE LAS VERDES & QUAIL GARDENS DR.	Park/landscaped areas	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
15	LEO MULLEN SPORTS PARK	951 VIA CANTEBRIA	Park/landscaped areas	NOT TRIBUTARY	High Priority	La Costa South
16	LEUCADIA OAKS PARK	1511 N. VULCAN	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
17	LEUCADIA ROADSIDE PARK	860 COAST HIGHWAY 101	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
18	LITTLE OAKS EQUESTRIAN PARK	2879 LONE JACK	Park/horse corral/landscaped areas	NOT TRIBUTARY	High Priority	Lower Escondido Creek
19	MILDRED MACPHERSON PARK	1045 VULCAN	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
20	MOONLIGHT BEACH	400 B STREET	Beach access/park/landscaped area/parking lot	TRIBUTARY TO PACIFIC OCEAN SHORELINE	High Priority	Encinitas
21	MS4	CITY WIDE	MS4	TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
22	OAKCREST PARK	555 BALOUR	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
23	ORPHEUS PARK	482 ORPHEUS	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
24	PAUL ECKE SPORTS PARK	278 SAXONY RD.	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
25	REQUEZA STREET FACILITY	397 REQUEZA	Municipal yard/sediment/materials storage	NOT TRIBUTARY	High Priority	Encinitas
26	ROADS, STREETS AND HIGHWAYS	CITY WIDE		TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
27	CITY OF ENCINITAS WASTEWATER COLLECTIONS DIVISION MUNICIPAL YARD	2695 MANCHESTER AVE	Municipal yard	NOT TRIBUTARY	High Priority	Cardiff
28	SCOTTS VALLEY PARK	1602 WILLOWHAVEN	Park/landscaped areas	TRIBUTARY TO ENCINITAS CREEK	High Priority	La Costa South
29	SPECIAL EVENTS	CITY WIDE	Recreational facilities, parks, landscaped areas, roads, streets and highways	MAY BE TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
30	SUN VISTA	2011 AVNDA LA POSTA	Park/landscaped areas	NOT TRIBUTARY	High Priority	La Costa South
31	SWAMI'S BEACH	1298 COAST HIGHWAY 101	Beach access/parking lot	NOT TRIBUTARY	High Priority	Encinitas
32	WIRO PARK	2232 EL CAM DEL NORTE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Lower Escondido Creek/Ranch Santa Fe
33	CARDIFF PUMP STATION	2690 MANCHESTER	Pump station	NOT TRIBUTARY	Low Priority	Cardiff
34	CIVIC CENTER	505 S VULCAN AVE.	Administrative offices/parking lot	NOT TRIBUTARY	Low Priority	Encinitas
35	COMMUNITY/SENIOR CENTER	1140 OAKCREST PARK DR	Administrative offices/parking lot	NOT TRIBUTARY	Low Priority	La Costa South
36	D STREET VIEWPOINT	450 D STREET	Beach access and vista point	TRIBUTARY TO PACIFIC OCEAN SHORELINE	Low Priority	Encinitas
37	FIRE STATION #1	415 2ND	Fire station	NOT TRIBUTARY	Low Priority	Encinitas
38	FIRE STATION #2	1867 MACKINNON	Fire station	NOT TRIBUTARY	Low Priority	Cardiff
39	FIRE STATION #3	801 ORPHEUS AVE	Fire station	NOT TRIBUTARY	Low Priority	Leucadia
40	FIRE STATION #4	2011 VILLAGE PARK	Fire station	NOT TRIBUTARY	Low Priority	La Costa South
41	FIRE STATION #5	540 BALOUR DR	Fire station	NOT TRIBUTARY	Low Priority	Encinitas
42	HALL PROPERTY	1451 STARLIGHT DR	Undeveloped park site	NOT TRIBUTARY	Low Priority	Cardiff
43	HIGHWAY 101 PUMP STATION	S. COAST HIGHWAY 101	Pump station		Low Priority	
44	I STREET VIEWPOINT	4981 I STREET	Vista point	NOT TRIBUTARY	Low Priority	Encinitas
45	INDIAN HEAD CANYON	0 QUAIL HOLLOW	Undeveloped park site	NOT TRIBUTARY	Low Priority	Leucadia
46	OLIVENHAIN PUMP STATION	MANCHESTER/I-5	Pump Station		Low Priority	
47	PUMP STATION	2690 MANCHESTER	Pump station	NOT TRIBUTARY	Low Priority	Cardiff
48	SAN DIEGUITO WATER DISTRICT*		Water reservoir/water storage	NOT TRIBUTARY	Low Priority	La Costa South/Encinitas
49	SAN DIEGUITO WATER DISTRICT*		Water reservoir/water storage	NOT TRIBUTARY	Low Priority	Encinitas
50	SAN DIEGUITO WATER DISTRICT*		Water recycling reservoir	NOT TRIBUTARY	Low Priority	Encinitas
51	SAN DIEGUITO WATER DISTRICT*		Pressure regulating station/no activities on site	NOT TRIBUTARY	Low Priority	Encinitas
52	SAN DIEGUITO WATER DISTRICT*		Pressure regulating station/no activities on site	NOT TRIBUTARY	Low Priority	Cardiff
53	SAN ELIJO BLUFFS PARCELS	1400 COAST HIGHWAY 101	Undeveloped site	NOT TRIBUTARY	Low Priority	Encinitas
54	STANDARD PACIFIC PARK SITE	OLYMPUS / PIRAEUS	Undeveloped site	NOT TRIBUTARY	Low Priority	Leucadia
55	STONESTEPS BEACH	350 SOUTH EL PORTAL	Beach access and vista point	NOT TRIBUTARY	Low Priority	Leucadia
56	UV TREATMENT FACILITY	305 THIRD ST.	UV Treatment Facility	TRIBUTARY TO COTTONWOOD CREEK	Low Priority	Encinitas

***Note: The San Diegito Water District's facility addresses have been omitted for security purposes.**

Item	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2008-09 Annual Result
1.	Report on updates to the municipal inventory and prioritization (J.3.a.(3)(c)i).	July 1, 2008-June 30, 2009		See Appendix C-1
2.	Confirmation that the designated BMPs were implemented, or required to be implemented for: municipal areas and activities (J.3.a.(3)(c)ii).	July 1, 2008-June 30, 2009		See Sections 4.2.3, 4.3.3, 4.4.3, 4.5.3 and 4.6.3
3.	Confirmation that the designated BMPs were implemented, or required to be implemented for: special events (J.3.a.(3)(c)ii).	July 1, 2008-June 30, 2009		See Section 4.7.3
4.	A description of inspections and maintenance conducted for municipal treatment controls-Municipal Filter Inserts (J.3.a.(3)(c)iii).	July 1, 2008-June 30, 2009		See Section 4.4.4.1
5.	A description of inspections and maintenance conducted for municipal treatment controls-UV Treatment Facility (J.3.a.(3)(c)iii).	July 1, 2008-June 30, 2009		See Section 4.4.4.1
6.	Identification of the total number of catch basins and inlets (J.3.a.(3)(c)iv).	July 1, 2008-June 30, 2009		1632
7.	Identification of the number of catch basins and inlets **inspected** (J.3.a.(3)(c)iv).	July 1, 2008-June 30, 2009		1547

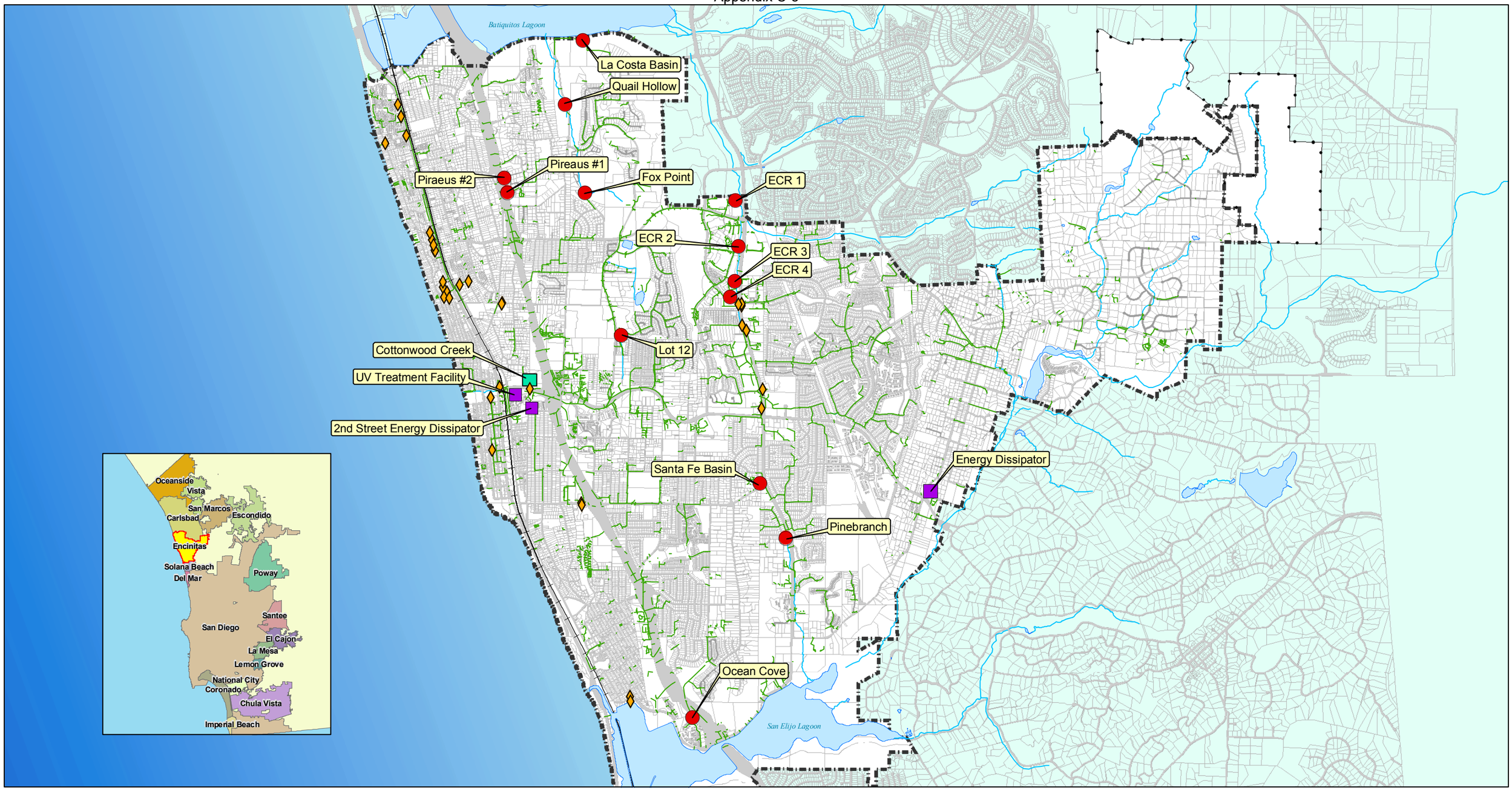
Item	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2008-09 Annual Result
8.	Identification of the number of catch basins and inlets found with accumulated waste exceeding 33% of design capacity ((J.3.a.(3)(c)iv).	July 1, 2008-June 30, 2009	All inlets and catch basins within the City are inspected on an annual basis, which is sufficient in ensuring the catch basins do not reach one-third of capacity and that self-cleaning facilities remain free of trash and debris.	0
9.	Identification of the number of catch basins and inlets **cleaned** (J.3.a.(3)(c)iv).	July 1, 2008-June 30, 2009		1547
10.	Identification of total distance (miles) of the MS4 (J.3.a.(3)(c)v).	July 1, 2008-June 30, 2009		61 miles of pipe
11.	Identification of distance of the MS4 **inspected** (J.3.a.(3)(c)v)**.**	July 1, 2008-June 30, 2009		57.6 miles of pipe
12.	Idenitification of distance of the MS4 found with accumulated waste exceeding cleaning criteria (J.3.a.(3)(c)v).	July 1, 2008-June 30, 2009		0
13.	Identification of distance of the MS4 **cleaned** (J.3.a.(3)(c)v)**.**	July 1, 2008-June 30, 2009		4.8 miles of pipe
14.	Identification of total distance (miles) of open channels (J.3.a.(3)(c)vi).	July 1, 2008-June 30, 2009		3.35 miles

Item	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2008-09 Annual Result
15.	Identification of distance of open channels **inspected** (J.3.a.(3)(c)vi).	July 1, 2008-June 30, 2009		6.32 miles
16.	Identification of distance of open channels found with anthropogenic litter (J.3.a.(3)(c)vi).	July 1, 2008-June 30, 2009		0
17.	Identification of distance of open channels **cleaned** (J.3.a.(3)(c)vi).	July 1, 2008-June 30, 2009		.24 miles
18.	Amount of waste and litter (tons) removed from catch basins (J.3.a.(3)(c)vii).	July 1, 2008-June 30, 2009	This result includes the amount of waste and litter removed from both catch basins and inlets by the City's Public Works Department.	64.4 tons
19.	Amount of waste and litter (tons) removed from inlets (J.3.a.(3)(c)vii).	July 1, 2008-June 30, 2009	This result includes the amount of waste and litter removed from the 57 storm drain filter inserts that are located within 35 inlets and are maintained by a City contractor.	2.8 tons
20.	Amount of waste and litter (tons) removed from the open channels (J.3.a.(3)(c)vii).	July 1, 2008-June 30, 2009		223.02 tons
21.	Amount of waste and litter (tons) removed from the MS4 (J.3.a.(3)(c)vii).	July 1, 2008-June 30, 2009	This includes the total amount of waste and litter removed from City's catch basins, inlets and open channels.	290.22 tons

Item	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2008-09 Annual Result
22.	Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification of the finding (J.3.a.(3)(c)viii).	July 1, 2008-June 30, 2009		None
23.	Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented or required to be implemented for municipal areas and activities (J.3.a.(3)(c)ix).	July 1, 2008-June 30, 2009		See Section 4.3.3.1
24.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating the **highest** volumes of trash and/or debris (J.3.a.(3)(c)x).	July 1, 2008-June 30, 2009		84 curb miles
25.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)x).	July 1, 2008-June 30, 2009	See Section 4.2.4	Weekly
26.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating **moderate** volumes of trash and/or debris (J.3.a.(3)(c)xi).	July 1, 2008-June 30, 2009		92 curb miles
27.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)xi).	July 1, 2008-June 30, 2009	See Section 4.2.4	Twice a month
28.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating **low** volumes of trash and/or debris (J.3.a.(3)(c)xii).	July 1, 2008-June 30, 2009		280 curb miles

Item	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2008-09 Annual Result
29.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)xii).	July 1, 2008-June 30, 2009	See Section 4.2.4	Monthly
30.	Identification of the total distance of curb-miles swept (J.3.a.(3)(c)xiii).	July 1, 2008-June 30, 2009		9,936 miles
31.	Identification of the number of municipal parking lots (J.3.a.(3)(c)xiv).	July 1, 2008-June 30, 2009		11
32.	Identification of the number of municipal parking lots swept (J.3.a.(3)(c)xiv).	July 1, 2008-June 30, 2009		11
33.	Identification of the frequency of sweeping (J.3.a.(3)(c)xiv).	July 1, 2008-June 30, 2009		See Section 4.2.4
34.	Amount of material (tons) collected from street and parking lot sweeping (J.3.a.(3)(c)xv).	July 1, 2008-June 30, 2009		1,449
35.	A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4 (J.3.a.(3)(c)xvi).	July 1, 2008-June 30, 2009		See Section 4.5.4.1

Item	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2008-09 Annual Result
36.	Identification of the number of fixed municipal sites requiring inspections (J.3.a.(3)(c)xvii).	July 1, 2008-June 30, 2009	Refer to Appendix C-1 list of all High Priority Municipal Facilities	28
37.	Identification of the number of sites inspected (J.3.a.(3)(c)xvii).	July 1, 2008-June 30, 2009		28
38.	Identification of the frequency of inspections (J.3.a.(3)(c)xvii).	July 1, 2008-June 30, 2009		Annual
39.	A description of the general results of the inspections (J.3.a.(3)(c)xviii).	July 1, 2008-June 30, 2009		See Appendix C-6
40.	Confirmation that the inspections conducted addressed all the required inspection steps and follow-ups to determine full compliance (J.3.a.(3)(c)xix).	July 1, 2008-June 30, 2009		See Appendix C-6
41.	The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken (J.3.a.(3)(c)xx).	July 1, 2008-June 30, 2009		0
42.	A description of notable activities conducted to manage urban runoff from municipal areas and activities (J.3.a.(3)(c)xxi).	July 1, 2008-June 30, 2009		See Sections 4.2.4, 4.3.4, 4.4.4, 4.5.4, 4.6.4 and 4.7.4



FY 2008-2009 Encinitas Municipal BMP Locations

CITY OF ENCINITAS G.I.S. DIVISION

- Storm Drain Inlet Filters
- Detention Basin
- Structural BMP
- Detention Basin, Pervious Pavement, Rock Swale, and Naturalized Channel
- Storm Drains
- Streams
- Roads

This map was produced by the City of Encinitas GIS and is designed for internal use only. The map is based on the best data available at the time of production and is not guaranteed to survey accuracy. City of Encinitas, SanGIS, SANDAG and other data are represented.

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Coordinate System:
California State Plane Feet, Zone 6
Datum: NAD83

Date of Map Production: September, 2009

N

0 2,500 5,000 Feet

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□ POLLUTION PREVENTION

Storm drains are not connected to the City's sewer system. All pollutants allowed to enter the storm drain system flow directly to our beaches, ocean, lagoons, and other waterways without being treated. The City of Encinitas is required by the San Diego Regional Water Quality Control Board to report on pollution prevention measures taken at special events held throughout the City.

In the area provided on the next page or on a separate sheet of paper, please complete the following questions and describe methods of pollution prevention that will be implemented at your proposed event.

1. Describe how trash, recycling, and debris will be managed (i.e. extra bins, temporary fencing, etc.)
2. If your event will include food production, describe how excess oil and grease will be disposed of. These materials cannot be dumped into the streets or storm drain system
3. Please identify any other pollutant generating activities that may take place (i.e. portable toilets).

For questions, please call the City's Clean Water Program at (760) 633-2787.

	Event	Date	Time	Location	Estimated Attendance	Clean-up Deposit required?
1	Rods and Woodies	July 17, Aug 21, Sept 18	5:30-7:30pm	Moonlight Beach (MLB)	1000	
2	Six Step House 4th of July Picnic	7/4/08	8am-5pm	Oakcrest Park	250	
3	Go Team Rally	7/13/08		Oakcrest Park	80	
4	Volcom's Blowfish Surf Series	7/19/08	8am-6:30pm	MLB/D Street	75	
5	Picnic/Rally for Judge Brandenburg	7/26/08	12-4pm	Oakcrest Park	150	
6	Solana Beach Triathlon & Duathlon	7/27/08		Hwy 101	1300	
7	Dog Day of Summer	8/9/08	10am-2pm	Aberdeen btwn Newcastle and San Elijo Ave.	1000	
8	St. John's Fiesta de las flores	Aug 15-17, 2008		1001 Encinitas Blvd	7000	
9	Taste of Main St.	8/21/08	6-9pm	Encinitas Blvd- K Street	1,000	
10	Leucadia Art Walk	8/31/08	8am-6pm	Leucadia Roadside Park	3000	
11	Challenge Walk MS	Sept 5-7, 2008		Beacon's Park, MLB, Swami's, Cardiff State Beach	350	
12	Seaside Surf Contest	9/6/08		Seaside Beach	50	
13	Wavecrest Woodies	Sept 19-20, 2008		MLB Parking lot	7500	
14	Coastal Cleanup Day	9/20/09	9am-12pm	Swami's	100	
15	Oktoberfest	9/21/08	10am-6pn	Mountain Vista Dr.	25000	$300.00
16	Kiwanis Luau Fundraiser	10/4/08		MLB	100	
17	Fire Prevention Week expo	10/4/08		MLB Parking lot	200	
18	National Scholastic Surfing Association	Oct 4-5, 2008	7am-6pm	MLB/D Street	300	
19	Leucadia Nights	10/11/08	6-9pm	Hwy 101	200	
20	Bike MS Bay to Bay Tour	Oct 11-12, 2008		Hwy 101	500	
21	MLB Run- Boys & Girls Club	10/30/08	2:30-6:30pm	MLB	400	
22	Safe Trick or Treat	10/31/008	4-9pm	Hwy 101 from D Street to K Street	2500	
23	Interscholastic Surfing Federation	Nov 1; Dec 13-14, 20-21, 2008	6am-5pm	MLB/D Street	350	
24	18th Annual Fall Festival	11/23/08	9am-4pm	Hwy 101, D to J Streets	40,000	
25	2008 Encinitas Holiday Parade	12/6/08	5-9pm	Hwy 101, D to J Streets	25000	
26	National Scholastic Surfing Association	Feb 7-8, 2009	7am-6pm	MLB	200	
27	Encinitas Chamber of Commerce Sidewalk sale	2/21/09		Citywide	1500	
28	3rd Annual Community Garage Sale	3/21/09	8am-12pm	Community Center Parking Lot	500	
29	Tour de Cure	4/18/09	6am-4pm	Mira Costa College	1,200	
30	Creek to Bay Cleanup	4/25/09	9am-12pm	MLB	100	
31	Encinitas Garden Festival	4/25/09	9am-5pm	1888 Montgomery Ave.	1,200	
32	26th Annual April Street Fair	April 25-26, 2009	9am-5pm	Hwy 101, D to J Streets	40,000	$300.00
33	Encinitas Surf Festival/Surf Contest	4/26/09	7am-5pm	D Street	180	
34	San Dieguito Alumni Event	5/9/09	8am-3pm	D Street	50	
35	Encinitas 5K/1K	5/16/09	8am	MLB	1,500	
36	S.D. Centry Bike Tour	5/16/09	6am-6pm	Mira Costa College	1,250	
37	San Dieguito Heritage Museum BBQ	5/16/09	8am-5pm	450 Quail Gardens Dr.	350	
38	MLB Paddle & Swim	May 16-17, 2009	8am	MLB	300	
39	Encinitas Sprint Triathlon	5/17/09	6:45-10:30am	MLB	1,000	$300.00
40	K-5 Surf Classic	5/23/09	8am-5pm	D Street/MLB	100	
41	Law Enforcement Torch Run	6/3/09	6-9am	Coast Hwy 101	100	
42	Encinitas Environment Day	6/7/09	10am-4pm	Cottonwood Creek Park	1,300	
43	Pet Health Expo	6/7/09	8am-1pm	City Hall Courtyard	100	
44	Encinitas Classic Car Night	6/18/09	5:30-7:30pm	682 S Coast Hwy 101	1000	
45	A Day with Dad on the Trail	6/20/09	9am-12pm	Las Verdes Park	300	
46	5th Annual Switchfoot Bro-Am	6/26/09 & 6/27/09	7am-5pm	MLB	5,000	

Appendix C-6 Routine Municipal Inspection Summary FY 2008-09

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
1	**87880**	4/20/09	City of Encinitas Requeza yard		No Corrective Actions Required			
2	**87881**	4/20/09	City of Encinitas Public Works Yard		No Corrective Actions Required			
3	**87882**	4/20/09	City of Encinitas Wastewater Collections Facility		No Corrective Actions Required			
4	**87883**	4/20/09	City of Encinitas A Tank Site		Obtain spill kit, post spill response plan See Follow up work order 87884	NO. Completed: 4/21/2009		
5	**97021**	6/8/09	Oakcrest Park		Remove leaf debris from concrete swale and DI northeast of picnic area. Clean up Excel yard- remove nursery cans, excess unused items. See Follow up work order 97025	NO. Completed: 6/18/2009		
6	**97026**	6/3/09	Paul Ecke Sports Park		No Corrective Actions Required			
7	**97027**	6/8/09	Encinitas Viewpoint Park		No Corrective Actions Required			
8	**97028**	6/8/09	Leo Mullen Sports Park		No Corrective Actions Required			
9	**97029**	6/15/09	Las Verdes Park		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
10	**97031**	6/15/09	Scott Valley Park		No Corrective Actions Required			
11	**97033**	5/20/09	Cottonwood Creek Park		Sweep dumpster enclosure per Supervisor's directions. See Follow up work order 97037	NO. Completed: 6/10/2009		
12	**97067**	6/23/09	Hawkview Park		No Corrective Actions Required			
13	**97068**	6/23/09	Leucadia Oaks Park		No Corrective Actions Required			
14	**97069**	6/10/09	Cardiff Sports Park		No Corrective Actions Required			
15	**97070**	6/10/09	Cardiff S.P. Expansion		No Corrective Actions Required			
16	**97071**	6/3/09	Little Oaks Equestrian Parks		No Corrective Actions Required			
17	**97072**	6/3/09	Wiro Park		No Corrective Actions Required			
18	**97073**	6/3/09	Sun Vista Park		No Corrective Actions Required			
19	**97074**	6/17/09	Grandview Beach		No Corrective Actions Required			
20	**97075**	6/10/09	Glen Park		No Corrective Actions Required			
21	**97076**	6/10/09	Orpheus Park		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
22	**97077**	6/10/09	Leucadia Roadside Park		No Corrective Actions Required			
23	**97078**	6/11/09	Mildred Macpherson Park		No Corrective Actions Required			
24	**97079**	6/11/09	Swami's Beach		No Corrective Actions Required			
25	**97080**	6/16/09	Moonlight Beach		No Corrective Actions Required			
26	**97081**	6/16/09	J STreet Viewpoint		No Corrective Actions Required			
27	**97082**	6/16/09	H Street Viewpoint		No Corrective Actions Required			
28	**97083**	6/17/09	Beacon's Beach		No Corrective Actions Required			

Total Municipal Inspections: 28 **Total Follow ups: 3** **Total NOVs: 0**

Appendix C-6 Routine Municipal Inspection Summary

Appendix D

Industrial and Commercial

D-1 **Stationary Commercial Inventory**

D-2 **Industrial Inventory**

D-3 **Industrial Inspection Form**

D-4 **Commercial Inspection Form**

D-5 **Routine Inspections Summary Table**

D-6 **Mobile Commercial Inventory**

D-7 **Inspection Summary Triplicate Form**

No	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
1	Cardiff Animal Hospital	2159 San Elijo Ave		Animal	742	Veterinary care	no	Low
2	Companion Pet Care Professionals	1466 Encinitas Blvd		Animal	753	Pet grooming service	no	Low
3	D A W G S	379 Trailview Rd		Animal	753	Pet grooming service	no	Low
4	DEBORAH PTASHNE GROOMING	2013 San Elijo Ave		Animal	753	Pet grooming service	no	Low
5	Dove Hollow Farm	1084 Double Ll Ranch Rd		Animal	752	Horse training, boarding	no	Low
6	Drake Center for Animal Health	195 N El Camino Real		Animal	742	Veterinary care	no	Low
7	GRATEFUL DOG	802 N Coast Highway 101		Animal	753	Pet grooming service	no	Low
8	Holiday Pet Hotel	551 Union St		Animal	752	Pet boarding	no	Low
9	Horses and Moore Pet Care	1060 California St		Animal	752	Horse boarding	no	Low
10	Moonlight Pet Sitting	152 N Coast Highway 101	21	Animal	752	Pet boarding	no	Low
11	North Coast Equestrian Park	1877 Olivenhain Rd		Animal	752	Horse boarding and training	yes	High
12	Puppy Love Pet Grooming	191 N El Camino Real	211	Animal	753	Pet grooming service	no	Low
13	Rancho Los Amigos Equestrian Center	3049 Camino Del Rancho		Animal	752	Horse boarding and training	no	Low
14	Santa Fe Animal Clinic	301 Santa Fe Dr	A	Animal	742	Veterinary care	no	Low
15	SIT AND STAY AWHILE PET CARE	251 Calle De Madera		Animal	742	Veterinary care	no	Low
16	Sunnybrook Farm Holistic Pet Care	812 Bracero Rd		Animal	752	Pet boarding	no	Low
17	SWEET PANDA PET CARE	1786 N Coast Highway 101	11	Animal	752	Pet boarding	no	Low
18	Sylvia's In-Home Pet Sitting	2210 Encinitas Blvd	W	Animal	752	Pet boarding	no	Low
19	The Animal Keeper	155 Saxony		Animal	752	Pet boarding	no	High
20	The Contented K-9	1711 Old Mill Ct		Animal	753	Pet grooming service	no	Low
21	The Pet Pals	3250 Country Rose Cir		Animal	753	Pet grooming service	no	Low
22	Underwater Environments	442 Rancho Santa Fe Rd		Animal	5999	Pet sales	no	Low
23	V C A North Coast Animal Hospital	414 Encinitas Blvd		Animal	742	Veterinary care	no	Low
24	Bradley Allen Auto Body	204 N Coast Highway 101		Auto Body Repair/Painting	7532	Auto body repair	no	High
25	California Body & Paint	320 N El Camino Real	F	Auto Body Repair/Painting	7532	Auto body repair	no	Low
26	Custom Cycle Creations, Inc.	304 N El Camino Real	B	Auto Body Repair/Painting	7549	Installation of interior auto parts	no	Low
27	Ding King	591 Westlake St	D	Auto Body Repair/Painting	7532	Auto body repair	no	Low
28	Fender Mender	326 N El Camino Real		Auto Body Repair/Painting	7532	Auto body repair	no	High
29	First Mission Auto Body Repair	339 N El Camino Real	B	Auto Body Repair/Painting	7532	Auto body repair	no	Low
30	Rancho Auto Body	591 Westlake St	A	Auto Body Repair/Painting	7532	Auto body repair	no	Low
31	S & Brothers Inc. Auto Upholstery	322 N El Camino Real	F	Auto Body Repair/Painting	7532	Auto upholstery repair	no	Low
32	SoCal Custom	328 N El Camino Real		Auto Body Repair/Painting	7532	Auto body repair	no	low
33	World Auto Body	140 N Coast Highway 101		Auto Body Repair/Painting	7532	Auto body repair	no	High
34	A+ Test Only Center	449 Second St		Auto Other	7549	Auto diagnostic testing center	no	Low
35	Encinitas Smog Test Only Ctr	682 S Coast Highway 101		Auto Other	7549	Auto diagnostic testing center	no	Low
36	FIC Smog	322 N El Camino Real	C	Auto Other	7549	Auto diagnostic testing center	no	Low
37	Johnathan Davis	543 Encinitas Blvd	121	Auto Other	557	Motorcycle parts retail	no	Low
38	Moonlight Auto Sales	140 N Coast Highway 101	C	Auto Other	5521	Motor vehicle dealer	no	Low
39	Road One	1205 S Coast Highway 101		Auto Other	7549	Auto towing and storage of towed cars	no	Low
40	SandToyZ 4 Less, Inc.	184 N Coast Highway 101		Auto Other	5521	Motor vehicle dealer	no	Low
41	Toolshed Equipment Rental/Rebel Rents	1900 N Coast Highway 101	A	Auto Other	7359	Equipment rental	no	High
42	Ace Cars & Vans	1244 N Coast Highway 101		Auto Repair/Maintenance	7514	Auto rental, car washing	no	Low
43	All Car CTR	140 N Coast Highway 101	Rear	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
44	Auto Zone	120 Leucadia Blvd		Auto Repair/Maintenance	5103	Auto parts supply used oil and used battery collection	no	Low
45	Boone & Associates	215 W G St		Auto Repair/Maintenance	5103	Auto repair and maintenance		Low
46	Brad's Foreign & Domestic	565 Westlake St	200C	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
47	CALIFORNIA ROVER	386 Encinitas Blvd		Auto Repair/Maintenance	7538	Auto sales and maintenance	no	Low
48	Cardiff Classic	1049 S Coast Highway 101		Auto Repair/Maintenance	7549	Auto sales and cleaning	no	Low
49	Charlie's Foreign Car	751 Second St		Auto Repair/Maintenance	7538	Auto sales and maintenance	no	High

Note: All facilities are in the Carlsbad Watershed.

No	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
50	Coast Brake & Wheel	444 S Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
51	Coastal Foreign Auto	320 N El Camino Real	A	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
52	Dan's Precision Alignment	565 Westlake St	200F	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
53	Dave's Automotive Services	591 Westlake St	E	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
54	Definitive Mobile Audio (DMA)	126 A St		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
55	DISCOUNT AUTO	710 S Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
56	Discount Tire	107 N El Camino Real	A	Auto Repair/Maintenance	5103	Auto repair and maintenance	no	Low
57	El Camino Tire & Brake	330 N El Camino Real		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
58	Encinitas Automotive Repair	322 N El Camino Real	A	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
59	Encinitas Car Wash	293 N El Camino Real		Auto Repair/Maintenance	7542	Car wash	no	Low
60	Encinitas Ford	1424 Encinitas Blvd		Auto Repair/Maintenance	7538	Auto sales, repair and cleaning	no	Low
61	ENCINITAS FOREIGN AUTO	901 Second St		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
62	Encinitas Japanese Car Specialists	328 N El Camino Real	A	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
63	FURGERSONS GARAGE	807 Second St		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
64	HAPPY AUTO SALES	148 N Coast Highway 101		Auto Repair/Maintenance	5511	Auto sales and cleaning	no	Low
65	Harloff BMW	1302 Encinitas Blvd		Auto Repair/Maintenance	5511	Auto sales, repair and cleaning	no	High
66	Harris Radiator	274 N Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
67	HUGO'S EUROPEAN CAR SERVICE	110 N Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
68	Instant Oil Change	127 S El Camino Real	A	Auto Repair/Maintenance	7549	Lubrication service	no	Low
69	JIFFY LUBE	221 N El Camino Real		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
70	K & B Auto Service & Repair	320 N El Camino Real	D	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
71	Kragen Auto Parts	180 N El Camino Real		Auto Repair/Maintenance	5103	Auto parts	no	Low
72	Midas Mufflers	328 N El Camino Real	C	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
73	Miller Tire	759 Munevar Rd		Auto Repair/Maintenance	5103	Auto parts, minor maintenance	no	Low
74	Moonlight Motors	215 Melrose Ave		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	High
75	Napa Auto Parts	523 Encinitas Blvd	100	Auto Repair/Maintenance	5103	Auto parts, used battery and used oil collection	no	Low
76	North County Jet Ski	111 C St		Auto Repair/Maintenance	5511	Personal watercraft sales and repair	no	Low
77	Olson's Hand Car Wash	127 S El Camino Real	B	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
78	Paul's Auto Electric	325 Melrose Ave		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
79	Pep Boys Manny Moe & Jack	256 N El Camino Real		Auto Repair/Maintenance	5103	Auto parts sales and used battery and used oil collection	no	Low
80	Precision Tune	318 N El Camino Real	A	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
81	Ray's Automotive	1051 South Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
82	Scott's Automotive	1508 N Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	High
83	Softspra Carwash	790 S Coast Highway 101		Auto Repair/Maintenance	7542	Car wash	no	Low
84	Speedy Tune & Brake	225 N El Camino Real		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
85	Suspension Plus	322 N El Camino Real	D	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
86	Swami's Automotive Repair	320 N El Camino Real	C	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
87	Transmasters Transmissions	184 N Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
88	Quail Botanical Gardens	230 Quail Gardens Dr		Botanical Garden	5361	Retail garden	no	Low
89	Home Depot	1001 N El Camino Real		Building Material	5211	Retail lumber, brick, paint, and other building supplies	no	High
90	101 Diner, The	552 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
91	1st Street Bar	656 S Coast Highway 101		Eating/Drinking Establishment	5813	Sells prepared drink for consumption on site	no	Low
92	7- Eleven 18087/Moonlight Partners Inc.	105 W D St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
93	7-11	1446 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
94	7-Eleven	2240 Encinitas Blvd	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
95	7-Eleven Food Store	592 Santa Fe Dr		Eating/Drinking Establishment	5541	Gas station, food store	no	High
96	A & M Investment/ Dba East Coast Pizza	2015 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
97	Amici Bakery	564 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
98	Angelo's Burgers	608 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High

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No	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
99	Auggies House of Crab	1468 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
100	Baja Fresh	194 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
101	Bar Leucadian	1542 N Coast Highway 101		Eating/Drinking Establishment	5813	Sells prepared drink for consumption on site	no	Low
102	Baskin Robbins	441 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
103	Beach City Cafe	102 Aberdeen Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
104	Beach Grass Cafe	1476 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
105	Beach House Restaurant	2530 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
106	Beach Tea House	1076 N Coast Highway 101	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
107	Beachside Bar and Grill	806 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
108	Bety's Mexican Restaurant	1464 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
109	Bird House Grill	250 N Coast Highway 101	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
110	Blue Fin Sushi	257 N El Camino Real	D	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
111	Borelli's Restaurant	285 N El Camino Real	106	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
112	Boscinitas, Inc. (Boston's)	294 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
113	Bretts B B Q	1505 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site		High
114	Bubby's	937 S Coast Highway 101	106	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
115	Calypso Cafe	576 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
116	Captain Keno's	158 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
117	Cardiff Seaside Market	2087 San Elijo Ave		Eating/Drinking Establishment	5411	Grocery store	no	Low
118	Carl's Jr. #181	1137 Regal Rd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
119	Champagne Bakery	162 S Rancho Santa Fe Rd	E10	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
120	Chart House, The	2588 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
121	Chick's Natural	191 N El Camino Real	107	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
122	Chili's Bar & Grill	1004 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
123	Chinatown Restaurant	118 Leucadia Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
124	Chin's Restaurant	625 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
125	Chipotle	268 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
126	Chuao Chocolatier	937 S Coast Highway 101	C109	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site		Low
127	Cicciotti's Trattoria Italiana	1933 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
128	Coco's #881	407 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
129	D Street Bar & Grill	485 S Coast Highway 101		Eating/Drinking Establishment	5813	Sells prepared drink for consumption on site	no	High
130	Dairy Queen	1465 Encinitas Blvd	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
131	DALEY DOUBLE	546 S Coast Highway 101		Eating/Drinking Establishment	5813	Sells prepared drink for consumption on site	no	Low
132	Daphne's Greek Cafe	130 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
133	Del Taco	130 Calle Magdalena		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
134	Denny's Restaurant	135 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
135	Dippin Dots	260 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
136	Dollshie Coffee	345 S Coast Highway 101	O-2	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
137	Domino's Pizza	1458 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
138	Duke's Bar	107 Diana St		Eating/Drinking Establishment	5813	Sells prepared drink for consumption on site	no	Low
139	E St Cafe	128 W E St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
140	Einstein Brothers Bagels	1006 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
141	El Callejon	345 S Coast Highway 101	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
142	El Nopalito	560 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
143	El Pollo Loco	1002 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
144	El Torito Market	948 N Coast Highway 101	C	Eating/Drinking Establishment	5411	Grocery store	no	High
145	El Torito Restaurant	1068 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
146	Encinitas Cafe	531 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
147	Encinitas Donut Shop	580 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low

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No	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
148	Encinitas Ranch Cafe & Golf School	1275 Quail Gardens Drive		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
149	Encinitas Swirls, Inc.	204 N El Camino Real	G	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
150	Encinitas Yogurt & Ice Cream	1070 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
151	Filiberto's Mexican Food	476 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
152	Firefly Grill & Wine Bar	251 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
153	FIRENZE TRATTORIA	162 S Rancho Santa Fe Rd	G10	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
154	Flippin Pizza, New York Style	215 S El Camino Real	H	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
155	French Pastry Cafe	127 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
156	Fulanos	145 Leucadia Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
157	Garden State Bagels	191 N El Camino Real	106	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
158	Giovanni's Sandwich Shop	764 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
159	Golden Baked Hams	114 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
160	Greek American Family Restaurant	392 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
161	Gusto Trattoria	429 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
162	Harvest Ranch Market	162 S Rancho Santa Fe Rd	E50	Eating/Drinking Establishment	5411	Grocery store	no	Low
163	HENRYS FARMERS MARKET	1327 Encinitas Blvd		Eating/Drinking Establishment	5411	Grocery store	no	Low
164	Honey Baked Ham	459 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
165	Honey's Bistro & Bakery	632 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
166	Island Brother's Teriyaki	274 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
167	Islands	1588 Leucadia Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
168	Its A Grind Coffee House	1920 Paxton Way	H	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
169	J. S. Foods/Dba Burger King	242 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
170	Jack In The Box	1439 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
171	Jam Roc 101	101 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
172	Jamba Juice	272 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
173	Java Express	325 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
174	Jorge's Mexicatessan	267 N El Camino Real	E	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
175	Jorge's Mexicatessen	417 Santa Fe Dr	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
176	Juanita's Taco Shop	290 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
177	Juice N Java	168 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
178	Juice Stop	1042 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
179	Just Peachy	1354 N Coast Highway 101		Eating/Drinking Establishment	5411	Grocery store	no	High
180	K C'S Tandoor	1070 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
181	Kaito Restaurant	130 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
182	Karina's Taco Shop	916 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
183	Kealani's	137 W D St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
184	Kentucky Fried Chicken	266 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
185	Kim's Vietnamese & Chinese Restaurant	745 S Coast Highway 101	103	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
186	Ki's Juice Bar	2591 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
187	Kona Coffee Hut	230 Quail Gardens Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
188	Kotija Jr. Taco Shop	852 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
189	Kraken	2531 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
190	L & L Hawaiian Barbeque Encinitas	215 S El Camino Real	G	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
191	LA BONNE BOUFFE	471 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
192	La Especial Norte	664 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
193	La Salsa Fresh Mexican Grill	219 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
194	Las Olas	2655 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
195	Le Petite Calypso	1002 N Coast Highway 101	2	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
196	Leucadia Donut Shop	1604 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low

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No	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
197	Leucadia Pizzeria	315 S Coast Highway 101	V	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
198	Leucadia Sushi Bar	996 N Coast Highway 101	D	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
199	Lil Jungle Java	1500 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
200	LITTLE CAESARS PIZZA	118 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
201	Little Moore, A	1030 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
202	Lumberyard Tavern & Grill	967 S Coast Highway 101	101	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
203	LUXUS 101 - BISTRO GRILL	1044 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
204	Mama Lulu's Pizza and Pasta	191 N El Camino Real	110	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
205	MANDARIN CITY	815 Birmingham Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
206	Mandarin Oriental	1337 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
207	Manhattan Pizza	143 W D St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
208	Mc Donald's	1271 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
209	McDonald's	1064 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
210	Mexico Viejo	1465 Encinitas Blvd	E	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
211	Mister Sushi	111 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
212	Miyabi's Japanese Restaurant	211 S El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
213	Moonlight Grille	190 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
214	Moonlight Snack Shack	400 B St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
215	Mozy	698 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
216	Mr. Peabody's Steakhouse	136 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
217	Nfarooqi Enterprises, L L C	1967 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
218	Noodles & Company	260 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
219	Nrgize Lifestyle Cafe	201 S El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
220	Ogata Japanese Cuisine	615 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
221	Oggis Pizza & Brew	305 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
222	One Sweet World, L L C (Besta Wan)	148 Aberdeen Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
223	PACIFIC Q BILLARDS, INC.	1454 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
224	Panda Express	1084 N El Camino Real	E	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
225	Pannikin Coffee & Tea	510 N Coast Highway 101	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
226	Papa John's Pizza #1596	337 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
227	Papa Toni's Pizza	554 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
228	Passage to India	257 N El Camino Real	K	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
229	Pasta Bravo	1042 N El Camino Real	J05	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
230	Pei Wei Asian Diner	1560 Leucadia Blvd	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
231	Pick Up Stix	127 N El Camino Real	H	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
232	Pipes	121 Liverpool Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
233	Pizza Hut	127 N El Camino Real	G	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
234	Pizzicato Gourmet Pizza (Hopuluvgarlic)	252 N El Camino Real	5	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
235	Potato Shack Cafe	120 W I St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
236	Premier Food Services at MiraCosta College	3333 Manchester Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
237	Quick Fix	552 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
238	QUICKIE FOOD STORE	233 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site		Low
239	Quizno's Classic Subs	337 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
240	Quizno's Subs	1042 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
241	R M C, L L C	2031 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
242	Ralphs	125 N El Camino Real		Eating/Drinking Establishment	5411	Grocery store	no	High
243	Raul's Taco Shop	490 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
244	REDBOX (Albertsons)	134 N El Camino Real		Eating/Drinking Establishment	5411	Grocery store	no	Low
245	Rico's Taco Shop	165 S El Camino Real	L	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low

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No	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
246	Rite Aid	439 Santa Fe Dr		Eating/Drinking Establishment	5411	Grocery store	no	Low
247	Robbie's Ristorante & Pizzaria	534 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
248	Robbie's Road House Grill	530 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
249	Roberto's Mexican Food	1900 N Coast Highway 101	D	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
250	Roberto's Taco Shop	274 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
251	Round Table Pizza	1321 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
252	Roxy Restaurant	517 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
253	Rubio's	252 N El Camino Real	4	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
254	Russo's Pasta Shop	270 N El Camino Real	I	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
255	Sage Grill	1506 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
256	Sake House	1246 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
257	Sakura-Bana Sushi Bar	1031 S Coast Highway 101	101	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
258	Sandwich Station	218 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
259	Santa Fe Cafe	120 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
260	Santa Fe Cafe	445 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
261	Savory Restaurant	267 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
262	Scripps Memorial Hospital	354 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
263	Siamese Basil Restaurant	527 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
264	Siilk Asian Tapas	288 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
265	Smart & Final	150 Encinitas Blvd		Eating/Drinking Establishment	5411	Grocery store	no	High
266	St Germain's Cafe	1010 S Coast Highway 101	112	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
267	St Tropez Bakery & Bistro	947 S Coast Highway 101	D103	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
268	Starbuck's Coffee	947 S Coast Highway 101	D101	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
269	Starbuck's Coffee	258 N El Camino Real	B2	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
270	Starbuck's Coffee	1040 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
271	Starbuck's Coffee	1560 Leucadia Blvd	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
272	Stater Brothers	1048 N El Camino Real		Eating/Drinking Establishment	5411	Grocery store	no	Low
273	Sub Palace	810 N Coast Highway 101	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
274	Subman	113 N El Camino Real	E	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
275	SubMania	1514 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
276	Subway	765 S Coast Highway 101	104	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
277	Subway	2105 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
278	Subway #27567	1560 Leucadia Blvd	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
279	Subway Sandwiches & Salads	272 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
280	Sunny Sub., L L C	252 N El Camino Real	1	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
281	Super Donut #2	252 N El Camino Real	2	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
282	Super Donuts #1	465 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
283	Surf Dog Records	1126 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
284	Sushi House	214 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
285	Swami's Cafe	1163 South Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
286	T M P Restaurant Group, L L C	162 S Rancho Santa Fe Rd	C10	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
287	Taco Bell #25497	1502 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
288	TARGET T - 1029	1010 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
289	Tastes Group, L L C	641 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
290	Thai Pan Express	138 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
291	The 3rd Corner Wine Shop & Bistro	897 S Coast Highway 101	F104	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
292	The Bullpen	149 S El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
293	The Greenery Raw Food Cafe	133 Daphne Avenue		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
294	The Original Pancake House	160 S Rancho Santa Fe Rd	D10	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low

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295	The Quick Fix	144 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
296	Todays Pizza	481 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
297	TOK Subs, Inc. aka Subway	138 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
298	Tomiko	87 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
299	Trader Joe's	115 N El Camino Real		Eating/Drinking Establishment	5411	Grocery store	no	Low
300	Trattoria	2171 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
301	Trattoria I Trulli	830 S Coast Highway 101	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
302	Treats By Teresa	1277 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
303	Tuscan Sun Italian Deli	1070 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
304	VG Donuts & Bakery	106 Aberdeen Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
305	Via Italia	565 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
306	Vigilucci's	505 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
307	Von's Grocery	262 N El Camino Real		Eating/Drinking Establishment	5411	Grocery store	no	High
308	Von's Grocery	453 Santa Fe Dr		Eating/Drinking Establishment	5411	Grocery store	no	Low
309	Wahoo's Fish Tacos	1006 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
310	Wendy's Hamburgers	102 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
311	When In Rome	1108 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
312	Wine Steals	1953 San Elijo Avenue	100	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
313	Yogi's Sports Bar & Restaurant	2633 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
314	Zi Bibbo	1560 Leucadia Blvd	E	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
315	7-Eleven Food Store	2211 San Elijo Ave		Gas Station	5812	Sells prepared food for consumption on site	no	High
316	7-Eleven Store, #13627D-2111	102 Leucadia Blvd		Gas Station	5541	Gas station, food store	no	High
317	7-Eleven Store, #24335D-2111	1988 Village Park Way		Gas Station	5541	Gas station, food store	no	Low
318	AM/PM Gas Station	1580 Leucadia Blvd		Gas Station	5541	Gas station	no	Low
319	Cardiff 76	3085 Manchester Ave		Gas Station	5541	Gas station	yes	High
320	Chevron Encinitas	350 Encinitas Blvd		Gas Station	5541	Gas station	no	High
321	Chevron Food Mart	805 Birmingham Dr		Gas Station	5541	Gas station, food store	no	Low
322	Chevron Station #1943	540 La Costa Ave		Gas Station	5541	Gas station	no	High
323	DREAM PETROLEUM, INC. (ARCO 9598)	633 Birmingham Dr		Gas Station	5541	Gas station	no	Low
324	Encinitas Gas	310 Encinitas Blvd		Gas Station	5541	Gas station	no	Low
325	Leucadia Shell	865 Orpheus Ave		Gas Station	5541	Gas station, service station	no	Low
326	Rosano's Unocal 76	236 N El Camino Real		Gas Station	5541	Gas station	no	Low
327	SEASIDE AUTOHAUS (Cardiff Valero)	820 Birmingham Dr		Gas Station	5541	Gas station	no	High
328	Shell Oil	160 Encinitas Blvd		Gas Station	5541	Gas station, car wash	yes	High
329	Shell Oil Company	1060 N El Camino Real		Gas Station	5541	Gas station	no	Low
330	Shell Station	1355 Encinitas Blvd		Gas Station	5541	Gas station	no	High
331	Valero Of Encinitas	325 Encinitas Blvd		Gas Station	5541	Gas station	no	High
332	Encinitas Ranch - Golf Building	1253 Paseo De Las Flores		Golf Course	7997	Golf Course	yes	High
333	Lui Delgado Landscaping and Tierra Verde	1545 Lake Dr		Landscaping	782	Lawn and garden services, turf installation, garden planting	no	High
334	Mark Lanager Masonry & Landscaping	1310 Summit Ave		Masonry	1741	Masonry work, stone setting, garden planting.	no	High
335	RCP Block Company	577 N Vulcan Ave		Masonry	5211	Sales of brick, rock and other masonry supplies.	no	High
336	A & M Farms	1534 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
337	Able's Flowers	710 Clark Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
338	Ades & Gish Nurseries - Growers	1150 Melba Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
339	Ades & Gish Nurseries - Growers	1492 Hymettus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
340	Anderson, H Greenhouse	375 La Costa Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
341	Andy's Orchids	734 Ocean View Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
342	Armstrong Garden Center	701 N El Camino Real		Nursery	5193	Production of ornamental plants, nursery products	no	Low
343	Barrels & Branches	1452 Santa Fe Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low

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344	Basil Tops	1425 Rubenstein Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
345	Bird Rock Tropicals	221 Princehouse Ln		Nursery	5193	Production of ornamental plants, nursery products	no	Low
346	Browns Plants Inc- Growers	1515 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
347	Byer, Richard- Growers	1731 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
348	C M A Growers- Growers	1254 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
349	CAL GRO (Expo Plant Service)	710 Clark Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
350	Cal Pacific Orchid Farm	1122 Orpheus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
351	Cardiff Palm Tree 2	333 Liszt Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
352	Cardiff/California Greenhouses	1753 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
353	Chino Greenhouses	1168 & 1253 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
354	Cordova Gardens	902 Encinitas Blvd	A	Nursery	5193	Production of ornamental plants, nursery products	no	Low
355	Cordova, Joe- Growers	720 Balour Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
356	Cosgrove Cymbidium Co- Growers	1200 Saxony Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
357	D. Ades Investment Corporation	875 Balour Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
358	Daniel Mojonnier	912 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
359	Davis, Eric- Growers	752 Bracero Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
360	Divine Orchids	1015 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
361	DONS FLOWERS	924 Bracero Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
362	Dramm & Echter	1150 Quail Gardens Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
363	Ecke, Paul Ranch	Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
364	EMERALD M. GROWERS, INC.	834 Leucadia Blvd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
365	Encinitas Green Houses - Nursery	351 Union St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
366	Erhardt's Tropicals (Morales Romero)	805 Bracero Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
367	ERIN VOLPI	887 Brittany Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
368	ERWIN MOJONNIER ENT.	2009 Sheridan Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
369	Erwin Mojonnier Enterprises- Growers	679 Camino El Dorado		Nursery	5193	Production of ornamental plants, nursery products	no	Low
370	Fiesta Flowers, L L C	335 Santa Fe Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
371	Flowers of La Costa	1911 Saxony Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
372	Franco's Flowers Inc- Growers	842 Leucadia Blvd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
373	Gill, Padam- Growers	754 Bonita Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
374	Gish Foliage	1255 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
375	Glover, A T- Growers	571 Union St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
376	Granite Homes Requeza LLC- Growers	843 Requeza St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
377	GREENS & THINGS, INC.	950 Brittany Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
378	Groot, Dana- Growers	603 Union St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
379	Hydro Scape Products, Inc	750 S Coast Highway 101		Nursery	5193	Production of ornamental plants, nursery products	no	High
380	Islas Jose L- Growers	231 La Costa Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
381	Ito Kiyoko- Growers	936 Eolus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
382	J & S Green Houses	748 Requeza St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
383	Jose Louis Islas	514 La Costa Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
384	L & E Greenhouses/G&J Plants	712 Clark Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
385	La Costa Farms	1911 Saxony Road		Nursery	5193	Production of ornamental plants, nursery products	no	Low
386	La Costa Flower Shop/Nursery (Gish Foliage)	1245 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
387	LEUCADIA GROWERS	940 Orpheus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
388	Leucadia Orchids	1660 Burgundy Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
389	Lois' Flowers	1195 Cardiff Dr & 1616 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
390	Lopez Flowers	440 Saxony Rd		Nursery	5193	Production of ornamental plants, nursery products	no	High
391	Maldonado Growers	1412 Mackinnon Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
392	Manatee Inc- Growers	1500 Somerset Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low

Note: All facilities are in the Carlsbad Watershed.

No	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
393	May Greenhouse Inc	241 Andrew Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
394	May Greenhouses, Inc- Growers	2021 Sheridan Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
395	Miquel Estevez Flowers	708 Del Rio Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
396	Native Sons Nursery	631 Orpheus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
397	O&J Growers	1313 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
398	Orchid Barron	804 Cathy Ln		Nursery	5193	Production of ornamental plants, nursery products	no	Low
399	Orchid Place	829 Bracero Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
400	Owens, Mark N- Growers	1073 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
401	Pacific Verde Nursery	556 Union St		Nursery	5193	Production of ornamental plants, nursery products	no	High
402	Pacifica Flowers	510 La Costa Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
403	Payne, Parry- Growers	1231 Birmingham Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
404	Quezada, Teresa A- Growers	1190 Island View Ln		Nursery	5193	Production of ornamental plants, nursery products	no	Low
405	R & L Sky Blue Inc. - Nursery	598 Park Ln		Nursery	5193	Production of ornamental plants, nursery products	no	Low
406	Rancho Uribe	1616 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
407	Seaside Farms- Growers	754 Plato Pl		Nursery	5193	Production of ornamental plants, nursery products	no	Low
408	Secret Garden	1236 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
409	Seedling Express	1698 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
410	Seedling Express	440 Saxony Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
411	Self-realization Fellowship - Growers	1177 Cornish Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
412	Skopec, Frank- Growers	1381 Summit Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
413	Speciman House	782 Leucadia Blvd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
414	Speert, Ellen- Growers	1905 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
415	Staver, Dan- Growers	1586 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
416	Tayama Greenhouse	710 Requeza St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
417	The Palm Source- Growers	1329 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
418	The Plantri - Nursery	921 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
419	Tinney, Brooke- Growers	1674 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
420	Tom, Gim- Growers	3107 Manchester Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
421	Tverdoch, R- Growers	898 Hymettus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
422	Twigs By Teri	155 Quail Gardens Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
423	W.F. Muhlethaler - Nursery	350 Seeman Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
424	Walt Hoehn	1752 Eolus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
425	Weidner's Gardens	860 Eolus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
426	Weidners' Gardens	695 Normandy Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
427	Weidner's Gardens- Growers	850 Normandy Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
428	Wilkens Palm Tree Nursery	1450 Mackinnon Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
429	Williamson's Produce	3111 Manchester Ave		Nursery	5193	Production of ornamental plants, nursery products	yes	High
430	Wilma Romero - Nursery	870 Devonshire Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
431	Zalinda Farms - Growers	501 Ocean Bluff Way		Nursery	5193	Production of ornamental plants, nursery products	no	Low
432	Frazee Paint	270 N El Camino Real	B	Painting	5231	Retail paint and other liquid building products	no	Low
433	The Sherwin-Williams Company #8557	208 N El Camino Real		Painting	5231	Retail paint and other liquid building products	no	Low
434	Vista Paint Corporation	133 N El Camino Real		Painting	5231	Retail paint and other liquid building products	no	Low
435	Del Rancho Pools	1315 Encinitas Blvd		Pool	1799	Pool supply	no	Low
436	Leslie's Pool Supply	270 N El Camino Real	G	Pool	1799	Pool supply	no	Low

Note: All facilities are in the Carlsbad Watershed.

No	Name	Address	Type	SIC	Description	Tributary	Priority
1	San Dieguito Union High School District Transportation Cooperative	1142 Bonita Dr	Vehicle Storage	4151	Vehicle storage and transportation services for students	no	High
2	San Elijo Water Pollution Control Facility	2695 Manchester Ave	Wastewater Treatment	9511	Treatment of wastewater for use a recycled water	no	High
3	Encinitas Landfill*	2099 Encinitas Blvd	Closed Landfill	4953	Closed solid waste collection facility	no	NA

*The Encinitas Landfill is regulated and inspected by the County of San Diego.
**All sites are in the Carlsbad Watershed.

Appendix D-3

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION FORM

CLEAN WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Inspector Name _____

Date____/____/_____Time_____AM / PM Type of Inspection: ☐ Routine ☐ Follow-up ☐ Complaint Investigation

A. CONTACT INFORMATION

Business Name_____

Street Address_____ Mailing Address_____

Email _____ _____

Responsible Person(s)_____ Property Manager_____

Business Phone # **(**_____**)** _____ **-** _____ext._____ Property Manager's #_____

Business Fax # **(**_____**)** _____ **-** _____ APN Number _____

B. FACILITY/SITE INFORMATION

Principal activity:_____

SIC Code(s)_____

Does SIC Code best represent principal activity: ☐ Yes ☐ No

What is recommended SIC Code(s)?_____ New JURMP Classification?_____

Does facility have a current Encinitas business certificate? ☐ Yes ☐ No #_____Exp._____

Is this facility currently listed in the City of Encinitas JURMP Inspection List? ☐ Yes ☐ No ☐ Unknown

Is facility subject to CA Statewide General Industrial Permit? ☐ Yes ☐ No

If yes, has facility filed a Notice of Intent (NOI) to comply? ☐ Yes ☐ No WDID #_____

If no, does facility have No Exposure Certification (NEC)? ☐ Yes ☐ No

Does facility maintain SWPPP or BMP Plan? ☐ Yes ☐ No

Does facility have a map/sketch of the site with flow lines and storm drains? ☐ Yes ☐ No

Has facility conducted previous storm water monitoring programs? ☐ Yes ☐ No

C. INITIAL OBSERVATIONS

Nearest conveyances or water bodies: _____

Approximate distance to water bodies: ☐ < 200 ft. ☐ 200 – 1000 ft. ☐ > 1000 ft.

Sensitivity of receiving waters: ☐ Sensitive (ESA, 303(d), or other) ☐ Non-sensitive

Discharge points along perimeter: _____

_____

Discharge observed: ☐ Yes ☐ No

If yes, describe: _____

Approximate area covered by industrial or commercial activities:_____square feet

Approximate % impervious surface of this area_____%

Exposed areas of intensive outdoor activity: _____

D. BMP ASSESSMENT

D.1 General

BMPs	N/A	Yes	No	Comments
1. Is the site free of litter and debris?				
2. Are discharge locations free of sediment and debris?				
3. Are parking lots, sidewalks and streets free of sediment and debris?				
4. Is pressure washing of parking lots or sidewalks conducted at the facility?				
a. If yes, is wash water captured?				
b. Please provide contact name and phone number info for pressure washing company.				
5. Are roof downspouts directed away from areas of potential pollutants?				
6. How many employees do you have? Are employees trained in storm water management? If so, provide a list of employees who have participated.				
D.2 Landscaping				
7. Are adequate erosion prevention measures employed? (vegetation or physical stabilization)				
8. Are irrigation systems programmed to minimize over-watering and runoff?				
9. Is reclaimed water used for irrigation?				
10. Are stockpiles of soil or landscape waste equipped to prevent runoff transport?				
D.3 Materials and Wastes				
11. Are adequate trash containers provided?				
12. Are adequate recycling containers provided?				
13. Is the trash/recycling area enclosed and free of litter and debris?				
14. Is timely service and removal provided to prevent waste containers and sanitary facilities from overflowing?				
15. Are outdoor material storage areas adequate (covered area with secondary containment)?				
16. Are outdoor storage containers properly labeled?				
17. Is there an accessible spill response kit?				
18. Is there a spill response plan? If so, please provide to inspector.				
19. Are storage tanks equipped with secondary containment?				
20. Is secondary containment free of spills and rainwater?				
21. Are loading and unloading areas free of spills and debris?				
D.4 Equipment and Vehicles				
22. Are exposed parking areas free of significant spills and leaks?				
23. Are heavy equipment and vehicles stored in garages or under canopies?				
24. Are vehicle maintenance activities conducted within contained areas (garage, canopy, work shop)?				
25. Are vehicle-fueling areas covered and are storm drain inlets protected from spills and leaks?				

BMPs	N/A	Yes	No	Comments
26. Is vehicle washing preformed in a contained area where runoff does not enter the MS4?				
D.5 Food Establishments N/A ☐				
27. Does facility have a grease trap or grease interceptor?				
28. Who maintains the grease trap? Company Name: Phone #				
29. When was the last time the grease trap was maintained? _____ (Please provide copy of invoice)				
30. Where is the grease trap located? ☐ Under the sink ☐ Outside ☐ Other _____				
31. How many grease fryers are at the facility? _____				
32. About how often is fryer oil replaced? ☐ Weekly ☐ Monthly ☐ Every 6 months ☐ Annually ☐ Other_____				
33. How is used oil disposed of? ☐ Outside rendering service ☐ Sanitary sewer/sink ☐ Other:_____				
Company Name: Phone #				
34. Do oil-recycling/grease bins have overhead coverage?				
35. Do oil-recycling/grease bins have secondary containment?				
36. Are deep fryer oil-recycling drums stored properly?				
37. At what time is restaurant cleaning performed? _____				
38. Are biodegradable soaps used for cleaning activities?				
39. How are kitchen floor mats cleaned? ☐ Hose off outside ☐ Clean inside (mop sink) ☐ Cleaning Service ☐ Other:_____				
40. Where is used cleaning water discharged? _____				
41. Does the restaurant hose off the site (parking lot, back lot, etc.)? If so, how often?				
42. Are storm drain inlets free of grease and other food debris?				
D.6 Non-Storm Water Management				
43. Is the site free of evidence of illicit connections and illegal discharges?				
44. Is the site free of evidence of unauthorized releases to storm drains?				
45. If not, have the appropriate authorities been notified?				
D.7 Commercial Nurseries N/A ☐				
46. Does nursery minimize water use and runoff during irrigation? What type of irrigation is used?				
47. Does nursery use controlled release fertilizers or other conservative fertilizing practices?				
48. Does nursery implement integrated pest management techniques to prevent pesticide pollution?				
D.8 Other				
49. Are there any other potential storm water pollution issues or concerns? If yes, explain below.				
50. Are all applicable activity-specific BMPs from Appendix C of the JURMP being implemented?				
51. Are there any structural BMPs on or near the site? If so, how often are they maintained? Provide maintenance records.				

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION SUMMARY

FACILITY: _____ DATE: _____

E. VIOLATIONS

- ☐ No violations have been noted at this time
- ☐ No violations have been noted, but required corrective actions are described below.
- ☐ Violation of storm water ordinance or other applicable regulations were found.
  (Attach Copy of NOV or Administrative Citation)

F. CORRECTIVE ACTIONS

Is corrective action needed? ☐ Yes ☐ No

As per Encinitas Municipal Code Section 20.08.110, the following corrective actions must be implemented. Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

1 _____

2 _____

3 _____

4 _____

5 _____

Owner/operator has been notified of corrective actions both verbally and by: ☐ Photocopy ☐ Fax ☐ Mail

G. Describe informational, educational or BMP information distributed: ☐ City of Encinitas Restaurant Brochure English/Spanish, ☐ County of San Diego-What's Cooking Guide English/Spanish, ☐ City of Encinitas Automotive Brochure English/Spanish, ☐ City of Encinitas Yard and Garden, ☐ County of San Diego-Green Wrench Guide English/Spanish.
OTHER: _____

H. FOLLOW UP INSPECTION? YES or NO (CIRCLE ONE) DATE: _____

COMMENTS_____
_____
_____

INSPECTOR NAME_____ **FACILITY CONTACT NAME (PRINT)** _____

INSPECTOR SIGNATURE _____ **FACILITY CONTACT SIGNATURE** _____

DATE _____ **DATE** _____

I. RECOMMENDED CITY ACTIONS

_____
_____

FOR OFFICE USE ONLY

Labor: ____Hours _____Mins
Vehicle#_____
Work Order # _____
Follow-up WO#_____

ASSESSMENT (circle appropriate level - "5" is a high level)
Level of knowledge regarding storm water issues: **1. 2. 3. 4. 5.**
Level of cleanliness, BMP implementation, orderliness of site: **1. 2. 3. 4. 5.**

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION REPORT

Appendix D-4

CLEAN WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Revised 3/09

Type of Inspection:	☐ Annual (Date):	☐ Complaint Investigation (Date):	
Business Name:		Size: Sq.Ft.	SIC Code:
Street Address:		Mailing Address:	
Contact Person(s):		Property Manager (PM):	
Business Phone/Fax:		PM Phone/Fax:	
Business Email:		PM Email :	
Does facility have a current Encinitas business certificate? ☐Yes ☐No #: Exp:			

A. Training **Number of Employees:**

1. Are employees trained? ☐Yes ☐No a. Training log at facility? ☐Yes ☐No Last time trained:

B. Liquid Storage (Oil, Grease, Antifreeze) ☐NA

2. ☐Trap- Last Maintained(LM): ☐Interceptor- LM: By: Every ____ months

3. ☐Bin- LM: ☐Clarifier- LM: By: Every ____ months

a. Is there secondary containment? ☐Yes ☐No b. Overhead Coverage? ☐Yes ☐No

4. Are other outdoor items adequately stored/covered? ☐Yes ☐No ☐NA

5. Does facility have a spill kit? ☐Yes ☐No a. Posted spill response plan? ☐Yes ☐No

C. Cleaning Activities

6. Does facility conduct any of the following activities?:

Washing Floor Mats: ☐Y ☐N Vehicle Washing/Fueling: ☐Y ☐N Hosing Off / Power Washing Site: ☐Y ☐N

a. Is wash water contained and disposed of properly? ☐Y ☐N

D. Waste Management	Yes	No	N/A	Comments
7. Are the storm drains and site free of litter and debris?				
8. Downspouts directed away from areas of potential pollutants?				

9. Does trash/recycling storage area meet the following requirements?:

Receptacle Lids Closed: ☐Y ☐N Clean/Well Maintained: ☐Y ☐N Are bins overflowing?: ☐Y ☐N

10. Does the facility properly maintain the following landscape/maintenance issues: ☐NA

Erosion Control: ☐Y ☐N Over-irrigation Runoff: ☐Y ☐N Reclaimed Water Use: ☐Y ☐N Stockpiles: ☐Y ☐N

E. Other Storm Water Management

11. Is the site free of any evidence of illicit connections and illegal discharges? ☐Yes ☐No

F. Corrective Actions Needed? ☐Yes ☐No If yes, see Inspection Summary

G. Follow Up Inspection? ☐Yes ☐No Date: _____ If yes, see Inspection Summary

H. Education or Best Management Practice (BMP) Information Distributed:

☐Restaurant Brochure Eng/Span ☐What's Cooking Guide Eng/Span ☐Auto Brochure Eng/Span ☐Green Wrench Guide Eng/Span ☐Only Rain ☐10 Simple Ways ☐Yard and Garden Care Eng/Span ☐Doorhanger ☐Business card ☐Green Business ☐Spill Response Guide ☐Other:

Inspector Name: **Signature:** **Date:**

Notes:

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ASSESSMENT (circle appropriate level - "5" is highest level)	
Level of knowledge regarding stormwater issues: 1 2 3 4 5	WO#:
Level of cleanliness, BMP implementation, orderliness of site: 1 2 3 4 5	Follow Up WO#

Appendix D-5 Routine Commercial Inspection Summary FY 2008-09

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
1	**39392**	6/3/09	The Original Pancake House		Obtain spill kit and post plan, Provide Training, and 2nd containment for grease storage	NO. Completed: 6/24/2009		
2	**79459**	8/28/08	Tomiko	Started inspection 6/26/08, but didn't finish until 8/28/08.	No violations or corrective actions.	NO. Completed: 4/7/2009		
3	**80581**	10/23/08	La Especial Norte		1.Post spill response plan. 2. Train employees, keep log. 3. clean litter and debris from site, trash area, and/or storm drain. No follow up required.			
4	**80590**	10/9/08	Subway		No corrective actions required.			
5	**80591**	10/8/08	Toolshed Equipment Rentals		No corrective actions required.			
6	**80592**	10/8/08	Subway		No corrective actions required.			
7	**80593**	10/9/08	Little Caesars Pizza		No corrective actions required.			
8	**80615**	10/16/08	Encinitas Ranch Golf Course		No corrective actions required. Pesticides & Fertilizers are kept indoors w/ 2nd containment.			
9	**80616**	10/22/08	The Greenery Raw Food Cafe		1.Obtain spill kit, 2..Post spill response plan. 3.Train employees, keep log. No follow up required.			

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
10	**80617**	10/22/08	Santa Fe Cafe		1.Obtain spill kit. 2.post spill response plan. 3.train employees, keep log. 4.keep trash lids closed. No follow up required.			
11	**80619**	10/22/08	3rd Corner Wine Shop and Bistro		1.obtain spill kit.2.post spill response plan.3.train employees, keep log.4.fax/email copy of training log.5.Recommend P.M. power wash transit area, contain wash water.6.keep trash bin lids closed.	No. Completed: 10/22/2008		
12	**80620**	10/24/08	Domino's		No corrective actions required.			
13	**80621**	10/24/08	Pacific Q Billiards		1.post spill response plan. 2.train employees, keep log. No follow up required.			
14	**80622**	10/24/08	Kaito Sushi		No corrective actions required.			
15	**80623**	10/24/08	Golden Baked Hams and Sandwiches		No corrective actions required.			
16	**80624**	10/24/08	Daphne's Greek Cafe		1.post spill response plan. 2.train employees, keep log. No follow up required.			
17	**80625**	10/24/08	Fillippi's Pizza		1.Train employees, keep log. 2.provide 2nd containment and overhead coverage. No follow up required.			

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
18	**81644**	10/13/08	QC Szechwan/Siilk Asian Tapas	QC Szechwan going out of business. New restaurant will be Siilk Asian Tapas. 10/14/08 called Property manager to get info on power washing and status of business. 10/21/08 Called property manager regard	Provide 2nd containment and overhead cover or remove outdoor liquid storage. clean littler and debris from site and remove outdoor misc equip.	NO. Completed: 12/5/2008		
19	**81646**	10/14/08	Brett's BBQ	See follow up WO 81647	1.obtain spill kit, post spill response plan. 2.train employees, keep log. 3.Provide 2nd containment and overhead cover for outdoor liquid storage.	NO. Completed: 12/5/2008		
20	**81648**	10/15/08	Beach Grass Cafe	See follow up WO 81649.	1.Obtain spill kit, post spill response plan. 2.train employees, keep log. 3.Provide 2nd containment and overhead cover for outdoor liquid storage. 3.Clean littler/debris from trash area.	NO. Completed: 11/12/2008		
21	**81650**	10/24/08	Bety's	See follow up WO 81651.	1.Obtain spill kit, post spill response plan. 2.Train employees, keep a log. 3.Clean litter and debris from trash area.	NO. Completed: 12/19/2008		
22	**81652**	10/27/08	Flippin Pizza		1.train employees, keep a log. No follow up required.			
23	**81653**	10/27/08	L & L Hawaiian BBQ		1.post spill response plan. 2. train employees, keep a log. No follow up required.			
24	**81654**	11/24/08	Valero		1.Clean litter and debris from trash area. 2. Paint chips left from contractor painting station need to be cleaned up. No follow up required.			

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups?	NOV Date
25	**81655**	12/2/08	Angelo's Burgers	See follow up 81656.	1.obtain spill kit, post spill response plan. 2.train employees, keep a log. 3.Clean litter from site (ATM trash).	NO. Completed: 12/11/2008		
26	**82918**	5/6/09	The Animal Keeper		post spill plan, training, provide containment for play yard	NO. Completed: 6/15/2009		
27	**83058**	10/13/08	Boston's Pizza	See follow up 83086	Obtain spill kit, post spill response plan, train employees and keep log, provide 2nd containment and overhead cover for outdoor liquid storage.	NO. Completed: 1/5/2009		
28	**83099**	1/15/09	Kraken		No Corrective actions. Monitor and clean when needed east lagoon bank of cigarette butts.			
29	**83118**	1/15/09	Ki's		No corrective actions required.			
30	**83121**	1/15/09	Las Olas		No corrective actions required. Consider additional/larger cigarette container.			
31	**83174**	1/15/09	Yogi's		No corrective actions. Consider repaving parking lot and smaller 2nd containment tray for grease storage. Keep mop buckets covered.			
32	**83181**	1/16/09	Chart House		No corrective actions. Consider cigarette waste container north of building.			

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
33	**83182**	1/16/09	The Beach House		No corrective actions. Keep trash container lids closed and area clean at all times.			
34	**83514**	1/21/09	Beach City Cafe		No corrective actions required.			
35	**83529**	1/21/09	7-Eleven		No corrective actions required.			
36	**83547**	1/22/09	Juanita's		No corrective actions required.			
37	**83548**	1/22/09	Trattoria Positano		No corrective actions required.			
38	**83907**	2/5/09	Cardiff 76 (Rosano's)		No corrective actions required. Remove hazardous waste containers from site per hazardous waste procedures on or no later than 7/1/09.			
39	**83908**	2/3/09	Encinitas Golf Course Cafe		No corrective actions required. Request email of photo of the issue of dumpster enclosure.			
40	**83928**	2/10/09	KC's Tandoor		No corrective actions required.			
41	**83972**	2/12/09	Williamson Produce		No corrective actions required.			
42	**84234**	2/25/09	Dollshie Coffee		No corrective actions required.			
43	**84235**	1/21/09	Leucadia Pizzeria	See follow up work order 84236	Clean litter and debris from trash area- need lid.	NO. Completed: 2/25/2009		
44	**84237**	2/25/09	El Callejon		Provide employee training- What's Cookin Guide. No follow up required.			

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
45	**84356**	2/24/09	World Auto Body		No corrective actions required.			
46	**84358**	2/24/09	Bradley Allen Auto Body		No corrective actions required.			
47	**84359**	2/24/09	Bird House Grill		No Corrective Actions Required			
48	**84360**	10/23/08	Mozy Cafe	See work orders 84361, 84362	Obtain spill kit, post spill response plan, train employees & keep log, Provide 2nd containment and overhead coverage for grease and other outdoor storage.	Yes: Provide 2nd containment for grease storage. Issued NOV.	No. Completed: 2/19/09	1/7/2009
49	**84363**	1/22/09	Kotija Jr. Taco Shop	See work order 84363	Provide 2nd containment for excess grease storage buckets. Empty/replace grease barrels.	NO. Completed: 2/19/2009		
50	**84365**	1/22/09	Jack in the Box	See work orders 84366, 84367	Clean debris from trash area, clean/maintain outdoor storage areas. Also, remove items behind or east of trash area.	Yes: Remove grease storage container in trash area. Issued NOV.	No. Completed: 3/4/09	2/23/2009
51	**84368**	3/5/09	Hydro-scape Products		No violations or corrective actions.			
52	**84369**	3/5/09	D street bar and grill	See work order 84370	clean litter and debris from trash area, consider replacing 2nd containment tray for grease storage.	NO. Completed: 3/5/2009		
53	**84371**	3/10/09	Beachside Bar and Grill		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
54	**84447**	3/11/09	Trattoria i Trulli		1. Post spill response plan. 2.Provide and document employee training. 3.Grease info- last time it was maintained and by whom- bin and trap. Call inspector with info. No follow up required.			
55	**84448**	3/5/09	Vigilucci's	See work order 84448.	1.Provide and document employee training. 2.clean litter and debris from trash area. 3.empty grease storage unit, sweep up kitty litter.	NO. Completed: 3/13/2009		
56	**84450**	3/13/09	Luxus 101 Bistro and Grill		Post spill response plan; provide and document employee training. No follow up required.			
57	**84541**	3/17/09	Just Peachy		Clean litter from trash area. Keep lids closed. No follow up required.			
58	**84542**	3/19/09	Manhattan Giant Pizza		No Corrective Actions Required			
59	**84544**	3/19/09	Kealani's		No Corrective Actions Required			
60	**84548**	3/24/09	Burger King 3528		No Corrective Actions Required			
61	**84603**	3/26/09	Java Express		No Corrective Actions Required			
62	**84604**	3/26/09	Vons #2144		No Corrective Actions Required			
63	**84605**	3/24/09	Pizzicato		Use what's cooking guide for training log. No follow up required.			

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
64	**84606**	3/23/09	Rubio's		No Corrective Actions Required			
65	**84607**	3/25/09	Passage to India		PM will remove old grease or cover w/plastic. No follow up required.			
66	**84608**	3/25/09	Firefly Grill & Wine Bar		No Corrective Actions Required			
67	**84609**	3/25/09	Blue Fin Sushi		No Corrective Actions Required			
68	**84610**	3/17/09	El Torito Market	See work order 84610	Provide or remove outdoor storage of liquid waste. Clean litter from site, trash areas, and/or storm drain.	NO. Completed: 3/27/2009		
69	**84612**	3/27/09	Wahoo's Fish Taco		Property manager needs to clean outside landscaped area from trash.			
70	**84613**	3/25/09	Mama Lulu's Pizza & Pasta		No Corrective Actions Required			
71	**84679**	3/23/09	Ralph's	See work order 84679	Clean litter from trash area.	NO. Completed: 3/27/2009		
72	**84681**	3/30/09	Tuscan Sun Deli		No Corrective Actions Required			
73	**84682**	3/30/09	Encinitas Yogurt & Ice Cream		No Corrective Actions Required			
74	**84683**	3/30/09	El Torito		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
75	**84684**	3/30/09	Fender Mender		No Corrective Actions Required			
76	**84685**	4/2/09	Borrelli's Pizza Inc		No Corrective Actions Required			
77	**84753**	3/31/09	Tomiko	See work order 84754	Obtain Spill kit, provide and document employee training, clean litter from trash area and grease storage area.	NO. Completed: 4/7/2009		
78	**84755**	3/13/09	St. Germain's	See work order 84756	Provide and document employee training, provide 2nd containment for grease, clean litter from trash area and keep lids closed.	NO. Completed: 4/14/2009		
79	**84757**	4/8/09	Shell Oil (CNG Inc)		No Corrective Actions Required			
80	**84758**	4/8/09	The Quick Fix		No Corrective Actions Required			
81	**84759**	4/2/09	Smart and final	See work order 84760	Provide and document employee training, clean litter and debris from trash area.	NO. Completed: 4/8/2009		
82	**84806**	3/30/09	Home Depot/Hot Dog Trailer	See work order 84807	Clean litter and debris from storm drain around perimeter south and east sides. Hot dog stand to provide 2nd containment.	NO. Completed: 4/16/2009		
83	**84808**	3/31/09	Wendy's	See work order 84808	Provide and document employee training.	NO. Completed: 4/16/2009		

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
84	**84810**	4/16/09	Honey Baked Ham		No Corrective Actions Required			
85	**86825**	4/21/09	Chin's		No Corrective Actions Required			
86	**86828**	4/15/09	Moonlight Snack Shack	See work order 86830	Obtain spill kit, post spill response plan, provide and document employee training.	NO. Completed: 4/22/2009		
87	**86831**	3/13/09	Sakura-Bana	See work order 86831	Provide and document employee training, clean litter and debris from trash area. Obtain dumpster with lid.	NO. Completed: 4/21/2009		
88	**87906**	3/17/09	Scott's Automotive	See work order 87907	Provide coverage for exposed equipment and/or parts.	NO. Completed: 4/24/2009		
89	**87908**	4/24/09	Chevron Extra Mile		No Corrective Actions Required			
90	**87944**	4/28/09	7-Eleven		No Corrective Actions Required			
91	**87945**	4/28/09	Carl's Jr. # 181		No Corrective Actions Required			
92	**87946**	4/28/09	Mr. Peabody's		No Corrective Actions Required			
93	**88059**	4/23/09	7-Eleven	See follow up 88061	Clean litter and debris from site-computer monitor, keyboard behind store.	NO. Completed: 5/12/2009		

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
94	**88062**	4/22/09	Taco Bell	See follow up 88063	Post spill response plan, provide and document employee training, provide 2nd containment for outdoor storage of liquid waste, provide grease interceptor info- last time serviced, by whom, how often.	NO. Completed: 5/13/2009		
95	**88251**	5/20/09	North Coast Equestrian Park		No. recommendations only: Document employee training, provide cover for tractors and NW corner. No follow up required.			
96	**88372**	6/15/09	Holiday Pet Hotel		Train employees and provide plumbing receipts for sump pump and broken pipe. No follow up required.			
97	**88375**	6/18/09	Encinitas green house nursery		No Corrective Actions Required			
98	**92399**	5/22/09	Lopez Flowers		No Corrective Actions Required			
99	**92400**	5/6/09	Moonlight Motors		Post spill response plan and provide and document employee training. No follow up required.			
100	**92402**	4/24/09	Bentley's Steak and Chop House		Obtain spill kit, post spill response plan, provide and document employee training. Consider cleaning area around grease storage area- capture all wash water.	NO. Completed: 6/2/2009		
101	**92404**	4/27/09	Sazio Ristorante Italiano		Post spill response plan, provide and document employee training.	NO. Completed: 6/3/2009		

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
102	**92406**	4/29/09	Wine Steals Cardiff		Post spill response plan, provide and document employee training.	NO. Completed: 6/2/2009		
103	**92408**	4/2/09	Denny's		Obtain spill kit; post spill response plan; Provide/document employee training; Provide 2nd containment and overhead cover for outdoor liquid storage; clean litter and debris from site, trash area, and/or storm drain- or order new dumpster.	Yes: Provide 2nd containment for outdoor liquid storage.	No. Completed: 6/8/09	
104	**92503**	5/8/09	RCP Block		Post spill plan; provide 2nd containment for fluid/liquid waste; clean litter and debris from storm drain; clean oil stains; Recommend downspout redirected away from vending machines, check maintenance records for flow guard in storm drain downstream	NO. Completed: 6/9/2009		
105	**92507**	5/8/09	Mark Lanager Masonry		Post spill response plan; provide overhead coverage and 2nd containment for fluid/liquid waste; clean/maintain outdoor storage areas	NO. Completed: 6/9/2009		
106	**92509**	12/19/08	Calypso Fish House		Obtain spill kit; Provide 2nd containment and overhead coverage for outdoor liquid storage	NO. Completed: 6/11/2009		
107	**92511**	4/29/09	Elizabethan Desserts		Post spill response plan; provide and document employee training	NO. Completed: 6/3/2009		

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
108	**92544**	5/26/09	Pacific Verde Nursery		Post spill response plan; provide employee training; provide 2nd containment for port-a-potty; provide cover for exposed equip or parts; clean litter and debris from storm drain; disconnect drain from sink.	NO. Completed: 6/16/2009		
109	**92700**	4/21/09	Shell Station		Provide coverage for exposed equipment or parts; clean oil stains from site.	NO. Completed: 6/17/2009		
110	**92702**	6/2/09	Scripps Memorial Hospital		Provide 2nd containment for liquid waste in universal waste area; Provide coverage for used cooking oil in loading area.	NO. Completed: 6/24/2009		
111	**92780**	5/28/09	Tierra Verde Resources Inc.		2nd containment for port-a-potty and herbicide; provide coverage for exposed stock pile of dirt.	NO. Completed: 6/25/2009		
112	**96887**	3/31/09	Panda Express		Obtain spill kit, post spill response plan, provide and document employee training, provide 2nd containment for outdoor liquid storage, clean litter from trash area outside backdoor. Also, provide grease maintenance info.	Yes: obtain spill kit, post spill response plan, provide and document employee training, provide 2nd containment, clean litter from trash area, provide grease maintenance info. Issued NOV.	Yes: Obtain 2nd containment, clean trash area, clean/replace dumpsters, provide grease maintenance records. NO. Completed: 7/7/09	5/7/2009

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
113	**97230**	4/27/09	Pipes Cafe		Provide and document employee training, provide 2nd containment for grease bins, consider replacing old dumpsters, consider power washing grease storage area-collect all wash water.	Yes: Provide 2nd containment tray for all grease storage. Consider removing 2nd grease barrel Issued NOV.	NO. Completed: 7/22/09	6/25/2009
114	**97233**	5/7/09	Charlie's Foreign Car Service		Post spill response plan, provide and document employee training, provide 2nd containment and overhead cover for oil bin-blue, provide cover for SE area, clean litter from east side, clean outdoor storage area on east side	Yes: Provide 2nd containment and overhead cover for outdoor oil storage, Cover or remove old parts and other items. Issued NOV.	NO. Completed: 7/22/09	6/8/2009
115	**97728**	4/24/09	Encinitas BMW		Provide and document employee training; provide cover or remove items on north side; clean litter and debris from trash areas, replace lid. check landscaping for overwatering.	NO. Completed: 9/9/2009		
116	**97796**	4/16/09	Chevron Encinitas	Corrective actions/follow up to be completed in FY 09-10.	Provide 2nd containment for gasoline storage; clean litter and debris from storm drain; replace cement berm or install temp BMP; plant area at end of down spout.			

Total Commercial Inspections: 116 **Total Follow ups: 51** **Total NOVs: 5**

Appendix D-5 Routine Industrial Inspection Summary FY 2008-09

	WOID	INSP DATE	Facility Name	Comments	Corrective Actions	Corrective Actions Still Needed? (Follow Up #1)	Corrective Actions Still Needed? (Additional Follow Ups)	NOV Date
1	**92698**	5/21/09	San Elijo JPA		Post spill response plan; Provide 2nd containment for polymer liquid in barn; Clean litter and debris from 4th inlet east of barn; provide maintenance records for rock swale and silt w See work order 92699.	NO. Completed: 6/19/2009		
2	**97795**	5/21/09	San Dieguito Transportation	Corrective actions/Follow up Inspection to be completed in FY 09-10.	Provide erosion control on NE corner of lot- maintain or replace BMPs- straw waddles, sand/gravel bags.			

Total Industrial Inspections: 2 **Total Follow ups: 1** **Total NOVs: 0**

	Facility Name	Address	Type	SIC	Acitivity Description
1	DEBORAH PTASHNE GROOMING	2013 SAN ELIJO AVE	ANIMAL	0752	Pet Grooming/Training
2	DOG BEHAVIOR 101	2142 MONTGOMERY AVE, F	ANIMAL	0752	Pet Grooming/Training
3	EVANS MOBILE VETERINARY CARE	2354 OXFORD AVE, #A	ANIMAL	0752	Pet Grooming/Training
4	MOBILE PET GROOMING	34189 PACIFIC COAST HWY	ANIMAL	0752	Pet Grooming/Training
5	PET BUTLER	2800 UNIVERSITY AVE #280	ANIMAL	0752	Pet Grooming/Training
6	SPAWTIQUE MOBILE PET GROOMING	1237 Hermes Ave	ANIMAL	0752	Pet Grooming/Training
7	UNDERDOG PET SITTING	2439 CAMINITO OCEAN COVE	ANIMAL	0752	Pet Grooming/Training
8	YOUR FAIRY DOGMOTHER	946 WOODGROVE	ANIMAL	0752	Pet Grooming/Training
9	CARDIFF LIMOUSINE	844 BONITA DR	AUTO	4111	Local and Suburban Transit
10	DONALD LEE MAGGARD	617 CATHY LN	AUTO	5511	Auto Sales and Maintenance
11	L. WICKS	804 SAXONY RD	AUTO	7538	Auto Repair and Maintenance
12	LEUCADIA TOWING	371 SECOND ST	AUTO	7549	Automotive services, except repairs and carwashes
13	LEUCADIA TOWING	905 ORPHEUS AVE	AUTO	7549	Automotive services, except repairs and carwashes
14	LUCAS' CAB	1410 VIA TERRASSA	AUTO	4111	Local and Suburban Transit
15	MERCEDES WEST AUTO WHOLESALE	2026 OXFORD AVE	AUTO	5511	Auto Sales and Maintenance
16	MILLER TIRE & WHEELS, INC.	248 LA VETA	AUTO	7538	Auto Repair and Maintenance
17	REED MOTORS aka Rent Sport Racing	1326 RAINBOW RIDGE LANE	AUTO	7538	Auto Repair and Maintenance
18	WALLACE COURIER	523 SAMUEL CT	AUTO	4215	Transport Services
19	WHALEN PERFORMANCE	1726 AVENUE MELODIA	AUTO	7538	Auto Repair and Maintenance
20	AFFORDABLE DETAIL GUYS	560 HERMES AVE	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
21	AMERICAN AUTO DETAILING	3016 AZAHAR ST.	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
22	COLOR SOLUTIONS AUTO TWO	126 TRITON CIR	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
23	CONNER DETAIL	1721 RED BARN RD	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
24	DANIEL TULCAN	Unknown	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
25	DETAIL ON US	1660 S EL CAMINO REAL G103	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
26	FOCUSED AUTO DETAILING	3660 CATALINA DR.	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
27	HERBIE AUTO MOBILE DETAILING	141 GRANDVIEW ST, APT 13	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
28	KIK'S MOBILE DETAILING	Unknown	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
29	LA COSTA AUTO DETAIL	740 AVENIDA CODORNIZ	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
30	MOBILE SHINE DETAILERS	3320 CALLE SAND BLAST	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
31	P.A.D (Professional Auto Detailing)	Unknown	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
32	SANTA FE DETAILING	1280 SANTA FE DR	AUTO DETAILING	7542	Mobile Auto Washing and Detailing
33	ALBERTA SANTIAGO	1020 ALOHA DR.	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces

	Facility Name	Address	Type	SIC	Acitivity Description
34	AROUND TOWN PRESSURE WASHING	1100 N CUYAMACA ST	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
35	BEST CLEANING DBA ANAGO	1543 VILLA CARDIFF DR	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
36	BEYOND INDUSTRIAL CLEANING	945 WOODGROVE	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
37	BOB'S CARPET CARE	336 SANFORD STREET	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
38	BUDGET WINDOW CLEANING	PO BOX 231606	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
39	CARPET CLEANING	Unknown	CLEANING/JANITORIAL	7217	Cleaning of interior retail or residential spaces
40	CLAUDIA NELSON'S HOUSEKEEPING	1338 MACKINNON AVE	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
41	CLEAN SENSE CARPET CLEANERS	328 1/2 LA MESA	CLEANING/JANITORIAL	7217	Cleaning of interior retail or residential spaces
42	CLEANINIG LADY ELMORR	2134 CAROL VIEW DR. #311	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
43	DAVID RIVERA CLEANING SERVICES	1743 OLD MILL RD.	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
44	DIAMOND ENVIRONMENTAL SERVICES, LLC	807 E. MISSION RD	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
45	DRENIE'S HOUSECLEANING	225 ROSEBAY DR	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
46	ENCINITAS JANITORIAL SERVICE	699 N. VULCAN AVE.	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
47	FAVORITE MAID	404 ENCINITAS BLVD #258	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
48	GILBERT'S JANITORIAL SERVICE	PO BOX 1877	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
49	GORILLA SERVICE INDUSTRIES, IN	Unknown	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
50	GUILLERMINA'S HOUSEKEEPING	1253 ORKNEY LN	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
51	INTEGRITY PRESSURE WASH	1508 GLACIER, RD	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
52	JASON CARDOZA GENERAL MAINTENANCE	884 DEL RIEGO AVE	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
53	JUST US CLEANING AND HOUSE SITTING	1066 GUILDFORD CT	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
54	KAMIN'S CLEANING SERVICES	170 PHOEBE ST, #11	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
55	LETTY BOOPS HOUSEKEEPING	407 REQUEZA ST, E10	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
56	LORENA'S CLEANING	1125 N VULCAN #11	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
57	MARIA LOPEZ PROFESSIONAL CLEANING	282 ASPENWOOD LN	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
58	MAVERICK CARPET CLEANING	14276 PEBBLE BEACH WAY	CLEANING/JANITORIAL	7217	Cleaning of interior retail or residential spaces
59	MONCARCA CARPET CLEANING	Unknown	CLEANING/JANITORIAL	7217	Cleaning of interior retail or residential spaces
60	NAYELI KIM DBA ANAGO OF SAN DIEGO	1015 GUADALAJARA DR	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
61	PACIFIC COAST MAINTENANCE	981 N VULCAN AVE #8	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
62	RITA'S CLEANINIG SERVICES	796 CLARK AVE	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
63	ROSANA'S HOME CLEANING SERVICES	1100 GARDEN VIEW RD. #129	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
64	ROTO ROOTER	Unknown	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
65	RUG DOCTOR	9630 Black Mountain Rd, Ste K	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
66	SEASIDE JANITORIAL SERVICE	1019 1/2 HERMES AVE	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces

	Facility Name	Address	Type	SIC	Acitivity Description
67	SOUTHERN LIGHTING AND GRAPHICS	10370 REGIS CT	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
68	SPANKY'S PORTABLE SERVICES	555 ENTERPRISE STREET	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
69	TERRY'S CLEANING SERVICE	2157 PLEASANT GROVE DR.	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
70	THE RESCUE MAIDS	1305 MACKINNON AVE	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
71	VELASQUEZ MAINTENANCE, LLC	1902 PAXTON WAY	CLEANING/JANITORIAL	7349	Cleaning of interior retail or residential spaces
72	A C ENERGY SYSTEMS, INC	224 BIRMINGHAM DR. 1 A 2	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
73	A.P. COTTAM CO	123 JAPSER ST, 12	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
74	ADD STYLE DESIGNS	607 N. VULCAN AVENUE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
75	ALL INTEGRITY PLUMBING	1062 GOLDEN RD	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
76	APP TEK COMMERCIAL, INC	171 SAXONY RD, #202	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
77	ARCHIBALD SHEET METAL	125 A STREEET	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
78	ARTISAN TEXTURES AND DRYWALL	909 WOODLAKE DR	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
79	BEESON SQUARED CONSTRUCTION	1572 CAUDOR	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
80	BLT CONSTRUCTION	1923 LAHOUD DR	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
81	BRIAN BUILDING CORPORATION	1009 HURSTDALE AVE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
82	C T M	1553 AVENIDA DE LAS LILAS	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
83	C.E. WYLIE CONSTRUCTION CO.	3777 RUFFIN RD	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
84	CALIBER DRYWALL	1253 N VULCAN AVE, #3	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
85	COASTAL CONSTRUCTION GROUP	742 NEPTUNE AVE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
86	COLT CONSTRUCTION & DEVELOPMENT	709 CATHY LN	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
87	CONCRETE HERITAGE, INC	825 DEL RIO AVE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses

	Facility Name	Address	Type	SIC	Acitivity Description
88	CREATIVE GARAGE DOOR SYSTEMS	1665 ORANGE BLOSSOM WAY	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
89	CUSTOM BUILDERS	1347 SUMMIT AVE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
90	D. BELL CONSTRUCTION, INC	1539 CAUDOR ST	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
91	D.H. CONSTRUCTION	477 DELAGE CT.	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
92	DANIELS CONSTRUCTION	2105 MONTGOMERY AVE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
93	DE PASCALE CONSTRUCTION, INC	555 SECOND ST. #4	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
94	DELANY CONSTRUCTION COMPANY	112 LA VETA AVE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
95	DROLET CONSTRUCTION	PO BOX 1175	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
96	E.L. HEWITT CONSTRUCTION	825 S VULCAN AVE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
97	ELKEN CONTRACTING	1540 Pioneer Way	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
98	FINISHING TOUCH MOLDING, INC	921 HYMETUS AVE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
99	HAR CONSTRUCTION	1480 W FRONTAGE RD	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
100	HAUSER HOUSES	1452 SANTA FE DR	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
101	J. BRYANT CONCEPTS	565 REQUEZA ST.	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
102	JOHN BLAND CONSTRUCTION	812 PALARO DR.	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
103	KHAVARI CONSTRUCTION	4550 Kearny Villa Rd	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
104	LANGTREE WOODWORKING	301 HORIZON DR	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
105	MRB CONSTRUCTION	1265 N VULCAN AVE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses

	Facility Name	Address	Type	SIC	Acitivity Description
106	PACIFIC CUSTOM BUILDERS	146 W GLAUCUS ST.	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
107	PACIFIC HORIZON CONSTRUCTION CO	773 HYMETTUS AVE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
108	PATRIOT CONCRETE INC	2591 S. SANTA FE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
109	PETRONELLA CORPORATION	2626 NEWPORT BLVD	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
110	QUALITY FIRST CONCRETE	930 LAWRENCE ST	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
111	R. D. T. CONSTRUCTION	1527 AVENIDA DE LOS LIRIOS	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
112	R.A. BOOKER BUILDERS, INC	3451 TOSCANO CT	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
113	RED POINT HOMES, INC	609 S. VULCAN AVE #302	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
114	RICHARD MELTON CONSTRUCTION, INC	1570 LAKE DR	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
115	RICHARD THAISZ CONSTRUCTION	1403 CAMINITO SEPTIMO	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
116	ROBERT R. LOVCI	1236 RUBENSTEIN AVE	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
117	ROBERT TESSIERI CONSTRUCTION	1743 LE GAYE DR.	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
118	ROOF RITE	1216 TOWER DR.	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
119	SAHBA JAVEDANI	624 FAITH AVE.	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
120	SO CAL DEMOLITION	1918 AZURE WAY	CONTRACTOR	1795	Wrecking and Demolition Work
121	STEFFEN ENTERPRISES, INC	1008 SAXONY RD	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
122	SUN CAL SOLAR INCORPORATED	745 WINDING WAY	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
123	TITAN WOODWORKS	1131 BONITA DR, B	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses

	Facility Name	Address	Type	SIC	Acitivity Description
124	TOM PENNA CONSTRUCTION/DBA DRY WALL D	476 LA MESA AVE.	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
125	TOM PORTER ROOFING	310 S TWIN OAKS VALLEY RD	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
126	TURN KEY CONSTRUCTION HANDYMAN	444 N EL CAMINO REAL, #87	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
127	VALVETTE SYSTEMS	23262 OXNARD ST	CONTRACTOR	508	Water Conservation Products
128	VAN VEEN TEAM	1145 ALOHA DR	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
129	VCI Telcom	1921 W. 11th St.	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
130	W O A BUILDERS INC	110 REQUEZA ST	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
131	WEST COAST COMFORT	4709 MORNING CANYON RD.	CONTRACTOR	1521	General contractors primarily engaged in construction of single-family houses
132	WILLIAM B. HANNON GENERAL	1748 LAKE DR	CONTRACTOR	1521	single-family houses
133	WILLOWEN BUILDERS	3410 ADAMS RUN RD	CONTRACTOR	1521	single-family houses
134	CARDIFF CARNIVORES	1285 BLUE SKY DR.	EXTERMINATOR	7342	Disinfecting and Pest Control Services
135	DAVE DE JOUR	2080 MONTGOMERY AVE	FOOD	5813	Sells prepared drink for consumption
136	GREEN GENERATION GREASE COLLECTION	2035 SEA VILLAGE CIR	FOOD	5813	Sells prepared drink for consumption
137	MOBILE CONCESSIONS AND CATERING	Unknown	FOOD	5813	Sells prepared drink for consumption
138	SHOURI SUSHI ENTERPRISE CORP	1404 VIA TERRASSA	FOOD	5813	Sells prepared drink for consumption
139	VICTORIA WIT	616 CYPRESS HLLS DR.	FOOD	5813	Sells prepared drink for consumption
140	101 WINDOW CLEANING	910 HERMES AVE	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
141	A& M WINDOW CLEANING	1125 N VULCAN AVE #26	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
142	ABSOLUTE PERFECTION FOUNTAIN	730 THIRD ST	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
143	ALL CITIES HAULING	937 WOODLAKE DR	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
144	ALL IN CARPET CLEANING	720 DEVONSHIRE DR	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
145	ANONYMOUS WINDOW CLEANING	1727 LEGAYE	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
146	AQUA TECH POOL CARE	233 DELPHINIUM ST	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.

	Facility Name	Address	Type	SIC	Acitivity Description
147	AZTECH CLEANING SERVICES	1627 VALLEDA LN	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
148	BART FORRY	404 ENCINITAS BLD #203	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
149	BELMAN HANDYMAN	738 SNAPDRAGON	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
150	BLADE DUFOUR HANDYMAN SERVICE	905 WOODLAKE	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
151	BOUCHE CONSTRUCTION	1438 VIA TERRASSA	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
152	BRIGHT VISIONS WINDOW WASHING	616 LYNWOOD DR	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
153	C C A R E	1399 RANCH RD	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
154	CALIFORNIA MAIDS HOME SERVICES	885 DEL RIO	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
155	CLEAN SWEEP	1252 MACKINNON AVE	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
156	CLEAR CHOICE WINDOW CLEANING	138 DIANA ST	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
157	COAST TRANSPORTATION	1990 COUNTRY GROVE LN	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
158	CROWN POOL AND LANDSCAPE	2126 VIA TIEMPO	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
159	DESIGNS BY THE SEA	1511 CALLE TULIPANES	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
160	ED'S HANDYMAN SERVICE	1372 HYMETTUS AVE	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
161	ENCINITAS HANDYMAN BIZ	1555 BELLA VISTA	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
162	F & V Painting, Inc. DBA CERTAPRO	1340 RAVEAN CT	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
163	FERNANDO J. C.	1168 ARCADIA RD	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
164	FIRST PLACE FINISH CARPENTRY	556 THIRD ST	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
165	FRAZIER WINDOWS	1017 HYGEIA AVE	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
166	G B ENTERPRISES	1106 SECOND ST	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
167	GARY WESLEY HANDYMAN	1813 N. VULCAN AVE	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.

	Facility Name	Address	Type	SIC	Acitivity Description
168	GAUL REMODELING	126 JASPER ST, 404 B	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
169	H.S. SOLUTIONS	731 SNAPDRAGON ST.	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
170	HEAVENLY VIEWS WINDOW CLEANING	1905 SOMERSET AVE.	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
171	HOME MAINTENANCE SERVICES	842 BONITA DR. #A	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
172	JESUS FUENTES	2039 SHADOW GROVE WAY	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
173	JOHN'S WINDOW CLEANING	1201 N VULCAN AVE, #25	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
174	KENS HANDYMAN SERVICE	152 N COAST HWY 101 #19	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
175	M H S- WORKS	1008 COTTAGE WAY	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
176	M.G. HANDY MAN WORK	2057 VILLAGE PARKWAY #204	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
177	MADRIGAL HANDYMAN SERVICE	513 S. WILLOWSPRING	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
178	MARIA ZAVALA	961 MELBA RD	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
179	MAURICE'S HANDYMAN SERVICES	1190 ENCINITAS BLVD P167	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
180	MAURILIO HERNANDEZ HANDYMAN	339 MARCOS ST, #129	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
181	MCGOWANS HOME MAINTENANCE	949 WOODGROVE	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
182	MICHAEL E. GREIFF	1448 CAMINITO SEPTIMO	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
183	MIKE HIDALGO, INC	119 EUROPA	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
184	MONTANO'S HOUSECLEANING	704 REGAL RD. #C-12	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
185	NORTH COUNTY HANDY MAN	1270 AVENIDA MIGUEL	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
186	NORTH COUNTY HAULING SERVICE	1117 WOODLAKE DR	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
187	OWENS CO.	18525 ALISO CANYON RD	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
188	PACIFIC ROOF CLEANING	1571 AVENIDA DE LAS LILAS	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.

	Facility Name	Address	Type	SIC	Acitivity Description
189	PATRA CRUZ	351 COUNTRYWOOD LN	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
190	PATRICE ALEXANDER	2437 OXFORD AVE	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
191	PATRICK W. QUINLAN HANDYMAN	454 REQUEZA ST. #320a	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
192	PERUVIAN BUILDERS	349 VILLAGE RUN EAST	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
193	PHIL'S HANDYMAN SERVICE	1726 OLD MILL RD.	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
194	PROFESSIONAL CLEANING & ERRANDS	1099 REGAL RD.	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
195	R. K. ENTERPRISES	658 SANTA FE DR	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
196	REVA HYDRO JETTING	1056 LARK SONG LN	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
197	REYES HANDYMAN	1143 GARDENA RD.	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
198	ROMEO GODINEZ HANDYMAN	1159 GARDENA RD	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
199	RUSTY TREE SERVICE	1144 WOODLAKE DR.	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
200	S.M.H. HANDYMAN SERVICE	1009 HERMES AVE. #A	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
201	SALO CUSTOM WOODWORK	1549 N VULCAN AVE #54	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
202	SAMMY'S HANDYMAN PLUMBING	110 S KITTRIDGE LN	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
203	SAN DIEGO STONE CARE	731 SNAPDRAGON ST.	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
204	SCOT ENTERPRISES	454 REQUEZA ST. #130C	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
205	SHORT PEOPLE SERVICES	116 QUAIL GARDENS #137	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
206	SPARKLE WINDOW CLEANING	2427 NEWCASTLE AVE.	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
207	SUNNY WINDOW CLEANING	404 ENCINITAS BLVD #345	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
208	WILLIAM BRADY HANDYMAN	923 MELBA RD.	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.
209	WORLD MAINTENANCE	1829 FORRESTDALE DR	HANDYMAN	1799	Contractor primarily engaged in minor construction work and home repairs.

	Facility Name	Address	Type	SIC	Acitivity Description
210	10-C'S LANDSCAPE ENHANCEMENTS	1301 TRABERT RANCH RD	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
211	ALFONSO REY LANDSCAPE MAINTENANCE	351 SPRUCEWOOD DR	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
212	ALL CITIES CONSTRUCTION SERVICES	729 REQUEZA ST	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
213	ANGUIANO LANDSCAPING	471 COLE RANCH RD	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
214	ARNULFO MEDINA LANDSCAPING	1408 HERMES AVE. A	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
215	BENNY'S GARDENING	1055 EVERGREEN DR	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
216	CARESCAPE LAWNS	174 S WILLOWSPRING	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
217	CARILLO TREE MAINTENANCE	794 CLARK AVE	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
218	COCO'S LANDSCAPE AND MAINTENANCE	1939 PLAYA RIVIERA DR	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
219	D & I GARDENING & LANDSCAPING	1743 OLD MILL RD.	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
220	DEL MAR LANDSCAPING	2016 BULRUSH LANE	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
221	ENRIQUE LANDSCAPING	1020 ALOHA DR.	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
222	FELIX SANCHEZ GARDENING SERVICE	880 DEL RIO AVE	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
223	FLORES LANDSCAPING	647 SAN DIEGUITO DR. #3	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
224	G.K. LANDSCAPE	244 SECOND ST. #E	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
225	GALAPACIFICA LANDSCAPE	253 MANGANO CIR	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
226	GREG STONE LANDSCAPE ARCHITECTS	69 MC NEILL AVE	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
227	GRESHAM GARDENS & CONSULTING	1734 NOMA LANE	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
228	HAULING AND LANDSCAPING.COM	1133 GARDENA	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
229	HERNANDEZ LANDSCAPING	PO BOX 1630	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
230	IBANEZ MAINTENANCE	Unknown	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.

	Facility Name	Address	Type	SIC	Acitivity Description
231	INNOVATIVE CONCRETE DESIGN	270 FRAXINELLA	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
232	J A LANDSCAPE	2068 BULRUSH LN	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
233	JEAN NORDSTROM	2156 MOUNTAIN VISTA DR.	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
234	JESUS AGUSTIN AMEZCUA LANDSCAPE	213 HICKORYHILL DR	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
235	JORGE MENDOZA	953 NARDO RD.	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
236	L & P LANDSCAPE/TREE SERVICE	309 VILLAGE RUN, E	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
237	L.B. DESIGNS	837 STRATFORD DR	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
238	LANDSCAPE DESIGNS/LANDSCAPE	944 HERMES AVE.	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
239	LANDSCAPE MAINTENANCE/DAVE STEINBIS	699 N. VULCAN AVENUE #127	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
240	LATTIN	564 UNION ST	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
241	LIVING ART WATER GARDENS	759 MUNEVAR RD	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
242	LLM LANDSCAPE, INC	675 REQUEZA ST	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
243	LUIS MALDONADO	1041 SAN ANDRADE #A	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
244	MAISTER LANDSCAPE CONSTRUCTION	PO BOX 715	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
245	MIGUEL'S LANDSCAPING	1105 REGAL RD	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
246	MIJANGOS LANDSCAPING	1608 CHARRO ST	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
247	MIKE HIRSCH	753 REQUEZA	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
248	PACIFIC VIEW LANDSCAPES	2444 MANCHESTER AVE	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
249	PRO EARTH LANDSCAPE	2210 ENCINITAS BLVD	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
250	REEGAN RAY DESIGN	734 SAN DIEGUITO	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
251	SECRET GARDEN LANDSCAPING	1236 URANIA	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.

	Facility Name	Address	Type	SIC	Acitivity Description
252	SINCLAIR GROUNDS MAINTENANCE	454 REQUEZA ST. 316A	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
253	STEVE'S WEEKLY LANDSCAPING	Unknown	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
254	THE URBAN GARDENER	591 HYGEIA AVE, A	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
255	TIERRA VERDE	LAKE DR	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
256	TREE ELEMENTS	1624 OLMEDA ST.	LANDSCAPING	0782	Performs a variety of lawn and garden services. Includes turf installation and garden planting.
257	U P E RESOURCES	1624 OLMEDA ST.	LANDSCAPING	0782	Includes turf installation and garden planting.
258	VELASQUEZ LANDSCAPING	2036 SHADY TREE LN.	LANDSCAPING	0782	Includes turf installation and garden planting.
259	CRAFTSMAN STONE AND TILE	1014 SAN ABELLA	MASONRY	1741	work, stone setting, and other stone work.
260	G.S. CUSTOM PAINTING	Unknown	PAINTING	1721	Painting of interior and/or exterior buildings
261	RUSSELL HANDY PAINTING	2056 BULRUSH LANE	PAINTING	1721	Painting of interior and/or exterior buildings
262	A PLUS POOL AND SPA SERVICE	1190 ENCINITAS BLVD, c252	POOL	7389	Swimming pool and fountain cleaning and maintenance
263	BISHOP POOL SERVICE AND REPAIR	744 FOXGLOVE ST	POOL	7389	Swimming pool and fountain cleaning and maintenance
264	BLUE WATER OF LA JOLLA POOL SERVICE	2008 WANDERING RD	POOL	7389	Swimming pool and fountain cleaning and maintenance
265	C D POOLS	1265 RUBENSTEIN AVE	POOL	7389	Swimming pool and fountain cleaning and maintenance
266	CIELO POOLS	708 OAKBRANCH	POOL	7389	Swimming pool and fountain cleaning and maintenance
267	DISTINGUISHED POOLS	14320 MOUNTAIN RD.	POOL	7389	Swimming pool and fountain cleaning and maintenance
268	LIQUID POOL AND SPA SERVICE	16 E I STREET	POOL	7389	Swimming pool and fountain cleaning and maintenance
269	MALLORY'S POOL & SPA MAINTENANCE	140 ENCINITAS BLVD, #183	POOL	7389	Swimming pool and fountain cleaning and maintenance
270	MAYER POOL SERVICE	1553 PLUMTREE DR	POOL	7389	Swimming pool and fountain cleaning and maintenance
271	NELSON AND SON'S POOL	PO BOX 235164	POOL	7389	Swimming pool and fountain cleaning and maintenance
272	PACIFIC COAST POOL SERVICE	1439 LINDA SUE LANE	POOL	7389	Swimming pool and fountain cleaning and maintenance
273	PALISADES POOL AND SPA SERVICE	230 GLOXINA ST	POOL	7389	Swimming pool and fountain cleaning and maintenance
274	POOLMASTER	PO BOX 232265	POOL	7389	Swimming pool and fountain cleaning and maintenance

	Facility Name	Address	Type	SIC	Acitivity Description
275	PRECISION POOL TILING	1991 FRIENDSHIP DR, STE F	POOL	7389	Swimming pool and fountain cleaning and maintenance
276	RANCH AND SEA POOL CARE	1686 FALCON HILL CT	POOL	7389	Swimming pool and fountain cleaning and maintenance
277	RANCHO SANTA FE POOL SERVICE	2039 WILLOWWOOD	POOL	7389	Swimming pool and fountain cleaning and maintenance
278	S.S. POOL SERVICE	1125 WOODLAKE DR	POOL	7389	Swimming pool and fountain cleaning and maintenance
279	SUN COAST POOL SYSTEMS	PO BOX 430	POOL	7389	Swimming pool and fountain cleaning and maintenance
280	THE POOL PROS	1190 ENCINITAS BLVD, 124	POOL	7389	Swimming pool and fountain cleaning and maintenance
281	UNDERWATER UNLIMITED LLC	281 1/2 HILLCREST DR	POOL	7389	Swimming pool and fountain cleaning and maintenance
282	WILSON POOLS PLUS	1530 BURGUNDY RD	POOL	7389	Swimming pool and fountain cleaning and maintenance
283	ERAGON RESTORATION	Unknown	Unknown	Unk	Unknown

CITY OF ENCINITAS

Commercial & Industrial

STORMWATER QUALITY INSPECTION SUMMARY

(760) 633-2787 ◆ FAX (760) 633-2818 ◆ npdesmail@cityofencinitas.org

ISSUED TO: _____

SITE ADDRESS: _____

PHONE #: _____

❒ **NO CORRECTIVE ACTIONS REQUIRED**

REQUIRED CORRECTIVE ACTIONS

ALL REQUIRED CORRECTIVE ACTIONS IDENTIFIED BELOW MUST BE COMPLETED AND REPORTED TO THE CITY BY THE FOLLOWING DATE: ____/___/____

❒ **Obtain Spill Kit**

❒ **Post Spill Response Plan**

❒ **Provide and Document Employee Training**

❒ **Provide Secondary Containment for Outdoor Storage of Fluid/Liquid Waste**

❒ **Provide Coverage for Outdoor Storage of Fluid/Liquid Waste**

❒ **Provide Coverage for Exposed Equipment and/or Parts**

❒ **Clean Litter and Debris From Site, Trash Areas, and/or Storm Drain**

❒ **Clean/Maintain Outdoor Storage Areas**

Other Corrective Actions/Comments:

_____

_____

_____

_____

The corrective actions listed above are required pursuant to Encinitas Municipal Code Section 20.08.110. Failure to comply with minimum Best Management Practice (BMP) Standards may result in further enforcement action by the City of Encinitas.

Inspector (Signature) **Date**

Responsible Party (Signature) **Date**

FOLLOW UP INSPECTION

❒ **All Corrective Actions Completed**

❒ **Corrective Actions Not Complete – Enforcement Action Required**

Inspector Sign-Off **Date**

Appendix E

Residential

E-1 Map of High Threat to Water Quality Residential Areas

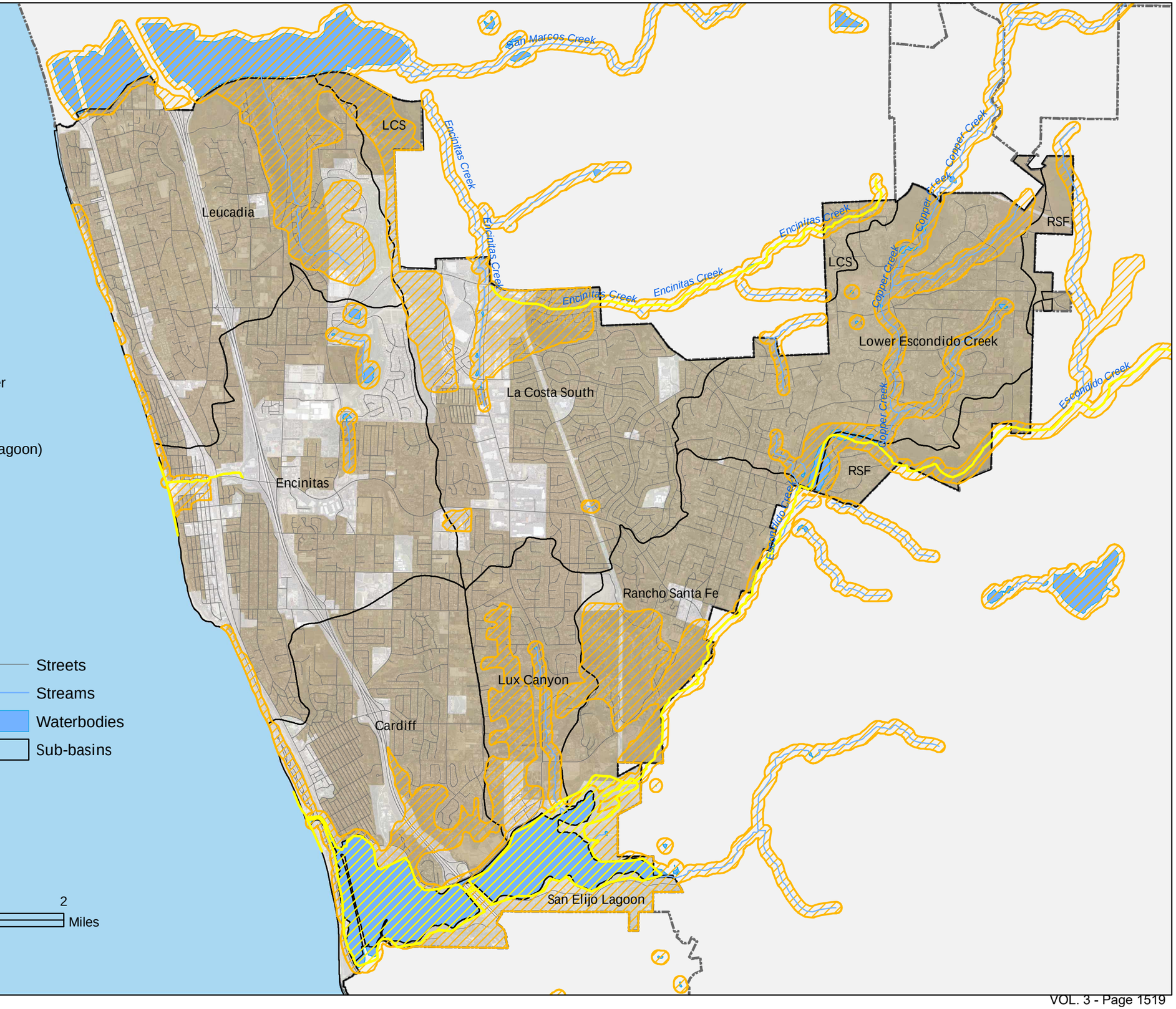
Appendix E-1

City of Encinitas

High Threat to Water Quality Residential Areas

High Threat to Water Quality Residential Areas in the City of Encinitas include:

- All residential areas within 500ft of any 303(d) listed water body or lagoon
- All residential areas within, directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an ESA
- The residential area to the west of Interstate 5 within the Cardiff sub-basin (drains to San Elijo Lagoon)
- The residential area south of Sylvia St, west of Second Street, and north of K Street (drains to Cottonwood Creek and Moonlight Beach)



Appendix F

Education

F-1 **Regional Mobile Business Outreach and Education Plan**

F-2 **NCSWP Construction Brochure**

F-3 **City of Encinitas Brochures (English/Spanish)**

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Regional URMP Attachment 5.0

Regional Mobile Business Outreach and Education Strategy

FINAL - March 20, 2008

Submitted by the San Diego Stormwater Copermittees in partial fulfillment of the requirements of San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (the San Diego Municipal Stormwater Permit)

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1.0 INTRODUCTION

This document describes a **Regional Mobile Business Outreach and Education Program** to be collaboratively conducted by the Copermittees of NPDES Order No. R9-2007-0001 (Permit). It was developed by the Mobile Business Subcommittee of the Copermittees' Outreach Workgroup. Permit section D.3.b.(4)(a) requires that each Copermittee develop and implement a program to reduce the discharge of pollutants from mobile businesses to the MEP. Section D.3.b.(4)(b) further states "if they choose to, the Copermittees may cooperate in developing and implementing their programs for mobile businesses, including sharing of mobile business inventories, BMP requirements, enforcement action information, and education." Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the Copermittees have chosen to collaborate on a regional mobile business outreach and education strategy. It addresses the following elements:

- Inventory Development and Maintenance;
- Establishment of Minimum BMP Requirements; and
- Outreach and Education (Including Business Notifications).

Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this Strategy.

2.0 SOURCE CHARACTERIZATION

Mobile businesses provide services at offsite locations rather than from fixed bases of operation. Services may be provided at, but are not limited to, residential, industrial, municipal, and commercial areas. Permit Section D.3.b.(1), identifies 12 categories of mobile business types that will be addressed as part of this regional Strategy. Table 1 identifies these businesses types and the potential pollutants associated with each. Additional characterization and description of these sources will be conducted during the development and implementation of the regional program elements described in Section 2.0

Table 1 – Identification of Mobile Business Types and Associated Pollutants-of-Concern

Source Type	Bacteria	Metals	Pesticides	Sediment	Trash	Nutrients	Organics	Oil/Grease
1. Auto Repair, Maintenance, Fueling, Cleaning		X		X	X		X	X
2. Equipment repair, maintenance, fueling, or cleaning		X		X	X		X	X
3. Mobile automobile or other vehicle washing		X		X	X		X	X
4. Pest control services		X	X				X	
5. Mobile carpet, drape or furniture cleaning							X	
6. Cement mixing or cutting				X		X	X	
7. Masonry				X		X	X	
8. Painting and coating		X			X		X	
9. Landscaping	X	X	X	X		X	X	
10. Pool and fountain cleaning		X		X		X	X	
11. Portable sanitary services	X				X	X	X	
12. Power washing services	X	X	X	X	X	X	X	X

3.0 REGIONAL PROGRAM ELEMENTS

The Regional Mobile Business Outreach and Education Program will consist of several elements to be developed and implemented by June 2010.

3.1 Inventory Development and Maintenance

Permit section D.3.b.(1) requires that each Copermittee keep as part of its commercial sources inventory a listing of mobile businesses known to operate within its jurisdiction, and section D.3.b.(4)(b) encourages Copermittees to share these inventories. In addition to sharing inventory information, the Copermittees have determined that the collaborative development of a shared regional inventory would promote consistency in the regulation of mobile businesses, and would promote cost-efficiency by eliminating redundancy between individual inventories and avoiding duplicative notifications. The Copermittees

intend to utilize a consultant to compile this inventory. It is expected to be completed by June 2009. Prior to the completion of a shared inventory, the Copermittees will continue to meet the requirements of section D.3.b.(4)(b) by individually maintaining and updating as necessary their existing jurisdictional mobile business inventories. These will be used as a starting point for the development of a consolidated inventory. The consultant will also be tasked with researching other information sources such as unlicensed mobile businesses operating within the County, as well as with managing updates to the inventory in subsequent years.

3.2 Establishment of Minimum BMP Requirements

Permit section D.3.b.(4)(a)i requires that Copermittees develop and implement minimum standards and BMPs to be required for each of the various types of mobile businesses. The Copermittees also intend to collaborate in the development of a minimum set of BMP standards for each type of mobile business addressed through the regional effort. Existing resources such as jurisdictional minimum BMPs, the Project Clean Water Clean Water Tool Box (http://www.projectcleanwater.org/bmp/) and the Think Blue website (http://www.sandiego.gov/thinkblue) will be reviewed by the Copermittees in developing these common standards. A consultant may also be utilized for BMP development support. This task is expected to be completed by June 2009.

3.3 Outreach and Education Strategy

Permit section D.3.b.(4)(a)iv requires that Copermittees develop and implement an outreach and education strategy for mobile businesses. A variety of educational methods and approaches will likely be utilized in complying with this requirement. These will be determined by the Copermittees during the development of this task. The centerpiece of the Copermittees' education strategy will be business notifications. This element is described further below.

3.4 Business Notifications

Permit section D.3.b.(4)(a)iii requires that, within the first three years of implementation of the updated JURMP, each Copermittee must notify the owner/operator of each

inventoried mobile business their minimum standards and BMP requirements and local ordinances. The Copermittees will collaboratively develop and implement a regional notification strategy to inform mobile businesses of their obligation to comply with the local ordinances of the jurisdictions where they operate. In addition to assisting in the development of this strategy, the consultant will be tasked with notifying businesses and tracking when and how they were notified. Potential notification options include mailing, emailing, workshops, and website posting. This task will be completed no later than March 24, 2011, but is targeted for completion by March 2010.

3.5 Implementation Schedule

Implementation of the Regional Mobile Business Outreach and Education Program will begin during FY 08/09, with all major tasks targeted for completion by the end of FY 2009/10. The consultant may also be retained for future management of the inventory and other tasks as needed. Major milestones are summarized below.

FY 2008/09

- Consultant selection by Subcommittee
- Completion and maintenance of regional inventory by consultant
- Development of regional minimum BMPs

FY 2009/10

- Notification of businesses by consultant (by January 2010)
- Final report including status of notifications submitted to Copermittees

4.0 INDIVIDUAL COPERMITTEE RESPONSIBILITIES

Although many of the specific requirements of Permit section D.3.b.(4)(a) will be collaboratively addressed through the completion and implementation of the Regional Mobile Business Outreach and Education Program, the responsibility for ensuring individual Permit compliance ultimately remains with each Copermittee. These responsibilities are briefly discussed below.

4.1 Inspections and Enforcement

Permit section D.3.b.(4)(a)ii requires that Copermittees develop and implement an enforcement strategy which specifically addresses the unique characteristics of mobile businesses operating within their jurisdictions. Section D.3.b.(4)(a)v further requires that Copermittees conduct inspections of mobile businesses as needed (e.g., on a complaint basis). The Regional Mobile Business Outreach and Education program will not address inspections or enforcement of mobile businesses; these responsibilities are retained individually by each Copermittee.

4.2 Education and Outreach

Copermittees are expected to participate as requested in the development of the Education and Outreach Strategy described in Section 3.3 above. Individual Copermittees may also have specific needs or requirements not addressed through this effort. Each jurisdiction retains the responsibility for developing additional education programs or strategies in accordance with their own needs, and as necessary to ensure their own Permit compliance.

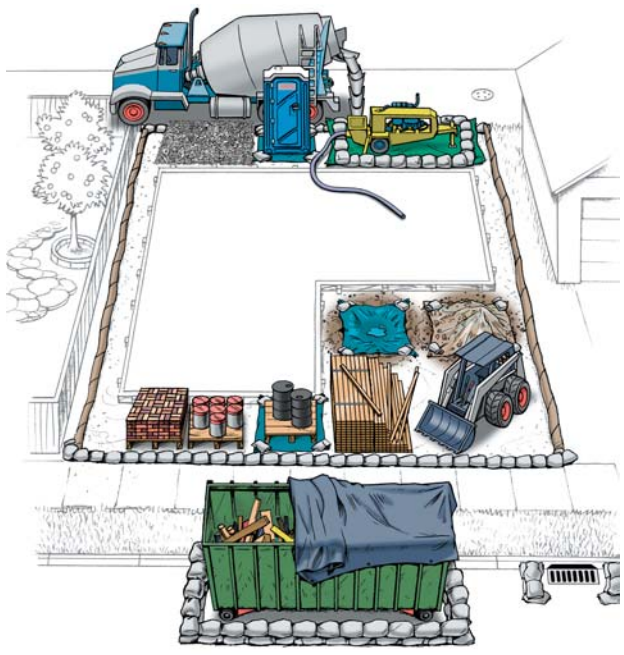
4.3 Inventory Updates

As described in Section 3.1 above, individual Copermittee mobile business inventories will initially be used as a starting point for the development of a consolidated regional inventory. Copermittees are expected to make their inventories available as requested, and to provide updated information as determined necessary for future updates.

4.4 BMP Requirements

Copermittees are expected to make their jurisdictional BMPs and requirements available as requested during the development of regional standards and program content. The Regional Mobile Business Outreach and Education Program will emphasize standardized, common content. In the event that an individual Copermittee determines that their specific requirements are not adequately addressed by the Regional Program, they will be responsible for completing additional notifications or other needed measures.

A Pollution Prevention Guide for the Construction Industry



North County Storm Water Program

Carlsbad • Del Mar • Encinitas • Oceanside • San Marcos • Solana Beach • Vista

Only Rain in the Storm Drain

Water Quality Regulations for Construction Sites

Dear Contractor,

The North County Storm Water Program (NCSWP) is a collective of jurisdictions in northern San Diego County working together to protect our watersheds. We believe that reducing pollution is critical to maintaining our communities' way of life.

It is our hope that this brochure will help you identify activities that are recognized to cause water pollution and implement appropriate Best Management Practices (BMPs) to minimize their impact. By providing you with these tools, we hope to make your job easier while keeping our waterways clean.

Each jurisdiction will be inspecting their construction sites to ensure the protection of water quality. We look forward to seeing the BMPs presented in this brochure implemented at your sites.

Together we have the ability to preserve and improve the quality of life in our communities.

Sincerely,

The North County Storm Water Program

Contact Phone Numbers:

City of Carlsbad
760-602-2719

City of San Marcos
760-744-1050

City of Encinitas
760-633-2787

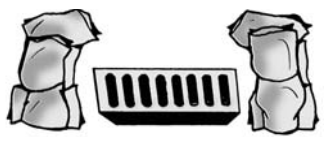
City of Del Mar
858-755-9313

City of Oceanside
760-435-5800

City of Solana Beach
858-720-2470

City of Vista
760-726-1340

Best Management Practices



The NCSWP is working with contractors to implement what are known as Best Management Practices (BMPs) on all construction sites. That is, methods used to keep pollution out of our storm drains and off public property, such as sidewalks, streets, parkways and alleys. Carrying out and maintaining these BMPs on the construction site is critical to protecting our ocean and lagoons.



The following is a list of BMPs and pollution prevention measures that shall be implemented at all construction sites:

1. **Conduct daily site cleanings.**
2. **Develop spill response and containment procedures.**
3. **Educate employees and subcontractors about BMPs.**
4. **Develop an erosion control plan for wind and rain.**
5. **Regularly maintain all BMPs at project site.**

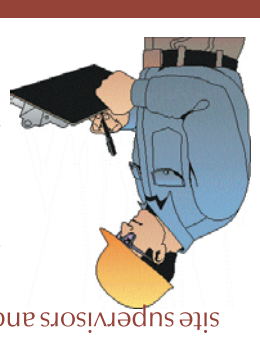
Construction materials such as paint, dirt and trash often find their way into our storm drains, polluting the environment and jeopardizing our creeks, rivers, lakes, lagoons, and ocean.

Right-of-Way Permitting

We understand that there are times when space on construction sites is limited. If at any point, you (as a contractor or subcontractor) need to use the public right-of-way in order to work or store materials, you must apply for a special permit. This permit allows you to use the City's right-of-way areas, and describes what is required to prevent illegal contaminants from entering local storm drains. For more information or to obtain a permit application contact your local jurisdiction.

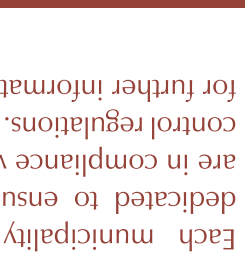
Inspection and Enforcement Program

Each jurisdiction has established an enforcement program to ensure that all businesses operate in compliance with all appropriate storm water laws and other City requirements. Contractors, site supervisors and property owners can be held responsible for violations, which may lead to a civil penalty of up to $10,000 per day and/or reimbursing the local jurisdiction for all expenses associated with clean up.



Water Quality Regulations for Construction Sites

In 1972, the environmental Protection Agency developed regulations to control water pollution. As a result, the National Pollutant Discharge Elimination System (NPDES) Permit was created. NPDES permits are issued to municipalities as well as construction sites. In addition to complying with local regulations, which are governed by our municipal NPDES permit, you may be required to obtain a permit through the State of California under the NPDES permit, which is administered by the State Water Resources Control Board. Construction sites over one acre are required to obtain coverage under this permit.



Construction sites can contribute pollutants, such as sediment, metals, and chemicals, to our local creeks, rivers, lakes, lagoons, and ocean. These pollutants make their way down our streets and into storm drains, eventually discharging to the nearest body of water.

All construction sites are required to implement Best Management Practices (BMP) to prevent storm water pollution. This brochure is intended to assist your construction site in understanding BMP requirements.

Each municipality has one or more persons dedicated to ensuring that all construction sites are in compliance with state and local storm water control regulations. Contact your local municipality for further information.

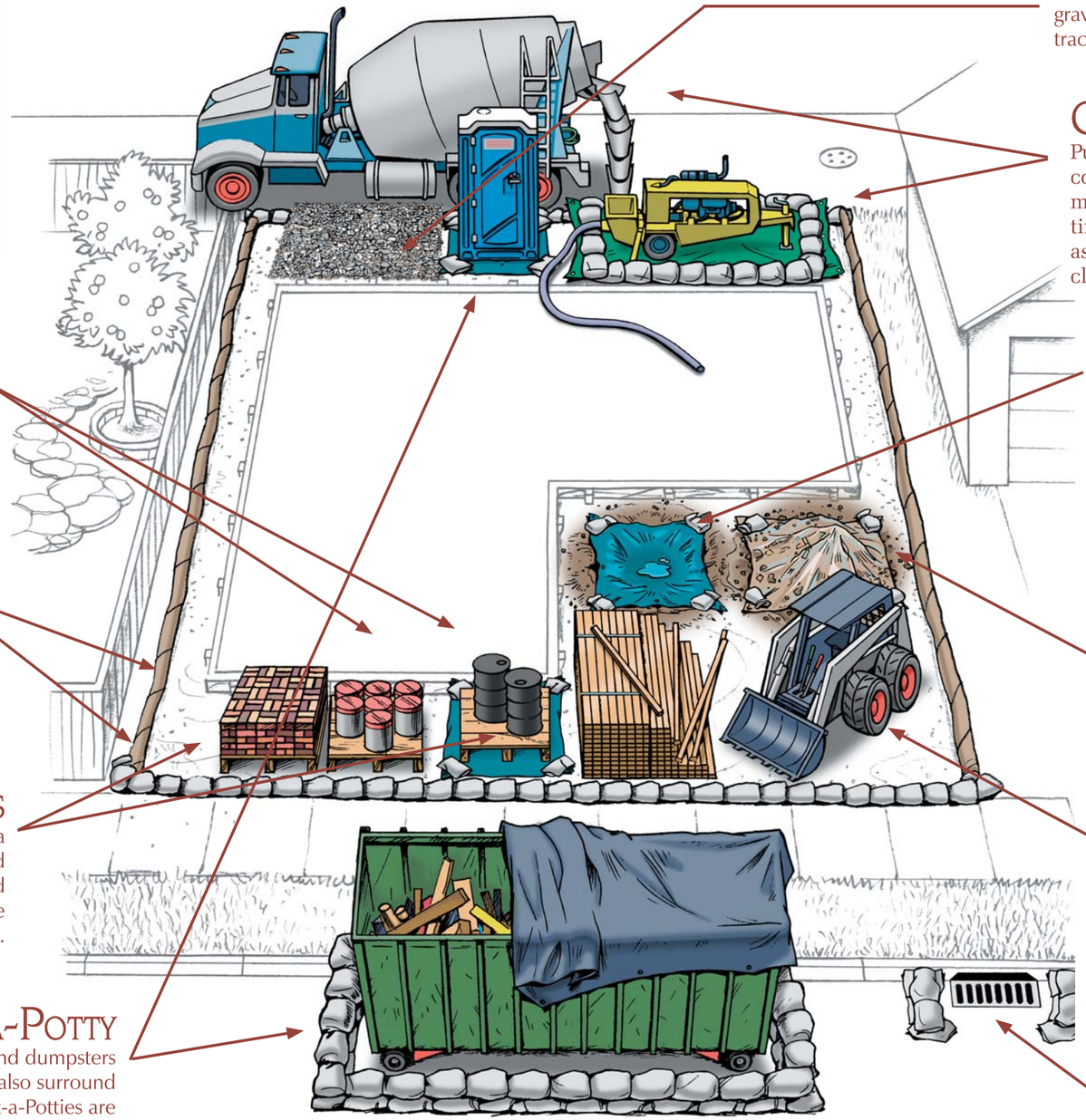
Best Management Practices

Site Overview

Protecting our water resources improves our quality of life and preserves the local environment for our children and future generations.

Untreated storm water and/or unintentional spills at work sites can flow into storm drains and pollute creeks, rivers, lakes, lagoons or the ocean. These discharges are prohibited by law.

The following drawing illustrates Best Management Practices (BMPs) that are recommended for construction sites in North County cities to protect storm drains and minimize pollution. Please check for local requirements.



Materials Storage

All building materials and fuel stored on the site must be contained and covered. It is illegal for contractors to wash out paint brushes in the street or dump any residues in the storm drain. Paint brushes and spray guns must be contained and disposed of properly.

Perimeter controls

Gravel bags, silt fences, and straw wattles are acceptable perimeter controls, and must be used to surround the entire site to control run-on and run-off. Avoid running over perimeter controls with vehicles or heavy equipment, as they can damage the materials. Keep extra absorbent materials and/or a wet/dry vacuum on site to quickly pick up unintended spills. Sites must also be checked and maintained daily.

Building materials/staging areas

Construction materials must be stored on site at all times unless a right-of-way permit has been obtained. Building materials should always be covered when not in use to prevent run-off caused by wind or rain. To apply for a right-of-way permit, contact the appropriate department of your local jurisdiction.

Dumpsters/Port-a-Potty

Always cover dumpsters with a rollback tarp. Areas around dumpsters should be swept daily. Perimeter controls should also surround dumpsters and all Port-a-Potties. If dumpsters or Port-a-Potties are kept on the street, right-of-way permits are needed.

Tracking Controls

All entrances and exits on the site must have coarse gravel or steel shaker plates to limit offsite sediment tracking.

Concrete Trucks/Pumpers

Pumpers must be surrounded by perimeter controls, such as gravel bags. Plastic sheets also must be placed beneath concrete pumpers at all times., and residual materials must be cleaned up as well. Washout areas must be used whenever cleaning trucks.

Washout area

The disposal of "wet" construction materials should be handled in the washout area. This includes paint, stucco and concrete. Use a berm and/or plastic sheet to collect and contain liquids and prevent run-off in nearby areas. The washout area must be checked and maintained daily to ensure compliance. Washout liquids must be disposed of properly.

Dirt and grading

Mounds of dirt or gravel should be stored on site. These materials should also be covered each day with a tarp, coconut mat, or other form of protection. Visqueen and/or tarps must be available and on site to cover 125% of exposed areas during the rainy season (October – April).

Earthmoving equipment

All earthmoving equipment should be stored on site. Maintenance should also be conducted on the site, and tracks and trails left by equipment leading to and from the site should be cleaned up immediately.

Storm drains

Storm drains must be protected at all times with perimeter controls, such as gravel bags or straw wattles. Sediment accumulation should be removed frequently.

These guidelines are generalized. Please check specific requirements with your local jurisdiction.


Mantenimiento
Automotriz
Automotive

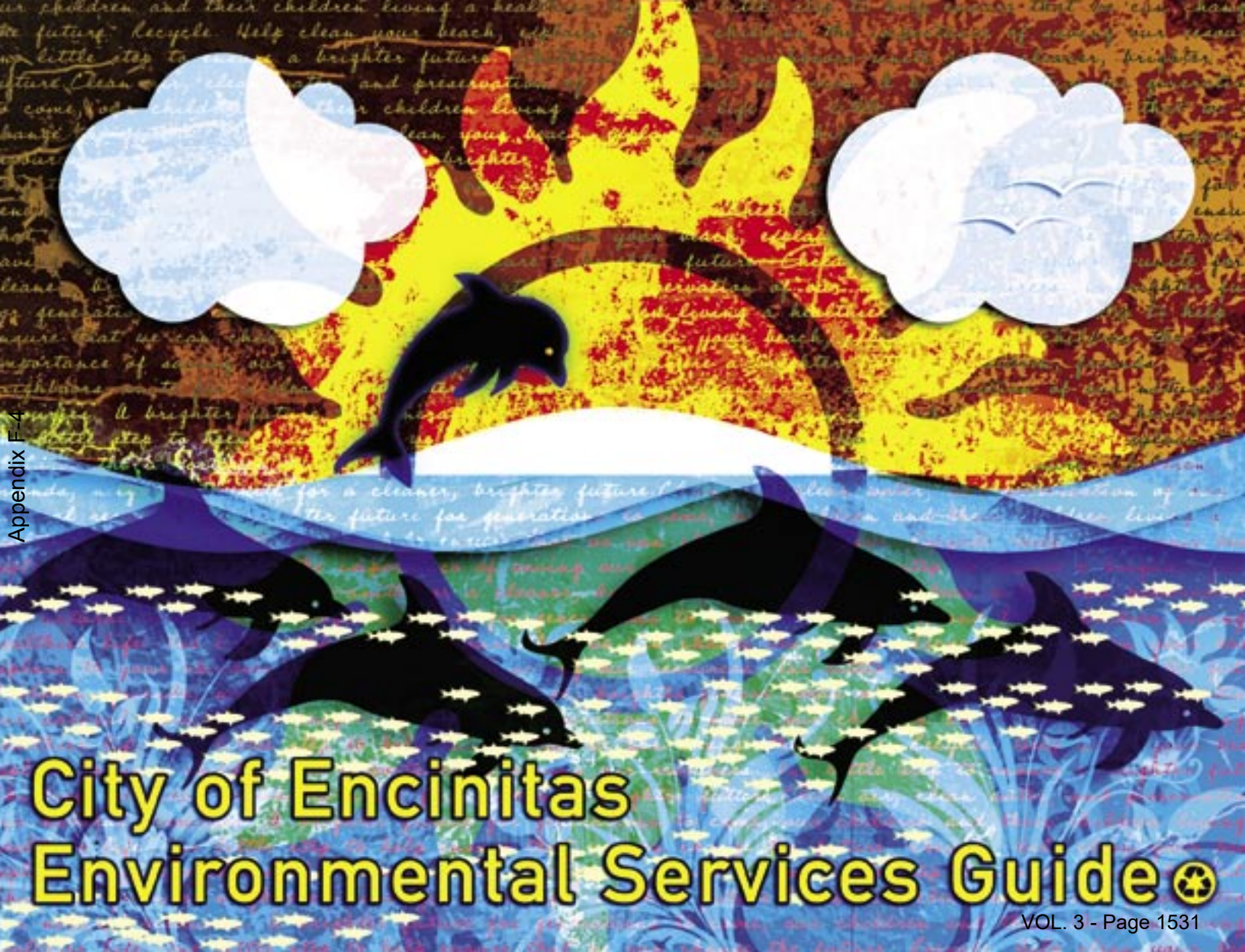

Empresas Constructoras
Developers


Hiring a
Handy Man


Diazinón
Diazinon


Restaurants Can
Help Keep our
Waterways Clean


Cuidado del
Patio y del jardín
Yard & Garden
Care



City of Encinitas Environmental Services Guide

Ocean protection

The ocean begins at your front door.



Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to carry rainwater away from developed areas to prevent flooding. Untreated storm water and the pollutants it carries flow directly into our creeks, rivers, lagoons, and the ocean.

Storm water pollution can have a serious impact on water quality in Encinitas. Pollutants from the storm drain system can harm marine life as well as coastal and wetland habitats. They can also degrade our recreational beach areas and contribute to beach postings.

Storm water pollution comes from a variety of sources, including:

- Sediment from construction, home improvement, and landscaping projects
- Excess pesticides and fertilizer from lawns, gardens, greenhouses, and nurseries
- Trash/litter
- Oil and metals from cars
- Detergents, cleaners, and solvents from car washing and power washing activities
- Bacteria from pet waste

Did you know?

One gallon of oil can pollute about one million gallons of water.
- California Integrated Waste Management Board

We all live in a watershed

A watershed is an area of land which drains all the water into creeks, rivers, lagoons, and eventually the ocean. The City of Encinitas drains into Cottonwood Creek, Moonlight Beach, San Elijo Lagoon, and Batiquitos Lagoon.

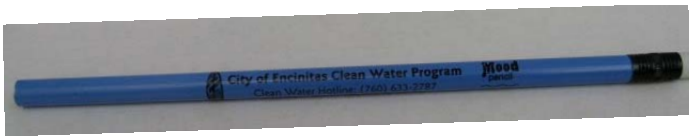
HEALTHY WATERSHEDS = HEALTHY COMMUNITIES

In Encinitas we are surrounded by water and your actions either help or hurt the environment. Healthy watersheds are vital to our quality of life. Here are some tips to help keep our community clean:

- Properly dispose of all trash and debris
- Use fertilizers and pesticides sparingly. For more information visit: www.ipm.ucdavis.edu
- Adjust sprinklers and prevent over-watering. For more information visit: www.bewaterwise.com
- When possible, take your car to a commercial car wash
- Keep your car properly maintained to prevent fluid leaks
- Volunteer at cleanup events in Encinitas
- Pick up after your pets

To report an illegal discharge or for more information, visit us online at:
www.ci.encinitas.ca.us/resident/environment/cleanWP
or call our Clean Water Hotline at (760) 633-2787.





Color Changing Mood Pencil



Bags on Board Pet Waste Bag Dispenser



Clean Water Magnet

NORTH COUNTY
STORM WATER PROGRAM

Carlsbad Vista Encinitas Escondido Oceanside
Solana Beach San Marcos County of San Diego

1. What is your zip code? _____

2. Where do you most often walk your dog?
   __ My neighborhood
   __ At the park
   __ At the beach
   __ I don't walk my dog
   __ Other _____

3. What happens to the pet waste that is not picked up?
   __ I don't know
   __ It disintegrates
   __ It fertilizes the ground
   __ It gets washed to creeks, lagoons, and the ocean
   __ Someone comes later to clean it up
   __ Other _____

4. If you saw people not picking up after their pet, what would be your reaction?
   __ I would not care
   __ I would report them to the City
   __ I would be surprised
   __ I would ask them to pick it up
   __ I don't know what I could or would do
   __ Other _____

5. Why do you think people would not pick up after their pet? (Check all that apply)
   __ They don't care
   __ They don't know they're supposed to
   __ There's no one around to see them
   __ They didn't bring a bag
   __ There was nowhere to throw it away
   __ They think it's gross
   __ Other _____

6. What do you think the City can do or should do about the pet waste problem?
   _____
   _____

Thank you!

Printed on Recycled Paper

Coastal Cleanup Day
9/20/08

1. What is your zip code?

3	92064
3	92024
2	92054

2. Where do you most often walk your dog?

5	My neighborhood	
	At the park	
3	At the beach	
	I don't walk my dog	
1	Other	don't own pet

3. What happens to the pet waste that is not picked up?

	I don't know	
1	It disintegrates	
	It fertilizes the ground	
7	It gets washed to creeks, lagoons, and the ocean	
	Someone comes later to clean it up	
	Other	

4. If you saw people not picking up after their pet, what would be your reaction?

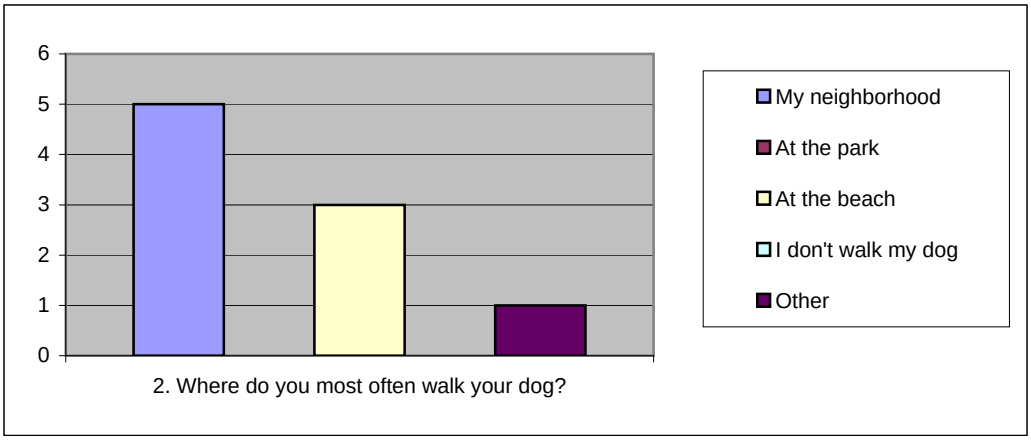
	I would not care	
	I would report them to the City	
1	I would be surprised	
7	I would ask them to pick it up	
	I don't know what I could or would do	
1	Other	report to property mgmt

5. Why do you think people would not pick up after their pet? (Check all that apply)

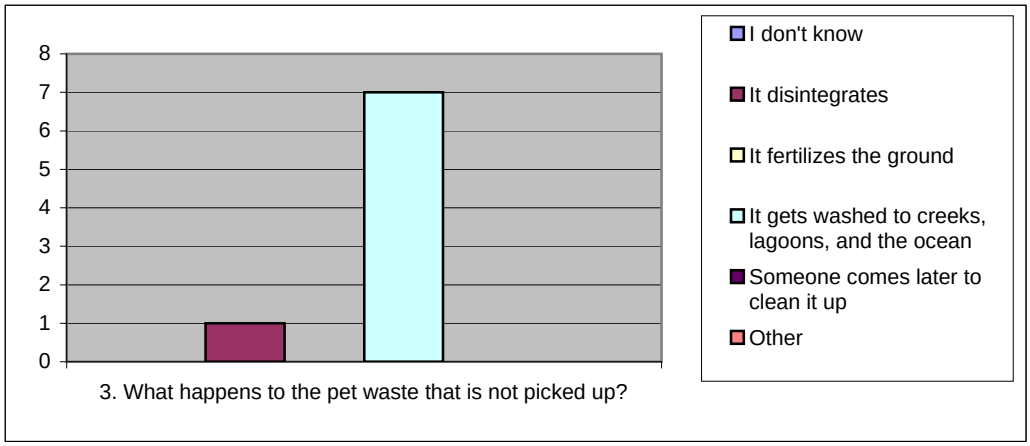
7	They don't care
4	They don't know they're supposed to
5	There's no one around to see them
4	They didn't bring a bag
3	There was nowhere to throw it away
4	They think it's gross
	Other

6. What do you think the City can do or should do about the pet waste problem?

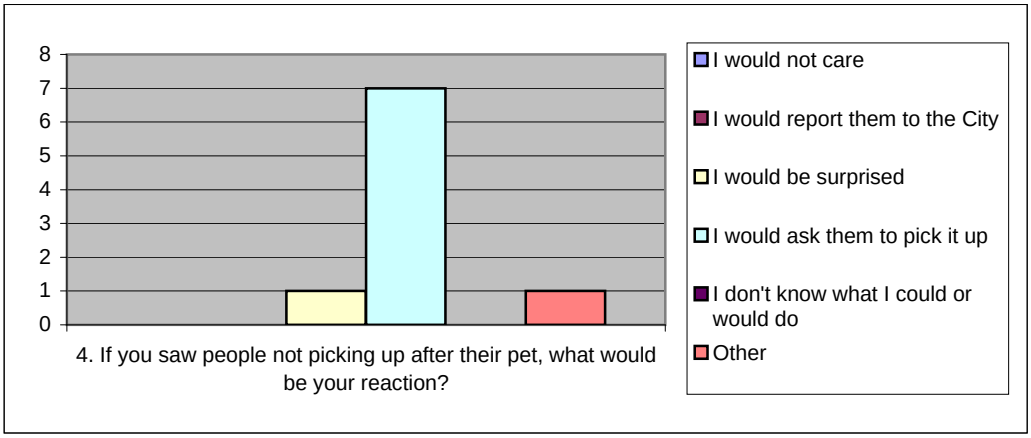
More bags
Education
Educate the people
Make a law, put more signs
Provide pet stations- fine owners if found
Provide pet stations
More places for dog



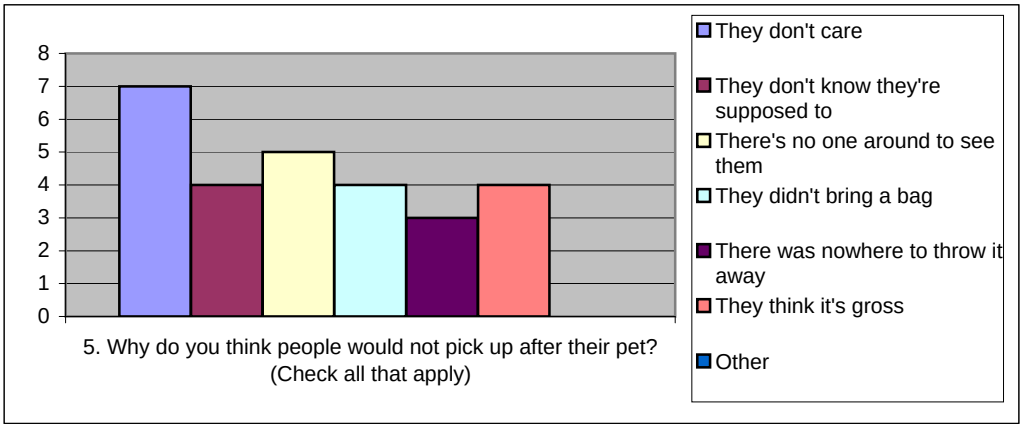
2. Where do you most often walk your dog?



3. What happens to the pet waste that is not picked up?



4. If you saw people not picking up after their pet, what would be your reaction?



5. Why do you think people would not pick up after their pet? (Check all that apply)

Cardiff Green Expo
12/7/08

1. What is your zip code?

6	92024
6	92007
1	92130

2. Where do you most often walk your dog?

13	My neighborhood
3	At the park
3	At the beach
	I don't walk my dog
	Other

3. What happens to the pet waste that is not picked up?

1	I don't know
	It disintegrates
1	It fertilizes the ground
11	It gets washed to creeks, lagoons, and the ocean
2	Someone comes later to clean it up
	Other

4. If you saw people not picking up after their pet, what would be your reaction?

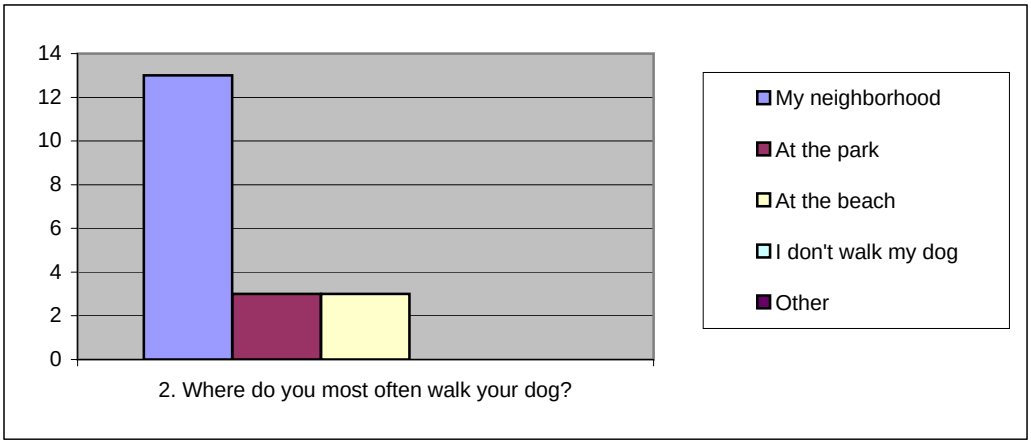
	I would not care
	I would report them to the City
	I would be surprised
12	I would ask them to pick it up
1	I don't know what I could or would do
	Other

5. Why do you think people would not pick up after their pet? (Check all that apply)

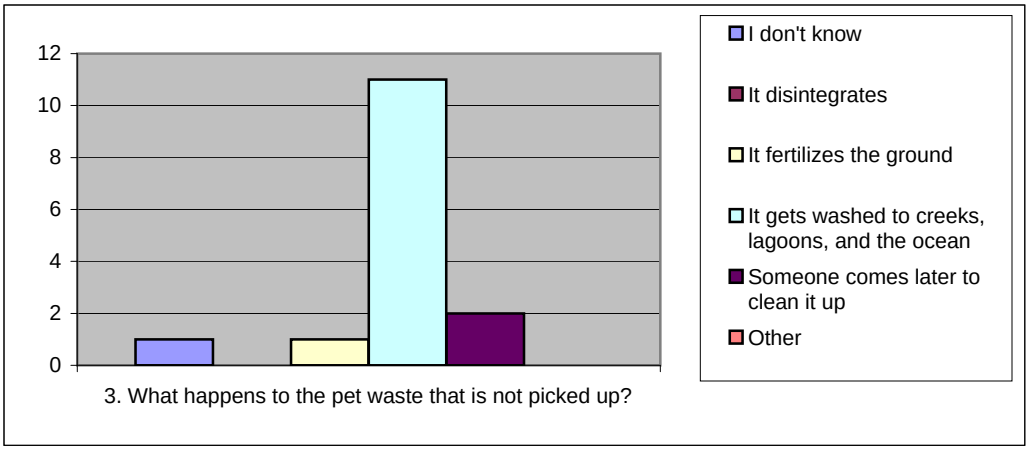
10	They don't care
3	They don't know they're supposed to
5	There's no one around to see them
9	They didn't bring a bag
4	There was nowhere to throw it away
4	They think it's gross
2	Other Lazy Didn't notice

6. What do you think the City can do or should do about the pet waste problem?

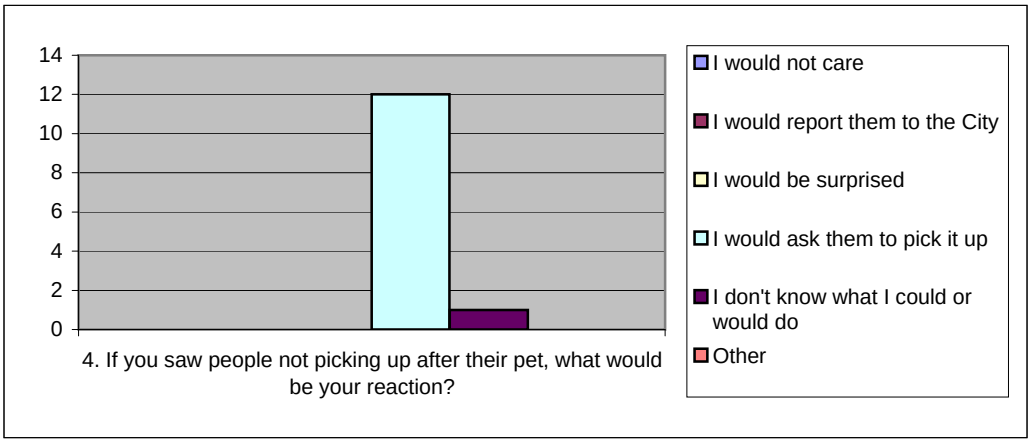
Wow, that's an interesting question. Education?
Make it an enforceable litter violation
Have more bag stands
Start issuing fines!
Inflict fines on the perps
Education campaign and more pooper scooper bags
Educate- have bags available in key locations
More bags on park and local streets and trails
If there isn't an ordinance already, the council should write one.
Fine people that are caught not picking up after their dog



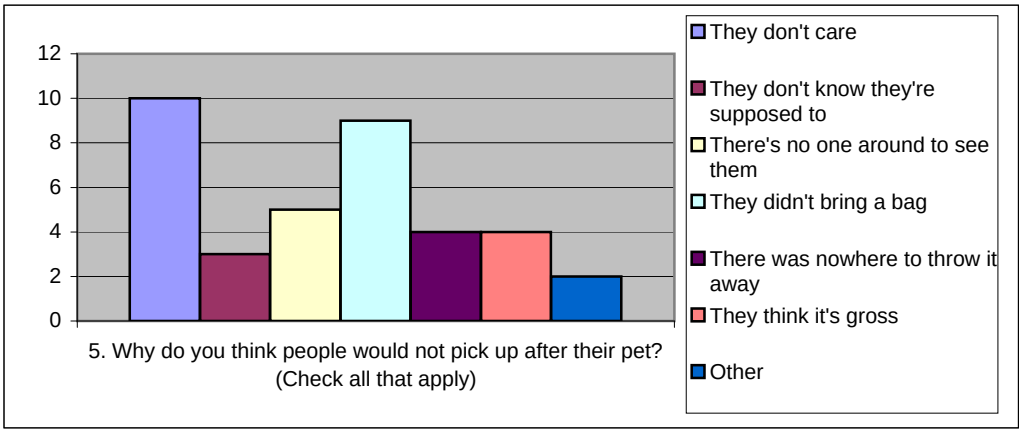
2. Where do you most often walk your dog?



3. What happens to the pet waste that is not picked up?



4. If you saw people not picking up after their pet, what would be your reaction?



5. Why do you think people would not pick up after their pet? (Check all that apply)

Encinitas Garden Fest
4/25/09

1. What is your zip code?

7	92007
1	92009
1	92011
1	92014
10	92024
3	92054
1	92071
1	92075
3	92078
2	92117
1	92124
1	92128
1	92129
1	92139
1	92584
1	94114

2. Where do you most often walk your dog?

31	My neighborhood		
7	At the park		
7	At the beach		
1	I don't walk my dog		
2	Other	Trails	Park trails/mountains

3. What happens to the pet waste that is not picked up?

1	I don't know	
7	It disintegrates	
6	It fertilizes the ground	
30	It gets washed to creeks, lagoons, and the ocean	
1	Someone comes later to clean it up	
1	Other	We give out bags on our grounds

4. If you saw people not picking up after their pet, what would be your reaction?

	I would not care	
1	I would report them to the City	
5	I would be surprised	
28	I would ask them to pick it up	
2	I don't know what I could or would do	
4	Other	Offer them a baggie. Pick it up. I would pick it up.
		I would be annoyed, but I don't think I'd say anything.

5. Why do you think people would not pick up after their pet? (Check all that apply)

25	They don't care	
11	They don't know they're supposed to	
22	There's no one around to see them	
27	They didn't bring a bag	
13	There was nowhere to throw it away	
16	They think it's gross	
3	Other	Irresponsible citizens= #1 reason
		Lazy Selfish

6. What do you think the City can do or should do about the pet waste problem?

Make disposal and bags more available.
More containers and bag stations
Education. I like the stations at San Elijo Lagoon!
Education
Waste bags available at parks- common areas pets walked.

Educate! Encinitas Garden Fest 4/25/09

Buy some small 8-10 gallon trash cans w/lids and work w/ PADS to have these placed in front of people's houses in a "test" neighborhood. See if we can lead by example and encourage folks to dispose of their pet waste responsibly.

Bring to attention. Bag dispensers are great.

People should take personal responsibility and go out prepared to clean up after their pet. The City does provide bags in parks and strategic public places. The City shouldn't have to do a lot else beside education.

Place disposal cans throughout neighborhood

Pet waste bag stations at prominent dog walk areas (along railroad track paths)

Keep doing things like this

Bag stations and trash bins

Offer "free" pet waste bags at designated locations

Along the beach in Carlsbad there are dog bag dispensers that work great and lot of trash cans

Display more signs, have baggie dispensers

Put up more poop bag stations. Fine people

Educate, make litter laws public!

More education

Put out post stations where bags can be given and trash dispensers to throw out the waste.

Make people more aware that it is against code not to pick up waste.

Info

Give doggie bag station

More available bag stations

Provide bags to pick up

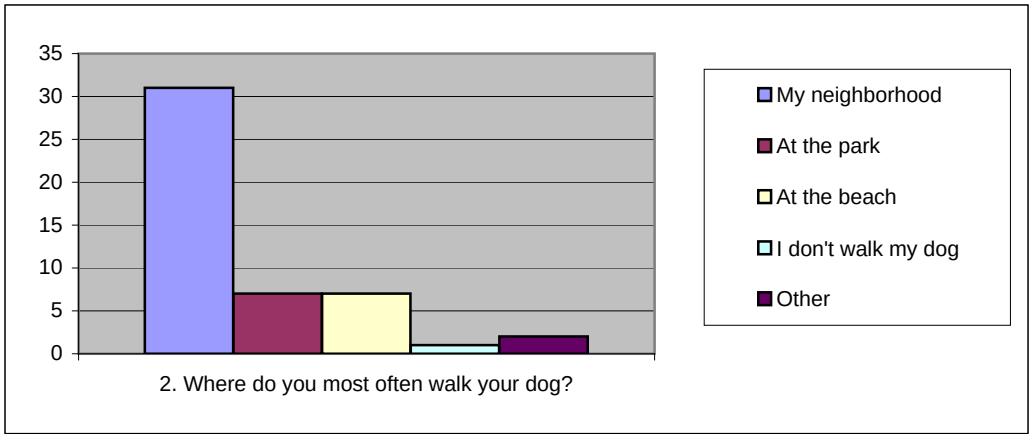
Fine people big time

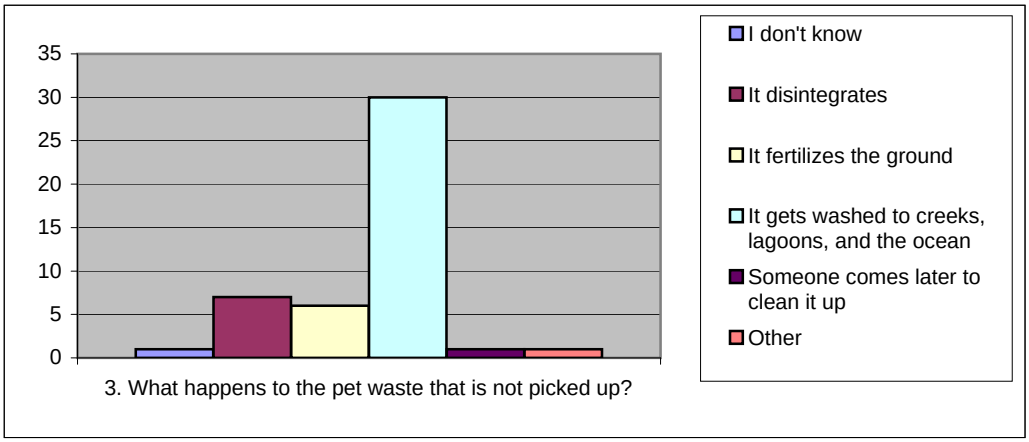
Install waste and dog bags around parks and trails, educating the people.

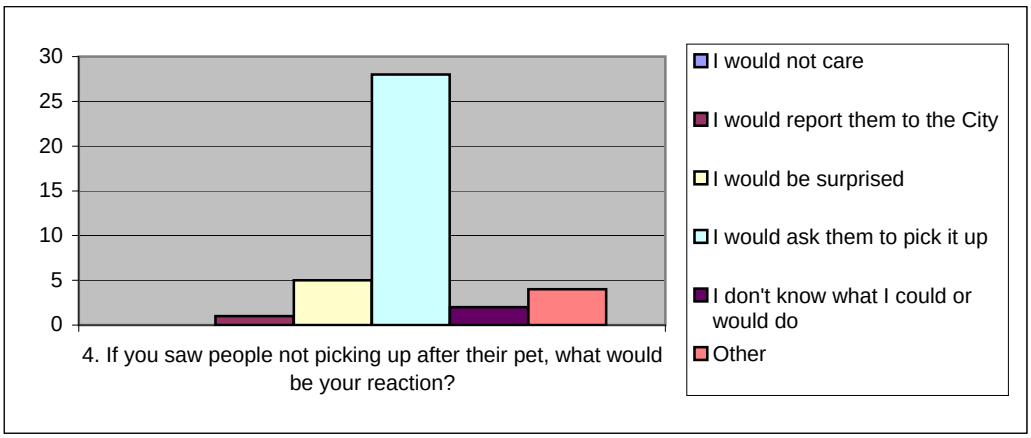
Put pet waste stations on common dog walking areas with trash cans and signs to say pick up after your pet.

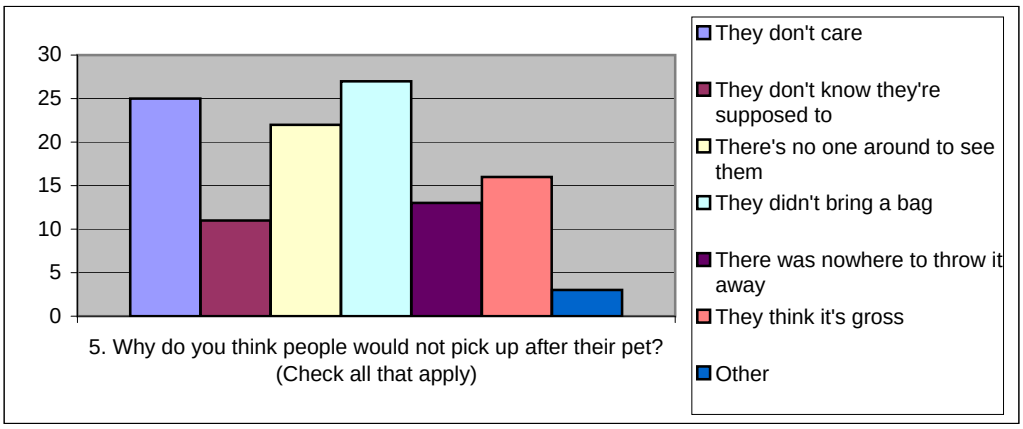
Heavy fines for offenders

Encinitas Garden Fest
4/25/09









San Elijo Lagoon Day
5/16/09

1. What is your zip code?

1	91941
4	92007
1	92008
1	92009
1	92010
1	92011
2	92014
1	92020
8	92024
1	92037
1	92067
1	92075
1	92130

2. Where do you most often walk your dog?

20	My neighborhood	
3	At the park	
	At the beach	
1	I don't walk my dog	
6	Other	Off leash areas Trails (lagoon) Lagoon Trails SEL Lagoon Campground

3. What happens to the pet waste that is not picked up?

1	I don't know	
1	It disintegrates	
1	It fertilizes the ground	
20	It gets washed to creeks, lagoons, and the ocean	
1	Someone comes later to clean it up	
2	Other	Breeds flies

4. If you saw people not picking up after their pet, what would be your reaction?

	I would not care	
	I would report them to the City	
	I would be surprised	
15	I would ask them to pick it up	
4	I don't know what I could or would do	
5	Other	I would pick it up. Offer them a bag. Pick it up. Pick up myself or offer them a bag.

5. Why do you think people would not pick up after their pet? (Check all that apply)

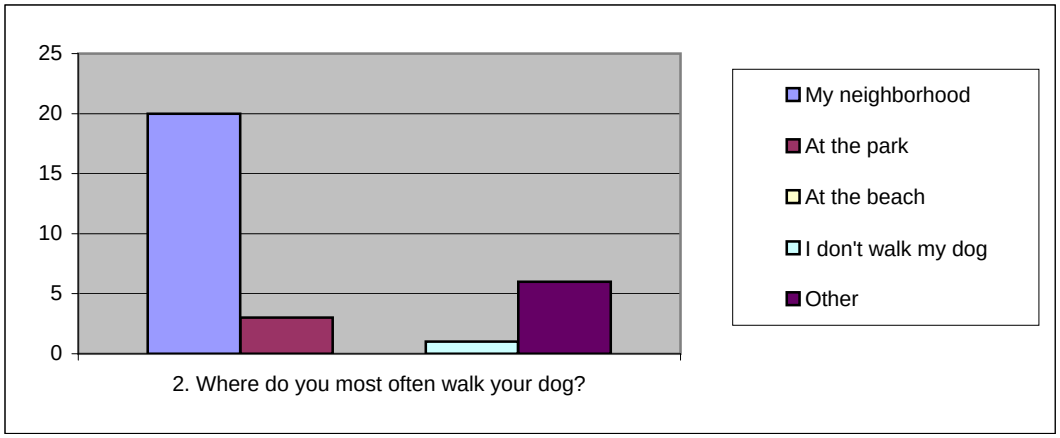
18	They don't care
4	They don't know they're supposed to
11	There's no one around to see them
11	They didn't bring a bag
9	There was nowhere to throw it away
11	They think it's gross
1	Other They don't know how much it harms the environment.

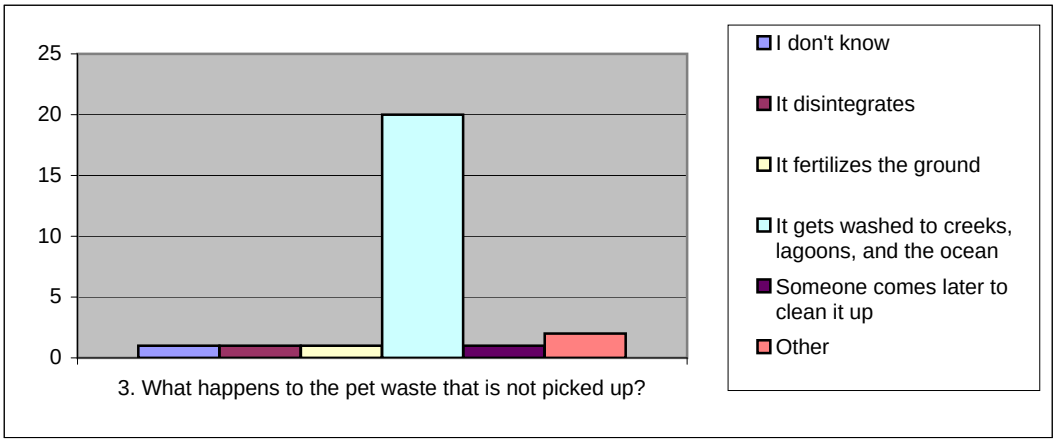
6. What do you think the City can do or should do about the pet waste problem?

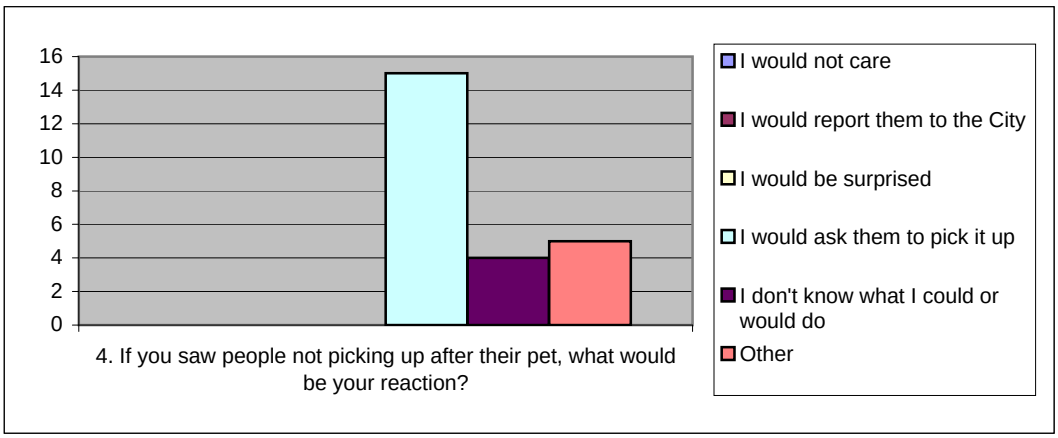
Make a rule that everyone pick up after their pets.
They should make a rule or law to pick up waste.
Make a law.
More signs
Install dispensers (there's one just recently installed in our neighborhood. Yeah!)
Provide more bags, put up more signs

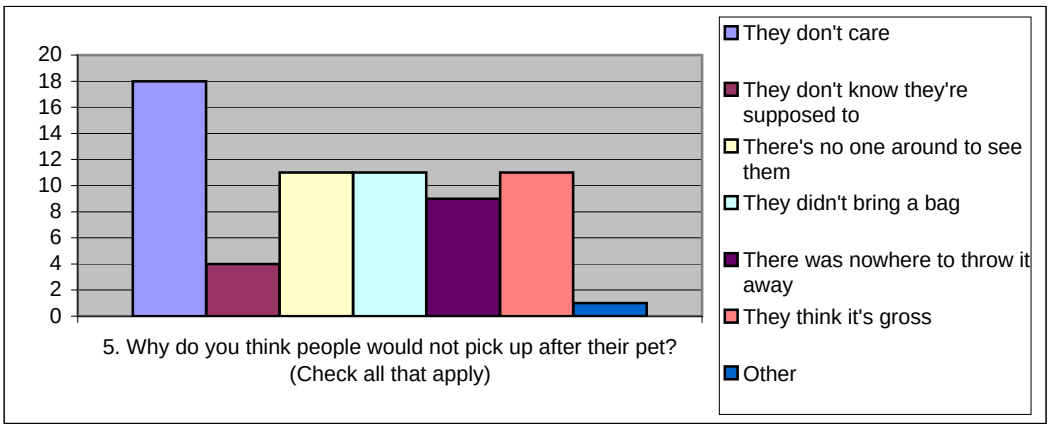
Provide more trash cans along the walk not just at the beginning or end.
Promote use of bags and install more trash cans
Enforce the law
Educate
Fines
Make cops patrol dog parks
Make people pick up after pet
Keep post around parks w/ bags for waste and trash can.
Make a law to stop people who carelessly leave poop wherever pets poop.

San Elijo Lagoon Day
5/16/09









Encinitas Environment Day
6/7/09

1. What is your zip code?

4	92007
13	92024
1	92105
1	92058
1	92084
1	92054
1	92067
1	92111
1	92107

2. Where do you most often walk your dog?

20	My neighborhood
4	At the park
4	At the beach
2	I don't walk my dog
	Other

3. What happens to the pet waste that is not picked up?

2	I don't know
2	It disintegrates
1	It fertilizes the ground
20	It gets washed to creeks, lagoons, and the ocean
1	Someone comes later to clean it up
2	Other

4. If you saw people not picking up after their pet, what would be your reaction?

	I would not care		
2	I would report them to the City		
2	I would be surprised		
18	I would ask them to pick it up		
1	I don't know what I could or would do		
5	Other	I'd pick it up myself.	Sometimes I don't want to be confrontational.
		Offer a bag.	

5. Why do you think people would not pick up after their pet? (Check all that apply)

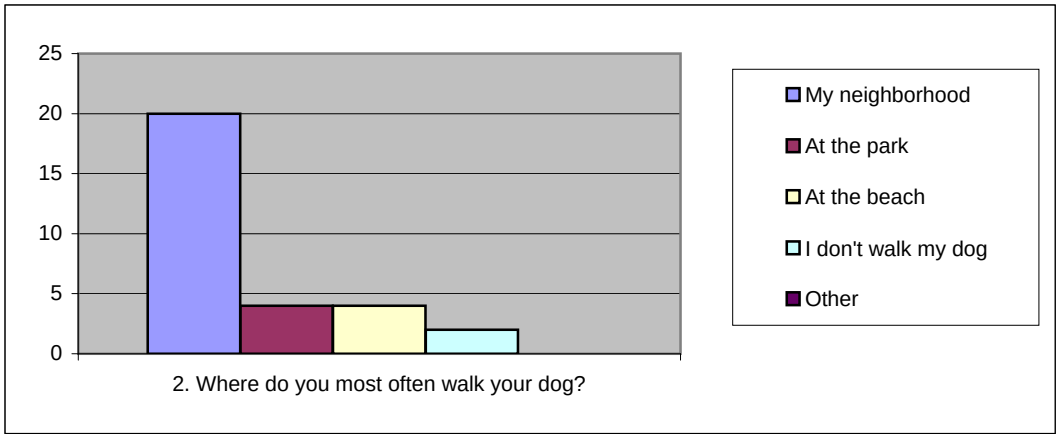
18	They don't care		
5	They don't know they're supposed to		
14	There's no one around to see them		
13	They didn't bring a bag		
6	There was nowhere to throw it away		
10	They think it's gross		
2	Other	They are morons.	Smelly.

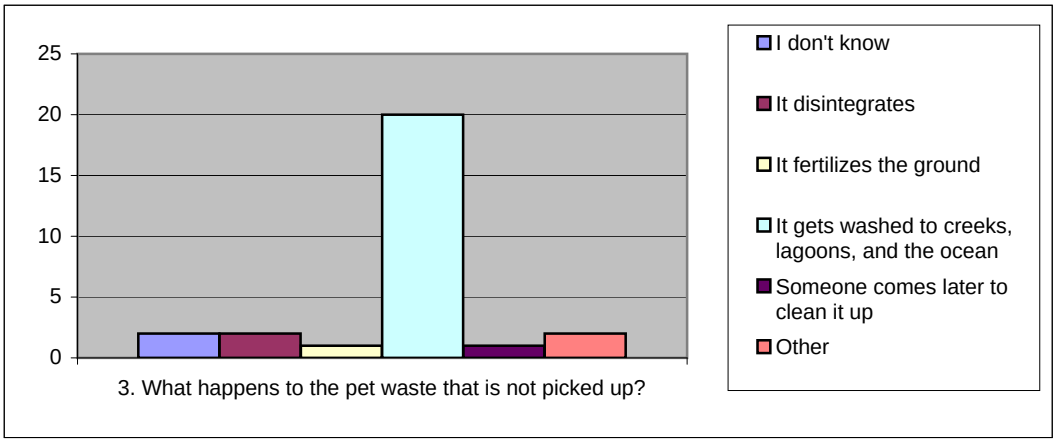
6. What do you think the City can do or should do about the pet waste problem?

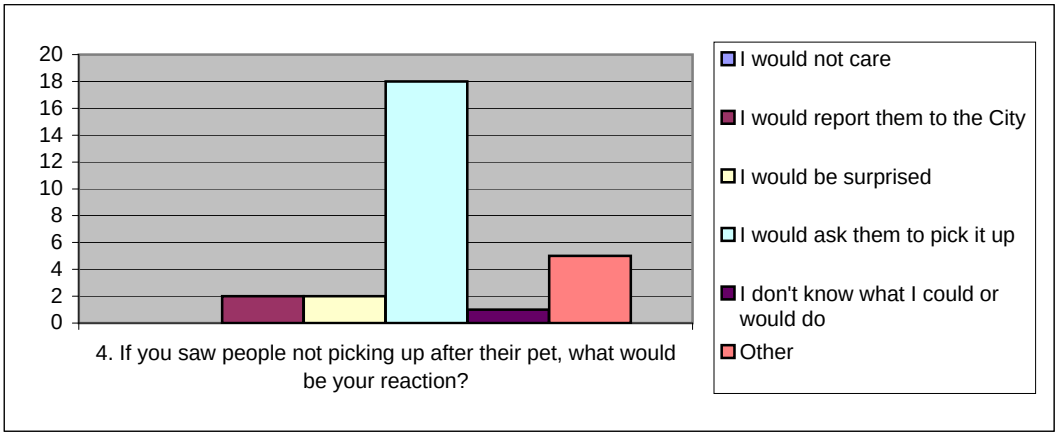
Provide waste bag depots like Del Mar.
They don't have an ordinance already?
Education of the public
More scoop your poop bags
More bag dispensers, signs like "Heal the Bay" campaign: "This goes to the bay."
More education of dangers.
Continue providing bags, refuse containers, and reminder signs
Perhaps have bags and cans for disposal in parks.
Enforce litter and pet waste laws and continue education efforts!
Puppy bag stations along neptune
More signage, more trash cans!
Pet poop bags at all places dogs might be and trash bins for poop.

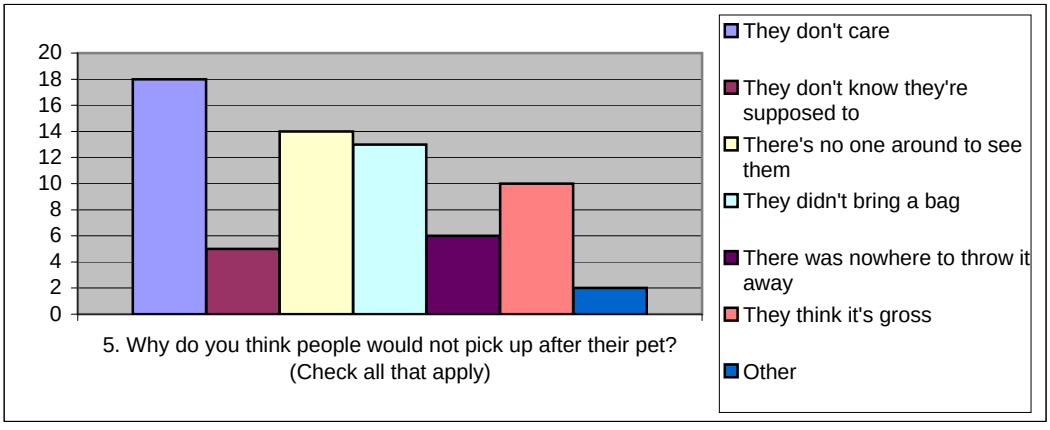
Incentive to pick up.
Fine them
Ticketing dog patrol
City/County law advertised on newspaper or on news to remind pet owners.
Educate
Very hard to control humans that are stupid.

Encinitas Environment Day
6/7/09









Regional URMP Attachment 2.0

Regional Residential Education Plan

FINAL – March 20, 2008

Submitted by the San Diego Stormwater Copermittees in partial fulfillment of the requirements of San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (the San Diego Municipal Stormwater Permit)

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1.0 INTRODUCTION

The Regional Residential Education Program is a joint effort by the Copermittees of the Municipal Stormwater Permit (Order No. R9-2007-0001, NPDES No. CAS0108758). The Regional Residential Education Plan (Plan) contains recommended strategies for the successful development and implementation of the Regional Residential Education Program. Per section F.1 of the Permit, as amended by Addendum No. 1 on December 12, 2007, this program must be collaboratively developed and implemented by March 24, 2008.

In the past, Copermittees have been limited in their ability to pursue strategies which may have a much greater potential to influence knowledge and behavioral change in residential populations. There are several benefits to implementing an enhanced regional program to target residential sources of stormwater pollution. First, it will encourage the development of consistent messages throughout the region. Second, a regional approach will enable Copermittees to better leverage resources and utilize economies of scale. Finally, stormwater and urban runoff pollution frequently cross jurisdictional boundaries, making collaborative approaches a necessity. While the regional program will be coordinated extensively among the Copermittees, it is not meant to supplant the jurisdictional and watershed programs.

The overall goals of the program are to increase awareness and knowledge, improve attitudes toward stormwater pollution and provide a foundation for changing behaviors that contribute to stormwater pollution. Based on extensive input from the Copermittee Regional Stormwater Management Committee (RMC) and the Education & Residential Sources Workgroup, as well as an independent analysis of existing educational efforts, the following objectives were developed to support these goals:

1. Maintain a consistent image, message, and brand
2. Use positive messages to increase knowledge and awareness, and ultimately change behavior
3. Develop community partnerships to leverage resources

4. Develop assessment strategies for program effectiveness

The Regional Education & Residential Sources Workgroup advises the RMC on regional shared outreach activities as necessary to support the requirements of the Permit. The Education & Residential Sources Workgroup plans, develops, and implements the various aspects of the stormwater education program. Education & Residential Sources Workgroup participants have traditionally combined efforts to reach business, industrial, and residential communities across the San Diego region. However, in accordance with the most recent NPDES Permit, this Plan represents a distinct effort to target residential sources of stormwater pollution.

Messages developed by the Education & Residential Sources Workgroup are designed to increase knowledge and awareness of regional stormwater issues and encourage positive changes in behavior. Assessment methods and measures have also been developed to evaluate the effectiveness of these messages and the strategies used to deliver them. Program evaluation methods and strategies will evolve as various program elements are implemented. Regional assessment methods will measure knowledge, awareness, and attitudes of residents. Program elements that are determined to be ineffective or least effective will be replaced by more effective elements or improved upon as needed. The regional program will also facilitate the measurement of changes in pollutant generating behaviors by the jurisdictional and watershed programs.

As a basis for developing this Regional Residential Education Plan, the Copermittees contracted with TRG & Associates to develop *Recommended Options for the San Diego Regional Stormwater Educational Program*. This document contains a number of recommended strategies for the successful development and implementation of a regional residential education program. It includes an extensive literature review, an analysis of existing educational programs in San Diego, and a comprehensive list of public awareness surveys. The literature review outlines other programs in the State that have

successfully implemented regional residential stormwater education programs. The document also summarizes the strengths and weaknesses of existing residential education efforts, provides suggestions for how they can be improved, provides a brief analysis of baseline public awareness surveys that have been implemented locally within the last five years, and offers recommendations for improving assessment methods and survey instruments.

2.0 SOURCE CHARACTERIZATION

The San Diego region occupies 4,261 square miles with a population of approximately 3 million people. Estimates for the year 2007 indicate that the San Diego regional population is 29% Hispanic and 71% non-Hispanic. Non-Hispanic persons include African Americans, American Indians, Native Hawaiians, Asians, and persons of a multitude of races, ethnicities, and cultures. SANDAG currently estimates that the median household income in the San Diego region is $68,388. According to the US Census Bureau in 2004 only 10.9% of San Diego's population was living below the poverty level, compared to 13.2% Statewide. Other estimates indicate that as much as 25% of California's population is living below the poverty level. Much of the region's quality of life revolves around the water resources.

Residential areas have been shown to be a prevalent source of urban runoff in the San Diego region, although less than ten percent of the region is developed as residential land. Most of the urban activity is clustered in the western third of the county, near coastal areas. However; residential land–based activities throughout the entire region contribute to polluted stormwater runoff.

The Regional Residential Education Program will focus efforts on high priority residential pollution sources that are common throughout the San Diego region. Water quality monitoring data and source characterization studies have provided the Copermittees with useful information in determining regional residential sources of stormwater pollution and constituents of concern. Regional threats to water quality were initially outlined in the Report of Waste Discharged and finalized in the Permit. Section

F.1.a of the Permit describes the process for determining which pollutants will be addressed by the program.

2.1. Regional Constituents of Concern

The following constituents of concern were determined to be the primary pollutants from residential sources for the San Diego region:

- Bacteria
- Nutrients
- Sediment
- Pesticides
- Trash

Some jurisdictions may have additional high priority pollutants. Each jurisdiction will be individually responsible for addressing additional pollutants and their sources. The pollutants listed above will remain the focus of the Regional Residential Education Program.

2.2. Pollutant-generating Activities and Constituents of Concern

Table 1 outlines residential pollutant generating activities and associated constituents of concern generated by residential areas in the San Diego region.

Table 1) Pollutant Generating Activities

Pollutant Generating Activities	Priority Constituents				
	Bacteria	Nutrients	Pesticides	Sediments	Trash
• Leaving pet waste in yard, street or sidewalk • Improper disposal of pet waste	X	X			
• Over-irrigation • Improper irrigation and system maintenance	X	X	X	X	
• Fertilizer use • Pesticide use • Landscaping activities	X	X	X	X	
• Cleaning outdoor impervious surfaces (i.e., driveways and patios)	X	X		X	X
• Improper waste disposal	X	X	X	X	X

2.3. Target Audiences

As described above, this program is intended to address the entire residential community of the San Diego region. This residential audience will be further described in terms of two specific target audiences in order to design more effective education and outreach strategies. The target audiences for the Regional Residential Education Program have been identified based on information gathered by the consultant (TRG and Associates), who utilized data from market research conducted by the County and City of San Diego and surveys gathered from other case studies. Although there may be other smaller groups of target audiences, regional outreach must realistically target the highest priority demographics in order to effectively utilize program funds. The following describes the target audiences for the campaign:

1. Primary Target Audience- English speaking residents and homeowners
2. Underserved Target Audience- Spanish speaking communities and Low Socio-Economic Status (SES)

One of the challenges of program implementation will be to develop messages that appeal to these communities. While creating content and developing materials for the primary target audience may be relatively straightforward, methods and approaches will need to be modified in order to engage the Underserved Target Audience. For example; some messages will be more conducive to translation into the Spanish language than others. Once translated, Spanish language media will be used to disseminate these messages.

According to the US Census Bureau, 33% of San Diego County residents speak a language other than English at home (2000). The same data indicates that 26.7 % of the regional population is Hispanic or Latino. Although this number varied within jurisdictions from 49.5% in Chula Vista to 11.7% in Carlsbad, it is clear that every jurisdiction in the region has significant populations of Hispanic or Latino residents. Therefore, although there are many languages spoken in San Diego, Spanish speaking communities are likely the most common throughout the region.

Research indicates that the motivating factors in Spanish speaking communities are 1) health and commitment to family, 2) children, and 3) finances. Similar priorities are found within the low SES communities. Hence, some messages will resonate more strongly with the communities among the Underserved Target Audience. Other messages may need to be modified in order to create a more appealing campaign. Low SES in California is defined as household annual income less than $25,000. Low SES residents tend to obtain information and resources from different sources than the residents within the Primary Target Audience. Again, message delivery becomes a key issue. In order to address all of these issues, specific outreach strategies will need to be developed in order to effectively reach the Underserved Target Audience.

3.0 TARGETED CHANGES TO KNOWLEDGE, AWARENESS AND BEHAVIOR

The overall goals of the Regional Residential Education Program are to raise the levels of knowledge and awareness with regards to stormwater pollution among residents, while encouraging changes to behaviors that are harmful to San Diego's waterways. The program will generally educate residents on 1) The difference between stormwater conveyance systems and sanitary sewer systems 2) the connection of storm drains to local waterways and 3) common residential sources of urban run-off. These are the general knowledge and awareness concepts upon which more specific messages will be built.

Recent research indicates that many residents do not understand that storm drains and sanitary sewer systems are completely separate. While sewage is treated, everything that goes down a storm drain goes directly to a creek, bay, or the ocean. The City of San Diego conducted a public opinion survey in 2007 in which 91% of respondents said they had heard the term "storm drain" before. However, only 46% knew that the water entering storm drains is not treated. This is a fundamental stormwater pollution prevention issue and general awareness concept. Awareness of the stormwater conveyance system is the first step towards understanding pollution prevention. Increasing knowledge and awareness that the system leads directly to local waterways will help residents to understand that urban sources of pollution have a direct effect on water quality. The awareness and knowledge of these issues are precursors to adjustments in attitudes (i.e.: increased concern for preventing this type of pollution).

Ultimately, it is anticipated that the program's targeting increased awareness and knowledge of these concepts will lead to positive changes in attitude. Furthermore, improved attitudes toward the importance of stormwater issues can provide motivation for changing pollutant generating behaviors.

In keeping with the program goals, the Copermittees have agreed on a number of positive behavior outcomes for each stormwater issue presented to the target audience. Pollutant generating activities are listed in Table 2, along with the knowledge required to understand the significance of the stormwater impacts. Also listed are numerous examples of desired behavior outcomes. Since it may not be feasible to craft messages that address each of the desired behavior outcomes listed in Table 2, some behaviors may be considered primary and targeted before others. Secondary behaviors will be targeted only if the initial efforts are determined to be unsuccessful. It is important to recognize that the Copermittees agreed on these issues and the associated behaviors, and some may wish to further utilize the concepts listed in Table 2 in their jurisdictional and/or watershed programs.

Table 2) Pollutant Generating Activities and Examples of Positive Behavior

Pollutant Generating Activities	Knowledge/Awareness	Examples of Desired Behavior Outcomes
• Leaving pet waste in yard, street or sidewalk • Improper disposal of pet waste	Pet waste left in the yard and streets may introduce solids, bacteria, and nutrients to the storm drain and/or receiving water bodies.	• **Pick up pet waste during walks** • Pick up pet waste around home • **Properly dispose of pet waste in trash can or bin**
• Over-irrigation • Improper irrigation and system maintenance	Over-irrigation causes water and pollutants in its path to run into the storm drain and/or receiving water bodies.	• **Reduce over-irrigation** • Use irrigation controller technology to reduce the amount of over-watering • **Inspect and maintain irrigation system regularly** • Adjust irrigation schedule according to seasonal changes
• Fertilizer use • Pesticide use • Landscaping activities	Fertilizers and pesticides become pollutants that can be harmful to natural ecosystems when entering receiving water bodies. Soil, sediment, and yard waste can clog storm drains and/or receiving water bodies.	• Use plants that reduce the need for fertilizers (i.e.: native plants) • Apply chemical fertilizers and pesticides only as needed and at the appropriate time • **Use organic or slow-release fertilizers** • **Use Integrated Pest Management** • Store chemicals inside in a shed or storage cabinet where they are protected from rainfall • **Collect grass clippings and yard waste** • **Dispose of grass clippings and yard waste in the proper containers** • Protect exposed soil from rain with a tarp, vegetation, and/or mulch
• Cleaning outdoor impervious surfaces (i.e.: driveways and patios)	When it rains, trash, dirt, and chemicals that have built up on these surface can run into the street, the storm drain, and eventually local waterways.	• **Clean driveways, walkways, and patios by sweeping instead of hosing** • Direct wash water to soak in to lawn or garden
• Improper waste disposal	Litter and debris dropped on the ground will be washed into storm drains and local water bodies.	• **Put litter and cigarette butts in trash cans or bins** • Keep lids closed on trash cans or bins

Although many positive behaviors have been identified that may be encouraged by the messages developed in this program, the following have been selected as the primary desired behaviors to result from the changes to knowledge, awareness, and attitudes:

- Pick up pet waste and properly dispose of in trash can or bin
- Reduce over-irrigation by regularly inspecting and maintaining irrigation systems
- Reduce fertilizer use by applying chemical fertilizer only as needed and using organic or slow-release fertilizers
- Reduce chemical pesticide use through Integrated Pest Management
- Collect grass clippings and yard waste and place them in the appropriate disposal container in order to prevent them from entering the storm drain systems
- Sweep up outside areas such as driveways, walkways, and patios instead of hosing them down
- Put litter and cigarette butts in trash cans or bins

Specific messages will be designed to increase knowledge and awareness, and therefore encourage the behaviors listed above. Regional messages will be initially developed to address only the primary targeted behaviors. Once a baseline is established and program implementation is underway, Copermittees will have the opportunity to evaluate the knowledge, awareness, and willingness of the residential target audiences to adopt these behaviors. Other positive behaviors from Table 2 may also be substituted, if necessary.
It can reasonably be expected that the regional program will be able to measure success in terms of increasing knowledge and awareness, and improving attitudes, of residents.

Knowledge describes the accuracy of one's beliefs and awareness indicates recognition of the severity of the issues whereas attitude can be described as an individual's evaluation of it (favorable or unfavorable).

As a result of the regional efforts, Copermittees expect to see an increase in the general awareness of storm drain systems and their connection to local waterways, as well the sources of urban run-off. Specifically, residents should understand the difference between the stormwater conveyance system and sanitary sewer systems. They should become aware that water entering storm drains flows untreated to local waterways. Residents should also be able to accurately identify sources of stormwater pollution (i.e.: pet waste). Attitudes toward stormwater pollution should also improve. Ideally, there will be an increase in the numbers of households or individuals engaging in the desired behavior outcomes as a result of their increased knowledge and awareness. These targets will be measured using the assessment methods described in Section 6.0.

The primary assessment tool will be the public opinion surveys. A baseline regional residential telephone survey will be conducted in 2008 and, ideally, at one other point during the current permit cycle. The numeric objectives for survey results are set so that they exceed the statistical margin of error of 2.5 percent (assuming a sample size of 1000) so that if they are achieved, they will be statistically significant. In addition, the objectives are intentionally set high, with the understanding that they are intended as a point of reference rather than a pass/fail measure. With that in mind, Copermittees have set a target of a 10% change in knowledge that storm drains are separate from sanitary sewer systems, a 10% increase in the awareness that all storm drains are connected to local waterways, and a 15% increase in the number of participants who can identify residential sources of stormwater pollution.

4.0 EDUCATIONAL METHODS AND APPROACHES

A variety of methods and approaches will be utilized to implement the program objectives. As described above, the Regional Residential Education Program objectives are 1) to maintain a consistent image and brand 2) use positive messages to change behavior 3) develop community partnerships and 4) develop strategies to assess program effectiveness. The following regional program elements are designed to meet these objectives:

- Standardized Regional Brand (Think Blue)
- Regional Think Blue Website
- Mass Media (Broadcast and Outdoor)
- Regional Outreach Materials (Development and Distribution)
- Regional Outreach Event
- Partnerships
- Regional Stormwater Hotline
- Public Relations

Some of the elements are designed for program management whereas others are outreach methods. Program management elements include standardizing the Think Blue brand, message and material development, and partnership development. The program will have a multi-faceted outreach approach utilizing a regional website, mass media (broadcast and outdoor), public relations, printed materials and promotional items, and regional outreach such as a community event. Implementation of all the recommendations is dependent on funding for each year. Therefore, some activities may be feasible only if sufficient or additional funds are available in a given year.

4.1 Standardized Regional Brand (Think Blue)

The Think Blue campaign has created a locally recognizable brand that has demonstrated effectiveness in stormwater outreach. Expanding the brand to the regional program has obvious benefits for all of the Copermittees. With a consistent look and brand, the Copermittees can continue to conduct their own outreach; however they can use the Think Blue brand in conjunction with their materials for consistency. There will be a Think Blue Graphic Standards Guide that provides the correct fonts, colors and standards to be used for all outreach materials. This will help reinforce the Think Blue brand and provide standards for its use in messages and materials. Messages and materials may need to be continuously revised in order to keep current and effectively reach target audiences.

4.2 Regional Think Blue Website

A regional Think Blue website will help build upon and reinforce the branding strategy. The Internet is a powerful means of communication. Web sites can reach large audiences with relatively minimal effort. The regional website will be developed and maintained by a contractor. It could contain easy to download, user friendly information sheets, links to Copermittees websites, and short surveys or quizzes. The regional web site, along with the new logo and slogan, will increase program visibility.

4.3 Mass Media

Although the website is an important component of the outreach efforts, many residents still get the great bulk of their environmental messages from more traditional venues such as the television and radio (broadcast media). Public Service Announcements (PSA) and advertisements are the most common forms of broadcast media. Some PSAs have already been developed under the Think Blue campaign and through the combined efforts of the Copermittees. The Copermittees can utilize funds to expand or complement the existing Think Blue campaign. The public relations component will involve news coverage such as news stories, interviews, and event coverage. Public relations provide

valuable outreach opportunities that will be sought whenever possible. Outdoor media such as bus placards and billboards can also be utilized for outreach. The location of outdoor media advertisements will need to be carefully placed in order to reach the regional target audience.

4.4 Regional Outreach Materials and Community Events

Print materials and promotional items are critical items for successful outreach. Materials include items like fact sheets, brochures, flyers, booklets, coupon booklets, posters, and doorknob hangers. These materials are easily created and the target audience can refer to them repeatedly. Promotional materials are good for promoting the regional brand, increasing knowledge and awareness, and encouraging simple actions to prevent stormwater pollution. They will be designed to also serve as visual prompts that remind people to choose behaviors that protect and improve water quality.

A regional outreach event can be an energizing and successful venue for distributing outreach messages. Careful attention should be given to participating in a community event so that the effort reaches residents from the entire region. Extensive planning, material or display development, coordination, and marketing will be necessary in order to prepare for one successful regional outreach event. This is an endeavor that will involve identifying events that reach the entire region as well as coordinating, funding, and staffing the selected event. The Copermittees expect to participate in up to two regional events over the duration of this permit cycle. Some examples of regional events that may be considered are the San Diego County Fair, the Miramar Air Show, or a local sports venue.

4.5 Partnerships

Partnerships are both a management and outreach element of the program. A partnership is a voluntary collaboration of agencies, organizations, or other groups or individuals that have joined to work toward a common goal. The Copermittees can maximize resources through the use of partnerships. The potential for partnerships is immense for the

Copermittees. Potential partnerships include local water districts (combine conservation and pollution prevention messages), hardware stores and nurseries, pet stores, and Homeowner's Associations and Property Management Companies. Initial development of partnerships with businesses and business organizations, nonprofits, other government agencies, will be necessary before the full benefits can be realized. Copermittees may then encourage partners to distribute materials or spread messages through signage, advertising and websites. Partnerships will require time to develop and may not be fully recognized until later in the permit cycle.

4.6 Regional Stormwater Hotline

Although a regional stormwater hotline is already in place, successful outreach may lead to an increase in hotline calls. The regional hotline can also help the public gain access to information quickly and easily. The hotline will be promoted through the website, media advertising and other promotional venues. The number of calls to the hotline can be tabulated to help gauge whether some advertising is effective (if the call to action is a hotline call). Since the hotline will also be an important measure of program success, careful consideration will be given to managing the hotline as the program implementation moves forward.

4.7 Behavior Specific Outreach Methods

Table 3 lists the primary target behaviors for the program during this permit cycle. The table indicates which of the outreach methods described above may be utilized to deliver messages designed for each behavior. These were selected as the primary targets because they have current appeal. Primary target behaviors may be updated as program evaluation progresses. If necessary, resources may be reallocated to address the other (secondary) target behaviors previously listed in Table 2.

Table 3) Applicability of Outreach Methods to Primary Target Behaviors

Primary Target Behaviors	Potential Methods of Outreach						
	Website	Mass Media Broadcast	Mass Media Outdoor	Public Relations	Material Distribution	Partnerships	Regional Community Events
Pick up pet waste and dispose of in trash bin	X	X	X	X	X	X	
Reduce over-irrigation by regularly inspecting and maintaining irrigation systems	X			X	X	X	X
Apply chemicals to lawn and garden only as needed	X	X		X	X	X	X
Use organic or slow-release fertilizers	X	X		X	X	X	X
Collect grass clippings and dispose of them in the proper container	X				X		
Employ Integrated Pest Management	X	X	X		X	X	X
Sweep outside areas instead of hosing them down	X		X		X		
Put litter and cigarette butts in trash cans or bins	X			X	X	X	X

Specific messages will be developed to increase knowledge and awareness that will lead to each desired behavior outcome

4.8 Program Implementation

While the overall goals of the program are to educate the general public in order promote knowledge and awareness and decrease pollutant generating behaviors, a successful program will also require coordination among the Copermittees. Program planning and message development are key components of the program that will precede full implementation. Message delivery will be ongoing. Subsequently, as results from assessments are reviewed, messages and delivery methods will need to be revised. Therefore, there are essentially three steps in the program implementation process 1)

development, 2) implementation, and 3) assessment. For the purposes of this report, the development phase includes planning projects as well as developing materials and messages. Implementation includes initiating a program element (such as media outreach) as well as maintaining the ongoing nature of the element once it is in place. Assessment includes all levels of determining the effectiveness of program elements, as well as making revisions that reflect the knowledge gained through assessment.

Table 4 charts the schedule of program implementation over the 5-year permit cycle. Strategies to achieve these objectives will be implemented over the 5-year permit cycle. Because some upfront planning and development is necessary, the first year will focus on standardizing a regional brand, developing messages, and determining the most appropriate methods for disseminating messages on a regional scale (i.e.: a regional website). Copermittees may also begin fostering partnerships in the initial years of the program. Subsequent years will build on this foundation. Copermittees may decide to refine messages and could begin leveraging resources through partnerships.

Table 4) Projected General Implementation Schedule

Program Elements	Year 1: 2007-08	Year 2: 2008-09	Year 3: 2009-10	Year 4: 2010-11	Year 5: 2011-12
Branding	D	D, I, A	I, A	I, A	I,
Regional Website	D	D, I, A	I, A	I, A	I,
Regional Hotline	D	D, I	I, A	I, A	I,
Mass Media	D	D, I	I, A	D, A	I,
Regional Outreach (Marketing and Community Events)	D	D, I	I, A	D, A	I,
Materials Development & Distribution	D	D, I, A	D, I, A	D, A	D, I
Public Relations	D	D, I	I, A	D, A	I,
Market Research & Assessment Tools	D, I, A	D, I, A	D, I, A	D, I, A	D, I,
Partnerships	D, I	D, I,	I, A	I, A	I

Development (D), Implementation (I), Assessment (A)

4.9 Social Marketing Approaches

In all of the aforementioned efforts, a variety of social marketing approaches will be utilized whenever possible. There are so many techniques described as social marketing that it is not possible to utilize them all, especially with limited staff and budgets. Social marketing uses many of the principles of social psychology and marketing techniques to bring about behavior change. Rather than being product oriented, social marketing focuses on people and their behaviors. All social marketing approaches use audience research to learn how to motivate an audience to change one or more recurring actions.

Social marketing consists of several basic components that result in delivering messages that will increase knowledge and awareness, thereby prompting people to change certain behaviors. The challenge is to present the new behavior in a positive way and emphasize the benefits to adopting a new behavior. Forming strategic partnerships with community resources can help to achieve the end goal of behavior change. Social marketing campaigns deliver messages that are strategically created and positioned to give people a compelling reason to adopt a new behavior. In order to overcome the barriers to action it is necessary to understand what the barriers are and why they exist. Researching and understanding the audience is a critical step in developing a social marketing campaign. Messages are conveyed through advertising, websites, materials and other communications. Messages should be simple, memorable and easy to follow. There should be one simple message for each of the targeted areas of knowledge and awareness. Each message needs to be used consistently in communications.

Community Based Social Marketing (CBSM) is a type of social marketing. It has gained popular appeal among the environmental community as an effective alternative to traditional information-based marketing approaches. CBSM packages basic principles of behavior change and social science research in a way that provides a usable framework for practitioners working to promote positive behavior change.

A key element of the CBSM approach is to pilot test the program with a small representative segment of the community, and compare the results to a control group. For example, a small jurisdiction may implement a project that essentially serves as a pilot for the regional program. If the pilot is not successful, the strategy should be refined and then pilot tested again. If the pilot is successful at changing behavior, the strategy can be implemented more broadly throughout the community or on a regional level. Once the successful pilot program has been widely implemented CBSM requires that the program be carefully evaluated at several points to measure continued success.

The Copermittees have agreed that CBSM offers a solid foundation for developing an effective program. However, it may not always be feasible to utilize the CBSM approach on a regional scale, hence the need for a combined approach that uses traditional social marketing techniques as well as CBSM. Some methods will lend themselves more readily to developing CBSM based approaches. When implementing each of the methods, a CBSM approach will be pursued whenever feasible.

5.0 RELATIONSHIP OF REGIONAL, WATERSHED, AND JURISDICTIONAL OUTREACH

The Regional Residential Education Program is designed to meet the Permit requirements for residential education based on regional needs and issues. The first step in meeting these requirements is to establish a regional brand and consistent image. The City of San Diego's regionally recognized Think Blue logo will be utilized as the Regional Residential Education Program's brand. During the implementation phase of the permit cycle the Copermittees will work collaboratively with the City of San Diego to update and standardize the Think Blue brand. A Graphics Standards Manual will be developed by the City of San Diego and adopted by the Copermittees in order to facilitate ease of material development and ensure a consistent regional image. Existing jurisdictional programs may also choose to use the Think Blue brand, maintain individuality, or

combine both programs for maximum impact. In a similar manner, watershed activities may be coordinated under the Think Blue brand, so long as the standards are adhered to.

Copermittees will hire a contractor to build and maintain a regional Think Blue website. The website may include links to jurisdictional program, watershed program websites, and other regional websites such as Project Clean Water. The regional Think Blue website will provide user friendly information for the public in a single location, thereby promoting consistency and coordination among the regional, jurisdictional, and watershed programs.

In addition, the Education & Residential Sources Workgroup provides a platform for integration of regional, jurisdictional, and watershed messages. The Education & Residential Sources Workgroup also coordinates activities between non-profit organizations, private institutions, and governmental agencies providing environmental and water quality education. Regular meetings will continue to provide a forum for educators, trainers, and public information officers to collaborate, share methods and materials, and seek policy level support and direction.

Watershed and jurisdictional programs should look to the Regional Residential Education Program when designing residential educational activities. The Regional Residential Education Program can thereby serve as a basis for developing these other programs. Some specific watershed or jurisdictional issues may not be covered by the Regional Residential Education Program, and must still be met by the individual or Watershed Copermittees as required by the Permit. These issues will be addressed in the watershed or jurisdictional programs. In this manner, the watershed and jurisdictional programs can supplement the Regional Residential Education Program in order to ensure that all requirements are met. As a result, each jurisdictional program may be unique in some respects and elements of the watershed programs may go beyond those in the regional program.

While the regional program may play a role in encouraging behavior changes, it is more feasible for jurisdictional programs to be able to measure actual behavioral changes resulting from increased knowledge and awareness because of their ability to implement pilots on a small scale. The broad based regional program will be implementing methods and utilizing assessment tools that most accurately gauge attitudes, knowledge, and awareness. Positive changes in attitudes and awareness are generally accepted as precursors to behavior change. Therefore, due to the difficulty of assessing behavior change on a regional level, demonstrating behavior change will therefore reside with the jurisdictional and watershed programs. In order to facilitate the assessment of jurisdictional and watershed programs, the Plan outlines assessment tools for measuring changes in knowledge and awareness through the regional program. These measures can also be tailored to meet the needs of the jurisdictional and watershed programs that implement CBSM pilots or focused outreach efforts, which provide excellent opportunities to assess behavior change. Section 6.0 describes assessment tools in further detail.

6.0 ASSESSMENT OF REGIONAL EDUCATION ACTIVITIES

In order to evaluate whether the various components of the program are resulting in the targeted knowledge and awareness outcomes, a number of assessment methods may be utilized. A random digit dial telephone survey will be the primary tool for measuring changes resulting from implementation of the regional program. Different types of assessment methods will be employed in order to gauge the outcomes of each activity and thereby determine effectiveness. Copermittees will review and assess existing survey data while developing the new regional baseline survey. Public opinion surveys will be alternated with other assessment methods to adequately assess the overall effectiveness of the Regional Residential Education Program. Copermittees have agreed to work cooperatively on funding and conducting market research and surveys. Measurement tools outlined in the Plan may be modified somewhat to correspond with different program elements. The Plan basically provides a model for program effectiveness

assessment. Specific assessment methods will depend on the type of outreach or education activity conducted and other constraints.

Copermittees will work with the City of San Diego to conduct a county-wide random digit dial telephone survey in order to obtain baseline information on knowledge, awareness, attitudes, and behaviors pertaining to stormwater. Results of the survey will guide further adaptation of the program objectives. Ideally, another public opinion survey will be conducted later in the permit cycle to assess any changes resulting from program implementation. Once the baseline is established, future permit cycles may involve one or more public opinion surveys. Additional evaluation methods may be utilized once specific media, promotions, and outreach activities are implemented. Results will enable Copermittees to determine the most effective outreach methods and make modifications to the programs as needed.

Outcome levels used in this program are based on the Hierarchy of Targeted Outcomes Pyramid referred to in the NPDES Permit, which includes outcome levels 1-6. Outcome levels 1-3 will be most applicable to educational and outreach activities. Table 5 illustrates potential assessment methods that may be utilized for each of the activities being considered. Level 1 outcomes indicate compliance with permit based activities. This is the most basic means of assessing program effectiveness. Measuring Level 2 outcomes will indicate changes in attitudes, knowledge and awareness. Surveys and quizzes provide the most common means for measuring Level 2 outcomes. Level 3 outcomes provide an opportunity to measure behavioral changes and implementation of Best Management Practices (BMPs). This can be accomplished through observations and program specific counts. For example, tracking sales of less toxic pesticides in a store where IPM information is available may indicate changes in the behavior of consumers. Level 4 outcomes indicate actual load reduction, and are more practical for activities such as clean up events or Household Hazardous Waste collection activities, which are sometimes associated with outreach activities.

Table 5) Potential Program Element Assessment Measures

Activity/ Level		Type of Assessment Measure
Branding		
1		Updating materials to reflect new regional brand.
2		Count number of survey respondents who are aware of brand/program.
3		N/A
4		N/A
Website		
1		Count number of hits to website, interactive use/quizzes taken, etc.
2		Administer survey/quiz to assess attitude/knowledge of web users.
3		Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data. Downloads of informational brochures.
4		N/A
Mass Media/Public Service Announcement (PSA)/Public Relations		
1		Count number of household/individuals reached.
2		Administer survey/quiz to assess attitude/knowledge of PSA recipients.
3		Comments and feedback received regarding PSA via the hotline or website.
4		N/A
Outreach Materials (i.e.: fact sheets and brochures)		
1		Count number of fact sheet/brochures handed out.
2		Administer survey/quiz to assess attitude/knowledge of fact sheet/brochure recipients
3		Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data.
4		N/A
Regional Outreach Event		
1		Count number of visitors to booths, brochures handed out, surveys/quizzes completed, etc.
2		Count number of mail-in cards, number of volunteers to organization, number of persons who attended community event. Administer survey/quiz to assess attitude/knowledge of visitors
3		Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data.
4		N/A

Partnerships

1	Count number of incentives distributed, participants in the program.
2	Survey or quiz to assess attitude/knowledge of volunteers pre- and post- participation
3	Administer survey to assess behavior change in program participants or count observable behavior of program participants and compare to pilot data, historical data, and/or control group. Count number of mail-in cards, number of volunteers to organization, or number of persons who signed a petition directed from incentive program.
4	Count amount of load reduction in targeted residential area or count amount of load removed from targeted area

Hotline

1	Count number of calls to hotline.
2	Administer survey/quiz to assess attitude/knowledge of hotline users.
3	Administer survey to assess behavior change of participants in program and compare to pilot, historical, or control data, count observable behavior of participants in program and compare to pilot data and/or control group.
4	N/A

7.0 CONCLUSIONS AND RECOMMENDATIONS

The San Diego region has widely diverse socio-economic, ethnic, biological, and physical characteristics. These characteristics create the region's appeal and present many challenges to the entities charged with developing and implementing an effective Regional Urban Runoff Management Program (RURMP).

The Regional Residential Education Program is a component of the San Diego RURMP. This program is designed to increase knowledge and awareness of stormwater issues and potentially change pollutant generating behaviors. Research indicates that these are attainable goals under a well-funded, long term, multi-faceted and strategic public outreach campaign.

In order to implement program goals, the Copermittees have agreed on general objectives: 1) maintain a consistent image, message and brand 2) use positive messages to increase knowledge and awareness, thereby increasing the likelihood of behavior change 3) develop community partnerships and 4) develop strategies to assess program effectiveness. In order to efficiently accomplish these objectives, Copermittees have agreed to adopt Think Blue as the regional flagship brand. In addition, strong and

focused outreach messages will be selected to increase knowledge and awareness and ultimately target the primary pollutant generating behaviors from residential activities.

The basic program elements include an array of methods and approaches that will be utilized for program management, message delivery, and effectiveness assessment. Over time, the Regional Residential Education Program will be adapted to utilize the most effective outreach and education strategies practicable while maintaining a clear focus for the entire region. Annual reports will summarize progress and provide an opportunity to reflect on the year's successes and shortcomings. At the end of the 5-year permit cycle, Copermittees will be able to assess of the program's progress and develop more effective regional outreach strategies.

Appendix G

JURMP Annual Report Requirements Checklist

G-1 Requirements Checklist

Appendix G
JURMP Annual Report Requirements Checklist

2.0 Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location In Report**
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2.4, 2.3, 2.4.4.1, 2.4.4.2
ii. Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.4.4.2, 2.4.4.3, 2.4.4.4
iii. A listing of the development projects to which SUSMP requirements were applied.	2.4.4.3, Table 2-3
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.4.4.3, 2.4.4.4
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.4.4.3
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.4.4.3 (N/A)
vii. An updated treatment control BMP inventory.	2.4.4.4, Appendix A-1
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.4.4.7
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.4.4.6
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.4.5
xi. A listing of any projects which received a SUSMP waiver.	2.4.4.3 (N/A)
xii. A description of implementation of any SUSMP waiver mitigation program.	2.4.4.3 (N/A)
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.4.3.1, 2.4.4.1
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.4.4.3 (N/A)
xv. A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	2.4.4.3

2.0 Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location In Report**
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	2.4.4.3 (N/A)
xvii. The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	2.4.4.8
xviii. A description of notable activities conducted to manage urban runoff from development projects.	2.4.3.1, 2.4.4.1, 2.4.4.4, 2.4.4.6, 2.4.4.7

3.0 Construction

Permit Annual Reporting Requirement—Section J.3.a.(3).(b)	**Location in Report**
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.5.1
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2.2, Appendix B-3
iii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iv. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.4.1
v. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.5.4 (N/A)
vi. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.5.3, 3.5.4 (N/A)
vii. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	Appendix B-1 and B-2
viii. A description of the general results of the inspections.	3.5.5.2
ix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5.5.1
x. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.5.5.2, Appendix B-6 and H-1
xi. A description of notable activities conducted to manage urban runoff from construction sites.	3.2.2, 3.3

4.0 Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
i. Any updates to the municipal inventory and prioritization.	Appendix C-1
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2.3, 4.3.3, 4.4.3, 4.5.3, 4.6.3, 4.7.3
iii. A description of inspections and maintenance conducted for municipal treatment controls.	4.4.4.1, Appendix C-2
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4.4.1, Appendix C-2
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	Appendix C-2
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	Appendix C-2
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4.4.1, Appendix C-2
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	N/A
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	4.3.3.1
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2

4.0 Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2
xiii. Identification of the total distance of curb-miles swept.	4.2.4, Appendix C-2
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.2.4, Appendix C-2
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.2.4, Appendix C-2
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	4.5.4.1
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.3.2, 4.3.4.3, Appendix C-2
xviii. A description of the general results of the inspections.	4.3.4.3, Appendix C -6
xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	4.3.4.3, Appendix C -6
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	Appendix C-6 and H-1
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	4.2.4, 4.3.3.2, 4.4.4.1, 4.5.4.1, 4.7.3.1, 4.7.4

5.0 Industrial and Commercial

Permit Annual Reporting Requirement—Section J.3.a.(3).(d)	**Location in Report**
i. Any updates to the industrial and commercial inventory.	5.2.2,
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.4.5, 5.3.4.4, Appendix D-5 and H-1
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.4.4, 5.3.4.1
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.4.2
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.4.1
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4.3, 5.2.4.5
vii. Identification of the number of third party inspections conducted.	5.2.4.3 (N/A)
viii. Identification of efforts conducted to verify third party inspection effectiveness.	5.2.4.3 (N/A)
ix. A description of efforts implemented to address mobile businesses.	5.3.4
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4.5, 5.3.4.4
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4.5
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	5.2.4, 5.3.4

6.0 Residential

Permit Annual Reporting Requirement—Section J.3.a.(3).(e)	**Location in Report**
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.3, 6.4.3, Appendix H-1
iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4.2
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4.2
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.2.3
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4.3, Appendix H-1
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4.4
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	6.4

7.0 IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
To be included in FY 2007-08 Illicit Discharge Detection and Elimination Component on December 15, 2009.	N/A

8.0 Education

Permit Annual Reporting Requirement—Section J.3.a.(3).(g)	Location in Report
i. A description of education efforts conducted for each target community.	8.3
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	8.3.1
iii. A description of education efforts conducted for municipal departments and personnel.	8.2
iv. A description of education efforts conducted for the new development and construction communities.	8.3.2
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.3.4

9.0 Public Participation

Permit Annual Reporting Requirement—Section J.3.a.(3).(h)	Location in Report
i. A description of public participation efforts conducted.	9.3

10.0 Fiscal Analysis

Permit Annual Reporting Requirement—Section J.3.a.(3).(j)	Location in Report
i. A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order. (For 2007-2008, the requirements that apply are essentially the same as those found in Order No. 2001-01)	10.1, 10.2

Same as old Permit for 2007-2008

11.0 Effectiveness Assessment

Permit Annual Reporting Requirement—Section J.3.a.(3).(i)	Location in Report
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11.2, 11.3

12.0 Special Investigations

Permit Annual Reporting Requirement—Section J.3.a.(3).(k)	Location in Report
i. A description of any special investigations conducted.	12.1, 12.2

13.0 Non-Emergency Firefighting

Permit Annual Reporting Requirement—Section J.3.a.(3).(l)	Location in Report
i. A description of efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	13.2

14.0 JURMP Revisions

Permit Annual Reporting Requirement—Section J.3.a.(3).(m)	Location in Report
i. A description of any proposed revisions to the JURMP.	14.0

Appendix H

Complaint Response

H-1 Construction Summary

Municipal Summary

Commercial Summary

Residential Summary

Referrals or Requests for Info Summary

Appendix H-1 Construction Complaint Response Summary FY 2008-09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	68896	7/1/08	GRAVEL	Discharge of construction debris - Broken gravel bags, silt in street at construction site at gas station.	7/1/08 Site inspection took photos of broken gravel bags. Contacted contractor (for Valero's construction-Max Raja 619 518 2936) to clean gravel bag areas and replace broken bags though NOV to comply by 7/2/08 12 noon See follow up WO 79378 Follow Up: 7/2/08 site inspection area cleaned and BMPs redone See original WO 74807	Yes	Yes	7/1/2008				CBS	7/2/08
2	68899	7/2/08	SAND	Discharge of construction debris - Construction waste at residence. Complainant would like a call back.	7/2/08 site inspection called contractor regarding removal and replacement sandbags and white substance that worker is spraying on Stucco. Contractor indicated that they were applying the stucco applicant according to the label and that he will remove the sandbags from the street ASAP	Yes	No		Yes			LUC	10/14/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
3	69278	8/13/08	SILT	Other discharge - Silt in street at construction site.	8/13/08 site inspection contact owner and requested that he install Min BMPs. took photos Follow Up: 8/13/08 site inspection showed that BMPs are in place took photos	Yes	No		Yes			ENC	8/13/08
4	69279	8/13/08	cement wash water	Discharge of concrete cutting slurry or washwater. - Company washing down cement pump into street.	8/13/08 site inspection no discharge observed 8/13/08 contacted lead worker and explained that no discharge can leave the site.	No	No		Yes			ESC	10/15/08
5	69423	8/29/08	CEMENT WASTE	Discharge of concrete cutting slurry or washwater. - Tile slurry/concrete dumped into street.	8/29/08 site inspection observed fresh cement in storm drain south of 2297 New Castle. Contacted lead worker and showed him cement debris. He said he would clean it up ASAP	Yes	No		Yes			CBS	10/15/08
6	69484	9/10/08	SEDIMENT	Discharge of construction debris - Resident complaining about mud being tracked into street from neighbor's backyard excavating. Construction inspector to investigate. Please keep complainant's information anonymous.	Per construction inspector: due to lack of proper permits, the project was stopped w/ stop work notice. Area cleaned up by contractor on 9/11 and 9/12.	Yes	No					CBS	10/15/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
7	69698	10/16/08	WATER	Discharge of construction debris - Contractor hit a water line. BMPs were not adequate, water and sediment flowing down B Street.	10/16/08 site inspection took photos contacted superintendant and requested that he clean all the streets and comply with inspector's direction.	Yes	Yes		Yes		OCEAN	ENC	10/21/08
8	69745	10/28/08	SILT	Discharge of construction debris - Lack of BMPs at site with building permit only. No construction inspector assigned to site.	10/28/08 site inspection observed failing silt fences and erosion from run on from north drive way. Took photos and called property owner and contractor. Contractor to do work within 7-10 days or within 24hrs of a 40% rain forecast. Needs follow up inspection. See follow up WO 80765 Follow Up: 12/31/08 site inspection new straw waddles installed case closed See WO 81556	Yes	No		Yes			ENC	12/31/08
9	69896	11/26/08	SILT	Discharge of construction debris - Sediment runoff from site after rain event.	11/26/08 930am site inspection observed silt discharge took photos (on phone) informed worker of the violation and how to cure it. See follow up WO 80937	Yes	No	11/26/2008	Yes			ENC	12/19/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
10	69897	11/26/08	SILT	Discharge of construction debris - Sediment runoff from site after rain event.	11/25/08 site inspection took photos of inadequate BMPs See follow up WO 80939	Yes	No	11/26/2008		11/26/2008	OCEAN	CBS	12/19/08
11	69919	12/8/08	SILT	Discharge of construction debris - Construction site at Encinitas Blvd and El Camino Real discharging sand into storm drain. 300 lbs of sand were cleaned out of closest storm drain on 12/8/08 during routine filter maintenance.	Per construction inspector 12/9/08: Walked job with superintendent. Onsite desilting basin fitted w/ filter fab failed under load, rain creating runoff; also noted breach in project silt fence. Storm drain cleanout cleaned. Fab filter reinstalled. Two rows of boundary silt fence installed by subcontractor. Site appears ready for additional rain. Site and drainage system to be monitored and cleaned during building construction. Super is aware that negligence by any subcontractors may result in fines levied against general contractor and/or permittee. Grading continues. Follow Up: 12/22/08 site inspection area cleaned up case closed See original WO 81408	Yes	Yes		Yes			LCS	12/22/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
12	69959	12/15/08	SILT, WATER	Discharge of construction debris - Contractor at Fire Station pumping silty water into street without containment.	Per construction inspector 12/16/08: Notified @ 9am, contacted construction company, issued notice to correct, work continued. When water tank arrived, street subgrade, water pumped into tank and spread onsite through rock filter.	Yes	Yes	12/15/2008	Yes	12/17/2008		LUC	12/19/08
13	69967	12/16/08	wash water	Discharge of other washwater - Washing off equipment at Lofts without containment. Construction inspector to investigate.	Per construction inspector 12/16/08: I did not see any discharge at site. Contractor was unaware of any equipment being hosed off. Case closed.	No	Yes					ENC	12/22/08
14	69968	12/15/08	Sediment	Discharge of construction debris - Brown water coming from construction site during rain event. Construction inspector to follow up.	Per construction inspector 12/15/08: Erosion control was installed per plan. called contractor and requested more check dams down the driveway. he was already doing it as I called. No follow up action required. Case closed.	No	Yes		Yes			LUC	12/19/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
15	69969	12/15/08	sediment/ water	Discharge of construction debris - Brown water coming from construction site during rain event. Construction inspector to follow up.	Per construction inspector 12/15/08: I did not see any illegal discharge. BMPs are installed. Case closed.	No	Yes					ENC	12/22/08
16	70000	12/18/08	SILT	Discharge of other washwater - Silt discharge after rain event.	12/18/08 site inspection took photos of silt discharge. contacted and thanked worker cleaning up discharge into neighboring property. Worker expressed concern for run on from 1302 Enc Blvd. See follow up 81431 Follow Up: 12/22/08 site inspection area cleaned up case closed See original WO 81408	Yes	Yes		Yes			LCS	12/22/08
17	70004	12/18/08	SILT	Discharge of other washwater - Pumping silt water into street.	12/18/08 site inspection took photos of pump and hose in alley with sediment water draining into storm drain that leads to Manchester. Contacted worker regarding pumping to storm drain. 12/23/08 sent email to construction inspector case closed	Yes	Yes		Yes		SAN ELIJO LAGOON	CBS	1/2/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
18	70005	12/18/08	SILT	Discharge of other washwater - Pumping out silt water from site into street.	12/18/08 site inspection appeared silt water was discharged onto side walk. Took photos of discharge. No workers on site 12/22/08 contacted construction inspector 12/23/08 sent email with photos to construction inspector Construction inspector spoke with site superintendent and gave verbal warning.	Yes	Yes		Yes		OCEAN	CBS	1/2/09
19	70006	12/18/08	SILT	Discharge of other washwater - Silt discharge after rain event, uncovered stockpiles.	12/18/08 site inspection took photos of dirt pile in street and run off. Contacted resident and worker to cover dirt pile ASAP See follow up WO 82014 Follow Up: 12/24/08 site inspection took photo of area clean up case closed See original WO 81446	Yes	No		Yes			CBS	12/24/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
20	70007	12/18/08	SILT	Discharge of other washwater - Dumping buckets of water and silt into street.	12/18/08 took photos of silt discharge from construction worker. Contacted worker to discontinue discharge and to use vegetation areas	Yes	Yes		Yes			CBS	1/2/09
21	70008	12/18/08	SILT	Discharge of other washwater - Silt runoff after rain event, lack of BMPs.	12/18/08 site inspection observed failing BMPs took photos. 12/23/08 emailed construction inspector with photos Construction inspector met with site superintendent and gave verbal warning.	Yes	No		Yes			CBS	1/2/09
22	70009	12/08/08	SILT	Discharge of other washwater - Silt runoff after rain event, failing BMPs.	12/18/08 site inspection BMPs failing took photos sent email to inspector on 12/23/08 See follow up WO 82038 Follow Up: 1/12/09 site inspection silt fence reinstalled case closed See original WO 81449	Yes	No		Yes			CBS	1/12/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
23	70011	12/18/08	SILT	Discharge of other washwater - Construction of undergrounding complete, but silt erosion occurring after rain event.	took photos of erosion See follow up 82117 Follow Up: 12/31/08 area cleaned up case closed See work order 82116	Yes	Yes					ENC	12/31/08
24	70012	12/18/08	SILT	Discharge of construction debris - Silt runoff after rain event, lack of BMPs.	12/18/08 site inspection took photos of failing BMPs called owner and contractor no answer 12/29/08 called owner and LM contacted contractor to maintain BMPs. Contractor said he contacted the owner and will inspect and fix the site with the owner and give me a call when it is complete and ready for a follow up inspection See follow up WO 82115 12/31/08 site inspection new straw waddles installed case closed	Yes	No		Yes			ENC	1/22/09
25	70013	12/18/08	SILT	Discharge of other washwater - Silt draining from underground boxes into street.	12/18/08 site inspection took photos 12/29/08 contacted PW to repair road drainage via email	Yes	Yes					ENC	12/31/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					See follow up 82156 Follow Up: 12/31/09 site inspection area cleaned up case closed See WO 82155								
26	70015	12/18/08	SILT	Discharge of other washwater - Constructing retaining wall, silt discharge after rain event.	1/15/2009 9:55:05 AM 12/1808 site inspection took photos contacted lead worker regarding clean up of silt. He was very cooperative. See follow up 82147 Follow Up: 12/31/09 site inspection area cleaned up case closed See wo 82126	Yes	Yes		Yes			ENC	12/31/08
27	70022	12/19/08	mud/erosion	Discharge of other washwater - Construction being done at neighboring property, causing erosion and mud onto complainant's property.	12/19/08 site inspection took photos of site did not see any discharge. Contacted Construction inspector case closed	No	No					ENC	12/19/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
28	70030	12/18/08	SILT	Discharge of construction debris - Sediment discharge, BMP maintenance needed.	12/18/08 site inspection took photos of failing BMPs. 12/22/08 contacted construction inspector and sent email with photos. Inspector reported that contractor/owner performed maintenance on BMPs over the weekend to ensure no run on or run off. Need to do follow up inspection. 12/24/08 site inspection took photos of fortified BMPs case closed	Yes	No		Yes			ENC	1/2/09
29	70094	1/7/09	WASH WATER	Discharge of building or sidewalk washwater. Power washing roof at Moonlight Lofts without containment.	1/7/09 site inspection took photos from discharge into creek to source at north building power washing the roofs. Received call from general contractor informing me that the discharge was filtered though a fossil filter. I explained that all information should come through the city construction inspector but even though a filter it is still not an allowed discharge. After discussing case with construction inspector an NOV was sent to the roofer with copies to be delivered by the inspector. Called contractor and informed him of the NOV and that all info would come though the inspector. Sent copies of the notice with photos, the storm water ordinance and a copy of the permit to the inspector.	Yes	Yes	1/7/2009	Yes		COTTONWOOD CREEK	ENC	1/16/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
30	70145	1/15/09	WATER	Discharge of water - Water running from construction site at 687 S Coast Hwy 101. Dewatering in progress.	1/15/09 site inspection traced water back to Pacific Station. 1/16/09 contacted city staff to get water quality report. 1/20/09 sent email requesting water quality report. received copy of water testing report stating that water quality was below the action level case closed	No	No				COTTONWOOD CREEK AND OCEAN	ENC	2/25/09
31	70155	1/22/09	lack of BMPs and erosion control	Discharge of construction debris - Referred from Construction Inspector. Site needs better trash management and siltation control maintenance. See inspection forms.	1/22/09 site inspection took photos contacted GC to fix/replace BMPs. Issued NOV to worker on site to comply by 1/22/09 3pm See follow up 84106 Follow Up: 1/22/09 site inspection BMP in good shape case closed See work order 84105	Yes	No	1/22/2009	Yes			CBS	1/22/09
32	70209	2/2/09	SAND/ SEDIMENT	Discharge of sediment. Trucks transporting sand from Pacific Station are tracking dirt onto Vulcan in front of City Hall and north on Vulcan. Construction Inspector to investigate.	Per construction inspector 2/2/09: Street sweeper runs 2-3 times per day. All sand tracked onto street will be cleared before operations end for the day.	Yes	Yes					ENC	2/12/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Issue was forwarded to the Senior Civil Engineer who oversees Construction Inspectors.								
33	70243	2/9/09	OIL	Discharge of construction debris - Oil spilled on street and other construction issues. Will be addressed by construction inspector assigned to site. Please see complaint forwarded form Code Enforcement.	Per Construction Inspector 2/10/09: Oil spill appears 1-2 weeks old. Only stain exists. Advised contractor to catch it in time in the future and clean up properly.	No	No					ENC	2/10/09
34	70244	2/9/09	DIRT/SILT	Discharge of water - Construction occurring on site, water running onto neighbor's property at 1641. No permit for 340.	2/10/09 site inspection took photos of failing BMPs contacted worker obtain ph # and called GC to address BMPs by 2/12/09 See follow up 84022 Follow Up: 2/12/09 met GC on site BMPs redone took photos case closed See work order 84021	Yes	Yes		Yes			LUC	2/12/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
35	70257	2/10/09	SEDIMENT	Discharge of sediment - Failing BMPs and sediment on sidewalk at old Barratt job site at Quail Point Lane and Quail Gardens Dr.	Per construction inspector 2/10/09: Senior Civil Engineer and Construction Inspector sent a letter to Barratt and the bank calling on the bonds. Bank is due to contact City by 2/12/09 to discuss usage of funds to maintain erosion control measures in place.	Yes	No					ENC	2/10/09
36	70316	2/17/09	Lack of BMPs	Discharge of construction debris - Complaint form resident, who lives adjacent to an abandoned nursery at 754 Bonita. The nursery has recently been demolished and the site cleared. Code enforcement forwarded complaint. The site is greater than 2 acres. No BMPs on site.	2/17/09 site inspection contacted owners took photos. Appears that some minor grading would create a silt basin. 2/18/09 emailed engineering regarding contact information and erosion control.	No	No		Yes			ENC	2/18/09
37	70320	2/19/09	SILT	Discharge of construction debris - Referred from Construction Inspector. Site needs to replace gravel bags and filter fabric at inlet. Also, install locks on fence off vallies to filter system to prevent homeless and/or vandals from altering system.	2/18/09 received call from inspector preformed site inspection took photos of discharge. Inspector reported that the discharge was a result of a transient had vandalized the filtering system. The inspector wrote a correction notice to replace BMPs and fence off valve controls. 2/19/09 inspector reported that corrective actions have been completed case closed	Yes	No		Yes		COTTONWOOD CREEK	ENC	3/5/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
38	70371	2/26/09	CONCRETE WASH WASTE FROM POWER WASHING	Discharge of building or sidewalk washwater - Complainant said there is white runoff coming from Fire Station site. Possibly from power washing building.	2/26/09 site inspection took photos of discharge met with contractor and inspector regarding discharge violation. Informed contractor that this was the second discharge violation and that the fine amount would be discussed with program manager. After speaking with the manager the contractor was informed that the second level citation would be issued. He said he understood and will pay the fine.	Yes	No	2/27/2009	Yes	2/27/2009		LUC	3/5/09
39	70490	3/18/09	AC pavement/soil	Discharge of construction debris - Complainant called about stockpiles and other construction debris without proper BMPs at a site located at La Costa Blvd and Hwy 101.	3-16-09 - 3-17-09 Contractor crew working night shift to replace LWWD MH 101 sewer. 3-18-09 Complaint of "no BMPs" received. Construction inspector contacted contractor PM about containing AC rubble and soil. Two man crew sent to cover stockpiles until they can be removed. 3-18-09 - 3-19-09 Stockpiles covered. LWWD inspector said sewer FM broke during the night. Spill was contained in the ditch line. Flowed to new 24" sewer, discharged to lift station. NO LOSS of sewage to environment. 3-23-09 Stockpiles removed by 2- end dumps to landfill.	Yes	Yes		Yes			LUC	3/26/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
40	78063	6/30/09	water	Discharge of water - Engineer received complaint from his dentist about water running down San Elijo Avenue for many days at a time. Source is south of Chesterfield. Blue house	6/30/09 site inspection took photos of red hose at 2351 San Elijo no discharge case closed	No	No					CBS	6/30/09
Construction Totals:	**40**				**Follow Ups:** **15**	**31**	**18**	**7**	**27**	**3**			

Appendix H-1 Municipal Complaint Response Summary FY 2008-09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	68898	7/1/08	OIL	Discharge of oil. - Puddle of oil dumped in street behind Cardiff Towne Center.	7/1/08 site inspection took photos and contacted streets to clean up See follow up WO 79955 Follow Up: 7/15/08 site inspection area cleaned up case closed See original WO 79954	Yes	No					CBS	7/15/08
2	69132	7/21/08	oil	Discharge of oil. - Oil spilled on dirt area east of tracks, west of Vulcan, north of Encinitas Blvd about 2 months ago.	7/28/08 site inspection observed stains and referred it to construction inspector for Encinitas road repaving	Yes	No					ENC	10/14/08
3	69199	8/1/08	green water	Discharge of water - Green water in alley behind VG's Donuts.	8/5/08 site inspection contacted commercial owner of 116 Aberdeen. She indicated that the water has been there for 14+ years ever since she moved in.	No	No					CBS	10/15/08
4	69686	10/15/08	GUTTER WATER	Discharge of water - Cleaning out gutters with Vactor truck. Not collecting water. Water pooling on Vulcan.	10/15/08 received complaint regarding large puddle out of	Yes	No		Yes			ENC	10/16/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					west drain at or in front of 505 S VULCAN AVE. Took photos and contacted janitor and informed him what the legal discharges are and requested that he contact the contractor doing the discharge to implement BMPs. Janitor indicated that the work has concluded but will capture all wash water next time this cleaning occurs.								
5	70053	12/30/08	SILT	Other discharge - Need to reinstall silt fence along Encinitas Blvd.	12/30/08 site inspection took photos of failing silt fence called Parks & rec. 1/2/09 received call from Parks and Rec. that they area meeting with the contractor to fix fence by Monday 1/5/09 See follow up WO 82015 and 82041 Follow Up: 1/12/09 site inspection took photos of correctly installed Silt fence Case closed See WO 81685 and 82015	Yes	No		Yes			LCS	1/12/09
6	73701	5/7/09	h2o	Discharge of antifreeze - People working on white truck near Phoebe and Hwy 101. Green liquid has been poured into gutter.	5/7/08 site inspection took photos of green puddle in street east of 1340 Coast hwy 101.	No	No		Yes			LUC	5/28/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Shop owner stated that the street does not drain and the Hydrants were just drained. 5/12/09 sent emails to vector control and public works streets division.								
Municipal Totals:		**6**			**Follow Ups:** **3**	**4**	**0**	**0**	**3**	**0**			

Appendix H-1 Commercial Complaint Response Summary FY 2008-09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	68890	6/30/08	wash water	Discharge of building or sidewalk washwater - Clean Water Staff witnessed gas station hosing off and scrubbing parking lot with no containment.	Discharge of building or sidewalk washwater Problem Details: Clean Water Staff witnessed gas station hosing off and scrubbing parking lot with no containment. Inspector to investigate storm drain or it is considered a violation. Issued an NOV to comply immediately. Follow Up: 7/2/08 site inspection area cleaned and BMPs redone	Yes	No	7/1/2008				CBS	7/2/08
2	68895	7/1/08	White Substance	Discharge of other washwater - Salt water pool drainage/cleaning. Trail of white substance down street.	7/1/08 site inspection took photos of white discharge. Left card at door 7/2/08 received call back from respondent stating that they will clean up the streets and gave me the pool guys information. Called pool guy and informed him that any colored discharge is a violation of the storm water permit--- case closed	Yes	Yes		Yes			CBS	10/14/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
3	68897	7/1/08	SILT	Other discharge - Broken sprinkler shooting into pile of silt.	7/1/08 site inspection See follow up WO 79377 Follow Up: 7/2/08 site inspection area cleaned OK to close	Yes	No		Yes			CBS	7/2/08
4	68905	7/2/08	VEHICLE WASH WATER	Discharge of vehicle wash water - Auto detailer washing cars w/o containment in parking lot at Erickson Electric.	7/2/08 site inspection contacted business owners and explained the law in washing vehicles. They said they would comply. Note that the person washing the company vehicles ran away when he saw me coming. The owners could not find him but will educate him when they do. They will also ask him not to run from clean water inspectors in the future.	Yes	Yes		Yes			LCS	10/15/08
5	69002	7/16/08	WHITE MILKY WATER	Discharge of building or sidewalk washwater - Restaurant hoses off outdoor patio with bleach every morning w/o containment.	7/17/08 site inspection, observed no discharge off patio. There was discharge in front of the business. I contacted Sergio regarding illegal discharge. I then spoke to the business owner and it appeared that	No	No					ENC	7/30/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					the discharge originated at 830 S. Coast HWY 101 from irrigation. Took photos and contacted resident who gave me Property Manager's info. 7/21/08 LM for Property Manager to call me back regarding possible irrigation discharge.								
6	69127	7/17/08	wash water	Discharge of building or sidewalk washwater - Restaurant hosing off sidewalk out front.	7/28/08 Site inspection no discharge business closed	No	No					ENC	10/14/08
7	69157	7/30/08	WASH WATER	Discharge of building or sidewalk washwater - Inspector witnessed line of sudsy water coming from back door of salon. Will follow up with NOV letter.	Discussed incident with Salon Manager on 7/30/2008. Sent NOV letter and education info on 7/31/2008.	Yes	No	7/31/2008	Yes			ENC	8/4/08
8	69171	7/29/08	water	Discharge of water - Inspector noticed concrete channel overgrown with plants/algae, leading down to a dry weather sampling site. Runoff coming from nursery drains into this channel. Will follow up.	Site inspection appears to be ground water could not find the source but the water runs around the business. Case closed	No	No					CBS	6/1/09

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See	69228	8/7/08	GREASE	Discharge of food waste. - Improper grease storage, trash under dumpster, possibly washing off mats behind restaurants. Inspector to investigate and contact property manager.	11/12/08 took photos of grease storage and called PM. See work orders 81334, 81339, 84224.	Yes	No		Yes			LCS	3/5/09
10	69240	8/11/08	VEHICLE WASH WATER	Discharge of vehicle wash water - Car washing without containment.	8/11/08 site inspection issued NOV to Dent Masters through Karl at BMW to clean storm drain and stop wash discharge took photos See follow up WO 79351 8/19/08 site inspection contacted employees at Dent masters . I requested that the owner of their business give me a call so that i can explain the storm water regulations.	Yes	Yes	8/11/2008			ENCINITAS CREEK	LCS	10/13/08
11	69254	8/10/08	SEWAGE	Discharge of sewage - After hours sewage overflow at apartment complex. Wastewater responded. Inspector to follow up.	8/12/08 called property Manager regarding the sewer spill. She informed me of the owner and maintenance supervisor. I requested that their sewer lines be video taped and that they start a maintenance schedule to inspect and routinely clean at least once a year. 8/25/08 received call from Property Manager stating that they have scheduled an inspection and cleaning for 8/29/08 at 8am. Discussed case with program manager, and we agreed that a citation should be issued for discharge and BMP maintenance (if records proving self inspection are not submitted.	Yes	No	9/10/2008		9/10/2008	COTTONWOOD CREEK	ENC	9/10/08

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					8/26/08 called Maintenance Supervisor and left message requesting sewer maintenance records. I spoke to Property manager and requested records from her and briefly explained the enforcement of this spill. Called waste water and to meet with me and the plumber on Friday. Drafted NOV and admin cite. See follow up 80044 Follow Up: 8/29/08 site inspection with waste water, property manager, maintenance supervisor and their contractor Drain Patrol w/ video. Drain patrol indicated that they could not provide a tape. Waste water indicated that Seacrest may need to jet their lines two or four times a year. Dropped off grease usage flyer to the PM. Exchanges info see inspection tab 10/7/08 called respondent regarding citation and NOV requirements. Respondent seemed to understand requirements 10/13/08 received email dated 10/10/08 stating the actions that they have completed (sewer inspection and jetting) and that they have contracted with a plumber to inspect and clear the line three times a year. They are getting bids for the pipes to be inspected for replacement. Forwarded email to supervisor and waste water for review and comments. Finance reported that fine and cost recovery was paid (post marked 10/10/08)								

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12	69275	8/13/08	GREASE	Discharge of food waste. - Full grease bin with no lid.	8/14/08 site inspection observed grease spilling onto ground and next to storm drain took photos and issued NOV to comply by 8/21/08 See follow up WO 79349 Follow Up: 8/21/08 site inspection area cleaned up OK to close	Yes	No	8/14/2008	Yes			LUC	8/21/08
13	69284	8/14/08	wash water	Discharge of other washwater - Business washing off carts, letting wash water run down street.	8/14/08 site inspection I observed very little discharge contacted Manager. He informed me that they are washing off the carts that they used to go to the storage units. I explained that the wash water cannot go into the storm drain and gave him some educational materials.	Yes	No		Yes		COTTONWOOD CREEK	ENC	10/15/08
14	69400	8/26/08	wash water	Discharge of vehicle wash water - Forwarded from Code Enforcement: Complaint regarding rental place. Complainant said that the business is washing down the equipment and the water is running into the street and ground. She stated that there is oil and grime being washed into street	8/27/08 site inspection no drainage discharge observed contacted manager who demonstrated how they clean their equipment without any discharge. sent emails for fueling, cleaning and storage BMPs	No	No		Yes			LUC	10/15/08

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15	69479	9/10/08	vehicle wash water	Discharge of vehicle wash water - Auto detailer washing cars without capturing wash water.	Site visit showed no vehicle washing or evidence of discharge.	No	Yes					SEL	9/10/08
16	69529	9/15/08	water/ sediment	Discharge of water - Over-irrigation water/sediment flowing into HOA parking lot to storm drain. Possibly coming from YMCA or West Hampton Cove irrigation.	9/15/08 Contacted Maintenance fro YMCA and sent him a GIS photo of the sediment runoff location. He checked his irrigation and believes the runoff is a combination of the YMCA and West Hampton Cove HOA. He would like a meeting with CWP inspector and an HOA representative. 10/6/08 called HOA to meet on 10/16/08 at 1pm called and LM with YMCA 10/16/08 site inspection with representatives from Hampton Cove HOA and the YMCA both groups tested their irrigation and did not find any run off. Hampton HOA rep thought that there is a large amount of ground water in the area and believes that the parking only floods silt after a rain event. Both groups will monitor area. Hampton HOA would like the complainant to contact them directly. Hampton was requested to label their storm drains, close trash container lids and post signs advising the same. Gave them ph # of ILACSD 619-291-0103 to help with labeling.	No	No		Yes			ENC	10/21/08
17	69555	9/22/08	SOAKING WATER	Discharge of water - Rancid smelling water coming from unknown source, running down Melrose behind Leucadia Glass.	9/22/08 site inspection contact business owner and gave him my card. He said the discharge was from soaking mats and that the water had	Yes	No		Yes			LUC	10/15/08

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					soaked for too long. He said he will discharge into a vegetated or landscaped area.								
18	69556	9/22/08	Vegetation Debris	Discharge of yard waste - Forwarded message from Councilmember. Resident noticed tree trimming service blowing leaves and debris from tree trimming into storm drain. Tree trimming being done in HOA.	9/23/08 site inspection met contractor on scene explained that all leaves and debris need to be pick up and mot blown into storm drain. He will clean again. Did not observe any discharge into storm drain.	No	Yes		Yes			LUC	10/15/08
19	69569	9/11/08	Messy storage area behind bulidings	Other discharge - Improper grease storage and overall lack of good housekeeping behind shopping complex.	9/25/08 site inspection no discharge observed	No	No					LCS	10/14/08
20	69571	9/22/08	SILT	Other discharge - Complaint of over-irrigation causing silt to run over sidewalk.	9/23/08 site inspection at side walk west of 625 Encinitas blvd. Took photos of drainage and silt discharging across sidewalk See follow up WO 79884 Follow Up: 9/25/08 site inspection area cleaned up took photos	Yes	No		Yes		COTTONWOOD CREEK	ENC	9/25/08

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21	69590	9/25/08	Oil or Hydraulic Fluid	Discharge of liquid fuels. - Some sort of old fuel spill on street appears to be from trash pick up, possibly from neighbor's trash.	9/25/08 site inspection took photos of oil spots in the street and complainant's driveway. Contacted worker at construction site to the west who informed me that the recycle truck had a broken hose. The complaint informed me that trash day was Monday. Called Edco. Supervisor to return call. 9/26/08 supervisor for Edco inspected the site and will have clean up company clean the oil marks off the street. Complainant informed me that the clean up was occurring and they were collecting all the wash water.	Yes	Yes					LUC	10/15/08
22	69598	9/29/08	DIRT	Other discharge - Trail of mud running down Grandview to Pacifica Apartment Complex on Hwy 101. Caller said mud is coming from Seabluff.	9/29/08 site inspection observed mud on sidewalk and in street took photos contacted community manager to clean up ASAP See follow up WO 80070 Follow Up: site inspection area cleaned case closed	Yes	No	12/9/2008	Yes			LUC	8/27/09

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23	69660	10/9/08	SOAK WATER	Discharge of other washwater - 2nd complaint about smelly water discharging from samurai place running down Melrose behind Leucadia Glass.	10/09/08 site inspection observed discharge issued citation took photos gave educational information and discuss flowing the discharge into the landscaped area so that no discharge enters the storm drain. Respondent to move soaking trough north in front of bamboo area.	Yes	No		Yes	10/9/2008		LUC	10/14/08
24	69668	10/10/08	OIL	Discharge of oil. - EDCO truck spilled small amount of oil in front of 1555 Bella Vista Dr/Bella Azul Ct. Power washing company is being called to site to properly clean oil from street.	10-10-08 site inspection observed spill and absorb all on spill area I requested contractor to use traffic cones to discontinue vehicle traffic. took photos See follow up 80173 Follow Up: 10-13-08 site inspection area cleaned up case closed took photos	Yes	Yes					LCS	10/13/08
25	69677	10/13/08	WASH WATER	Discharge of building or sidewalk washwater - Power washing roof, BMPs not working properly.	10-14-08 received complaint on voice mail. Called contractor to clean up the sand bags and cones ASAP.	Yes	Yes				OCEAN	ENC	10/21/08

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					Site inspection showed BMPs not adequate. Called contractor and informed him that he needed to sweep up the street in addition to removing the BMPs. If more roof cleaning is required better BMPs need to be implemented See follow up 80357 10/14/08 site inspection area clean up case closed								
26	69685	10/15/08	WASH WATER	Discharge of building or sidewalk washwater - Power washing building at Calle Magdalena without containment.	10/15/08 site inspection observed power washing to clean buildings before painting without capturing the wash water. Placed sandbags in storm drain to prevent discharge and contacted contractor. Contractor will have street sweeper clean all surface areas as the power wash drainage has evaporated. Took photos. Case closed	Yes	Yes		Yes			ENC	10/16/08
27	69697	10/16/08	wash water	Discharge of building or sidewalk washwater - Power washing, unknown if they are using containment. Some runoff coming from driveway onto Encinitas Blvd.	10/16/08 site inspection observed water from power washing going into sump and then pumped to clean out. Contacted worker and informed him that the waste water must be contacted when discharging into sewer.	No	No		Yes			ENC	10/21/08

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28	69817	11/13/08	PAINT	Discharge of paint - Gas station scraping old paint off building, leaving paint chips on ground.	11/17/08 site inspection no discharge observed contacted owners who showed me where the painting took place and indicated that all of the paint was cleaned up on 11/12-13/08	No	No		Yes			ENC	11/25/08
29	69900	11/28/08	LEAVES, DIRT, AND DEBRIS	Discharge of yard waste - Clean Water Staff witnessed employee hosing off driveway debris (leaves, branches) into storm drain at approximately 12:50pm. Driveway is at the corner of Saxony and Union.	12/1/08 site inspection took photos of leaves and debris in the storm drain need to call Maintenance chief to clean storm drain See follow up WO 81341 Follow Up: 12/2/08 site inspection area storm drain cleaned of leaves and debris took photo	Yes	No		Yes			ENC	12/2/08
30	69905	12/2/08	Concrete, Dirt, and Water	Discharge of concrete waste. - Concrete discharge into gutter/storm drain at 4th and E streets.	12/2/08 site inspection took photos of concrete and dirt discharge. Contacted contractor and showed him the discharge and requested that he clean it up and that I was issuing a citation for concrete/dirt discharge into the storm drain.	Yes	Yes		Yes	12/2/2008		ENC	12/2/08

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					See follow up WO81148 Follow Up: 12/2/08 site inspection area cleaned up installed three sandbags. Citation paid on 12/9/08---case closed								
31	69906	12/2/08	bleach wash water	Discharge of building or sidewalk washwater - Restaurant hoses off floor with bleach on a nightly basis around 8 or 9 pm and lets wash water go into street.	12/2/08 conducted formal storm water quality inspection. no discharge case closed	No	No		Yes			ENC	12/19/08
32	69907	12/2/08	SILT DIRT	Other discharge - Concern of sediment/lack of erosion control in dirt lot behind Ocean Knoll School on Bonita Dr.	12/2/08 site inspection took photos of erosion. Called Operations and Facilities director and left message. Received call from Director stating that he will look at erosion on 12/3/08. See follow ups 81112, 81169, 81170. Follow Up: 12/24/09 site inspection area cleaned up case closed See WO 82158	Yes	No	12/4/2008	Yes			ENC	12/24/08

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33	69913	12/2/08	Hand Degreaser	Discharge of other washwater - Complaint forwarded from the San Diego RWQCB. Liquid substance seeping under wall towards storm drain. Inspector to investigate.	12/2/08 site inspection took photos of milky discharge. Contacted contractor who showed me where the discharge source was located. Appeared that the white milky fluid was created from hand washing that drained into the storm drain. Issued citation. Needs follow up inspection. See follow up WO 81142	Yes	Yes	12/9/2008	Yes	12/2/2008		LUC	12/19/08
34	69917	12/5/08	CEMENT AND DIRT	Discharge of concrete waste. - Concrete being washed into street.	12/5/08 site inspection observed cement and sediment discharge no one home tools still out left card to call me. One hour later contacted owner's son requested that his parents give me a call back issued NOV. See follow up WO 81094 Follow Up: 12/8/08 site inspection area cleaned up case closed	Yes	Yes	12/5/2008	Yes			LCS	12/8/08

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35	69927	12/9/08	WASH WATER	Discharge of water - Restaurant possibly hosing off sidewalk without containment.	12/9/08 site inspection took photos of wet sidewalks and patios and contacted worker who indicated that it could have been the person that waters the plants. Plant soil not wet and it appears that washing off tables on the north side. Called owner to investigate. Owner stated that all of his employees are trained not to discharge any water into the lagoon. He will contact all of his employees again to make sure no discharge had occurred---case closed	Yes	No		Yes			SEL	12/19/08
36	69928	12/9/08	Concrete Dust	Discharge of concrete cutting slurry or washwater. - Contractor cutting concrete, dust blowing, no containment.	12/9/08 site inspection took photos of worker cutting concrete with/out any BMPs. Contacted worker and he stopped working immediately. See follow up WO 81145 Follow Up: 12/9/08 site inspection area cleaned up case closed .	Yes	Yes		Yes			LUC	12/9/08

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37	69966	12/13/08	wash water/urine	Discharge of building or sidewalk washwater - Business washing off sidewalk without containment.	1/7/09 Site inspection contacted worker at store and gave educational information and possible solution using sandbags and a wet vac. Gave four sandbags.	Yes	No		Yes			LUC	1/21/09
38	69980	12/17/08	SILT	Discharge of other washwater - Silt coming from growing fields going into natural channel.	12/17/08 site inspection took photos of silt draining off property. Called business operator and requested that he address runoff ASAP--needs follow up See follow ups82017, 82037, 83833 Follow Up: 1/28/09 site inspection property and BMPs in compliance case closed See WO 81225, 82017, 82037	Yes	No	1/12/2009	Yes		SAN ELIJO LAGOON	CBS	1/28/09
39	70001	12/18/08	Silt, dirt, and water	Discharge of other washwater - Silt discharge after rain event, clogged desilting basin.	12/18/08 site inspection observed erosion and silt discharge took photos. 12/23/08 called Property Manager to meet regarding temporary and permanent BMPs	Yes	No					LCS	5/21/09

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					See work orders 81255, 82092, 84386, 87943								
40	70002	12/18/08	DIRT	Discharge of other washwater - Silt discharge after rain event.	12/18/08 site inspection took photos workers still cleaning up discharge into street. 12/23/08 LM for Samantha to call me back See follow up wo 81683 Follow Up: 12/30/08 site inspection met with business owner of Barrels & Branches and thanked him for the clean up. He showed me the source of the discharge on the property to the north. I made some suggestions to prevent run on but that the street was clean case closed	Yes	No		Yes			LUX	12/30/08
41	70003	12/18/08	SILT	Discharge of other washwater - Silt discharge after rain event.	12/18/08 site inspection took photos of discharge contacted worker to work on discharge clean up.	Yes	No		Yes			CBS	12/24/08

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					See follow up WO 82016 Follow Up: 12/24/08 site inspection took photos of new sandbags and gravel at the entrance/exit case closed								
42	70010	12/18/08	silt	Discharge of other washwater - Silt runoff after rain event. possibly coming from greenhouse.	conducted storm water quality inspection which showed no discharge from this business. there are two other businesses that were possibly responsible for the rainy season discharge. The other businesses were to be added to the inspection inventory. Conducted storm water quality inspection which showed no discharge from this business. There are two other businesses that were possibly responsible for the rainy season discharge. The other businesses were to be added to the inspection inventory.	No	No		Yes			LUC	7/2/09

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43	70016	12/18/08	SILT	Discharge of other washwater - Lack of erosion control in empty lot behind school. Failed BMPs.	12/18/08 site inspection took photos of failing BMPs See follow up 82159	Yes	No					ENC	1/22/09
44	70032	12/19/08	WASH WATER	Discharge of building or sidewalk washwater - Restaurant employee hosing off sidewalk without containment.	12/19/08 site inspection took photos of worker washing down sidewalk. issued NOV. Need to do complete formal storm water inspection added business to inventory list case closed	Yes	No	12/19/2008	Yes			ENC	1/2/09
45	70035	12/22/08	WASH WATER	Discharge of other washwater - Plumbing truck emptying equipment into street.	Called trailer park to get plumbing company's phone number. Called plumbing company and spoke with office manager. He referred me to man that was onsite during illegal discharge. Spoke to employee on site, informed him of the illegal discharge and that we would be sending an NOV Letter. Also informed him of proper BMPs, and he will bring up this issue at the next safety meeting. Case closed.	Yes	Yes	12/23/2008	Yes			LUC	12/23/08
46	70039	122408	WASH WATER	Discharge of building or sidewalk washwater - Clean Water staff witnessed property management employee washing off cart storage area in front of vons without containment.	12/24/08 site inspection took photos and contacted worker discharging into the storm drain as a result of washing out the cart area. Called and left message	Yes	No	1/8/2009	Yes			LCS	1/16/09

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					1/5/09 called LM 1/6/09 called LM 1/7/09 received call back and contact information 1/8/09 sent NOV								
47	70051	12/30/08	water	Discharge of water - At&t installing new cable, pumping out water into street.	12/30/08 site inspection no discharge observed contacted worker who stating that AT&T is replacing a phone cable and that pump out potable water when required	No	Yes		Yes			CBS	1/16/09
48	70052	12/30/08	SILT	Discharge of construction debris - Construction at residence, muddy water running down street to Balour.	12/30/08 site inspection issued citation took photos of silt discharge See follow ups 81679, 81681, and 81684 Follow Up: 1/02/09 site inspection area cleaned up to the satisfaction of the city took photos case closed See work orders 81678, 81679, 81681	Yes	Yes	12/31/2008	Yes	12/30/2008		CBS	1/2/09
49	70095	1/07/09	SILT	Other discharge - Silt discharge, lack of erosion control at park.	1/7/09 site inspection took photos of erosion and unmaintained permanent BMPs. We were contacted by K & R landscaping company employees.	Yes	No		Yes			ENC	3/10/09

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					They informed us that they were contracted to maintain the improved park area but not the paths. We informed them what we were requesting the association to do (remove silt and fix erosion.) 1/8/09 Clean water staff reviewed plans and determined that the City did not accept offered easements therefore maintenance responsibilities are of the property owners/managers. Follow Up: site inspection erosion issues addressed case closed								
50	70118	1/13/08	DRYWALL DEBRIS	Discharge of paint - Painters working on Townwood Way are dumping blue paint into street.	1/13/09 site inspection took photos w/ phone issued NOV to dry clean street ASAP. Worker accidentally discharge dry wall debris See follow up 82114 Follow Up: 1/13/09 site inspection area cleaned case closed See WO 82113	Yes	Yes	1/13/2009	Yes			RSF	1/13/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
51	70143	1/16/09	Wash Water	Discharge of other washwater - White discharge coming from carpet cleaner's van.	1/16/09 site inspection took photos of white drainage in curb line. Contacted worker and issued citation for $100 and clean up by 2pm See follow up 82569 Follow Up: 1/20/09 site inspection area cleaned up retrieved san bags case closed See WO 82419	Yes	Yes	1/20/2009	Yes	1/16/2009		LCS	1/20/09
52	70162	1/24/08	paint	Discharge of paint - Renovations being done at Taco Bell. Paint and construction waste in gutter.	1/26/2009 3:31:02 PM 1/26/09 per Clean Water Program inspector: spoke to manager at restaurant, no renovations in progress. Paint may have spilled from a work truck in the parking lot, unrelated to Taco Bell. No evidence of discharge. Case closed. See work order 82954. Follow Up: ck. I took photos of the truck bed with paint stains	No	No		Yes			LCS	1/27/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					case closed See work order 82885.								
53	70163	1/23/08	Hydraulic Fluid from truck	Discharge of oil. - Edco truck leaked fluid onto condo complex driveway. Spots of discharge all around complex.	1/26/09- Called field supervisor to let him know of spills. He said power washers would be out that day to clean the driveway. Drive-by on 1/27/09 showed driveway clean. Case closed.	Yes	Yes		Yes			ENC	1/27/09
54	70174	1/26/08	OIL	Discharge of oil. - Spill of motor oil in front of Rancho Park Pharmacy, 1331 Encinitas Blvd. Complainant said it looks like someone attempted to clean it up, but there is still residue on the ground.	1/27/09 site inspection took photos of oil spill. Contacted cleaners business and they indicated that a Volvo was picked up by AAA on 1/26/09 See FU 83826 Follow Up: 1/28/09 site inspection took photos of area cleaned up. Thanked Henry's manager and gave him handout on power washing See WO 83825	Yes	Yes		Yes			LCS	7/29/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
55	70175	1/27/09	WASH WATER	Discharge of vehicle wash water - Mobile car washers on Dublin washing a Porsche without containing wash water. Near Dublin and Oxford.	1/27.09 site inspection observed drainage and wet area in front of 267 Dublin Drive. Contacted resident of 251 Dublin who witnessed the discharge. He said the residents at 267 Dublin do not own a Porsche but the detailer just uses that area to clean cars. I gave him my card and asked him to call the hotline when he witnesses illegal discharges case closed	Yes	Yes		Yes			CBS	2/2/09
56	70228	2/4/09	CEMENT CUTTING WASTE	Discharge of concrete cutting slurry or washwater. - Concrete cutting at W. I Street and Sea Lane Dr. Not containing wash water.	2/4/09 site inspection took photos of cement drainage, worker and worker's vehicle. Contacted worker and issued citation for illegal discharge with a requirement to clean up discharge by 5pm. Placed sandbags before storm drain and cones in street 2/5/09 PW reported that clean up was adequate - --- case closed	Yes	Yes		Yes	2/4/2009		ENC	2/4/09
57	70235	2/5/09	SILT	Discharge of sediment - Erosion/sediment runoff from northwest corner of parking lot occurring during rains.	2/9/09 site inspection took photos 2/17/09 called PM to clean up area and install BMPs to prevent run off	Yes	No		Yes			ENC	6/1/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Follow Up: 4/1/09 site inspection took photos of silt leading to storm drain. Appeared to be a problem with the irrigation. called Barrett PM to fix problem								
58	70256	2/10/09	Concrete Dust and Debris	Discharge of concrete cutting slurry or washwater. - Concrete cutting at Leo Mullen Sports Park without containment.	2/10/09 site inspection issued NOV to clean sidewalk debris took photos See work order 83995 Follow Up: 2/10/08 site inspection area cleaned up case closed See work order 83994	Yes	Yes	2/12/2009	Yes			LCS	2/10/09
59	70274	2/13/09	SILT AND TRASH	Other discharge - The open space area east of the AM/PM gas station is occupied by homeless encampments. The trail and adjacent drainage swale is littered with trash and debris.	2/17/09 site inspection took photos of dirt in storm drain contacted PM and sent email with photos 3/2/09 site inspection area not cleaned 3/3/09 sent email to PM	Yes	No		Yes			LCS	3/19/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					See follow up 84625 Follow Up: 3/19/09 site inspection took photos of cleaned drainage swale Case closed See work order 84019								
60	70348	2/24/09	STUCCO	Discharge of construction debris - Stucco debris left on ground after construction.	2/23/09 site inspection took photos of stucco construction waste debris in storm drain. Contacted manager at Leucadia pizzeria to notify PM to clean ditch. See work order 84120 Follow Up: 2/25/09 site inspection area was not cleaned up. Contacted owner of Leucadia Pizzeria. He sent his workers out to clean up the spill. area was clean up with in 30 min case closed	Yes	No		Yes			ENC	2/25/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
61	70352	On-going	Leaking oil	Discharge of oil. - Staff from Trattoria I Trulli parking their white Toyota 4-Runner which is leaking oil next to a storm drain.	3/11/09 site inspection did not observe any discharge requested that owner check with their employees to get the oil leak fixed.	No	No		Yes			ENC	4/13/09
62	70372	2/26/09	silt	Discharge of other washwater - Complainant says water is running down to his street, possibly originating from nursery on Lake Dr.	2/26/09 Site inspection. Took photos. Appears discharge is from Brown's or construction site at 1403 Caminito Septimo. Left card at Caminito Septimo. Talked with worker at Brown's nursery. Received call from 1403 Caminito Septimo and Brown's Plants. Browns Plants indicated they had a broken pipe and it was fixed. Streets removed silt in street/drain by hand.	Yes	No		Yes			CBS	4/13/09
63	70406	3/3/09	SEWAGE	Discharge of sewage - Sewage overflow coming from cleanout in parking lot.	3/3/09 1615 site inspection observed discharge from clean out just east of side walk. took photos and contact lead worker to shut off water and call a plumber as there is sewage discharge into the street. Called PW to have the Vaccon unit responded and sucked up discharge. Plumber arrived and cleared the line. See work order 84384. Follow Up: submit sewer line maintenance information within a week or 3/11/09 to avoid BMP violation on citation.	Yes	No	3/12/2009	Yes	3/12/2009		CBS	3/4/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
64	70408	3/4/09	SILT	Discharge of sediment - Erosion in drainage ditch causing silt in parking lot.	3/4/09 received call from PW regarding large erosion and silt discharge issues. Site inspection took photos of erosion and silt discharge into parking lot of Days Inn. Left card at front desk. Met with PW gave me further information on drainage. Reviewed GIS and it appears drainage swale is to be maintained by private property owner. informed complainant that this is a civil issue and to speak to engineering if they had additional questions Follow Up: 4/2/09 site inspection area cleaned up case closed	Yes	No		Yes			ENC	4/2/09
65	70435	3/10/09	POOL WATER	Discharge of water - Pool water running down street, unsure of level of chlorine.	3/10/09 site inspection contacted contractor who informed me that the pool has not been	No	Yes		Yes			ESC	3/16/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					chlorinated for 2 or 3 months. After observing the green color of the pool the contractor was allow to continue discharging the pool water into the storm drain.								
66	70441	3/11/09	Water	Discharge of building or sidewalk washwater - Neighbor of Pet Hotel says water flow is constant, sometimes sudsy, and eroding driveway.	3/12/09 CW Staff performed site inspection did not observe any drainage or discharge called complainant to get additional information. Contacted planning and code enforcement to get complainant info called a left message.	No	No		Yes			ENC	4/16/09
67	70444	3/12/09	sudsy wash water	Discharge of building or sidewalk washwater - Complainant says this new store was washing and sweeping something from their parking area on 3/10/09, and there may have been suds in the curb.	3/12/09 site inspection contacted owner and advised him of the complaint and allowable discharges. Gave him educational information and a list of approved power washers. Case closed	No	No		Yes			CBS	3/16/09
68	70472	3/16/09	water, clogged storm drain	Discharge of water - Private storm drain clogged with sediment, causing flooding in restaurant drive thru. Property manager contacted plumber. He wants to know if it's possible to install a sump pump in the storm drain.	3/16/09 took photos of storm drains around the restaurant and called the PM (Zelman) to request that their contractor (Downstream) clear the drain. 3/18/09 met with PM who indicated that she will have Downstream clear the drain. 3/19/09 sent email to PM requesting Downstream contact info.	No	No		Yes			LCS	9/10/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Note that this restaurant was placed on the inventory Follow Up: 8/12/09 site inspection area cleaned up signed off NOV case closed								
69	70478	3/17/09	drainage/ effluent	Discharge of water - Complaint forwarded from Engineering. Drainage exits from drain on site and flows northward up the east side of Eolus ave. Dirt and gravel in drainage path. See complaint form.	3/17/09 site inspection no drainage observed Case closed Note to put it on inventory	No	No					LUC	6/1/09
70	70494	3/19/09	wash water	Discharge of building or sidewalk washwater - Gas station scrubbing stains from concrete without containing wash water. complainant to send photos.	3/19/09 site inspection no discharge observed Case closed	No	No					LCS	4/13/09
71	70518	3/25/09	trash, light pole, and silt	Other discharge - Trash and debris in storm drain swale.	3/27/09 site inspection	Yes	No		Yes			LCS	4/14/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					took photos of trash area, NE storm drain and run-off from sprinkler next to trash area. 3/31/09 Called property manager and explained issues. He will clean up the storm drain and the trash area and review the irrigation to make sure there is no run-off. He said he needed five days will give a reminder call in two weeks if no contact Follow Up: 4/14/09 site inspection area cleaned up case closed								
72	70559	4/2/09	pool filter debris	Discharge of paint - Construction in the backyard, with hose draining the waste into the street. Possibly paint, puddling in front of 114.	4/2/09 site inspection took photos of white discharge down to Encinitas Blvd. contacted construction workers on site. They stated that the pool guy was just there clean out the filters. Contractor gave their phone #. Called pool contractor and requested clean up ASAP no wash down. See WO 84670	Yes	Yes	4/2/2009	Yes			LCS	4/9/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
73	70565	4/2/09	trash	Other discharge - Clean water staff observed trash, dog food and other waste in trash area	4/2/09 site inspection took photos of trash and other debris. Contacted manager and requested that she have the area cleaned up. 4/2/09 received photos showing area cleaned up case closed	Yes	No		Yes			ENC	4/13/09
74	70572	4/7/09	carpet cleaning wash water	Discharge of other washwater - Resident said the carpet cleaners she hired dumped the waste water into the storm drain after they were done cleaning her carpets. She waited a week to report the incident because she wanted to remain anonymous.	Called company to get address of local business office. Sent educational info on 4/7/09. Received returned letter (addressee unknown) on 4/10/09. Correct contact info unknown. Attempted to send information via email on 4/13/09.	No	Yes		Yes			LUC	4/13/09
75	70610	4/15/09	trash	Other discharge - Trash area in back of complex is dirty, with trash outside of dumpsters.	4/14/09 site inspection took photos of trash areas contacted PM to clean trash areas Follow Up: 6/1/09 took photos of trash in A/C area called PM to clean	Yes	No		Yes			ENC	6/8/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
76	70626	4/20/09	h2o	Discharge of water - Water coming from resident's backyard causing erosion and asphalt problems.	4/22/09 site inspection took photos of over irrigation runoff contacted landscaper to fix problem Case closed	No	Yes		Yes			LCS	6/1/09
77	72644	4/22/09	Wash water	Discharge of other washwater - Complainant said the dry cleaner was washing or cleaning something outdoors 4/21 at 5:30pm and letting wash water run down driveway. Complainant reported water to Vons; employee from Vons said they could not clean it up because it wasn't theirs.	4/23/09 site inspection no discharge observed contacted worker who stated "we had a plumber fix the leak that day and it was clean water that was discharging" case closed.	No	No		Yes			LCS	5/6/09
78	73681	4/29/09	drive way cleaning wash water	Discharge of building or sidewalk washwater - Red clay/silt material running down street from driveway. BMPs in place are not adequate.	4/29/09 site inspection observed discharge of brown driveway wash water running down the storm drain gutter. Took photos and contacted workers, home owner and contractor in charge to clean up immediately. Issued citation for illegal discharge. See work order 87932 Follow Up: 5/4/09 site inspection area cleaned case closed called and informed contractor that no further clean up is required	Yes	Yes		Yes	4/29/2009		ENC	5/4/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
79	73705	5/7/09	wash water	Discharge of building or sidewalk washwater - Gas station power washing pumping area.	5/7/09 site inspection took photos of workers power washing outside of gas station issued NOV.	Yes	Yes	5/7/2009	Yes			ENC	6/1/09
80	73728	5/8/09	carpet cleaning wash water	Discharge of other washwater - Carpet cleaning- no containment for wash water.	5/13/09 site inspection took photos of discharge from carpet cleaners issued NOV respondent to clean area 5/8/09 was the inspection and 5/13/09 was the follow up inspection Follow Up: 5/13/09 site inspection-area cleaned up case closed took photos	Yes	Yes	5/8/2009	Yes			ENC	5/13/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
81	73730	5/12/09	wash water, improper storage	Discharge of building or sidewalk washwater - Restaurant washing off site without containment. And improper storage of outdoor items.	5/8/09 site inspection contacted employees to store items inside	Yes	No		Yes			ENC	6/1/09
82	73742	5/12/09	sediment	Discharge of sediment - Neighbor called to report dirt in street. At&t hit a water main. it was repaired by SDG&E, but there was dirt left in the street. Correction: Repaired by SDWD.	Per construction inspector: Inspected site-additional street sweeping recommended. Emailed SDWD for action. Cost recovery bill to At&t.	Yes	Yes		Yes			LUC	5/14/09
83	73816	5/22/09	oil and kitty litter	Discharge of oil. - Tow truck spilled some fluid from a car onto the ground when towing it away. Put kitty litter down, but didn't clean it up.	5/22/09 Site inspection took photos of absorbs all/kitty litter in driveway. Contacted manager of Shell and he indicated the Leucadia Towing picked up a vehicle on 5/21/09. The manager said he would clean it up with his staff. Contacted Chris of Leucadia towing and informed her of the mess. She said she would train her staff not to leave any debris in street after a pick up. See work order 88247 Follow Up: 5/22/09 site inspection area cleaned up took photos and thanked manager of Shell.	Yes	Yes		Yes			ENC	5/22/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
84	73831	5/27/09	water	Discharge of water - Water conservation demonstration without BMPs. water running down street.	5/27/09 site inspection took photos of discharge of water from sprinkler display. Contacted salesman/business owner and explained that he needed to discontinue discharge and installed some BMPs. He immediately stopped and installed some sand bags and swept the puddles of water into a landscaped area. Issued NOV. Follow Up: 5/27/09 site inspection area cleaned up case closed	Yes	Yes	5/27/2009	Yes			ENC	5/27/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
85	73854	6/1/09	oil	Discharge of oil. - Construction Inspector noticed a spill of an oil like substance in the parking lot of the Post Office. Looks like someone may have tried to clean it up.	6/1/09 site inspection took photos of oil spill with kitty litter on it. Contacted business owner and requested call back after area is cleaned capturing all wash water/debris. Follow Up: 6/5/09 site inspection took photo of cleaned up area case closed.	Yes	No		Yes			LUC	6/5/09
86	73855	6/1/09	wash water from cleaning tile saw	Discharge of concrete cutting slurry or washwater. - Disposing of cement in gutter/storm drain. cutting concrete blocks w/out dust control. discharge in curb line reaches storm drain at Oakbranch Dr.	6/1/09 site inspection took photos of drainage stains to the storm drain. Contacted owner who wanted to know who the complainant was or he would not cooperate. He was shown the discharge but would not give contractor information or received an NOV. Contractor's sign and trailer had ph #. Called and Left message for business owner.	Yes	Yes		Yes			LUX	6/17/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
87	75890	6/1/09	sewage	Discharge of sewage - LWD notified us of a sewer overflow at 1450 Encinitas Blvd.	Email from LWD on 6/1/09: We responded to a private Lateral spill on Friday the 29th at 1450 Encinitas Blvd. at approximately 4:40 pm. The crew discovered lateral for 1450 Encinitas overflowing. The overflow was approximately 25 Gallons of which only 5 gallons reach storm drain. The crew contained spill and Property Management called Plumber to relieve stoppage. NOV letter mailed 6/5/09.	Yes	No	6/5/2009				LCS	6/5/09
88	77943	6/11/09	wash water	Discharge of building or sidewalk washwater - Clean Water Program staff witnessed company power washing without containment.	Clean Water Program staff spoke with discharger to let him know that no water was allowed to leave site. Took photos. Company has been cited before. Mailed NOV Letter and Citation 6/15/09.	Yes	Yes	6/15/2009	Yes	6/15/2009		ENC	6/15/09
89	77989	6/22/09	trash and leaves	Discharge of yard waste - Complaint forwarded from SDWD and Code Enforcement. Residents washing cards in emergency fire lanes on 6/2 and 6/4. Also, gardeners blowing trash and leaves near storm drain.	6/23/09 site inspection left card and garden information with guard	Yes	Yes		Yes			LUC	7/2/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
90	78052	6/28/09	wash water	Discharge of building or sidewalk washwater - Restaurant washing off items behind store without containment. Complainant tried talking to restaurant, but they continue to discharge.	6/30/09 site inspection took photos of discharge water and contacted worker issued NOV	Yes	No	6/30/2009	Yes			ENC	7/2/09
91	78056	6/30/09	carpet cleaning wash water after filter	Discharge of building or sidewalk washwater - Carpet cleaners dumping waste into street.	6/30/09 site inspection took photos and issued NOV contractor indicated that it was clean water. He was informed that it is not an allowed discharge. He understood and will comply in the future.	Yes	Yes	6/30/2009	Yes			CBS	7/2/09
Commercial Totals:	**91**				**Follow Ups:**	**45**	**67**	**37**	**26**	**75**	**10**		

Appendix H-1 Residential Complaint Response Summary FY 2008-09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	34887	7/10/07	private landscape drain connected to public storm drain.	Other discharge - Neighbors found private landscape drain connection to a public storm drain.	8/7/08 CWP Manager and I went to property knocked on door, no answer, left card to call me 8/12/08 Wastewater and i entered the storm drain area from the gated community below the property. We observed the illegal hook up and took photos. It appeared that a tree limb had broken off and landed on top of the illegal hook up. We removed the limb and took photos. A resident of the home owners association informed us that the limb has been there for over 2 months. I informed the resident that we would forward the fire hazard/complaint to the Fire prevention officer and gave her my card and asked that she call me if she sees anyone working around the storm drain pipe or any other storm drain violations. 8/14/09 received correspondence from the property owner indicating that the prior owner is responsible for the construction and they are currently in a Civil dispute to resolve the connection issue. 11/26/08 No permits submitted 12/1/08 LM with owner 1/14/09 Received call from current owner stating that he is moving forward and meeting with his realtor and get back to the City by 1/31/09	Yes	7/6/2009	Yes		BATIQUITOS LAGOOON	LUC	7/17/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					1/14/09 received call from Buyers realtor requesting city cost to permit legal drainage and repair of pipe. Engineering staff said a minor plan check is $900. It was agreed that the cost may be doubled. Informed realtor that the cost estimate would be $2000 or under unless changes occurred before submittal. 3/10/09 Spoke to seller's realtor she will call owner for update and get back to the city. 6/9/09 seller's realtor is waiting for call from owner. It was agreed that if no call by 6/11/09 then call realtor and owner. Owner may want to sell house and will have to disclose drainage violation. 6/16/09 contacted realtor who stated that she is meeting with the owner on 6/18/09 and will call the city on 6/19/09 with the results of the meeting. 6/24/09 received fax of email buyer intends to send seller. Clean water manager & I discussed the case and it was decided to uphold the original NOV requirements to get a grading permit. Called and informed the property owner that an NOV will be sent out in early July. 7/6/09 sent NOV to comply by 8/7/09 Engineering Dept to follow up.							

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
2	64704	6/2/08	NA- Wet soil in backyard, some sewer smell	Discharge of sewage - Resident complaining about constant wet soil in backyard. Dead tree pulled from ground smells like sewer. Ongoing problem.	8/7/08 site inspection did not observe any discharge or sewer smells on 406 Jolina Way. Did produce a service request for 257 N. El Camino Real Villa Encinitas Plaza for grease and trash storage	No					LCS	8/11/08
3	68808	6/18/08	WATER	Discharge of water - Neighbor's sump pump pumping water into dirt alley 3-4x per week. Possibly causing erosion.	7/1/08 Site inspection observed no discharge. Called complainant, she informed me that the hosing off has stopped, but the water still comes up from the ground. Complainant will call when she sees runoff and would like a call after contact is made. Set to inspect Tuesday 7/8/08. See follow up WO 75376 Follow Up: Site inspection- Left card and door hanger.	No					CBS	7/7/08
4	68872	6/25/08	White Sheetrock Material	Discharge of concrete cutting slurry or washwater. - White sheetrock material appears to have been dumped in/near storm drain at Passiflora and Sidonia, going south on Leucadia.	7/2/08 Site inspection- could not find discharge.	No					ENC	8/1/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
5	68889	6/30/08	WHITE CLAY WASH WATER	Discharge of concrete cutting slurry or washwater. - Trail of dried white substance leading from shed in alley to storm drain.	7/1/08 Site inspection- took photos, contacted resident/owner. She will take care to use buckets of water to prevent colored discharge.	No					CBS	8/1/08
6	68909	7/2/08	Red Hydraulic Fluid	Discharge of liquid fuels. - Staff noticed red fluid lining curb after hours. Traced it back to equipment inside abandoned house. .	7/2/08 site inspection took photos left card at door. City Staff used kitty litter to clean up fluid. 7/8/07 site inspection no one there took photos. 7.9.08 drafted NOV. 7/10/08 sent NOV via cert mail with photos and educational materials. Received undelivered certified mail on 8/5/08. Resent via regular mail 8/6/08.	Yes	7/10/2008	Yes			CBS	8/5/08
7	68910	7/3/08	Diatomaceous Earth/ pool filter	Discharge of water - Neighbor is emptying pool and causing erosion into the street, causing complainant to have to sweep in front of his house. Inspector to investigate. Please call complainant back.	7/9/08 site inspection contacted owner regarding discharge of pool water. He showed me where the pool man fixed the pump and said there may have been some discharge. I called the complainant back and asked if he wanted to call the respondent. He declined but requested that I inform the pool owner that there is a discharge pipe that creates erosion when the pool discharges from the SW corner of the lot.	No					LUX	7/30/08
8	68921	7/6/08	water	Discharge of water - Neighbor is watering incessantly, flooding alley between Oxford and Montgomery. Possibly washing off dog waste as well.	7/7/08 site inspection left door hanger and business card. No discharge was observed	No		Yes			CBS	10/14/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
9	68924	7/7/08	TILE WASTE DEBRIS	Discharge of concrete cutting slurry or washwater. - Neighbor washing white residue from home remodel into storm drain. Inspector to investigate. Please call complainant back after investigation.	7/7/08 site inspection observed discharge took photos and issued NOV See follow up 79925 Follow Up: 7/9/08 site inspection area cleaned up case closed	Yes	7/7/2008	Yes			LCS	7/9/08
10	68928	7/7/08	yard waste	Discharge of yard waste - Neighbor washing leaves and yard waste into street and cul-de-sac.	7/8/08 SITE INSPECTION TOOK PHOTOS left card and door hanger no discharge observed	No		Yes			CBS	10/14/08
11	68938	7/8/08	POOL WATER	Discharge of water - Constant flow of water down street all morning. Possibly from pool drainage.	7/8/08 site inspection, contacted home owner Terry Ash 760 436-6002. He stated that the pool has not been chlorinated for three weeks and that he had a cracked pool. Called and informed the complainant that this is an allowed discharge	No				OCEAN	LUC	7/30/08
12	68943	7/8/08	Diatomaceous Earth	Discharge of water - Dried white trail, possibly diatomaceous earth, running down street.	7/9/08 site inspection took photos of white substance in street. Left door hanger and card to call me. 7/9/08 called Daniel Giroux 942-8460. A French speaking person requested that I call back the next day 7/14/08 Called and left message See follow up WO 79972 Follow Up: FOLLOW UP SHOWED AREA CLEANED	Yes	7/16/2008	Yes	7/16/2008		CBS	7/21/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
13	69126	7/17/08	water	Discharge of water - Water running down street from a blue hose in the driveway. Possible pool or waterbed draining.	7/28/08 site inspection no discharge observed	No					ENC	10/14/08
14	69130	7/23/08	sewage	Discharge of sewage - RV parked in front of house. Overflow tank & sewage has been leaking into street.	7/28/08 site inspection did not observe any discharge left card at RV door Follow Up: that the oil was contaminated and that they needed HHW phone number to get the waste picked up. Called property owner and gave her the phones # 800 444-4244 and asked that she get a receipt and give a copy to me or Code after it is picked up.	No		Yes			ENC	10/20/08
15	69131	7/27/08	red tinted water	Discharge of building or sidewalk washwater - Drainage water with red tint coming from Morning Sun Dr. Unsure of source or discharge.	7/28/08 site inspection observed red dye in street left card to call me. property owner returned call and will contact roof cleaner	Yes		Yes			LCS	10/14/08
16	69255	8/11/08	concrete slurry	Discharge of concrete cutting slurry or washwater. - Concrete slurry entering street.	8/12/08 site inspection no discharge observed gave contractor educational materials	No		Yes			CBS	10/15/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
17	69282	8/14/08	GRANITE CUTTING DEBRIS	Other discharge - Contractor at residence installing new countertops. Cuttings going into street.	8/14/08 site inspection observed discharge too photos and issued NOV to comply by 8/14/08 5:30 pm See follow up WO 79353 Follow Up: 8/15/08 site inspection showed area cleaned up---OK to close	Yes	8/14/2008	Yes			LUX	8/15/08
18	69300	8/15/08	WASH WATER	Discharge of building or sidewalk washwater - Resident power washing roof without containment.	8/15/08 site inspection contacted a home owner washing off his roof. Bill understood and discontinued the discharge immediately. OK to close	Yes		Yes			LUX	10/15/08
19	69301	8/18/08	cleaning wash water	Discharge of other washwater - Residents discharging cleaning wash water to street.	8/18/08 site inspection did not observe any discharge but i did see where the drainage comes off the lot. I left card to call me regarding drainage. I received call back from Luis stating that he will address the possible erosion control and that the drainage was from over-irrigation.	Yes		Yes			ENC	10/29/08
20	69302	8/18/08	White Substance	Discharge of paint - Resident dumping paint into storm drain.	8/18/08 site inspection observed white substance in street. Took photos and left door hanger. sent NOV to comply by 8/25/08 needs follow up	Yes	8/18/2008	Yes			LUX	8/25/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					See follow up WO 79312 Follow Up: 8/25/08 received call requesting a compliance inspection at 4p today. Site inspection showed that area was cleaned up ok to close							
21	69419	8/29/08	wash water	Discharge of other washwater - Forwarded from Code Enforcement. Outdoor shower not connected to sewer. Water drainage causing structural damage. Inspector to investigate. Code Enforcement will require permit for outdoor shower.	9/4/08 site inspection with code enforcement observed outdoor shower took photos respondent agreed to remove structure rather than applying for a permit. 9/30/08 code reported that shower was removed Case closed	Yes					ENC	10/15/08
22	69420	8/28/08	Discharge of water	Discharge of water - Resident installing pipe to carry water from back structure to street. Inspector will visit site to assure storm water compliance.	8/29/08 site inspection contacted workers and was informed that the drainage is for rain water and irrigation.	No		Yes			ENC	10/15/08
23	69434	9/2/08	white wash water	Discharge of construction debris - Construction on condo. Contractor doing work outside next to storm drain, using water to wash off area.	9/3/08 site inspection contacted owner and gave card and const. flyer no discharge observed	No		Yes			ENC	10/14/08
24	69440	9/3/08	cement, plastic, soil	Discharge of concrete waste. - Email from CWP website. Abandoned construction project, materials left out, uncovered, blowing into storm drain.	9/3/08 site inspection left card & construction flyer. No discharge observed took photos of building materials	No		Yes			LCS	10/14/08

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25	69471	9/3/08	OPEN OUTDOOR USED OIL STORAGE	Discharge of oil. - Open/outdoor storage of oil and batteries.	9/4/08 site inspection with code enforcement. Observed open storage of used oil and batteries took photos contacted residents to properly dispose of the items See follow up 80174 Follow Up: 10/20/08 code informed me that the oil was contaminated and that they needed HHW phone number to get the waste picked up. Called property owner and gave her the phones # 800 444-4244 and asked that she get a receipt and give a copy to me or Code after it is picked up.	Yes		Yes			ENC	10/20/08
26	69474	9/9/08	Pine sol	Discharge of other washwater - Complaint of pine sol-like substance being hosed into street.	9/9/08 left card at residence to call me. Received call from resident stating that he will work on the erosion problem.	Yes		Yes			ENC	10/15/08
27	69495	9/11/08	Diatomaceous Earth	Discharge of other washwater - White creamy substance was washed to storm drain.	9/11/08 Inspector saw illegal discharge of diatomaceous earth from swimming pool cleaning activities. Issued warning citation to clean up within 24 hours. Follow Up: Drive by follow up at 4:15pm. Site has been properly cleaned. Sent case closed letter to resident 9/15/08.	Yes		Yes	9/11/2008		ENC	9/12/08
28	69502	9/12/08	PAINT	Discharge of paint - Garbage bag full of paint cans is spilling into swale and down street.	12-15 gallons of paint in curb. 1 bag ripped open and leaking into curb line and gutter. Streets maintenance responded to clean up spill in front of 2033 shady tree ln. Approx. 20 door hangers distributed to addresses 2002-2041.	Yes		Yes			LCS	10/15/08

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29	69503	9/11/08	Pine sol smelling water	Discharge of other washwater - Pine sol smell coming from resident's backyard, draining out and seeping into ground. Not running onto sidewalk. Inspector has visited site before.	9/23/08 site inspection observed no discharge	No					ENC	10/15/08
30	69504	9/10/08	outdoor shower wash water	Discharge of other washwater - Newly constructed outdoor shower drains to street. 2260 not showing on GIS map, may be new address.	10/2/08 site inspection no discharge observed no one home	No					CBS	10/14/08
31	69519	9/16/08	White Construction Runoff	Discharge of paint - Painting being done on 1700 block of Gascony. Discharge of materials leading down to Burgundy.	NOV Letter sent to residents at 1704, 1708, 1710, 1714, 1716, 1718, 1720, 1722 Gascony Rd. and to HOA mgmt company. Received call 9/22 from 1704 saying it wasn't them. Received call 9/24 from 1716 saying they weren't responsible and that the HOA hired the contractor. Received letter from HOA mgmt company 10/7/08 stating that the Board will be informing homeowners and construction vendors of the community about the incident and will educate to prevent any future violations.	Yes	9/18/2008	Yes			LUC	10/13/08
32	69554	9/19/08	UNKNOWN	Discharge of other washwater - Resident says someone dumped petrochemicals into puddle at the corner of La Mesa and N El Portal.	9/22/08 site inspection took photos and contacted PW and complainant. 9/23 site inspection left door hangers at adjacent addresses (438, 462, 460, 476, 482 La Mesa, 210 N. El Portal and on vehicle red truck	Yes		Yes			LUC	9/25/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					exp 9/08) that would drain into the puddle. Emailed Engineering, PW and Vector control. Updated complainant on actions taken. Need to re inspect and advise PW of when and how to clean up. See follow up WO 79905 Follow Up: 9/25/08 site inspection area cleaned took photo							
33	69567	9/23/08	CEMENT DEBRIS	Discharge of water - Resident says a white residue is in the puddle of water at the end of her driveway. Claims that it's coming from her neighbor's property. Has called numerous times about this before, but it usually ends up being a non-issue.	9/23/08 site inspection observed puddle in front of complainant's house took photos and investigated upstream and found some cement debris in front of 603 faith Ave. Updated complainant See follow up WO 80046 Follow Up: 10/7/08 site inspection area cleaned up case closed	Yes		Yes			CBS	10/7/08
34	69572	9/20/08	construction wash water	Discharge of construction debris - Resident washing off construction tools in driveway without containment.	9/23/08 site inspection contacted resident and gave her power washing handout. no discharge or stains on the driveway	No		Yes			CBS	10/15/08

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35	69573	9/21/08	White Construction Debris	Discharge of concrete cutting slurry or washwater. - Contractor washing out equipment, dumping wash water into drain in grass.	9/25/08 site inspection observed drainage took photos left handyman flyer and construction handout with business card at door.	Yes		Yes			ENC	10/15/08
36	69596	9/29/08	OIL	Other discharge - If you walk by 1345 Greenlake Drive in Cardiff by the Sea, there is a white Ford Bronco that has an oil slick under it and on top of it, the guy sits in his truck and throws cigarettes out into the gutter next to his truck.	10/2/08 site inspection took photos and was contacted by neighbor who confirmed that the resident at 1345 Greenlake Drive owns a white ford bronco. Left door hanger at site. See follow up 80096 Follow Up: Drive stating that he does not own a white ford bronco and to stop leaving notices at his door10/20 site inspection vehicle GOA case closed	Yes		Yes			CBS	10/9/08
37	69597	9/27/08	DIESEL FUEL	Discharge of liquid fuels. - Accidental diesel spill over weekend. Streets responded to emergency cleanup. No discharge to storm drain. Inspector to check out site with Fire Chief to make sure no more cleanup is needed.	9/29/08 site inspection w/ FD took photos observed stained roadway and dirt. there was a great odor of diesel fumes. We contacted responsible party and referred them to hazardous waste clean up companies. Hand derived list of contractors. Respondent wanted their daughter to be informed of the requirements. received call from daughter and explained that the city needs a written plan of action and for that plan to be implemented asap. 9/30/08 received email with action plan from respondent's daughter See follow ups 80042, 80349, 80350, 80351. Follow Up: By EMERSON, MIKE: 10/20/2008 1:02:39 PM 10/15/08 site inspection work no completed took photos	Yes		Yes			ENC	10/20/08

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38	69603	9/29/08	water	Discharge of water - Complaint about water running from Oxford and pooling in alley between Oxford and Montgomery, causing slime, mud, and smell. Groundwater-engineering issue. We have received complaints on this before; inspector has been to site.	Complainant would like call back. 10/2/08 clean water program met with senor civil engineer and contacted complainant and informed her of the process to connect the surface drainage to underground drainage and the CIP process and priorities of CIPs. Complainant requested and was given Public Works and Engineering phone #s. Complainant made reference to an adjacent property owner (324 Liverpool drive) with whom the City has taken encroachment violation actions against in recent months, suggesting that the adjacent property owners actions had resolved the problem, but the City forced the property owner to cease and desist actions. Further, complainant suggested diversion of drainage into the right of way easement, as a means of "aquifer recharge" and was explained that this is not a viable option in consideration of legal constraints, and that this would not resolve surface drainage issues. Engineering issue, not Clean Water Program issue.	No				OCEAN	CBS	10/14/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
39	69607	9/30/08	GRAY BUILDING DEBRIS	Discharge of water - Another call regarding a puddle of water with a sheen on it in front of complainant's driveway.	By EMERSON, MIKE: 9/30/2008 3:07:02 PM 9/30/08 site inspection observed some gray particles in the storm drain took photos and was contacted by the complainant stating that she will keep complaining when she sees non storm water in drain. Contacted respondent and showed him the violation and requested that the discharge be discontinued and to sweep up the debris that settled in the storm drain and call me back for a follow up inspection See follow up WO 80043 10/2/08 site inspection area appeared to be cleaned up took photos.	Yes					CBS	10/14/08
40	69627	10/2/08	water	Discharge of water - Swimming pool discharge coming from neighbor's house is potentially causing runoff in front of complainant's house.	10/02/08 site inspection no discharge observed ==no violation	No					LUX	10/14/08
41	69642	10/7/08	water	Discharge of water - Complaint forwarded from Code Enforcement. Complainant is concerned with neighbor's pool discharge causing erosion along side of road.	10/7/08 site inspection no discharge observed===no violation. CW manager spoke with complainant and explained that pool discharge is not a violation as long as it's dechlorinated and not causing erosion. The inspector verified that erosion is not occurring as a result of the pool discharge. CW updated Code Enforcement.	No					LUX	10/14/08

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42	69669	10/10/08	Pine sol/ water	Discharge of building or sidewalk washwater - Another complaint regarding Pine sol smell coming from backyard. Cleaning something without containing wash water. Discharge is coming out where the gate is.	10/15/08 met with respondent informed him that washing down the patios so that the discharge flowed into the storm drain was a violation. He understood and will use biodegradable soaps and contain all wash water on site..	No		Yes			ENC	10/21/08
43	69676	10/13/08	WATER/ SOOT	Discharge of other washwater - Ash/soot being washed down street, coming from storm drain on Townwood Way. Possibly coming from burned house near Digueno Middle School.	Inspector went to site, saw wet area on Townwood Way near storm drain outlet. Could not find source of discharge on Meadow Vista Way. Called to inform complainant. he said the flow was stronger earlier in the day. case closed.	No					RSF	10/14/08
44	69678	10/13/08	OIL	Discharge of oil. - Oil residue from car on driveway.	10/14/08 site inspection contacted owner who indicated that it was her workers vehicles that are leaking oil. left card and door hanger See follow up 80402 Follow Up: 10/20/08 site inspection oil drips appeared to be cleaned up	Yes		Yes			LUX	10/20/08

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45	69696	10/16/08	water	Discharge of water - Complainant is concerned with neighbor's pool water draining down street and dissipating into pavement. Worried there may be an underlying erosion problem under the pavement.	10/20/08 site inspection. Observed no drainage or trails of drainage. Resident informed me that the pool drainage disappeared into the street took photos and informed the resident that I would forward this concern to the street division of the PW department. 10/21/08 sent email to PW with photos.	No		Yes			LUC	10/21/08
46	69699	10/16/08	WASH WATER	Discharge of building or sidewalk washwater - Resident hosing off driveway into storm drain adjacent to Moonlight Beach.	10/16/08 site inspection observed worker hosing off patio into storm drain. Informed worker that washing patios is a violation and to sweep it up. He understood and complied case closed	Yes		Yes			ENC	10/21/08
47	69842	11/18/08	sewage	Discharge of sewage - Sewage overflows in yard. Sump pump alarm goes off, cap is being left off.	Clean Water and Wastewater staff visited site, spoke to responsible party. He assured them that no sewage had gone into street or storm drain. the alarm on the pump is malfunctioning. Staff told him he needs to maintain his pump to make sure no discharges occur. Staff also spoke to complainant's wife and let her know no discharge was seen, told her to call Hotline if any discharges occur.	No		Yes			ESC	11/19/08
48	69843	11/17/08	SAND AND DIRT	Discharge of other washwater - Resident cleaned out garage and hosed dirt and sand into parking lot. trail of white leading to storm drain.	11/17/08 site inspection took photos of stains from a white substance that had been washed into the storm drain. I contacted the owner and informed him that washing out his dirt and sand from his garage is not an allowed discharge and is a violation of our storm drain ord. He said in the future he will sweep it up and not wash it into the storm drain	Yes	11/19/2008	Yes			ENC	11/25/08

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
49	69844	11/17/08	PAINT-WHITE	Discharge of paint - Contractor spilled white paint on sidewalk, hosed it into bushes where there is a drain. Other substance was used to get paint off sidewalk, and that was also washed into the drain in the bushes.	11/19/08 site inspection observed some white stains in landscaped area next to drain took photos and contacted resident who indicated that the worker was an employee of the PM. Called PM and left messages on 11/19 and 11/21/08. No reply as of 11/24 See follow up 81178. Follow Up: 12/2/08 sent NOV letter to PM 12/11/08 received call from PM stating that they have sent a letter to all of the residents regarding discharge and will mail a copy to the City	Yes	12/2/2008	Yes		NO	ENC	12/2/08
50	69845	11/19/08	WASH WATER	Discharge of building or sidewalk washwater - Clean Water Staff saw power washer washing a deck that faced the ocean.	Clean Water staff went to house, spoke with homeowner. She let them in the backyard to speak with the power washer. all wash water was draining into landscaping. no violation. Sent informational letter with handyman brochure to resident.	No		Yes			ENC	11/19/08
51	69901	11/26/08	DIRT	Discharge of water - Call from Wastewater about possible illegal connection to storm drain between 1702 and 1703.	12/1/08 site inspection took photos of dirt coming out of storm drain. Contacted residents at 1703 and 1702 Sienna Canyon Drive. 1703 said he would clean storm drain out. I said I would call both 1702 and 1703 back after I spoke to wastewater complainant. Called waste water to get more info. See follow up WO 81348 Follow Up: 12/10/08 site inspection area cleaned case closed	Yes		Yes			RSF	12/10/08

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52	69914	12/3/08	STUCCO WASTE	Discharge of construction debris - White substance, possibly plaster or paint, coming from outlet in street between 507 and 509. Construction is at 503.	12/4/08 took photos of discharge in storm drain at 503 Ocean bluff and on the street around the corner. Contacted worker and showed him where the discharge was coming from and that he needs to clean it up collecting all of the washwater. also told him to use the wash out pit to clean his tools. See follow up 81096 Follow Up: 12/5/08 site inspection area cleaned up contacted PO gave her bus card	Yes	12/4/2008	Yes			ENC	12/5/08
53	69930	12/9/08	Sewage	Discharge of sewage - Call from Leucadia Wastewater District regarding possibly blocked sewer lateral.	12/9/08 site inspection took photos of exposed sewage issued NOV left at door See follow up WO 81366 Follow Up: 12/10/08 site inspection two roto rooter vehicles on site reported that they cleared the line last night (12/9/08) at 8pm. Contacted the owner and signed off the NOV	Yes	12/9/2008	Yes			LUC	12/10/08
54	69961	12/10/08	VEHICLE WASH WATER	Discharge of liquid fuels. - Complainant says neighbor is power washing some sort of oil/gas mixture into the street without containment.	12/10/08 site inspection took photos contacted owner and worker regarding discharge. Worker immediately started clean up See follow up WO 81403 12/11/08 site inspection area cleaned up---case closed	Yes		Yes			LUC	1/2/09

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55	69994	12/18/08	dirt	Discharge of concrete waste. - Pond built in yard, concrete waste dumped over fence on bank of Batiquitos Lagoon.	12/18/08 site inspection took photos of work site contacted worker and directed him to clean up and discontinue discharge. Follow Up: 12/22/08 took photo area cleaned up area	Yes		Yes			LUC	12/22/08
56	70014	12/18/08	SILT	Other discharge - Lack of BMPs, failed block wall.	12/18/09 site inspection observed bricks in road and some silt discharge left card at door. See follow up WO 82044 Follow Up: 1/7/09 site inspection area cleaned up case closed	Yes		Yes			ENC	1/7/09
57	70018	12/19/08	SILT	Discharge of other washwater - Erosion, sediment runoff after rain event.	1/13/09 site inspection took photos of run on to 1223 Crest View drive from three different properties. Met with clean water manager regarding residential run off/on. Received call from owner of 1934 Crest drive indicating that he would do what is necessary to comply. He was informed that he needed to make sure that his property stayed on his site. No sediment should leave his property from a rain event or over irrigation. 1/30/09 received complaint call from owner of 1223 Crestview drive. discussed case with engineering grading enforcement staff and it was determined to be a civil issue but that clean water staff would give education to land owners regarding erosion and BMPs. Informed complainant that it was considered a civil issue between neighbors	Yes		Yes			CBS	2/9/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Follow Up: 2/9/09 site inspection took photos of BMPs at discharge point and it appeared to be working after a rain event. Case closed							
58	70043	12/29/08	SILT	Other discharge - Sediment runoff in street, possibly coming from house on corner or Piraeus and Olympus.	12/29/08 site inspection took photos of dirt discharge. contacted owner to clean up See follow up 81622 Follow Up: 12/29/08 site inspection area cleaned up took photos. Emailed street sweeper schedule and emailed streets to do an extra sweep.	Yes		Yes			LUC	12/29/08
59	70054	12/30/08	SILT	Other discharge - Silt discharge in street from landscaping activities.	12/30/08 site inspection took photos of dirt in street left card at door to call me. See follow up 81698 Follow Up: 1/2/09 site inspection contacted owner and took photos of clean up	Yes		Yes			CBS	1/2/09

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60	70055	12/30/08	SILT	Other discharge - Silt discharge in street.	12/30/08 site inspection at neighbor's construction site took photos of drainage into shared drain that is draining silt into street.	Yes		Yes			CBS	1/16/09
61	70067	12/31/08	SILT	Other discharge - Silt discharge into street and lack of BMPs.	12/31/08 site inspection contacted owner regarding erosion control See follow up 81695 Follow Up: 1/5/09 site inspection driveway complete and erosion control at the drainage points called and thanked owner	Yes		Yes			ENC	1/5/09
62	70073	1/4/08	BEACH SAND	Discharge of other washwater - Trail of unknown white substance leading from driveway at or near 230 Fourth St.	1/5/09 site inspection took photos of white stain. It appeared to be beach sand from an outdoor shower. Left card at door case closed	No		Yes			ENC	1/16/09
63	70110	1/12/09	detergent smelling water	Discharge of building or sidewalk washwater - Resident walking by house on corner of El Camino del Norte and Edelweiss smelled Tide detergent coming from drain.	1/12/09 site inspection observed no discharge or any trails of discharge	No					RSF	1/21/09
64	70146	1/20/09	Sewage	Discharge of sewage - Pumping out septic tank into adjacent property.	1/20/09 site inspection with waste water. Took photos of discharge and gave card to resident to have owner call me ASAP. Discussed case with supervisor and it was decided that DEH should be	Yes	1/21/2009	Yes	1/21/2009		ENC	1/22/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					contacted. Registered a complaint with DEH and sent photos to inspector. Inspector cautioned that it could take up to 30 days to get the discharge to stop. Called waste water to update. Wastewater cleaned up all discharge with vactor truck.							
65	70171	1/26/09	PAINT	Discharge of paint - Resident says his neighbors dumped paint into storm drain. He confronted them about it and they denied it, but the paint is the same color that they just painted their house.	No discharge observed. Will mail education letter on 1/27/09 to resident/owner. Complainant wishes to be contacted if contact with responsible party occurs. Case closed.	No		Yes			LUX	1/26/09
66	70253	2/9/09	SILT	Discharge of water - Drain on north end of property gets filled with debris and water overflows into complainant's back yard.	2/12/09 site inspection took photos contacted upstream neighbor (2323 Camino Del Rancho) regarding maintenance of storm drain. He said he cleans it every 6 months. Additionally he believes that he owns to the middle of the storm drain. I called and informed the complainant his neighbor believes that the swale is owned by both property owners equally the maintenance can be done to the middle of the swale.	No		Yes			ESC	2/25/09
67	70267	2/11/09	Yard Waste	Discharge of yard waste - Complainant witnessed a man blowing leaves and other debris into the storm drain with a leaf blower on 2/8/09. Forwarded from Code Enforcement.	2/12/09 site inspection left card at door. Received a call back from the resident. Educated her that leaves and debris cannot be deposited into the storm drain. She understood and will not do it again. Case closed	No		Yes			CBS	2/17/09

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68	70323	2/19/09	Possible auto fluids and paint	Other discharge - Forwarded from Code Enforcement. Auto body & mechanic work in driveway again. Prepping an RV for painting.	2/23/09 site inspection no discharge or RV observed on site contacted resident who stated that they were washing the vehicle. CASE CLOSED	No		Yes			CBS	3/5/09
69	70380	2/9/09	SILT	Discharge of sediment - Sediment discharge, inadequate BMPs causing erosion.	2/9/09 site inspection took photos of silt discharge into permanent BMP See WO 84159 Follow Up: ion or construct the BMPs to the MEP. He understood and will be on site to ensure that the silt is staying on his property during the next rain events. 2/17/09 received call from complainant stating that the BMPs (cement structures were working well. case closed	Yes		Yes			CBS	2/12/09
70	70387	2/27/09	water	Discharge of vehicle wash water - Complainant says neighbor is letting water and other wash run down street. He had the hood of his car open and a towel in the gutter line to try and catch the runoff, but it wasn't working.	2/27/09 SITE INSPECTION did not observed any discharge took photos and contacted resident gave him education flyers	No		Yes			CBS	3/5/09
71	70407	3/4/09	OIL	Discharge of oil. - Illegal storage and discharge of motor oil.	3/4/09 site inspection took photos oil storage in alley. Left Door hangers in alley and at front walk requesting a call and placed NOV at the alley garage. Neighbor's worker indicated that the garage appeared to be rented out. They	Yes	3/4/2009	Yes			ENC	3/5/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					will monitor and call the hotline if there is a discharge. See follow up 84286 Follow Up: 3/5/09 site inspection oil storage removed took photos Case closed							
72	70414	3/5/09	WASTE PAPER DEBRIS	Discharge of sewage - Cleaning out sewage lateral, overflow into street.	3/5/09 site inspection took photos of what appeared to be dried toilet paper coming out of sewer clean out. Contacted the resident to clean it up ASAP without any discharge. See follow up 84328 Follow Up: 3/9/09 site inspection took photo of area that was cleaned up Case closed	Yes		Yes			ENC	3/9/09
73	70438	3/11/09	water	Discharge of water - Complainant said that a large City truck was dumping water from the truck into the storm drain near Sheridan Rd and La Costa Ave. Not sure which department.	3/11/09 Contacted City of Encinitas Wastewater and Street Maintenance Divisions, San Dieguito Water District, and Leucadia Wastewater. None had trucks in the area this morning. Encinitas Wastewater drove to area of complaint and saw no evidence of illegal discharge. Construction at La Costa Ave and Hwy 101 in progress- could have possibly been one of their trucks. Informed resident to call asap if he sees it again. Case closed.	No					LUC	3/16/09

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74	70473	3/16/09	water and white powdery substance	Discharge of water - Complainant says that a white power substance has been applied at 1257 and can be seen on the ground and in the storm drain. She is concerned that it is poisonous and harming her landscaping.	3/16/09 site inspection did not observe any discharge took photos of storm drain left card at door	No		Yes			CBS	4/13/09
75	70476	3/16/09	WATER	Discharge of water - Possible illegal connection to storm drain system, causing erosion and flooding.	3/16/09 site inspection observed some discharge into commercial property to the west. Contacted owner and it appeared to be over-irrigation. The owner directed his landscaper to dig up the three irrigation lines and replace the valves. No violation case closed	No		Yes			LCS	4/13/09
76	70491	3/18/09	OIL AND KITTY LITTER	Other discharge - Bag of kitty litter left at the corner of Santa Fe Dr and Evergreen, possibly left over from an oil spill.	3/18/09 took photos of kitty litter in street with some oil visible. Left door hanger and called realtor. 3/19/09 called PW to clean up street emailed photos. See work order 84624 Follow Up: 3/27/09 site inspection area cleaned up case closed	Yes		Yes			CBS	3/27/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
77	70560	4/2/09	clean out waste	Discharge of sewage - Possible Illegal connection to the storm drain. Grey water draining from house.	4/2/09 site inspection with waste water appears a clean out cap was not connected. 4/6/09 called owner to get clean out pipe reconnected. 5/5/09 called and spoke to property owner and she understands what she needs to do. Need to call her back within two weeks. Follow Up: 5/28/09 received invoice from plumber showing clean out redirected to the roof.	Yes		Yes			ENC	5/28/09
78	70585	4/8/09	vehicle wash water	Discharge of vehicle wash water - Forwarded from Code Enforcement. Complainant believes neighbor is running a vehicle washing business out of his home. Wash water runs down street into storm drain.	4/14/09 site inspection left card at door. Received call back stating that he was washing his private vehicles. He was requested to capture all wash water.	No		Yes			LCS	7/1/09
79	70599	4/10/09	possibly detergents, oils, gasoline	Discharge of other washwater - Complainant says neighbor routinely dumps oils, detergents, and gasoline down her driveway and into the street. He has called multiple times about this before.	4/14/09 site inspection no discharge took photos case closed	No					CBS	6/1/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
80	70611	4/15/09	sand	Discharge of sediment - Neighbor has large pile of uncovered dirt in street.	4/15/09 site inspection took photo of dirt in street contacted owner to remove. Follow Up: 5/13/09 completed follow up inspection area cleaned case closed	Yes		Yes			CBS	5/13/09
81	70617	4/16/09	water	Discharge of water - Owner of local business called to report neighbor's continuous flow of water from hole in curb. Also, leaves in street gutter cause backup of water and provide breeding ground for mosquitoes. Will forward over-irrigation complaint to SDWD.	4/20/09 site inspection drainage appeared to be clean water colorless and odorless case closed	No					CBS	4/21/09
82	70625	4/19/09	paint	Discharge of paint - Forwarded from County: Occupants of the house were cleaning paint brushes and dumping paint into the gutter at their driveway.	4/20/09 site inspection took photos of paint stains in street. Contacted owner of house she informed me that she was directed by her paint store to wash the paint brushes at the curb. Contacted business to give out correct information and added them to our inventory. Respondent was directed to sweep up street to storm drain via NOV to comply by 4/21/09 12 noon. See work order 84811 Follow Up: 4/21/09 site cleaned up NOV signed off	Yes	4/20/2009	Yes			LCS	4/21/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
83	70629	4/20/09	sewage	Discharge of sewage - HOA reported sewage spill. Plumber is on site to address the issue, but sewage may have gone into street.	Sewage spilled from cleanout when plumber opened it for maintenance. Wastewater Division responded to scene. 1-2 gallons of sewage spilled into a private drain. No residual sewage in storm drain downstream on Hygeia. Plumber had cleaned most of spill when it happened. Case closed.	No					LUC	4/21/09
84	73696	5/6/09	h2o	Discharge of other washwater - Neighbor washing something into street w/out containment.	5/6/09 site inspection took photos of drainage streaks from 2512 San Elijo. Neighbors confirmed that he was washing down his driveway. respondent stated that he was emptying his water feature no violation case closed.	No		Yes			CBS	6/1/09
85	73729	5/12/09	h20	Discharge of water - Heavy water flowing from apartment complex. Possible broken sprinkler. SDWD couldn't get into site.	5/12/09 site inspection took photos of discharge appears to be a broken sprinkler/over irrigation. Called PM he will look into it case closed	No		Yes		Ocean	ENC	6/1/09
86	73735	5/13/09	Diatomaceous earth	Discharge of other washwater - Pool drainage, diatomaceous earth in street.	5/13/09 site inspection took photos of discharge contacted resident to inform pool service to discontinue practice.	Yes		Yes			LCS	6/2/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
87	73783	5/20/09	wash water	Discharge of vehicle wash water - Neighbor's workers power washing driveway without containment of wash water.	Mailed educational letters with BMP info to residents at 395 and 399. Shared driveway made it unclear who was doing the power washing. Case closed.	Yes		Yes			LUC	5/26/09
88	73818	5/26/09	oil	Discharge of oil. - Forwarded from Code Enforcement. Oil spill in street from gold station wagon in front of residence. See attached complaint form.	5/26/09 site inspection took photos of old oil stains in street. left card to call me. It appears that the oil drips occurred months ago. no clean up needed case closed	No		Yes			ENC	5/27/09
89	73848	5/29/09	trash	Discharge of trash - Neighbor dumping trash (toilet paper and glass) into the storm drain. Complainant says she was doing it while he was calling the hotline.	6/1/09 site inspection took photos left card at door requesting a call back	No		Yes			CBS	6/5/09
90	73889	6/25/09	dirt	Discharge of sediment. over irrigation and sediment runoff	6/25/09 left a card and took photo. I received a call back from resident. She said it was a one time thing. They were using a hose to chase a snake out of their yard. case closed	Yes		Yes			LUC	7/2/09
91	75889	6/5/09	trash and water	Discharge of trash - Neighbor dumping trash into storm drain. Broken glass, newspaper, and a dead rat.	6/5/09 took photos of trash in street cleaned it up and issued NOV to discontinue discharge and cover outdoor storage immediately.	Yes	6/5/2009				CBS	6/5/09
92	77892	6/4/09	Wash water	Discharge of other washwater - Resident rinsing out buckets into curb line. water running down gutter.	6/3/09 site inspection observed discharge contacted resident/owner informed him of the correct disposal of wash water and gave him a business card. Case Closed	Yes		Yes			LUX	6/8/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
93	77936	6/11/09	Sealer	Discharge of paint - Painters washing off painting supplies. Puddle of brown paint pooling in the dip on Saxony Rd.	site inspection issued nov to comply by 6/12/09 5pm by cleaning gutter and containing all wash water.	Yes	6/11/2009	Yes			ENC	6/18/09
94	77940	6/12/09	trash	Discharge of trash - Neighbor complaining of trash and yard waste being dumped into storm drain.	Site inspection took photos of street and storm drain no discharge or evidence of discharge observed Case closed	No					CBS	6/17/09
95	77956	6/16/09	appears to be drywall dust	Discharge of other washwater - Unknown white chalky substance coming from drain line, dried in street. Discharge was first noticed a few weeks ago.	6/16/09 site inspection spoke to resident at 1445 caminito septimo she said she could not find the source I left card at 1455 caminito septimo and took photos of what appears to be dry wall dust	No		Yes				7/1/09
96	77960	6/16/09	diatomaceous earth	Discharge of concrete cutting slurry or washwater. - Possible concrete/drywall discharge flowing down gutter into storm drain.	6/16/09 site inspection took photos and contacted owner appears to be diatomaceous earth from pool maintenance. Owner will contact pool contactor and have street cleaned and call when complete	Yes		Yes			ENC	7/1/09
97	78002	6/22/09	gray water	Discharge of other washwater - House car disposing of grey water into the street	6/22/09 site inspection took photos of drainage sheriff community service officer ran plates to get address of RV owner 6/24/09 sent citation and NOV. 6/25/09 received call from respondent stating that he wanted to pay for cost recovery but not a fine forwarded it to wastewater and clean water program manager	Yes	6/24/2009	Yes	6/24/2009		LUC	6/23/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Follow Up: 6/23/09 site inspection area clean up took photos case closed							
98	78007	6/19/09	wash water and improper storage of batteries	Discharge of building or sidewalk washwater - Lack of containment of wash water and improper outdoor storage of batteries.	6/19/09 site inspection with code enforcement and Sheriff's deputies. Took photos of battery storage. Code will ensure that the site is in compliance with storm water codes	Yes					CBS	7/1/09
99	78009	6/23/09	erosion from water runoff	Discharge of sediment - SDWD saw erosion occurring from runoff going into storm drain. Water has been turned off.	6/23/09 site inspection no discharge left card	No		Yes			CBS	7/21/09
100	78046	6/29/09	white dust from pool filter	Discharge of concrete cutting slurry or washwater. - Construction last Friday- concrete cutting and wash water left in street and gutter.	6/30/09 site inspection took photos of discharge contacted resident and issued NOV to dry clean street capturing all cleaning debris. Follow Up: 6/30/09 site inspection area cleaned case closed	Yes	6/30/2009	Yes			ENC	6/30/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
101	78047	6/29/09	sewage	Discharge of sewage - Received call from Wastewater about sewage spill.	6/25/09 site inspection with waste water. took photos and contacted PM and service contractor. They informed me that they are going to replace the line. Follow Up: 6/30/09 site inspection area cleaned took photos. Met Property west employee. He stated that they are going to TV all of the lines and send the city photos of the clean up activities capturing all of the wash water	Yes	6/30/2009	Yes		San Elijo Lagoon	CBS	6/30/09
Residential Totals: 101					**Follow Ups: 38**	**55**	**19**	**78**	**4**			

Appendix H-1 Referrals or Requests for Info FY 2008-09

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
1	68906	7/2/08	Residential	water	Discharge of water - Inspector noticed broken sprinkler leaking into road. Resident said someone was on the way to fix it. Referred to SDWD.	SDWD		CBS	7/2/2008
2	68913	7/3/08	Municipal	sewer smell, no discharge	Discharge of sewage - Resident complaining of sewer smell coming from storm drain in front of his house. Referred to wastewater for cleanout.	Wastewater Division		ENC	7/7/2008
3	68914	7/3/08	Residential	NA- wanted info on capturing rainwater	Discharge of water - Contact forwarded from Think Blue booth at County Fair. Encinitas resident wanted info on capturing rainwater. Forwarded him info from SDWD and gave him SDWD's phone number for further info.	SDWD	Capturing rainwater	CBS	7/3/2008
4	68930	7/7/08	Construction	ground water draining from site	Discharge of construction debris - Construction site is discharging ground water again. Per construction inspector BO, water is clear and clean. See attached email.	Construction Inspector		CBS	7/7/2008
5	68989	7/15/08	Residential	water	Discharge of water - Cracks in home foundation. Concerned about possible leak in storm drain/sewer lines. Bathroom erupted w/overflow 7/14/08. See attached complaint form. Referred to wastewater for pipe inspection.	Wastewater		CBS	7/16/2008
6	69128	7/23/08	Residential	water	Discharge of water - Report of broken sprinkler head. Forwarded message to SDWD.	SDWD		ENC	7/28/2008
7	69177	8/1/08	Residential	Discharge of water	Discharge of water - Resident called in to find out pool draining requirements.		Pool draining regulations	RSF	8/1/2008
8	69195	8/4/08	Residential	wash water/trash	Discharge of building or sidewalk washwater - Complainant says his neighbor washes out gas cans in her driveway and hoses off driveway w/ no containment. Also has a lot of trash around yard and in street. Numerous similar complaints on this address. Inspector to investigate.	Code Enforcement		CBS	8/4/2008
9	69204	8/5/08	Commercial	water	Discharge of water - Drainage coming from adjoining commercial property, across parking lot, ruining asphalt. Forwarded from Code Enforcement.	OMWD		LCS	12/23/2008
10	69226	8/7/08	Residential	Discharge of water	Discharge of water - Resident at 3451 Dove Hollow Rd. asking how to properly drain jacuzzi.		Spa draining regulations.	ESC	8/7/2008

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
11	69303	8/18/08	Residential	water	Discharge of water - Report of broken sprinkler head constantly running. Referred to SDWD.	SDWD		ENC	8/18/2008
12	69376	8/25/08	Commercial	Discharge of building or sidewalk washwater	Discharge of building or sidewalk washwater - Contractor calling to find out power washing requirements before power washing buildings.		power washing requirements	LCS	8/25/2008
13	69415	8/28/08	Commercial	Discharge of building or sidewalk washwater	Discharge of building or sidewalk washwater - Requesting power washing requirements. Inspector went and showed how to properly direct wash water to landscaped areas.		power washing BMPs	ENC	8/28/2008
14	69472	9/3/08	Municipal	na- blocked storm drain	Other discharge - Complaint of blocked storm drain west of 7-11 on Encinitas blvd by Pet People. Referred to Wastewater.	Waste water		RSF	9/9/2008
15	69473	9/8/08	Commercial	water	Discharge of water - Call about over-irrigation from the Arco. Referred to SDWD.	SDWD		CBS	9/9/2008
16	69505	9/8/08	Municipal	na- clogged storm drain	Discharge of water - Clogged drain causing pool of water in street. Referred to wastewater. Wastewater cleaned the drain from Balour to Monterey Vista way cul-de-sac	Wastewater		CBS	9/12/2008
17	69514	9/15/08	Residential	water	Discharge of water - Councilmember called in about water running over a sidewalk and into the street. Program Manager determined that it is an encroachment violation. Forwarded to Engineering.	Engineering		LCS	9/16/2008
18	69564	9/18/08	Residential	water	Discharge of water - Water constantly running down street, green slime in front of everyone's houses. Referred to OMWD.	OMWD		LCS	9/23/2008
19	69565	9/23/08	Residential	water	Discharge of water - Broken sprinkler heads and over-irrigation causing flooding on dirt road. Referred to SDWD.	SDWD		CBS	9/23/2008
20	69594	9/26/08	Municipal	water	Discharge of water - Storm drain at corner of Balour and San Andrade- water leaking out of drain, puddling at end of road. Referred to wastewater.	Wastewater		LCS	9/26/2008
21	69643	10/7/08	Residential	diesel fuel	Discharge of liquid fuels. - Complainant calling to follow up about fuel spill. Information about spill has been captured already in SR 69597 and WOs 79904 and 80042.		Details about fuel spill on Stratford	ENC	10/7/2008
22	69662	10/9/08	Residential	water	Discharge of water - Over-irrigation causing puddle at Avenida De San Clemente and San Andrade, algae growing, slip hazard. Forwarded to SDWD.	SDWD		ENC	10/9/2008

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
23	69705	10/20/08	Municipal	unknown yellow substance	Other discharge - Complaint about artist using rock salt and unknown yellow substance to create sand art at Stonesteps. Referred to Lifeguards. This is a recurring situation and they are working on enforcement.	Lifeguards		LUC	10/20/2008
24	69717	10/21/08	Municipal	na- clogged drain	Other discharge - Complaint about clogged storm drain inlet in Lahoud Drive cul-de-sac. Referred to Wastewater for clean out.	Wastewater		CBS	10/21/2008
25	69761	10/29/08	Residential	water	Discharge of water - Complaint about pool drainage running down Fourth St. Site is under supervision of construction inspector. Residents neutralized water before discharging. Called complainant to let him know.	Construction Inspector		ENC	10/30/2008
26	69772	11/2/08	Residential	unknown-brown mushy substance	Other discharge - Unknown brown mushy substance in plastic bag in gutter along street. Referred to Streets Dept for cleanup.	Streets Dept		CBS	11/3/2008
27	69779	11/4/08	Municipal	Water back up from clogged storm drain	Discharge of water - Resident called about clogged storm drain in the cul-de-sac. Water is backing up into her driveway and yard. Referred to Wastewater for cleanout.	Wastewater		ENC	11/4/2008
28	69803	11/12/08	Municipal	na- clogged drain	Other discharge - Clogged drain 100ft east of intersection of El Camino del Norte and Cole Ranch Rd. Referred to Wastewater.	Wastewater		RSF	11/12/2008
29	69815	11/13/08	Residential	over-irrigation water	Discharge of water - Complaint of neighbor's over-irrigation causing problems in street. Referred to OMWD.	OMWD		LUC	11/13/2008
30	69816	11/13/08	Commercial	over-irrigation water	Discharge of water - Complaint of over-irrigation behind the new Staples and Vons shopping centers on El Camino Real. Referred to SDWD.	SDWD		LCS	11/13/2008
31	69841	11/17/08	Residential	NA- Request for greywater info only	Other discharge - Request for greywater system requirements. Crystal gave caller number for County Dept of Environmental Health and SD County Water Authority.		Greywater system requirements		11/19/2008
32	69881	11/18/08	Municipal	water	Discharge of water - Inquiry regarding water being pumped onto E Street from construction site. Construction Inspector informed caller that SDWD is flushing out their system (scheduled maintenance).		Source of water on E Street	ENC	11/24/2008
33	69918	12/8/08	Commercial	water	Discharge of water - Over-irrigation complaint about restaurant. Forwarded to SDWD.	SDWD		CBS	12/8/2008

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
34	69958	12/15/08	Residential	water	Discharge of water - Complainant says water is running off street and flooding her driveway. Forwarded to Streets.	Streets		ENC	12/16/2008
35	69975	12/11/08	Residential	NA- algae growth	Other discharge - Resident slipped and fell on algae that is growing on Liverpool in standing water. Forwarded to Engineering and Streets.	Engineering and Streets		CBS	12/17/2008
36	69981	12/17/08	Municipal	Discharge of water	Discharge of water - President of Beach Walk Condos called to report clogged storm drain near corner of Hwy 101 and W Glaucus St. Referred to Wastewater.	Wastewater		LUC	12/17/2008
37	70029	12/22/08	Commercial	water	Discharge of water - Operator of green house says someone promised him that a drain would be installed into the storm drain pipe at the rear of his property. Heavy rain is causing his property to flood without the drain. Forwarded to 2 senior engineers.	Engineering		CBS	12/22/2008
38	70034	12/22/08	Municipal	NA- cap on sidewalk washed away	Other discharge - Resident called to report that the cap on the sidewalk in front of his house had washed away in the rains. Possibly the manhole cover? Forwarded to Streets.	Streets Division		LCS	12/22/2008
39	70090	1/6/09	Residential	water	Discharge of water - Resident called to ask about draining pool water. Would not give address or phone number.		pool draining requirements		1/6/2009
40	70130	1/14/09	Municipal	plastic sheeting	Other discharge - Someone dumped some plastic sheeting over the bridge on El Camino del Norte. Message forwarded from Parks & Rec to us and Public Works. Public Works will take care of clean up.	Public Works		RSF	1/14/2009
41	70368	2/25/09	Municipal	cement mix	Discharge of concrete waste. - One bag of cement mix fell off vehicle on westbound side of Leucadia Blvd, just east of Saxony. Referred to Streets Division.	Streets Division		ENC	2/25/2009
42	70422	3/9/09	Commercial	Discharge of building or sidewalk washwater	Discharge of building or sidewalk washwater - Question about the requirements for power washing/hosing at commercial facilities.		Power washing requirements	ENC	3/9/2009
43	70504	3/23/09	Residential	bleach water	Discharge of other washwater - Mosquitoes breeding in fountain water- resident poured bleach to kill them, but some have survived. Gave her Vector Control's number and advised her how to properly discharge water from fountain.		Vector Control contact and how to empty fountain water		3/25/2009

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
44	70536	3/23/09	Residential	woodchips	Discharge of yard waste - Resident called concerned about a pile of woodchips that had been left next to the canyon on Sea Village Way between Sea Village Drive and Lake Dr. She was concerned that it is a fire hazard. Referred to Parks & Rec and PW Streets Division. case closed	P&R and PW Streets Division		CBS	3/31/2009
45	70613	4/15/09	Municipal	urine from Rest Room	Discharge of sewage - Received complaint regarding drainage of urine in SW Men's rest room. Complainant believes an increased slope will fix the problem. Received complaint regarding drainage of urine in SW Men's rest room at Moonlight Beach. Complainant believes an increased slope will fix the problem.	Parks and Rec		ENC	4/16/2009
46	70623	4/18/09	Residential	wash water	Discharge of vehicle wash water - Neighbor washing motor home near Moonlight Beach. Suds running down street. LIC #4CLV466. Called complainant back to let him know that residential vehicle washing is not an illegal discharge.		Residential car washing	ENC	4/20/2009
47	70630	4/21/09	Municipal	na- clogged storm drain	Other discharge - Request for storm drain cleanout. Referred to Wastewater.	Wastewater		CBS	4/21/2009
48	73651	4/23/09	Residential	over-irrigation runoff	Discharge of water - Complaint of over-irrigation and broken sprinklers. Forwarded to OMWD.	OMWD		LUC	4/23/2009
49	73748	5/18/09	Municipal	NA- uncovered manhole	Other discharge - Resident called to report a tree limb lying across a sidewalk and an uncovered manhole. Forwarded the message to Streets for tree removal and to Wastewater to get cover for manhole.	Street Maintenance and Wastewater		LCS	5/18/2009
50	73879	6/4/09	Residential	NA- request for info	Discharge of building or sidewalk washwater - Apt complex called to get info on power washing. Gave verbal education and faxed them Project Clean Water Toolbox info.		Power washing requirements	LCS	6/4/2009
51	78051	6/29/09	Commercial	NA- request for info	Discharge of building or sidewalk washwater - Request for list of power washers that properly collect wash water. Request for list of power washers that properly collect wash water. Sent via email 6/30/09.		Power washing companies	ENC	6/30/2009

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date

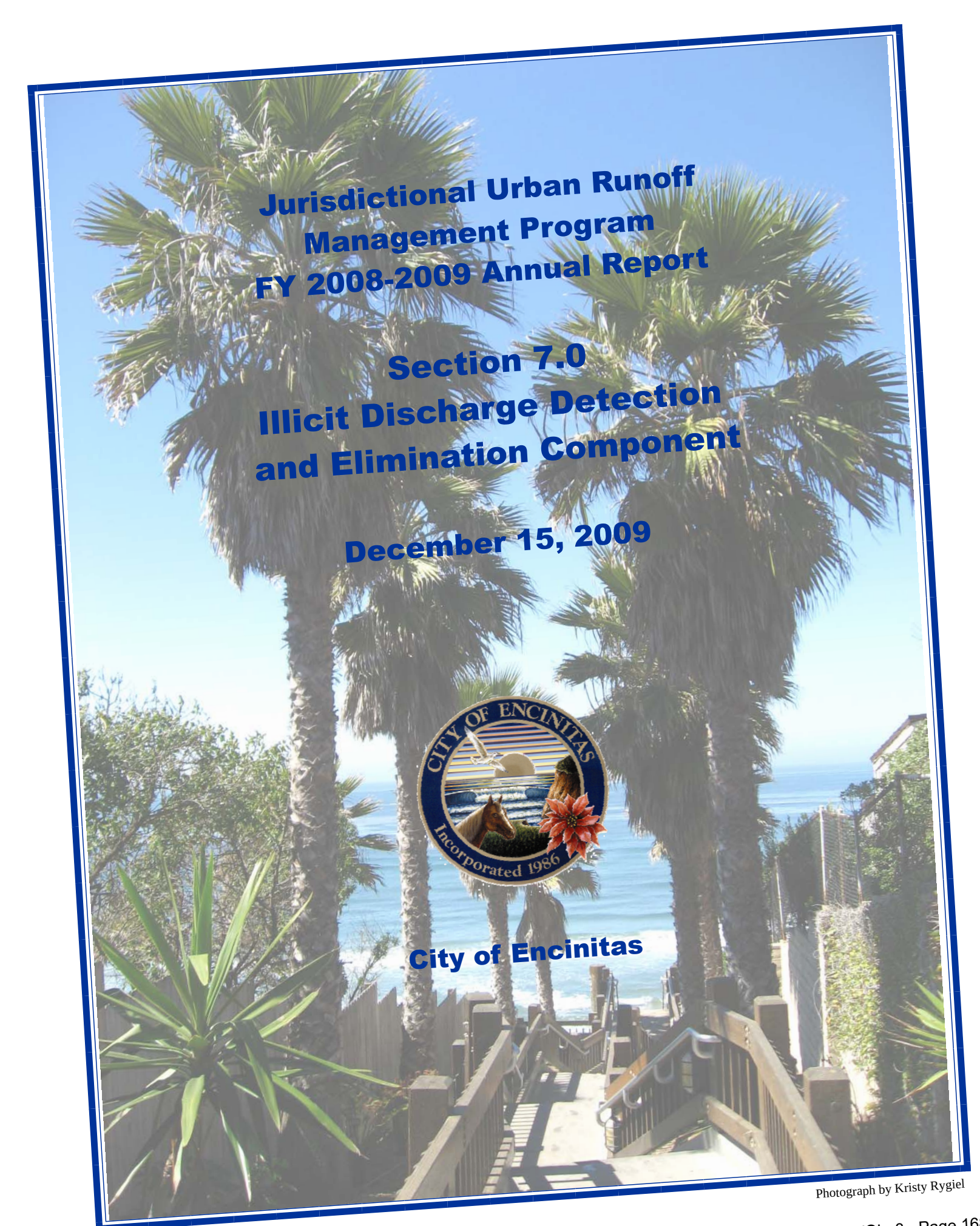
Commercial Total:	**9**
Residential Total:	**25**
Construction Total:	**1**
Municipal Total:	**16**

Total Referrals or Requests for Info: 51

Jurisdictional Urban Runoff Management Program FY 2008-2009 Annual Report

Section 7.0 Illicit Discharge Detection and Elimination Component

December 15, 2009



City of Encinitas

Photograph by Kristy Rygiel



CITY OF ENCINITAS

Jurisdictional Urban Runoff Management Program
Annual Report

Section 7.0
Illicit Discharge Detection and Elimination Component

FY 2008-2009

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E JURMP Annual Report Requirements Checklist

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Phil Cotton, City Manager
City of Encinitas

12-8-09
Date

EXECUTIVE SUMMARY

On March 24, 2008, the City of Encinitas finalized an updated Jurisdictional Urban Runoff Management Program (JURMP) as required by Water Quality Order No. R9-2007-0001 (San Diego Municipal Stormwater Permit). The updated JURMP serves as the City's foundational program management tool, capturing newly developed process, procedure, and implementation strategies for overall program effectiveness and compliance. Within the updated JURMP document, the City of Encinitas also details the City's comprehensive update of the Illicit Discharge Detection and Elimination (IDDE) and Dry Weather Field Screening and Analytical Monitoring (Dry Weather Monitoring) programs.

As required by Water Quality Order No. R9-2007-0001 (San Diego Municipal Stormwater Permit), on September 30, 2009, the City of Encinitas submitted its 2008-2009 JURMP Annual Report to the San Diego Regional Water Quality Control Board (RWQCB). September 10, 2008, the RWQCB adopted Addendum 2 to Order No. 2007-0001 (Addendum 2) titled:

AN ADDENDUM EXTENDING THE DUE DATE FOR THE ILLICIT DISCHARGE DETECTION AND ELIMINATION REPORTING REQUIREMENT AND CHANGING THE BIOASSESSMENT MONITORING PROGRAM FOR ORDER NO. R9-2007-0001

Addendum 2 effectively extended the deadline for submittal of the JURMP Annual Report Section 7.0 – Illicit Discharge Detection and Elimination (IDDE) to December 15 of each year and established a separate submittal requirement. The following report culminates newly developed IDDE elements and supporting monitoring components to meet the standards established in Order No. 2007-0001 and the provisions of Addendum 2. This report covers IDDE program implementation for fiscal year 2008-2009, and Dry Weather Monitoring from May 1, 2009 – September 30, 2009, and details all reporting, response, and enforcement actions related to illicit discharges and illicit connections to the City's MS4, Dry Weather Field Screening and Analytical Monitoring, follow-up investigations, sewer maintenance and spill prevention activities, and sewer spill response actions.

IDDE reporting and Dry Weather Monitoring results and analysis presented in the following report have been prepared in consideration of regulatory standards as well as a means to further advance programmatic elements in support of overall stormwater and water quality management in the City of Encinitas.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

The Municipal Permit requires the establishment of an Illicit Discharge Detection and Elimination (IDDE) Program to actively seek and eliminate illicit connections and discharges into the MS4.

This component describes the IDDE program developed by the City of Encinitas to seek and eliminate illicit connections and discharges. Eliminating illicit connections and discharges helps minimize potentially negative impacts of human activities on receiving water bodies. Illicit connections and illicit discharges can be defined as the following:

- An *illicit connection* is a physical connection to the Storm Water Conveyance System or Receiving Waters which has not been reviewed and authorized by the City, or a permitted connection which conveys Illegal Discharges.

- An *illicit discharge* is any discharge to the Storm Water Conveyance System that is not composed entirely of storm water or is not discharged in compliance with the City's Storm Water Management Ordinance (Municipal Code Chapter 20.08).

The City of Encinitas uses its municipal personnel to assist in actively seeking, identifying, and reporting illicit connections and discharges during their daily activities. Detection, prevention, and elimination of illicit connections and discharges is achieved by

1. Operating a public hotline and responding to complaints;
2. Inspecting commercial, industrial and municipal facilities;
3. Conducting an annual Dry Weather Monitoring Program;
4. Maintaining municipal MS4 and sewer systems; and
5. Educating the local community.

The City investigates, inspects, and appropriately follows-up on every illicit connection and discharge that is reported or detected to identify the source(s) of the discharge. Voluntary compliance and escalating enforcement mechanisms are implemented to immediately eliminate the illicit connection and discharge once the source has been identified. Educational materials are distributed to help prevent future illicit connection and discharge occurrences. This program involves the City's Clean Water Program staff, two Sanitary Districts (Leucadia Wastewater District and the City of Encinitas Wastewater Division), the City's Fire Department, Public Works Department, the Engineering Department, and County Hazardous Incident Response Team (HIRT), as well as the public.

7.2 PUBLIC REPORTING OF ILLICIT DISCHARGES AND CONNECTIONS

7.2.1 METHODS OF REPORTING

To support the identification and notification of illicit discharges, the City actively promotes public and City staff reporting of all suspected illicit connections and discharges. Multiple opportunities are provided to facilitate public reporting of illicit discharges and connections to the City's Clean Water Program staff, and reporting of non-storm water discharges can be received from the public, City staff, or outside agencies. Clean Water Program staff maintains a 24 hour, bilingual Clean Water Hotline for reporting storm water discharges at (760) 633-2787. Additionally, the Public Works Wastewater Collection Division accepts calls at (760) 753-5018 for sewage related discharges. The public can also notify any City employee (the City Lifeguards are often notified of spills), who will promptly notify the appropriate staff in the Clean Water Program or Public Works Department. In cases of incidents occurring after working hours, the City provides a hotline number (760) 633-2922 where the public can call and report emergency cases of illicit discharges. Alternatively, a regional public reporting hotline is provided by the County of San Diego at (888) 846-0800. The County hotline is answered Monday through Friday, 8:00 a.m. – 5:00 p.m. and provides a voice mail message for 24-hour public access in both English and Spanish.

7.2.2 STORM WATER COMPLAINT RECEIPT PROCEDURES

All calls to the City's Clean Water Hotline are documented and investigated in a timely manner. The City of Encinitas has configured its enterprise Geographic Information System (GIS) to document and track all complaints as well as complaint driven storm water inspections in a spatially-based program called Cityworks. This system supports the entry of service requests for educational inquiries, citizen complaints, inspection results, ad-hoc and cyclical work orders, and report generation. All of the information stored in the system is accessible to any City user through the City's standard desktop GIS application – CityGIS. Refer to Appendix A for a copy of the "Storm Water Complaints Service Request Form." Clean Water Program staff responds immediately, investigates each case, and takes appropriate action to educate the responsible party and/or enforce the City's Storm Water Management Ordinance when applicable. When a warning, Administrative Citation, or Notice of Violation is issued, this information is added to the case file created in Cityworks. The City's GIS system is a useful tool for tracking all complaints, follow-ups, enforcement, and education efforts, and to spatially locate potential problem areas throughout the City.

For each complaint investigation, Clean Water staff is prepared to run field screening analysis, sample for laboratory analysis, and document the discharge for enforcement proceedings as deemed necessary. If immediate clean up actions are required, the City's Public Works Department maintenance crews are equipped with absorbent materials, vacuum trucks, and other equipment to contain large volumes of illegal discharge and/or cleanup of large spills. If the violation or accident involves hazardous materials, the Fire Department is informed and responds immediately. When necessary, the Fire Department calls other responsible agencies

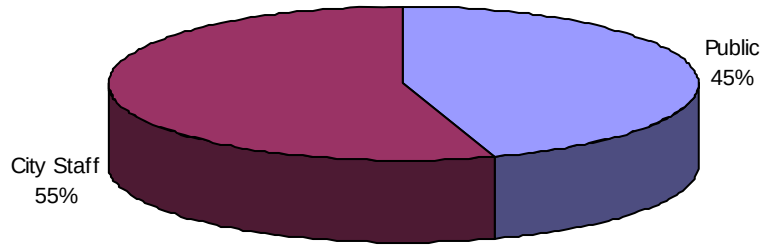
or contractors for cleanup and handling of hazardous materials, including the County of San Diego's Hazardous Incident Response Team.

7.2.3 HOTLINE UTILIZATION

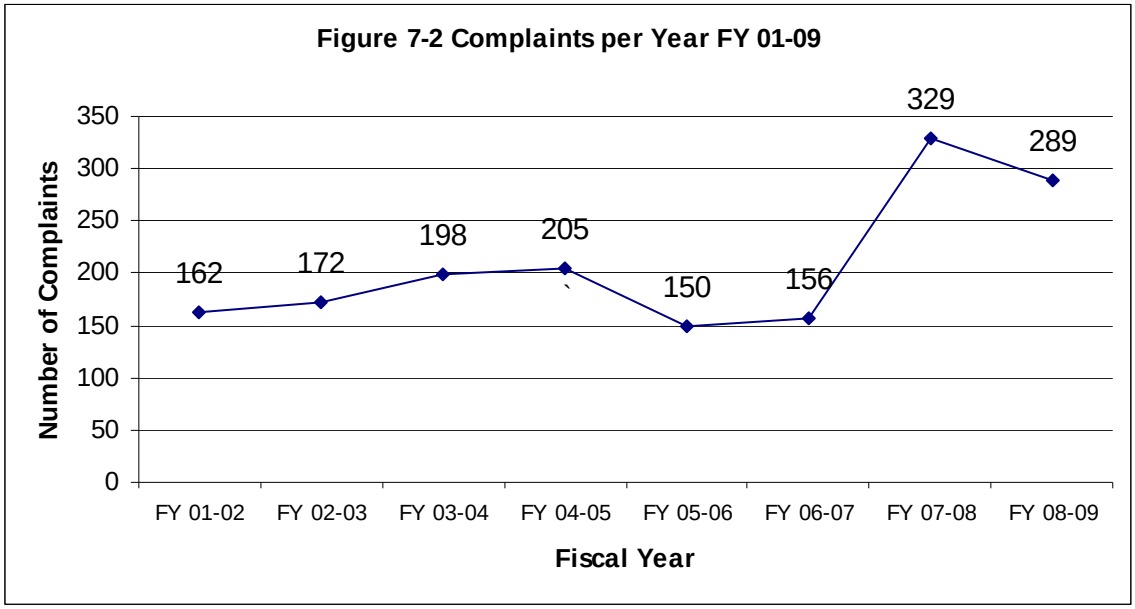
Through the ongoing education efforts of the Clean Water Program staff, both the general public and the City of Encinitas staff have become increasingly aware of the effects of illicit discharges on the environment, and what to look out for in identifying potential illicit discharges and connections. Methods to report storm water issues were continually publicized throughout the FY 2008-09 reporting period. The hotline number can be found on inspection forms, the City's website, and was also publicized in various newsletters, storm water brochures, the City's Environmental Services Guide, on product giveaways, and at all Clean Water Program presentations.

In FY 2008-09, there were 289 complaints filed with the Clean Water Program. Detailed summaries of all complaint cases that were reported and closed (illegal discharge abated) in FY 2008-09 are included in Appendix H-1 of the City of Encinitas' FY 2008-09 JURMP Annual Report. Clean Water Program staff documented receipt of 130 complaints from the public via the Clean Water Hotline, and an additional 159 complaints were reported to the hotline by City staff. Figure 7-1 shows the percentage of complaints that were reported to the Clean Water Hotline by the public and city staff in FY 2008-09.

Figure 7-1 Clean Water Hotline Complaints in FY 2008-09



As illustrated in Figure 7-2, both City staff and the public continue to actively participate in the reporting of suspected illegal discharges and illicit connections throughout the City of Encinitas.



7.2.4 CATEGORIES OF COMPLAINTS

In FY 2008-09, the majority of complaints reported to the Clean Water Hotline were primarily related to residential and commercial activities. In total, 43.6% of the hotline complaints reported were related to residential activities, 34.6% were related to commercial activities, 14.2% were related to construction activities, and 7.6% were related to municipal activities. Figure 7-3 shows the percentage of complaints by source category.

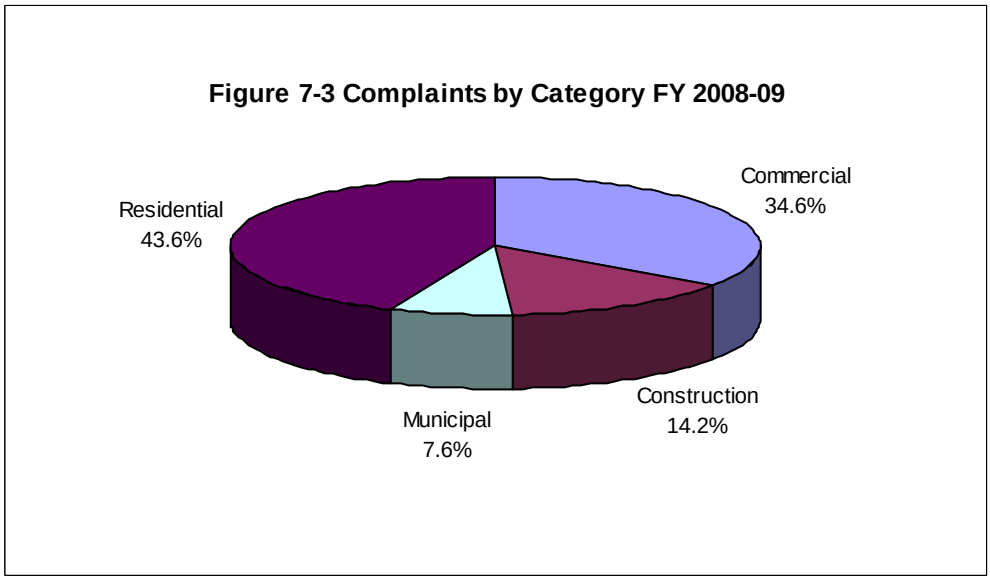
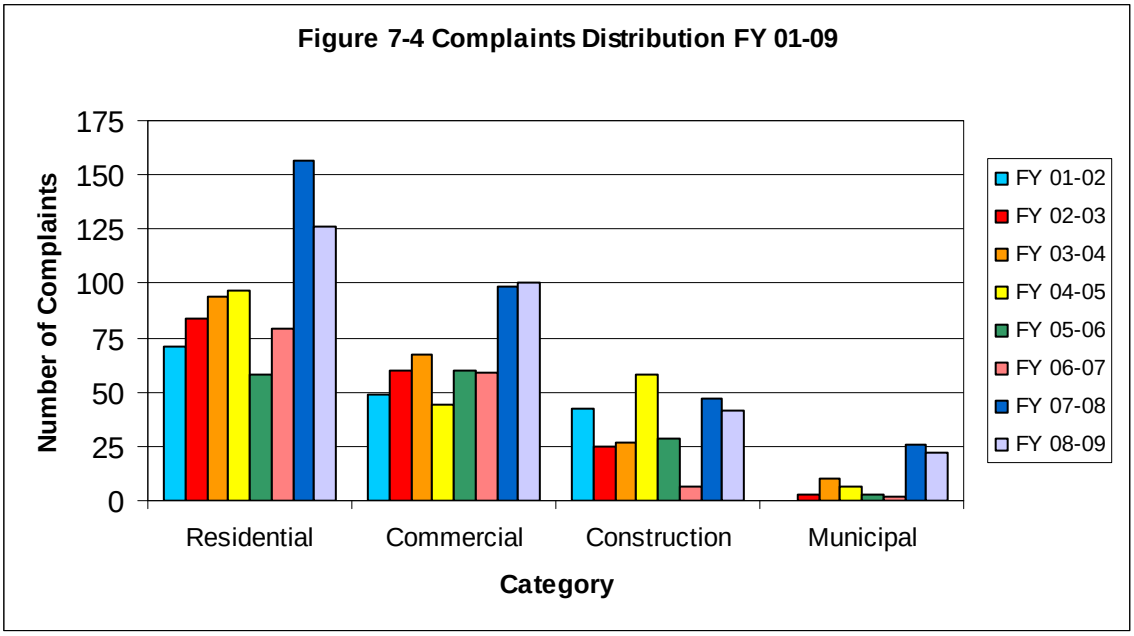
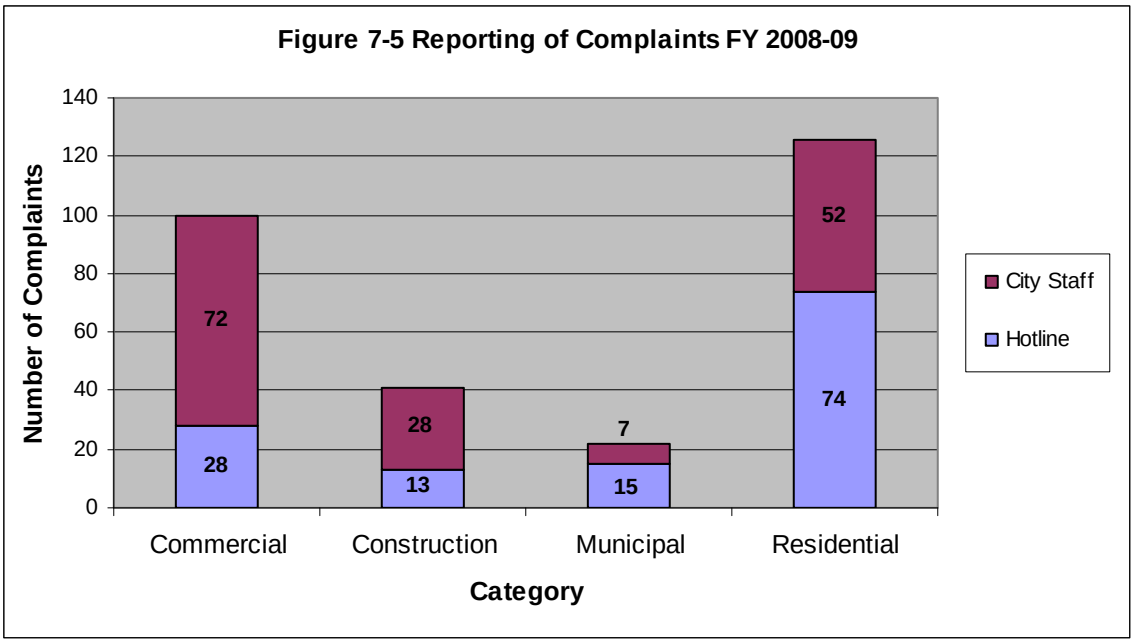


Figure 7-4 below illustrates the complaints distribution over the past eight reporting periods. The complaint distribution remains consistent across categories with residential and commercial sectors receiving the most complaints.

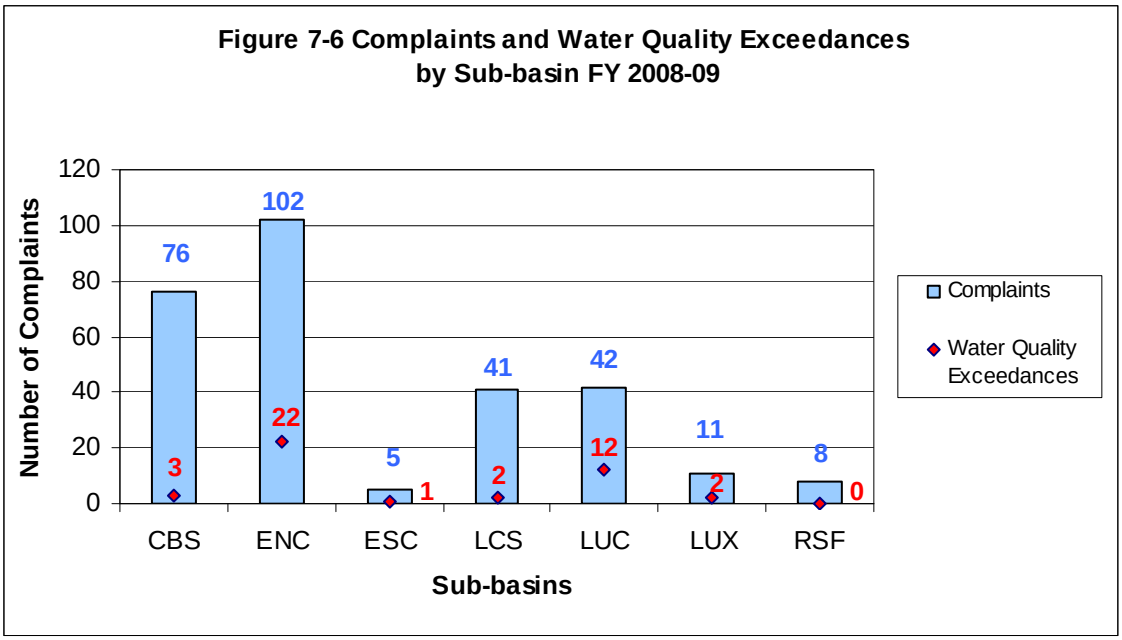


Clean Water Program staff provides annual education and training to City employees and City contractors on applicable storm water regulations to assure that proper storm water management practices are applied in all areas of the City. The City of Encinitas tracks all complaint calls received on the Clean Water Hotline and records whether each call is from the public or the from City staff. Figure 7-5 below shows the breakdown of reported complaints by the public and City staff for each category.



7.2.5 DISTRIBUTION OF COMPLAINTS BY SUB-BASIN

The City of Encinitas is broken up into seven distinct drainage sub-basins which include the Cardiff sub-basin (CBS), Encinitas sub-basin (ENC), Escondido sub-basin (ESC), La Costa South sub-basin (LCS), Leucadia sub-basin (LUC), Lux Canyon sub-basin (LUX) and Rancho Santa Fe sub-basin (RSF). Detailed maps of each of these sub-basins can be found in the 2009 Dry Weather Monitoring Assessment Report in Appendix C. A full map of the entire city that outlines each of the sub-basins can be found in Appendix C-1. Of the City's seven sub-basins, the Encinitas Sub-basin had the largest number of reported complaints followed by the Cardiff sub-basin and the Leucadia sub-basin. In Figure 7-6 below the numbers of complaints are compared to water quality exceedances in the sub-basins. This correlation helps the City prioritize inspection activities in specific sub-basins.



7.3 SPILL PREVENTION, RESPONSE, AND REPORTING

The City implements spill prevention, spill response, and reporting mechanisms to prevent, respond to, contain, and clean up all sewage and other spills that may discharge to its MS4 from any source.

7.3.1 SEWAGE SPILL PREVENTION

The spill prevention measures outlined below were implemented in FY 2008-09 to prevent overflows, spills, and infiltration of seepage from sanitary sewer systems to the MS4.

Preventive Maintenance Activities

The City of Encinitas' sewage collection system consists of over 120 miles of pipeline. The City actively maintains its sewage collection system and MS4 by ensuring that the following measures are implemented:

- Sanitary sewer inspections
- MS4 inspections
- Thorough, routine preventive maintenance of both systems (annual cleaning of entire sanitary sewer system, and "high priority" sewer lines cleaned at least every three months)
- Dry Weather Monitoring
- Data tracking and management of all complaints in Cityworks GIS
- Video inspection of underground systems (televise sewer mains to visually detect any potential problems)
- Replacement and upgrade of sewer pipes as needed
- GIS mapping of sewer and MS4 intersects
- Alarm system at sewage pump stations

Sewer System Management Plan (SSMP)

In FY 2008-09, the City of Encinitas fully implemented a Sewer System Management Plan (SSMP) in order to comply with the new sewer regulations set forth by the State Water Resources Control Board (SWRCB) Order No. 2006-003-DWQ. This new permit describes the applicable set of regulations for sewer system maintenance and reporting with respect to Sanitary Sewer Overflows (SSOs). These regulations are met mainly through the development and implementation of a Sewer System Management Plan (SSMP). However, the City also continues to maintain a Sanitary Sewer Overflow Prevention Plan (SSOPP), and a Capacity, Management, Operations, and Maintenance (CMOM) program, which have been incorporated into the City's SSMP. The SSOPP has been designed to prevent or minimize the potential for SSOs. The CMOM describes how the City maintains and operates its sanitary sewer system, as follows:

- Manage, operate, and maintain at all times the parts of the collection system that the City owns or over which it has operational control
- Provide adequate capacity using citywide sewage flow monitoring programs to convey base flows and peak flows
- Take all feasible steps to stop and mitigate the impact of SSOs
- Provide notification to parties with a reasonable potential to exposure to pollutants associated with the overflow event through the County of San Diego
- Keep records of all maintenance activities

The City of Encinitas also has a Fats, Oil, and Grease (FOG) ordinance, EMC Section 18.04. The primary purpose of this ordinance is to reduce the amount of FOG introduced into the sanitary sewer system by residents and businesses. This ordinance requires all Food Service Establishments (FSE) which discharge fats, greases, and waxes to the sewer system to install a grease pre-treatment device on the sewer lateral, which connects their facility to the City's wastewater collection system. The City is currently evaluating options to enhance existing FOG program elements which will include implementing a multi-phased process of information gathering, education, and targeted code enforcement.

The Municipal Permit also requires all sewage discharges caused by blockages or other problems within a privately owned lateral or failing septic systems to be dealt with appropriately. If a spill from a private sewer lateral is not being contained and the responsible party fails to take action to repair the lateral, the City can take necessary action to contain the spill, make necessary repairs to the lateral, and/or contact a contractor for appropriate maintenance and bill the responsible party. The City's Clean Water Program staff is tasked with handling all illicit connection and discharge citations. If there are sewage spills due to failing septic systems at private residences, the County Department of Environmental Health (DEH) is responsible for responding to these complaints.

7.3.2 SEWAGE SPILL RESPONSE

Spills from the sanitary sewer entering the MS4 may be discovered during routine maintenance activities or observed and reported to the City by the public. All Municipal personnel field crews call the Clean Water Hotline or report sewage spills to the Public Works Wastewater Collection Division. When spills occur, the appropriate agencies (as described in Table 7-1 below) are informed of all sewer related spills and are responsible for control, containment, and clean up of all reported discharges.

Table 7-1
Responsible Agency for Sewage Spills

Source	Responsible Agency
Leaks and spills from publicly owned collection system	City of Encinitas
Private residence (failing septic systems)	County DEH
Any spill reaching MS4	City of Encinitas

Both the City's Public Works Wastewater Collection Division and the City's Clean Water Program accept complaint calls for commercial lateral discharges. For any incidents that may occur after hours, callers are directed to contact the City's answering service at (760) 633-2922. Based on the urgency, City crews are dispatched immediately, work orders are prepared, and each case is tracked in the City's GIS based system. The City also provides a 24- hour, on-call City staff member with the ability to call additional resources or other appropriate agencies if necessary.

The City of Encinitas' Wastewater Collection Division has implemented the following remedial actions to the extent that they are applicable to any discharges:

- Interception and rerouting of sewage flows around the sewage line failure
- Vacuum truck recovery of SSOs and wash down water
- Cleanup of debris of sewage origin at the overflow site
- Inform the responsible party to cease and desist, clean and abate, and repair the problem to ensure that the incident will not occur again.

7.3.3 SEWAGE SPILL REPORTING

The City reports all SSOs to the State Water Resources Control Board (SWRCB) online using the California Integrated Water Quality Management System (CIWQS) database, as required by SWRCB Order No. 2006-003-DWQ. Initial online reports are sent to the CIWQS within three days, and final, certified reports are sent within 15 days. The City reports all SSOs that are at least 1,000 gallons and SSOs that cause a beach closure (regardless of volume) to the CIWQS within 2 hours. All illicit connections and discharges are reported annually in the City of Encinitas JURMP Annual Report. In some cases, inspections are conducted and enforcement

actions may be taken if necessary. If a Notice of Violation (NOV) is issued by the Clean Water Program, copies of all NOVs will be sent to the Regional Board.

As required in the Municipal Permit, the City of Encinitas will provide oral notification to the Regional Water Quality Control Board (RWQCB) of all Illicit connections and discharges within its jurisdiction that are determined to pose a threat to human or environmental health within 24 hours of the discovery of non-compliance. Oral notification will be followed up by a written report to the RWQCB within five days of the incidence of non-compliance.

All sewage spills of at least 1,000 gallons, or any spills to surface waters are required to be reported to the RWQCB within 2 hours by fax or telephone. Surface waters include rivers, streams, ephemeral streams, lagoons, the ocean, dry arroyos, and storm drains. In all instances, the City must fax a Sanitary Sewer Overflow (SSO) Report Form to the RWQCB within five days of the spill. The completed SSO Report Form must also be faxed to the County DEH. A quarterly report of all sewage spills, including those not meeting the criteria stated above, will also be submitted electronically to the RWQCB, as required.

In FY 2008-09, the City complied with the sewage spill reporting requirements outlined in Table 7-2.

Table 7-2
Summary of Sewage Spill Reporting Requirements

Spill Volume	Criteria	Agency Receiving Report	Reporting Timeframes
Any	Spills to waters of the State	SWRCB online RWQCB DEH	Immediate, but no later than 2 hours after becoming aware of the discharge
Any	Municipal Permit non-compliance threatening human or environmental health	RWQCB SWCRB	24 hours verbal and 5 days written 3 days (initial)
Any	Mitigated spills (absorbed, cleaned up, or captured)	DEH	24 hours
Any	Unmitigated spills to areas with potential public contact	DEH	Immediate, but no more than 2 hours after becoming aware of the discharge
Any	Unmitigated spills to areas without potential public contact	DEH	24 hours

Spill Volume	Criteria	Agency Receiving Report	Reporting Timeframes
>1000 gallons	Anywhere	Office of Emergency Services (OES) RWQCB DEH SWRCB online	2 hours 2 hours 2 hours 3 days (initial)

Table 7-3 contains a summary of all SSOs in Encinitas in FY 2008-09.

Table 7-3
Sanitary Sewer Overflows, FY 2008-09

Date	Agency	Location	Approx. Volume Spilled (Gallons)	Approx. Volume Recovered (Gallons)	Approx. Volume Released (Gallons)	Cause	Reported To
8/10/2008	City of Encinitas Wastewater Division	117 Rosebay	450	50	400	PRIVATE SPILL Cause unknown	CIWQS DEH
9/04/2008	Leucadia Wastewater Division	162 Range St.	50	50	0	Main line blocked due to roots from a lateral	CIWQS RWQCB DEH
11/04/2008	Leucadia Wastewater Division	1602 Burgundy Rd.	500	500	0	Main line blocked due to roots from a lateral	CIWQS RWQCB DEH
11/11/2008	Leucadia Wastewater Division	1540 Caudor St.	110	110	0	Main line blocked due to rags	CIWQS RWQCB DEH

Date	Agency	Location	Approx. Volume Spilled (Gallons)	Approx. Volume Recovered (Gallons)	Approx. Volume Released (Gallons)	Cause	Reported To
12/04/2008	Leucadia Wastewater Division	1660 Highway 101	10	10	0	PRIVATE SPILL Cause unknown	CIWQS RWQCB DEH
12/07/08	Leucadia Wastewater Division	1600 Burgundy Rd.	15	15	0	PRIVATE SPILL Cause unknown	CIWQS RWQCB DEH
3/03/09	City of Encinitas Wastewater Division	1967 San Elijo Ave.	25	0	25	PRIVATE SPILL Cause unknown	CIWQS DEH
5/25/09	Leucadia Wastewater Division	2154 Pleasant Grove Rd.	100	0	100	Main line blocked due to roots through joint.	CIWQS RWQCB DEH
5/29/09	Leucadia Wastewater Division	1450 Encinitas Blvd.	25	20	5	PRIVATE SPILL Cause unknown	CIWQS RWQCB DEH
6/29/09	City of Encinitas Wastewater Division	2170 Carol View Dr.	375	0	375	PRIVATE SPILL Tree roots	CIWQS DEH

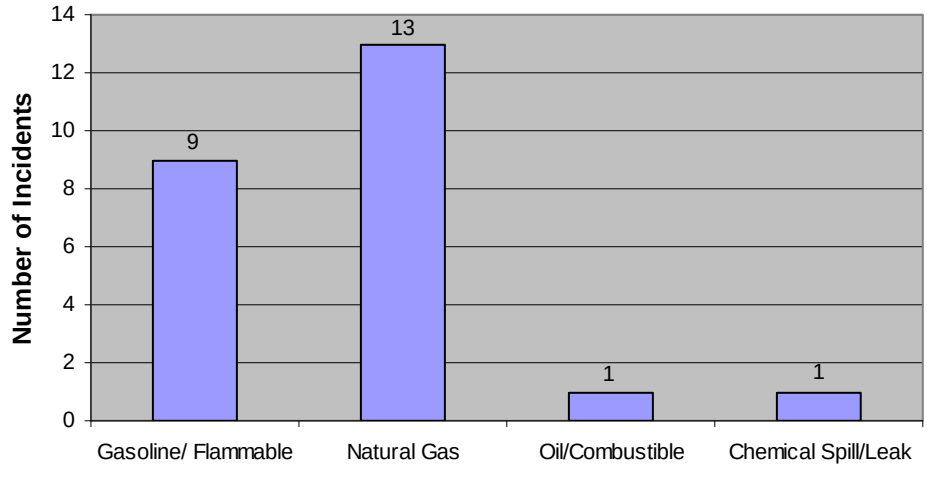
7.3.4 OTHER SPILL PREVENTION AND MITIGATION PROCEDURES

The City coordinates spill prevention, containment, and response activities throughout all appropriate departments, programs, and agencies so that maximum water quality protection is available at all times.

Spills are prevented and mitigated through the implementation and enforcement of minimum BMPs. These BMPs are described in the City of Encinitas 2008 JURMP update in the Development Planning, Municipal, Construction, Industrial and Commercial, and Residential components located in sections 4, 5, 6, 7, and 8 and in the City's BMP Manual Part I and II.

In FY 2008-09, the City of Encinitas Fire Department responded to a total of 24 hazardous materials incidents. These incidents included gasoline spills, gas leaks, oil spills, and chemical spills. The Fire Department is equipped with containment booms, absorbent material, shovels, storm drain covers, and disposal equipment. When hazardous material incidents occur, the City's Fire Department is typically the first responder. They are equipped to capture and contain most discharges on site and will notify the Public Works Department and the Clean Water Program for additional help when it is warranted. The Public Works Department is available to respond with additional sandbags, absorbent materials, and increased manpower. Clean Water Program staff is notified to document the incident and to issue any enforcement actions that may be necessary. If warranted, storm drain samples and pictures are taken for potential court action and cost recovery. The City of Encinitas also has a contract with the County of San Diego Hazardous Incident Response Team who will respond when the chemical is unknown or is determined to be hazardous. Figure 7-7 below illustrates the distribution of hazardous materials incidents for FY 2008-09. All hazardous materials incidents that occurred in the City of Encinitas were documented by the Fire Department and are included in Appendix B.

Figure 7-7 Hazardous Material Incidents FY 2008-09
Encinitas Fire Department



7.4 URBAN RUNOFF MONITORING

The Urban Runoff Monitoring Program incorporates MS4 Outfall Monitoring, Source Identification Monitoring, and the Dry Weather Field Screening and Analytical Monitoring Program.

7.4.1 MS4 OUTFALL MONITORING

The MS4 Outfall Monitoring Program is a new requirement of the RWQCB Order R9-2007-0001 (Section B.2 of the Receiving Waters and Urban Runoff Monitoring and Reporting Program).

The purpose of the MS4 Outfall Monitoring Program is to characterize pollutant discharges from MS4 outfalls in each Watershed Management Area (WMA) during wet and dry weather.

The program was developed by the San Diego Regional Stormwater Copermittees (Copermittees) in FY 2007-08 and was designed to have four monitoring components: random dry weather, random wet weather, targeted dry weather, and targeted wet weather. The City of Encinitas is responsible for targeted dry weather sampling at four sites throughout Encinitas. A regional contractor is responsible for collecting all random dry weather, random wet weather, and targeted wet weather samples in each WMA throughout San Diego County.

Table 7-4 below presents the targeted dry weather monitoring sites the City of Encinitas visited during the 2008-09 fiscal year and the lab analytes that were assessed at each site in support of this regional monitoring effort.

Table 7-4
FY 2008-09 City of Encinitas Targeted Dry Weather Monitoring Sites

Station ID	Sample Date	Water Flow	Flow Rate (gpm)	Analysis
CBS-2	6/17/09	Flowing	1	Bacteria, TDS, TSS, Total Nitrogen-N, and Total Phosphorous-P
ESC-1	6/24/09	Flowing	100	Bacteria, TDS, TSS, Total Nitrogen-N, Total Phosphorous-P, Manganese, Selenium and Sulfates
ENC-10	6/24/09	Flowing	7.5	Bacteria, TDS, Total Nitrogen-N, and Total Phosphorous-P
LCS-1	6/24/09	Flowing	2	Bacteria, TDS, Total Nitrogen-N, and Total Phosphorous-P

To help complete the first phase of the MS4 Outfall Monitoring Program, a regional contractor for the Copermittees conducted the random dry weather and wet weather sampling in each

WMA throughout San Diego County. The targeted wet weather monitoring will be implemented in FY 2009-10.

The monitoring results for this program are presented in detail in the Copermittees' 2008-09 Urban Runoff Monitoring Report. It is anticipated that more meaningful spatial comparisons can be made as a more robust data set is developed in subsequent years for the MS4 Outfall Monitoring Program.

7.4.2 SOURCE IDENTIFICATION MONITORING

The Source Identification Monitoring Program is a new requirement of the RWQCB Order R9-2007-0001 (Section B.2 of the Receiving Waters and Urban Runoff Monitoring and Reporting Program).

In FY 2008-09, a regional workplan for the source identification monitoring program was implemented by the Copermittees to identify sources of discharges of pollutants causing the priority water quality problems in select residential areas.

During FY 2008-09, the Source Identification Monitoring Program was conducted in the City of Del Mar and the City of La Mesa. The monitoring results for this program are presented in detail in the Copermittees' 2008-09 Urban Runoff Monitoring Report.

7.4.3 DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING

The Dry Weather Field Screening and Analytical Monitoring Program is a crucial part of the City's Urban Runoff Monitoring Program (Dry Weather Monitoring Program). The City of Encinitas has been conducting dry weather monitoring since 1996. The City's previously established Dry Weather Monitoring Program included selecting city-wide monitoring stations, creating a map of the MS4 in GIS, developing dry weather monitoring program procedures, conducting field sampling, testing, and follow-up investigations.

The updated requirements of the Dry Weather Monitoring Program component as outlined in the Municipal Permit (Order No. 2007-0001) are very similar to those in the previous Municipal Permit (Order No. 2001-01). However, the new Municipal Permit includes the following additional requirements: a trash assessment component and follow-up sampling conducted within two business days of receiving results which exceed identified action levels. The City of Encinitas 2009 Dry Weather Monitoring Assessment Report can be found in Appendix C.

There are four main components to the City's Dry Weather Monitoring Program:

- Field observations (site description and qualitative observations)
- Field screening monitoring (testing of sample while at site and flow estimation)
- Analytical monitoring (performing further tests of sample later at a laboratory)
- Follow-up and investigations of all field screening and analytical exceedances

As described in the City of Encinitas JURMP Update, dated March 24, 2008, the City revised its Dry Weather Monitoring Program in FY 2007-08 to meet all of the requirements that were established in the Municipal Permit (Order No. 2007-0001). Field screening and analytical lab

results from the 2009 Dry Weather Monitoring Assessment Program are included in Appendix C of this section.

7.4.3.1 MS4 MAP

The City has developed a detailed map of its entire MS4 that includes MS4 facilities, dry weather monitoring stations, and drainage basins. When field staff finds inaccuracies in the map during dry weather monitoring, the inaccuracies are reported to the City's GIS Department so that updates can be made. The current map of the City of Encinitas MS4 and 2009 Dry Weather Monitoring Stations is located in the 2009 Dry Weather Monitoring Assessment Report in Appendix C-1.

7.4.3.2 DRY WEATHER ANALYTICAL MONITORING STATIONS

In March 2008, the City of Encinitas revised its Dry Weather Monitoring Program as part of the Jurisdictional Urban Runoff Management Program (JURMP) Update. The goal of the revised program was to continue to retain existing sites that had been monitored for analytical laboratory testing to establish long-term trend analysis and select additional sites to facilitate a better understanding of the water quality in Encinitas. The City removed and added new dry weather monitoring locations based on adequate coverage of the MS4, characterization of flow, land use, previous water quality data, areas of historic illegal discharges, and environmentally sensitive areas. The Dry Weather Monitoring Program for 2009 included 39 primary sites and 16 alternate sites distributed across seven sub-basins.

7.4.3.3 DRY WEATHER ANALYTICAL MONITORING PROCEDURES

The City's Dry Weather Monitoring Program utilizes methods and procedures in collecting and analyzing data which are consistent with those developed by the Copermittees' Dry Weather Monitoring Workgroup. The elements of the City's dry weather program include established sampling locations, sampling frequencies, field screening and sampling procedures (including monitoring parameters), recommended action levels and data interpretation, follow-up investigations, and reporting.

In 2009, all 39 primary monitoring sites were field screened along with 11 alternate monitoring sites. Twenty five percent of the primary monitoring sites (10 of 39) were also analyzed in the lab. Qualitative observations were made at all sample locations. Each location had a unique field data sheet noting observations such as color, clarity, odor, and biological characteristics of the runoff. A multiparameter meter was used in the field to determine pH, conductivity, temperature, and turbidity. Ammonia, nitrate, ortho-phosphate, and MBAS analyses were performed with CHEMetrics instrumental field kits. Oil and grease, diazinon, chlorpyrifos, dissolved cadmium, dissolved copper, dissolved lead, dissolved zinc, total coliform bacteria, fecal coliform bacteria, and Enterococcus bacteria were all analyzed in the laboratory.

7.4.3.4 DRY WEATHER DATA ANALYSIS

Detailed analyses of the 2009 dry weather data are included in the Dry Weather Monitoring Assessment Report, May 1, 2009 – September 30, 2009 in Appendix C.

7.5 FOLLOW-UP AND ENFORCEMENT

7.5.1 INVESTIGATIONS/INSPECTIONS AND FOLLOW-UP

All potential illicit connections and discharges are investigated and eliminated in a timely manner after the City is notified of their occurrence. Illicit connections and discharges are mainly identified through public complaints; referrals; routine inspections of municipal, industrial, and commercial business facilities; and the Dry Weather Monitoring Program.

If an illicit connection and discharge is discovered as a result of the Dry Weather Monitoring Program, an investigation is required to be conducted within two business days of receiving dry weather field screening and/or analytical laboratory data. All sampling results are compared to the regionally developed dry weather monitoring numeric action levels to determine if follow-up investigations/inspections are warranted. The numeric action levels (determined by the Regional Copermittees' Dry Weather Monitoring Workgroup), is the primary approach for interpreting pH, ortho-phosphate, nitrate, ammonia, surfactants, oil and grease, diazinon, chlorpyrifos, total coliform bacteria, fecal coliform bacteria, and Enterococcus analytical results. The California Toxics Rule (CTR) is used to establish an action level for dissolved trace metals, including cadmium, copper, lead, and zinc. In general, best professional judgment is utilized as the primary approach for interpreting turbidity, water temperature, and conductivity and as a secondary approach for interpreting the results of all other field and laboratory analyses. Under best professional judgment, the need for a follow-up investigation is left to the discretion of the Clean Water Program field staff due to their familiarity with the City's Dry Weather Monitoring Program and their knowledge of typical levels for the tested parameters.

There were three main illicit connection and discharge investigations in response to Dry Weather Monitoring in 2009. These investigations took place in the La Costa South sub-basin, Leucadia sub-basin, and the Encinitas sub-basin. A more detailed discussion including sample locations, parameters exceeded, follow-up sampling, and investigation results can be found in the 2009 Dry Weather Monitoring Assessment report (Appendix C) in Sections 4.3, 4.4, and 4.5.

A complete table with all illicit connection and discharge complaints reported to the Clean Water Program, which includes investigation dates, sources of discharge, investigation actions, follow-ups, and enforcement activities, can be found in the City of Encinitas FY 2008-09 JURMP Annual Report, Appendix H-1.

7.5.2 ELIMINATION OF ILLICIT DISCHARGES AND CONNECTIONS

The City utilizes the following primary methods for the identification of illicit discharges and connections: complaint responses via the Clean Water Hotline, City staff complaints and observations, and detection and elimination through monitoring (primarily dry weather).

Action is taken to eliminate all detected illicit discharges and connections and their sources as soon as possible after detection. Illicit discharges and connections that pose a serious threat to public health or the environment are eliminated immediately. Illicit discharges and connections that are not deemed to pose serious threats to public health or the environment are eliminated through an escalating series of enforcement actions.

Remove Illicit Connections
The City ensures that the violator takes appropriate action to disconnect, block, stop, or divert drainage facilities and pipe connections that are determined to discharge pollutants to the MS4. Appropriate actions may include the following:

- Plug sinks and drains that are discharging illicit materials to the storm drain system
- Disconnect all drainage pipes found to discharge illicit pollutants to the storm drain system
- Dispose of illicit materials via the sanitary sewer or other appropriate disposal or storage methods
- Divert illicit discharges to the sanitary sewer or treat on-site

In some cases, special permits from the local wastewater authority are needed before material can be discharged to the sanitary sewer system.

Discontinue Illicit Discharges
As applicable to each individual circumstance, the City ensures that responsible parties implement the procedures outlined below to eliminate discharges that transport pollutant materials to the MS4.

- Eliminate the source of the discharge
- Remove pollutant materials from the site
- Prevent pollutant materials from coming in contact with the discharge
- Contain potential illicit discharges on site for treatment or proper disposal

In FY 2008-09, the Clean Water Program received a total of 289 complaints. A total of 51 complaints involved issues that were referred to other departments/agencies or requests for information only (requests related to the City's storm water regulations such as car washing and power washing requirements or general questions about the City's Storm Water Ordinance). In FY 2008-09, there were 238 complaints investigated, resulting in 183 education actions, 52 NOVs, and 17 Administrative Citations for illegal discharges. Appendix H-1 in the City of Encinitas' FY 2008-09 JURMP Annual Report identifies all complaints received by the hotline and includes incident dates, details of substances discharged, and the resulting actions taken by City Staff to eliminate and prevent discharges in the future.

The most serious violations observed by City staff resulted in Administrative Citations issued to the responsible party. Table 7-5 below summarizes the violations and the resulting actions that occurred in FY 2008-09.

Table 7-5
Citations Issued FY 2008-09

Date	Code Violation	Violation Description	Fine	Category
9/10/2008	20.08.040, 20.08.140	Illegal discharge of sewage	$200.00	Commercial
10/9/2008	20.08.040 & 20.08.110	Illegal discharge of wash water	Warning	Commercial
12/2/2008	20.08.040	Illegal discharge of wash water	$100.00	Commercial
12/2/2008	20.08.040	Illegal discharge of construction debris	$100.00	Commercial
12/30/2008	20.08.040, 20.08.140	Illegal discharge of sediment	$100.00	Commercial
1/16/2009	20.08.010	Illegal discharge of wash water	$100.00	Commercial
2/4/2009	20.08.040	Illegal discharge of construction debris	$100.00	Commercial
3/12/2009	20.08.040	Illegal discharge of sewage	$200.00	Commercial
4/29/2009	20.08.040	Illegal discharge of wash water	$100.00	Commercial
6/15/2009	20.08.040	Illegal discharge of wash water	$200.00	Commercial
11/26/2008	20.08.040 & 20.080.040B	Illegal discharge of sediment	$200.00	Construction
12/17/2008	20.08.040B, 20.08.080	Illegal discharge of sediment	$200.00	Construction
2/27/2009	20.08.040	Illegal discharge of sediment	$400.00	Construction
7/16/2008	20.08.040	Illegal discharge of wash water	Warning	Residential
9/11/2008	20.08.040B	Illegal discharge of wash water	Warning	Residential
1/21/2009	20.08.040, 20.08.060	Illegal discharge of sewage	$200.00	Residential

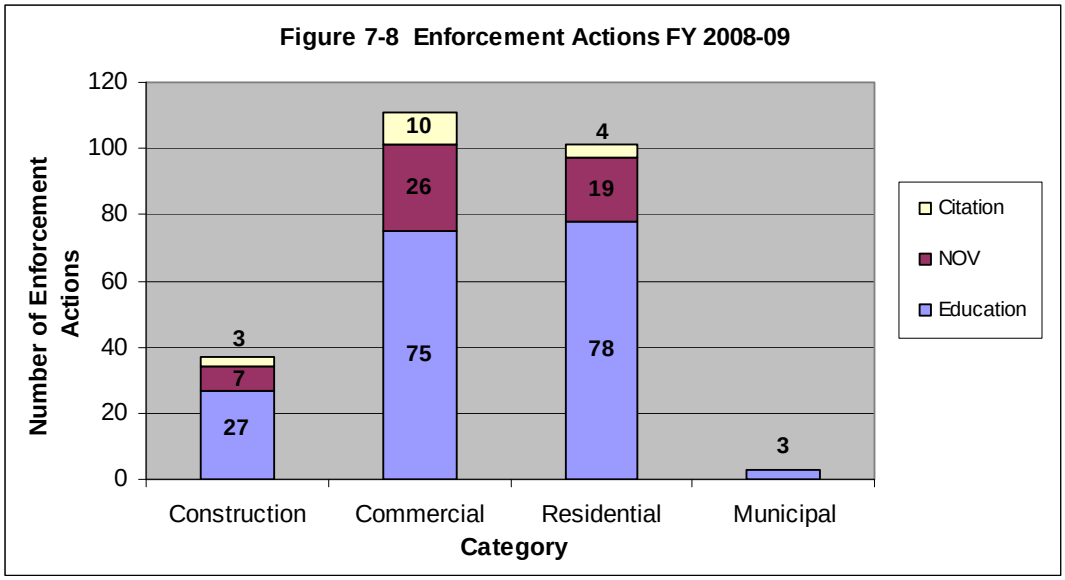
Date	Code Violation	Violation Description	Fine	Category
6/24/2009	20.08.040	Illegal discharge of grey water	$200.00	Residential
		TOTAL	**$2,400.00**	

7.5.3 ENFORCING THE DISCHARGE PROHIBITIONS ORDINANCE

The City implements and enforces its ordinances, orders, or other legal authority to prevent illicit discharges and connections to its MS4. Many illicit connections and illegal discharges can be eliminated through voluntary compliance. Most violators are willing to change their behaviors when they learn that their actions are detrimental to the environment and local waterways. The City utilizes a variety of options under a flexible and graduated system of enforcement actions, emphasizing voluntary compliance when possible. Voluntary compliance may be used for first-time, minor violations, whereas more serious violations or continued non-compliance may warrant a more aggressive and enforcement oriented approach. Increased enforcement actions are taken until compliance is achieved or the illicit connection or illegal discharge is otherwise eliminated.

In cases where further enforcement is needed, the typical progressive enforcement procedures that the City can implement are as follows: verbal warnings and education, written warnings (Stop/Correct Work notice or a NOV), and administrative citations. A copy of the City's Administrative Citation can be found in Appendix D. The nature of the City's enforcement approach is determined on a case-by-case basis and is based on factors such as the severity of the violation, the threat to human or environmental health, site-specific circumstances, and past compliance history. If the situation is determined to pose an immediate risk to public health or the environment, the City may coordinate with other agencies or teams that are specially trained to assess and mitigate emergency situations (e.g., those involving hazardous wastes/materials, etc.).

In FY 2008-09, enforcement in each category varied according to the complaint. Overall, construction, commercial, residential and municipal complaints were primarily resolved through education. A breakdown of the enforcement actions performed per category of complaint is presented below in Figure 7-8.



Residential complaints accounted for 43.6% of all complaints received and resulted in 78 educational actions, 19 Notices of Violation, and four citations. Commercial complaints totaled 34.6% of all complaints received and resulted in 75 educational actions, 26 Notices of Violation, and 10 citations. Construction complaints totaled 14.2% of all complaints received and resulted in 27 educational actions, seven Notices of Violation, and three citations. Municipal complaints accounted for 7.6% of all complaints received and were referred to the City's Public Works Department for immediate maintenance. There were no industrial complaints this fiscal year.

In FY 2008-09, Clean Water Program staff evaluated all reported illegal discharges and proceeded with appropriate enforcement actions as necessary. The Clean Water Program staff issued a total of 52 Notices of Violation and 17 Administrative Citations. The total amount of citations collected in FY 2008-09 was $2,400.00 (see Table 7-5). With appropriate education and enforcement, there were numerous illegal discharges and connections eliminated in FY 2008-09.

7.6 PROGRAM REVIEW AND MODIFICATION

In November 2008, the Copermittees requested the Dry Weather Monitoring Workgroup to re-evaluate the dry weather action levels that were regionally adopted in April 2003. All of the action levels were deemed appropriate except for the bacteria action levels for Total Coliform, Fecal Coliform, and Enterococcus. The Dry Weather Monitoring Workgroup contracted the services of D-Max Engineering to conduct an evaluation of all of the historical bacterial data collected from the Copermittees' dry weather monitoring programs from 2002 through 2007. Details of D-Max Engineering's data evaluation are posted on the Project Clean Water Website at:
http://www.projectcleanwater.org/pdf/science_mon/dry_weather_2009bacteria_action_level_report_draft.pdf.

On May 19, 2009, the Copermittees evaluated the recommendations of the Dry Weather Monitoring Workgroup and selected the following new bacteria action levels presented in Table 7-6 below. These new action levels will become effective May 1, 2010.

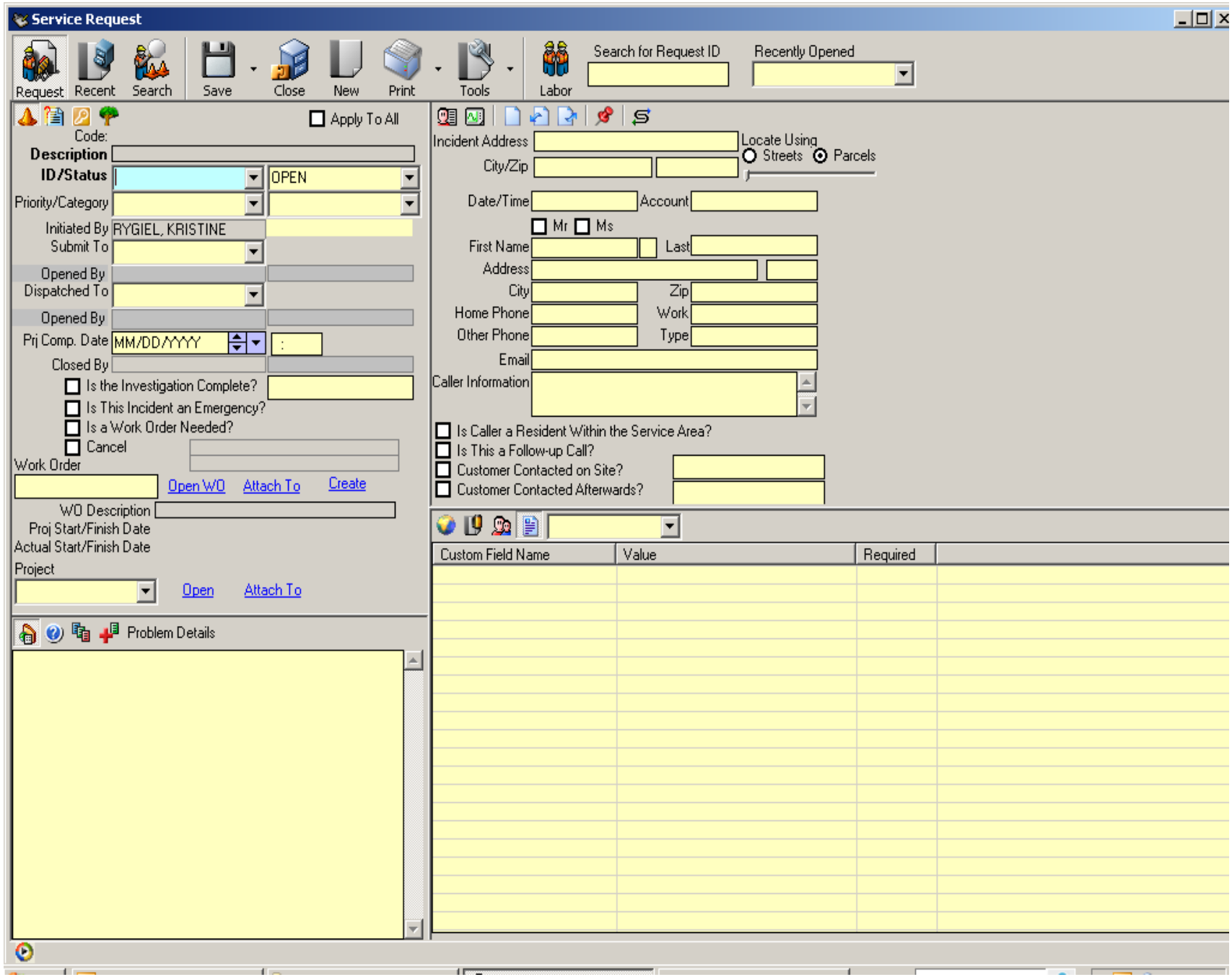
Table 7-6
Bacteria Action Levels for the City of Encinitas' Dry Weather Monitoring Program

	Total Coliform (MPN/100 mL)	Fecal Coliform (MPN/100 mL)	Enterococcus (MPN/100mL)
2003-2009 Bacteria Action Levels	50,000	20,000	10,000
2010 -2012 Bacteria Action Levels	130,000	13,000	7,000

Appendix A

Cityworks GIS Service Request Form

Storm Water Complaints Cityworks GIS Service Request Form



Appendix B

Hazardous Materials Incident Reports

Incident Listing

Tuesday July 1, 2008 through Tuesday June 30, 2009

411 - Gasoline or other flammable liquid spill

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0003261	000	08/26/2008 16:41:58	411	N	573 02nd St	X	X	
0003474	000	09/13/2008 18:08:12	411	2	3120-312 Manchester Ave	X	X	
0003660	000	09/27/2008 16:37:48	411	N	949 Stratford Dr	X	X	
0004483	000	11/29/2008 18:00:37	411	N	1766 N Coast Highway 101	X		
0000344	000	01/26/2009 22:02:59	411	N	1271 Encinitas Bl	X		
0001723	000	05/09/2009 17:17:29	411	N	175 N El Camino Real	X		
0001890	000	05/22/2009 17:04:27	411	N	1763 Greentree Rd	X		
0001976	000	05/30/2009 14:56:51	411	N	1334 Via Terrassa	X		
0002026	000	06/03/2009 08:58:44	411	N	540 La Costa Ave	X		

End of Report

Incident Listing

Tuesday July 1, 2008 through Tuesday June 30, 2009

412 - Gas leak (natural gas or LPG)

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0003250	000	08/25/2008 14:20:24	412	N	858 Del Rio Ave	X	X	
0003657	000	09/27/2008 14:19:25	412	N	In front of 245 Via Tierra	X	X	
0003854	000	10/12/2008 02:47:18	412	N	1820 Dora Dr	X		
0003921	000	10/17/2008 08:04:45	412	N	1646 N Coast Highway 101	X		
0004203	000	11/08/2008 09:03:30	412	N	1546 Vivaldi St	X		
0004498	000	11/30/2008 21:49:08	412	N	130 N El Camino Real	X		
0004721	000	12/16/2008 12:46:29	412	N	240 Birmingham Dr	X		
0004861	000	12/25/2008 00:34:55	412	N	701 S Vulcan Ave	X		
0000827	000	03/03/2009 10:33:32	412	N	650 02nd St	X		
0001457	000	04/19/2009 11:20:05	412	N	101 Turner Ave	X		
0001662	000	05/05/2009 10:06:31	412	N	258 Neptune Ave	X		
0002024	000	06/03/2009 04:18:46	412	N	1900 N COAST HIGHWAY 101	X		
0002204	000	06/16/2009 13:33:49	412	N	755 Stratford Dr	X		

End of Report

Incident Listing

Tuesday July 1, 2008 through Tuesday June 30, 2009

413 - Oil or other combustible liquid spill

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0004192	000	11/07/2008 11:43:31	413	N	In front of 751 Snapdragon St	X		

End of Report

Incident Listing

Tuesday July 1, 2008 through Tuesday June 30, 2009

422 - Chemical spill or leak

Encinitas Fire Department (No Filter)

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0000305	000	01/23/2009 13:32:07	422	N	1550 Encinitas Bl	X		

End of Report

Appendix C

2009 Dry Weather Monitoring Assessment Report

Dry Weather Monitoring Assessment

May 1, 2009 - September 30, 2009



Prepared by:

City of Encinitas
Clean Water Program
505 South Vulcan Avenue
Encinitas, CA 92024

December 2009

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Dry Weather Analytical Monitoring

1.0 Introduction

The Dry Weather Monitoring Program is a crucial part of the City of Encinitas' Urban Runoff Monitoring Program. Since May 2002, the California Regional Water Quality Control Board, San Diego Region (Regional Board), has required the San Diego County Copermittees to implement an annual Dry Weather Storm Drain Monitoring Program (Dry Weather Program). On January 24, 2007, Order No. R9-2007-0001 (Municipal Permit), was adopted by the Regional Board, regulating the discharge of urban runoff from municipal separate storm sewer systems (MS4) draining the watersheds of the County of San Diego and the incorporated Cities of San Diego County, including the City of Encinitas. The updated requirements of the Dry Weather Monitoring Program can be found in Section II.B.3 of the Receiving Waters and Urban Runoff Monitoring and Reporting Program of the Municipal Permit.

Order No. R9-2007-0001 requires the City of Encinitas to implement a dry weather analytical monitoring program for the detection and elimination of illicit discharges and connections to the City's MS4 in addition to including a trash assessment component. The purpose of the City's Dry Weather Program is to actively seek and eliminate illicit connections and illegal discharges, to characterize dry weather flows and trash assessments throughout the City's MS4.

An illicit discharge is defined as a point source discharge of pollutants to the MS4 that is not comprised entirely of storm water, not exempted by the City's Storm Water Ordinance, or not authorized by an NPDES Permit. An illicit connection is defined as a physical connection to the Storm Water Conveyance System or Receiving Waters which has not been reviewed and authorized by the City. The regulatory backbone of this program is the establishment of discharge prohibitions in the City's Municipal Code, Chapter 20.08 (Storm Water Management).

Dry weather monitoring of the MS4 is performed by establishing monitoring locations throughout the City to adequately cover the entire storm drain system. In 2009, the City of Encinitas' Dry Weather Program encompassed 39 primary monitoring locations and 16 alternate monitoring locations throughout the city. Monitoring of these locations included recorded observations, field screening where water was present, and analytical laboratory testing at selected locations.

The City of Encinitas conducted dry weather monitoring during the period of May 1, 2009 to September 30, 2009. The analysis of the dry weather monitoring results for 2009 is documented in the following report.

2.0 Dry Weather Analytical Monitoring Stations

In March 2008, the City of Encinitas revised its Dry Weather Monitoring Program as part of the Jurisdictional Urban Runoff Management Program (JURMP) Update. The goal of the revised program was to continue to retain existing sites that had been monitored for analytical laboratory testing to support long-term trend analysis, select additional sites to facilitate a better understanding of the water quality in Encinitas, and to ensure compliance with Dry Weather Monitoring program standards established in Order No. 2007-0001.

Under the previous Municipal Permit (2001-01), the City of Encinitas conducted dry weather field screening at an average of 37 sites per year. On average, the City also visited another 13 dry sites per year, with the total number of sites visited varying from 48 to 52 sites per year. To make more efficient use of its resources, the City adjusted its Dry Weather Monitoring Program in 2008 to include 39 primary sites and 16 alternate sites. As part of the monitoring site evaluation, sites that had never had ponded or flowing water were removed from the monitoring site list. Sites that were regularly dry but had ponded or flowing water at least once during previous monitoring years were changed to alternate sites. The City also assessed whether any existing sites should be relocated and whether any new sites were necessary to provide better coverage of key areas of the MS4. This process relied on reviewing historical data from past monitoring programs and reviewing the MS4 and land use data. Geographic Information Systems (GIS) data files of the City's drainage system, watersheds, major water bodies, environmentally sensitive areas, existing dry weather monitoring locations, and approximate locations of potential sources of pollutants were all evaluated to assist in this process. In 2008, the City's Clean Water Program staff, accompanied by Public Works maintenance staff familiar with the storm drain conveyance system, conducted field visits to assess the suitability of 29 potential new sites. This process included locating appropriate access points and then checking for the presence of ponded or flowing water, assessing accessibility, and recording GPS coordinates or the GIS ID name of the relevant storm water facility. As a result of this assessment, 12 suitable locations were identified and added to the City's lists of dry weather monitoring sites. Only one out of seven sub-basins retained the same primary sites that existed in the City's dry weather monitoring program under the previous Municipal Permit. Consequently, only the past three years of dry weather monitoring data (2007-2009) have been compared to each other in the water quality exceedance charts throughout this report.

A storm drain (MS4) database has been developed by the City of Encinitas in a GIS and is maintained in an ArcInfo platform by the City's Information Technology Division. The database is continually updated to include new additions to the MS4 as validation is ongoing. The City has also developed a detailed map of its entire MS4 that includes MS4 facilities, dry weather monitoring stations and drainage basins. A copy of the 2009 MS4 and Dry Weather Monitoring Stations Map can be found in Appendix C-1.

3.0 Dry Weather Analytical Monitoring Procedures

The City's dry weather monitoring program uses methods and procedures in collecting and analyzing data which are consistent with those developed by the San Diego Regional Copermittee's Dry Weather Monitoring Workgroup (DWM Workgroup). The elements of the dry weather program include establishing primary and alternate sampling sites, sampling frequencies, field screening and sampling procedures (including monitoring parameters), recommended action levels and data interpretation, follow-up investigations, and reporting. Each of these procedures is outlined in detail below.

Dry weather field screening and analytical monitoring consists of field observations, field screening and monitoring, and analytical monitoring at selected stations. The Municipal Permit requires each Copermittee to conduct field screening analysis of the following constituents at all dry weather monitoring stations where water is present: conductivity, turbidity, pH, ortho-phosphate, nitrate-nitrogen, ammonia-nitrogen, and surfactants (MBAS). The Municipal Permit also requires that each Copermittee conduct analytical laboratory analysis of the following constituents at 25% of the dry weather monitoring stations where water is present: total hardness, oil and grease, diazinon, chlorpyrifos, cadmium (dissolved), lead (dissolved), zinc (dissolved), copper (dissolved), Enterococcus bacteria, total coliform bacteria and fecal coliform bacteria.

Dry weather monitoring was conducted at 39 primary sites and 11 alternate sites throughout Encinitas during the period of May 1 – September 30, 2009. Of the 50 locations monitored, flowing water was observed at 29 sites, ponded water was observed at 10 sites and 11 sites were observed to be dry. Field analysis was conducted at all sites with flowing or ponded water. A total of 10 monitoring locations or 25% of all 39 sites were sampled for full laboratory analysis to meet the minimum 25% requirement as established in the Municipal Permit. An additional 7 sites were analyzed for total coliform, fecal coliform, and Enterococcus in order to further characterize bacteria concentrations throughout the City's MS4.

As required by the Municipal Permit, a trash assessment was conducted at 39 primary sites and 11 alternate sites throughout the City to provide information on the spatial extent and amount of trash present, as well as the nature of the types of trash present. A more detailed analysis and results of the trash assessment program can be found in Section 7.0 of this report. All of the 2009 Trash Assessment forms can be found in Appendix C-5.

Qualitative observations were made at all sample locations. A field data sheet noting observations such as color, clarity, odor, and biological characteristics was recorded at each monitoring site. The 2009 Dry Weather Monitoring Field Datasheets for each monitoring site are included in Appendix C-2. Photographs for all dry weather monitoring sites visited in 2009 can be found in Appendix C-3.

Field tests were performed by Clean Water Program staff at all monitoring locations with flowing or ponded water. In 2009, the Clean Water Program purchased new monitoring

equipment to help create a more efficient and accurate sampling program. The new equipment included a Hydrolab Quanta multi-parameter instrument to determine pH, conductivity, temperature, and turbidity and a Chemetrics V-2000 multi-analyte photometer to analyze ammonia-nitrogen, ortho-phosphate, nitrate-nitrogen, and MBAS.

Where possible, flow was determined by filling a bottle of known volume using a timer and an estimation of the amount of flow captured. For the locations (such as manholes) in which flow was not able to be measured, these sites were always noted as flowing or ponded on the Dry Weather Monitoring Datasheets. Action levels for the field screening analysis were pre-determined by the DWM Workgroup and are shown in Table 3.0. Follow-up sampling for exceedances detected in field screening were performed within two business days of receiving the results that exceeded action levels as required in section D.4.d of the Municipal Permit.

Source investigation actions are initiated based upon field screening and analytical monitoring results that have exceeded established action levels during initial testing and follow-up testing. Source investigation actions may include field investigations and/or formal facility inspection activities based upon a variety of considerations which are described in each of the sub-basin evaluations in Section 4.0.

There were 10 samples collected for full laboratory analysis in order to further characterize the water quality at specific locations throughout the City. When feasible, laboratory testing was performed as far down in the watershed as possible to assess water quality prior to discharging into a receiving water. Methods for laboratory analysis were based on EPA approved methods described in the *Standard Methods for the Examination of Water and Wastewater, 18th edition.* Follow-up sampling for exceedances detected in laboratory analyses were performed within two business days after receipt of data from the laboratory. The field and analytical results for each monitoring station are provided in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2009 Field Screening and Analytical Monitoring Results Table in Appendix C-4.

Table 3.0 Action Levels for Field Screening and Laboratory Analytical Parameters		
Field Screening Analytes	**Action Levels[1]**	**Source/ Notes**
pH	<6.5 or >9.0	Basin plan, w/ allowance for elevated pH due to excessive photosynthesis.
Ortho-Phosphate (mg/L) as P	2.0	USEPA Multi-sector GP
Nitrate-N (mg/L)	10.0	Basin plan, and drinking water standards
Ammonia-N (mg/L)	1.0	Workgroup experience, may also consider unionized ammonia fraction
Turbidity (NTU)	Best Professional Judgment	USEPA Multi sector general permit level-5 NTU. Typical levels are substantially higher. Base judgment on channel type and bottom
Temperature	Best Professional Judgment	Base judgment on season, air temp., channel type, shade, etc.
Conductivity (µmhos/cm) or TDS (mg/L)	Best Professional Judgment – City of Encinitas considers 5.00mS/cm (umhos/cm) an exceedance	EC may be highly elevated in some regions due to high TDS/groundwater exfiltration to surface water, mineral dissolution and seawater intrusion. Normal source ID and discharge elimination work is not effective in these situations. Also consider investigating unusually low EC (<800 umhos/cm) accompanied by unusual flows.
MBAS (mg/L)	1.0	Basin plan, w/ allowance based on Workgroup field experience and possible field reagent interferences
Laboratory Analytes	**Action Levels**	**Source/Notes**
Oil and Grease (mg/L)	15	USEPA multi-sector General Permit
Diazinon (µg/L)	.5	Response to diazinon and chlorpyrifos levels above 0.5 µg/L should focus on education and outreach to potential dischargers in the target drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (µg/L)	.5	
Dissolved Cadmium	California Toxics Rule	Use CTR Table, 1-hour criteria to determine action level for sample.
Dissolved Copper	California Toxics Rule	
Dissolved Lead	California Toxics Rule	
Dissolved Zinc	California Toxics Rule	
Total Coliform (cfu/100 ml)	50,000	Action levels are based on upper 90% confidence level of Copermittees 2002 dry weather analytical monitoring data.
Fecal Coliform (cfu/ 100 ml)	20,000	
Enterococcus (cfu/100 ml)	10,000	

Notes: [(1)] The referenced action levels should not be the sole criteria for initiating a source identification investigation. Dry weather monitoring data should be interpreted using a variety of available information.

4.0 Dry Weather Data Analysis

Data analysis is based on three methods of data interpretation: numeric action levels, California Toxics Rule (CTR) and best professional judgment.

The numeric action levels in Table 3.0 are the primary approach for interpreting pH, ortho-phosphate, nitrate, ammonia, surfactants, oil and grease, diazinon, chlorpyrifos, total coliform, fecal coliform and Enterococcus bacteria results. A 90th-percentile statistical confidence interval test, developed by the DWM Workgroup in 2003 is currently used to determine exceedances for bacteria indicators.

The CTR is used to establish an action level for dissolved trace metals, including Cadmium, Copper, Lead and Zinc. The CTR equations provide benchmarks based on the total hardness of the sampled water, with the action levels increasing as hardness increases.

Best professional judgment is used as the primary approach for interpreting turbidity, conductivity and water temperature. Best professional judgment is also the secondary approach for interpreting the results of all other field and laboratory analyses. The best professional judgment of Clean Water Program staff takes into account the characteristics of each sample location, and historical data to determine whether sample data exceedances require follow-up or further investigation.

In 2009, the City upgraded to using an instrumental colorimetric analysis for ammonia-nitrogen, nitrate-nitrogen and ortho-phosphate concentrations at all dry weather monitoring sites. The City purchased a Chemetrics V-2000 Multi-analyte Photometer- a portable instrumental colorimeter that automatically tests pre-programmed analytes using the Chemetrics instrumental kits which include self-filling, pre-measured ampoules. There are two instrumental kits available for use with the V-2000; the K-1503 (Direct Nesslerization method) and the K-1403 (Salicylate method). Although the methods and range concentrations for each instrumental kit are different, the process for measuring ammonia concentrations is similar for both kits. Water samples are placed into the ampoules provided in the instrumental kits to react with the reagent in the ampoule. In a strongly alkaline solution, ammonia reacts with the reagent to produce a yellow-colored complex in direct proportion to the ammonia concentration. The ampoule is then placed into the V-2000 which digitally reads the color concentrations of the ampoule and provides a digital result.

Initially, field staff used the K-1503 instrumental kit to analyze ammonia concentrations at multiple dry weather monitoring sites located throughout the city. Field staff began to suspect erroneous results after many of the analyses resulted in clouded color development within the ampoules and the majority of these tests were found to be exceeding water quality benchmark values. Three follow-up investigations were initiated in response to the ammonia exceedances determined by the K-1503 instrumental kit. These investigations took place in the La Costa South sub-basin, Leucadia sub-basin, and the Encinitas sub-basin

and the outcomes of these investigations are discussed in more detail in Sections 4.3, 4.4, and 4.5 of this report. Ultimately, 69% of all analysis for ammonia using the K-1503 method exceeded the water quality benchmarks. This finding was inconsistent when compared to prior years of sampling data in which only 9% of all ammonia samples in 2008 and 12% of all ammonia samples in 2007 exceeded water quality benchmarks.

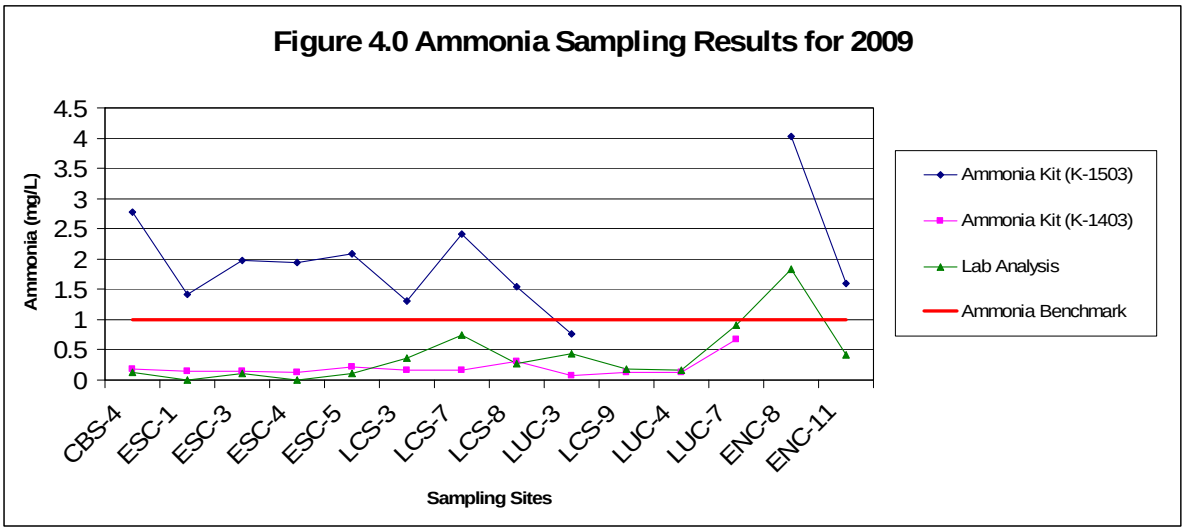
To check the validity of the 2009 sampling data, field staff purchased a new Chemetrics Ammonia instrumental kit (K-1403) midway through the monitoring season. Field staff analyzed 14 duplicate samples with the prior kit (K-1503), the new kit (K-1403) and also conducted lab analysis for each sample. The sampling results are shown in Table 4.0 below.

Table 4.0 2009 Ammonia Sampling Results

Station ID	Date	K-1503 Ammonia Kit	K-1403 Ammonia Kit	Lab QA/QC	Ammonia Benchmark
CBS-4	9/14/2009	2.78	0.18	0.12	1.00
ESC-1	9/22/2009	1.42	0.14	0	1.00
ESC-3	9/22/2009	1.97	0.14	0.11	1.00
ESC-4	9/29/2009	1.95	0.12	0	1.00
ESC-5	9/11/2009	2.09	0.22	0.1	1.00
LCS-3	9/29/2009	1.31	0.16	0.36	1.00
LCS-7	9/16/2009	2.41	0.17	0.74	1.00
LCS-8	9/11/2009	1.55	0.3	0.27	1.00
LUC-3	9/21/2009	0.76	0.08	0.43	1.00
LCS-9	9/30/2009	NT	0.13	0.18	1.00
LUC-4	9/30/2009	NT	0.12	0.16	1.00
LUC-7	9/30/2009	NT	0.67	0.9	1.00
ENC-8	7/22/2009	4.02	NT	1.83	1.00
ENC-11	8/5/2009	1.59	NT	0.42	1.00

NT = indicates analyte was not tested at this site.

While the new kit results and the lab analysis results seemed close, field staff performed statistical analysis on the data to determine whether there was significant evidence of correlation between the new kit and the lab analysis. The linear correlation coefficient (r) between the new kit and the lab analysis data is 0.650 with 1.0 indicating perfect positive correlation and 0 indicating no correlation. At the 95% confidence level the critical value for 12 samples is 0.576. Since the test statistic 0.650 is greater than the critical value of 0.576, we can conclude that there is significant linear correlation between the new kit and the lab analysis data. Figure 4.0 below illustrates the close correlation between the new kit and the lab analysis and validates the suspected erroneous results produced by the prior instrumental kit (K-1503).



The following subsections contain analyses of the 2009 dry weather data collected for each of the seven sub-basins within the City of Encinitas.

4.1 Cardiff Sub-basin

Dry weather monitoring in the Cardiff sub-basin (CBS) included a total of eleven locations; eight primary sites and three alternate sites. Land use in the sub-basin is primarily residential with some commercial and agricultural uses in the upper reaches of the sub-basin. All run-off in the Cardiff sub-basin drains into the San Elijo Lagoon.

Of the eight designated locations for routine monitoring in 2009, three locations were observed to have flowing water, two locations had ponded water and three locations were dry. All five locations with flowing and ponded water were field screened and analytical lab samples were collected at three locations (CBS-1, CBS-2 and SEL-2). CBS-1 was selected only for bacteria analysis to help further characterize the water quality in the Cardiff sub-basin. CBS-2 and SEL-2 were both selected for full laboratory analysis to assure continuity from previous years of monitoring and to assist in long term trend analysis.

Of the eight locations where routine field screening was performed, four of the sites sampled exceeded the action levels for conductivity and two sites exceeded for turbidity. There were a total of three sites analyzed for total coliform, fecal coliform and Enterococcus bacteria; however none of the sites exceeded for any of these bacteria indicators. Table 4.1 summarizes the action levels exceeded in the Cardiff sub-basin.

Table 4.1 Cardiff Sub-Basin Action Level Exceedances						
Station ID	**Date**	**Water Flow**	**Analyte**	**Result**	**Unit**	**Action Level**
CBS-2	7/8/09	Flowing	Conductivity	6.93	mS/cm	5
CBS-4	9/14/09	Flowing	Conductivity	7.65	mS/cm	5
SEL-2	8/10/09	Ponded	Conductivity	7.05	mS/cm	5
SEL-2	8/10/09	Ponded	Turbidity	56.3	NTU	5
SEL-3	9/15/09	Ponded	Conductivity	9.73	mS/cm	5
SEL-3	9/15/09	Ponded	Turbidity	68.4	NTU	5

CBS-2

CBS-2 is an open channel that drains both residential and commercial areas and discharges directly to San Elijo Lagoon. CBS-2 was one of the sites selected for full analytical monitoring in 2009. The water sample at CBS-2 contained elevated conductivity. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity was not warranted and was not performed.

CBS-4

CBS-4 is located in a detention basin that drains both agricultural nurseries and residential areas and discharges directly to San Elijo Lagoon. The water sample at CBS-4 was obtained from a flowing outfall in the detention basin and contained elevated conductivity. The sample was clear in clarity and colorless and no other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity was not warranted and was not performed.

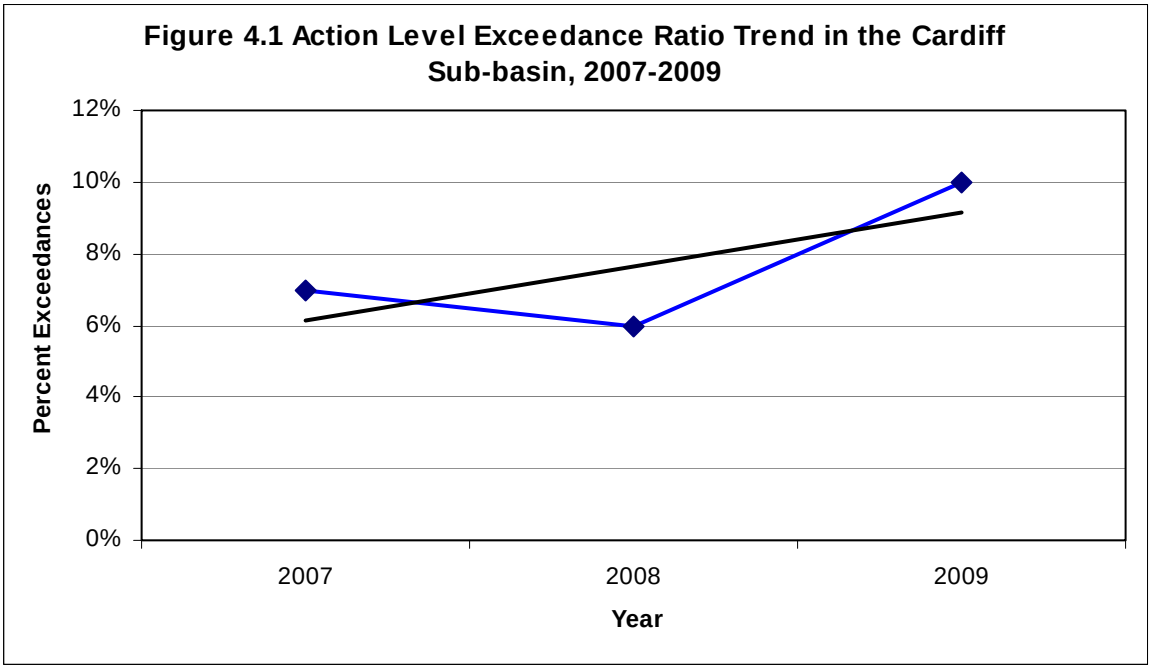
SEL-2

SEL-2 is located in an open channel that drains residential areas and discharges directly to the San Elijo Lagoon. SEL-2 was one of the sites selected for full analytical monitoring in 2009. The water sample was taken from ponded water in an area with excessive vegetation that is situated at the edge of the San Elijo Lagoon. The sample contained elevated conductivity and turbidity. No other constituents analyzed at this site exceeded action levels. A review of historical data at this site indicates that the only exceedances at this location have been for conductivity, primarily due to saltwater intrusion from the lagoon. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity or turbidity was not warranted and was not performed.

SEL-3

SEL-3 is located in a detention basin that drains a community college campus and a residential area. The water sample was taken from ponded water in an area with excessive algae. The water sample at SEL-3 contained elevated conductivity and turbidity. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity and turbidity was not warranted and was not performed.

Five of the eight sampling sites (CBS-1, CBS-2, CBS-4, SEL-2 and SEL-3) in this sub-basin have consistently been field screened during dry weather monitoring from 2007 to 2009. Figure 4.3 illustrates the trend in water quality exceedances in the Cardiff sub-basin over the past three years based on the analysis from these sites. The increase in the percent exceedance value is reflective of the exceedances for conductivity and turbidity in this sub-basin.



All of the monitoring data collected in the Cardiff sub-basin during the 2009 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2009 Field Screening and Analytical Monitoring Results Table in Appendix C-4. Figure 4.2 illustrates the dry weather monitoring stations located through out the Cardiff sub-basin. Photographs of all of the monitoring sites are available in Appendix C-3.

Figure 4.2



Cardiff Sub-basin

4.2 Lower Escondido Creek Sub-basin

Dry weather monitoring in the Lower Escondido sub-basin (ESC) included a total of five locations; three primary sites and two alternate sites. The land uses consist primarily of residential and open space areas with a few commercial establishments interspersed throughout the sub-basin. All run-off in the Lower Escondido Creek sub-basin drains to the San Elijo Lagoon.

Of the five designated locations for routine monitoring in 2009, all five locations were observed to have flowing water and were field screened only. One of the sites (ESC-2) sampled had results exceeding the action levels for turbidity.

Table 4.2 summarizes the action levels exceeded in the Lower Escondido Creek Sub-basin.

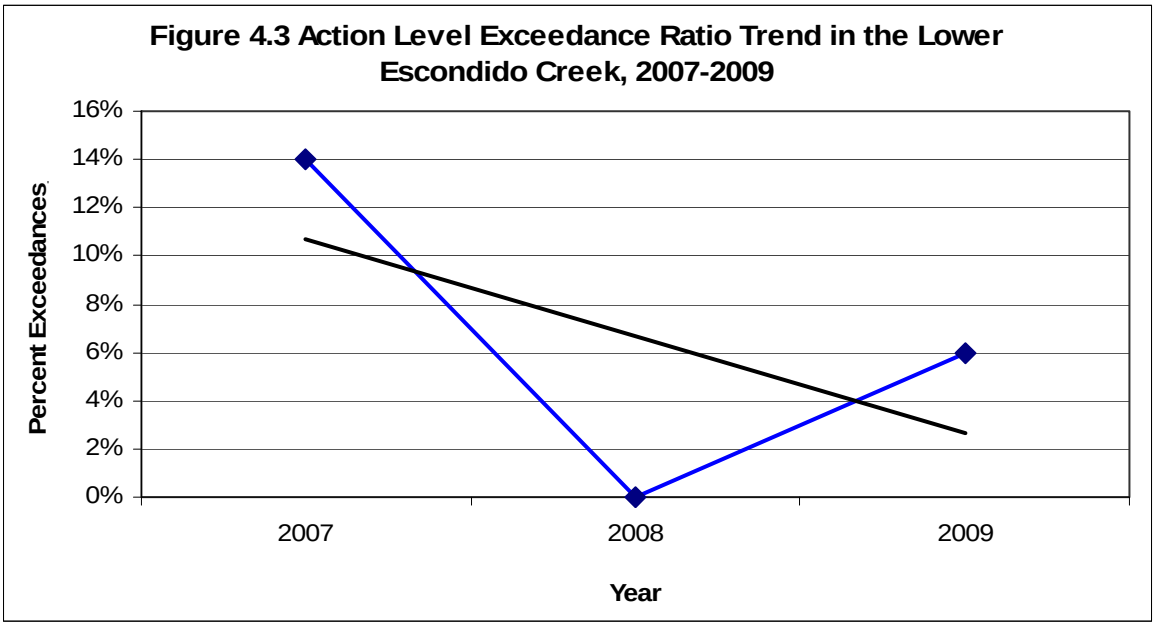
Table 4.2 Lower Escondido Creek Sub-Basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ESC-2	9/16/09	Flowing	Turbidity	16	NTU	5

ESC-2

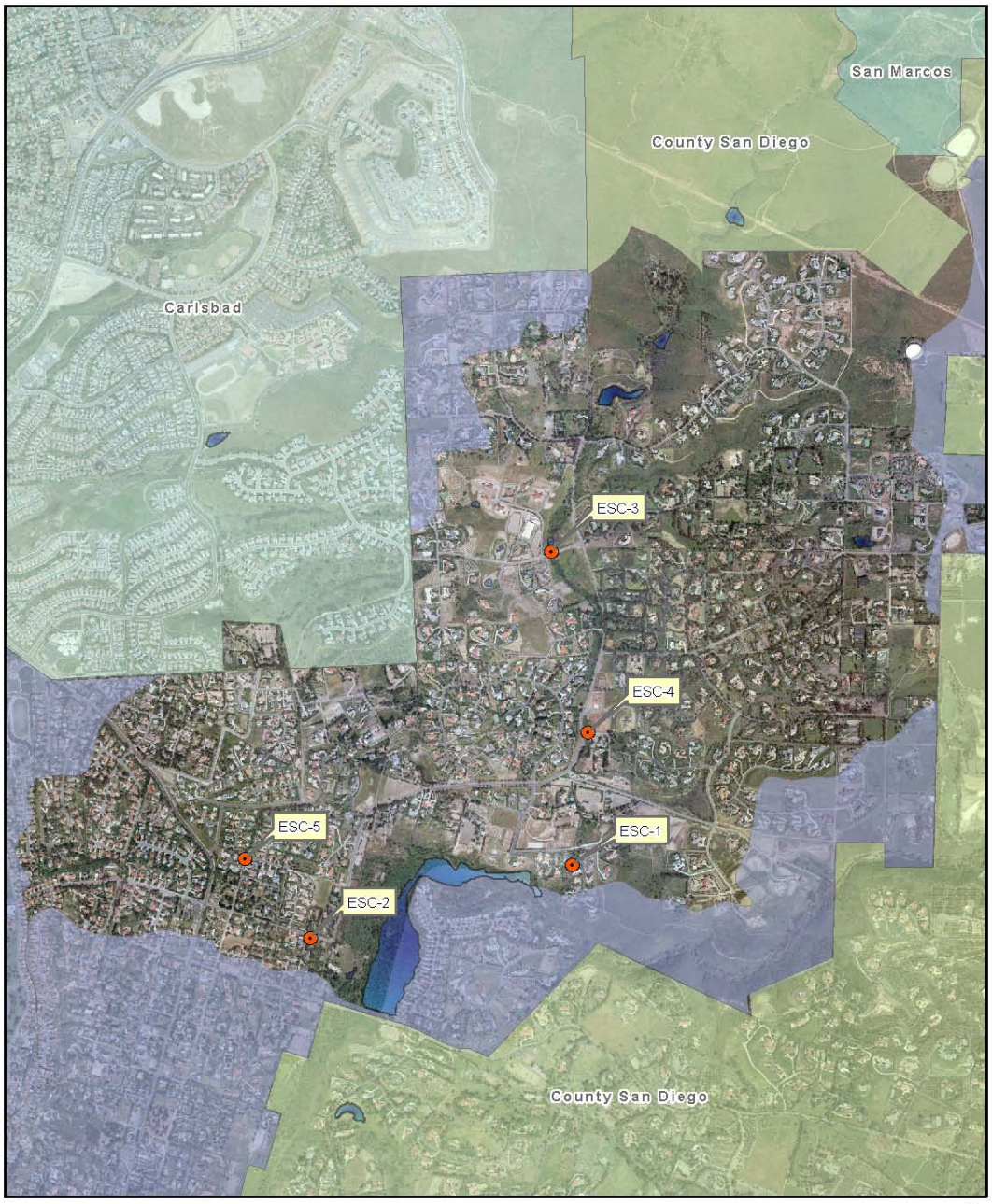
ESC-2 is located in an open channel adjacent to a residential area along Escondido Creek. The water sample at ESC-2 contained elevated turbidity as a result of shallow water with excessive sediment and algae at this location. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

Two of the five sampling sites (ESC-1 and ESC-2) in this sub-basin have consistently been field screened during dry weather monitoring from 2007 to 2009. Figure 4.3 illustrates the trend in water quality exceedances in the Lower Escondido Creek sub-basin over the past three years based on the analysis from these sites. The historical frequency of exceedances in this sub-basin is variable. The action level exceedance ratio for this sub-basin increased six percent from 2008 to 2009 due to only one exceedance in this sub-basin. Overall, the trend of water quality exceedances is down over the three year monitoring period, indicating improvements in water quality in this sub-basin.



Data collected in the Lower Escondido Creek sub-basin during the 2009 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2009 Field Screening and Analytical Monitoring Results Table in Appendix C-4. Figure 4.4 illustrates the dry weather monitoring stations located through out the Lower Escondido Creek Sub-basin. Photographs of all of the monitoring sites are available in Appendix C-3.

Figure 4.4


San Marcos
County San Diego
Carlsbad
ESC-3
ESC-4
ESC-5
ESC-1
ESC-2
County San Diego
Lower Escondido Creek Sub-basin
Feet
0
1,000
2,000
N

4.3 La Costa South Sub-basin

Dry weather monitoring in the La Costa South sub-basin (LCS) included a total of eight locations; six primary sites and two alternate sites. Land use in this sub-basin encompasses one of the city's largest commercial zones in addition to a significant residential area. All run-off in the La Costa South sub-basin drains to Encinitas Creek. Encinitas Creek flows north into Batiquitos Lagoon in the City of Carlsbad. Monitoring locations in the La Costa South sub-basin were all located within the City of Encinitas.

Of the eight designated locations for routine monitoring in 2009, six locations were observed to have flowing water and two locations had ponded water. All eight locations were field screened and two were sampled for a full laboratory analysis (LCS-1 and LCS-5) to assure continuity from previous years of monitoring and to retain long-term trend analysis.

There were three routine monitoring water quality exceedances in the La Costa South sub-basin in 2009. Table 4.3 summarizes the action levels exceeded in the La Costa sub-basin during routine monitoring.

Table 4.3 La Costa South Sub-Basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LCS-1	7/29/09	Ponded	Turbidity	13.6	NTU	5
LCS-4*	7/6/09	Flowing	Ammonia	3.78	mg/L	1.0
LCS-9	9/30/09	Ponded	Conductivity	23.77	mS/cm	5

*This was an erroneous exceedance due to chemistry interference in the instrumental kit (K-1503). Please refer to discussion in Section 4.0.

LCS-1

LCS-1 is located in an open channel that drains northward into Encinitas Creek. The surrounding land use in this sub-basin is primarily commercial. The water sample at LCS-1 was taken from ponded water in the channel and was field screened and sampled for full laboratory analysis. Water flow at LCS-1 was significantly constrained due to excessive vegetation and organic matter decay at this site. The sample at LCS-1 contained elevated turbidity. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

LCS-4

LCS-4 is located in a manhole that drains northward into Encinitas Creek. The surrounding land use at this location is primarily commercial. The water sample at LCS-4 was taken from a flowing manhole and was field screened using the original instrumental kit (K-1503)

for analyzing ammonia. A confirmation sample for ammonia was analyzed with the K-1503 kit on 7/8/09 and the result exceeded action levels again. Since this site exceeded action levels for ammonia during both the routine monitoring and confirmation monitoring, the field team immediately conducted a field investigation upstream. Follow-up sampling upstream of LCS-4 occurred on 7/9/09. The results again exceeded the action levels for ammonia. Table 4.4 below summarizes the results of the confirmation and follow-up sampling for LCS-4.

Table 4.4 LCS-4 Confirmation and Follow-up Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LCS-4	7/8/09	Ponded	Ammonia (K-1503 Kit)	3.3	mg/L	1.0
LCS-4 (Upstream)	7/9/09	Flowing	Ammonia (K-1503 Kit)	2.85	mg/L	1.0

Upon receipt of the exceedance results from the confirmation samples at LCS-4, the Clean Water Program's storm water inspector was notified of the exceedances and the potential sources in the area. A total of one storm water inspection at a nearby commercial facility and one residential area was initiated to try and identify the ammonia source(s) upstream of LCS-4. Table 4.5 below summarizes all of the inspection activities that were performed in the area.

Table 4.5 LCS-4 Investigation Activities

Name	Address	Date of Inspection	Results
Private Residence	444 Dunsmore Ct.	7/13/09	Corrective action required. Resident washing down driveway with BEHR concrete and masonry cleaner and ZEP commercial cleaning product.
Villa Encinitas Plaza	251-257 N. El Camino Real	7/15/09	Corrective action required however, no violations noted.

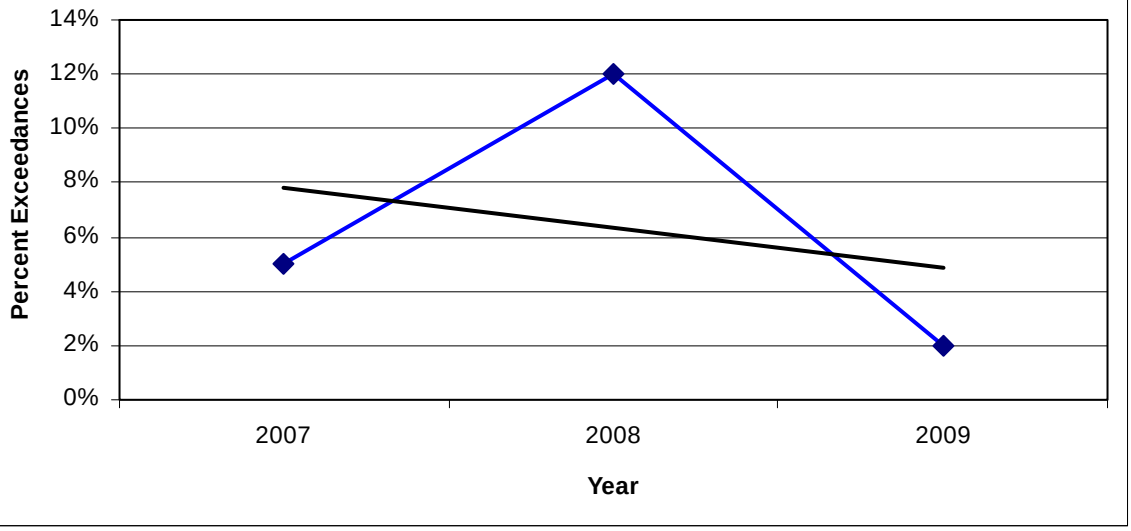
Although, there were no specific sources of ammonia identified as a result of these investigations, one illicit discharge was mitigated and the commercial investigation activities have resulted in recent facility upgrades to minimize any future discharges into the City's storm drain system. The commercial facilities at 251-257 N. El Camino Real recently upgraded their outdoor trash enclosure to drain directly into the sewer system and have removed an old grease bin. They are also currently making plans to repair the concrete so that it will no longer convey irrigation/groundwater runoff into the storm drain system.

LCS-9

LCS-9 is an alternate monitoring site located in a manhole that drains west into Encinitas Creek**.** The surrounding land use at this location is residential. The water sample at LCS-9 was taken from ponded water in the manhole and was field screened only. The sample at LCS-9 contained elevated conductivity. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity was not warranted and was not performed.

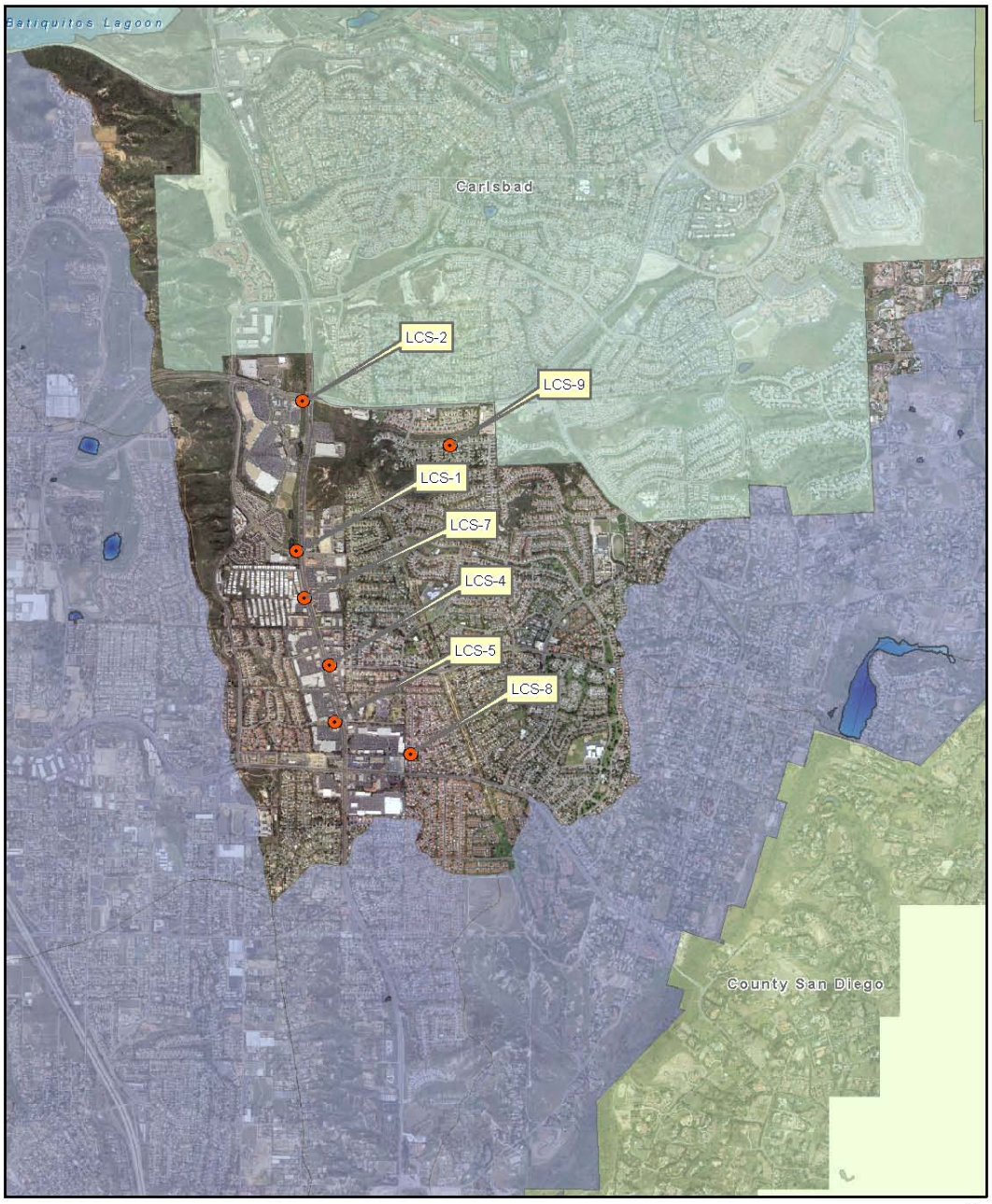
Five of the eight sampling sites (LCS-1, LCS-2, LCS-4, LCS-5 and LCS-7) in this sub-basin have consistently been field screened during dry weather monitoring from 2007 to 2009. Figure 4.5 illustrates the trend in water quality exceedances in the La Costa South sub-basin over the past three years based on the analysis from these sites. Although several water quality exceedances have been typical for the La Costa South sub-basin, overall water quality has been improving over the past three years of dry weather monitoring.

Figure 4.5 Action Level Exceedance Ratio in the La Costa South Sub-basin, 2007-2009



Data collected in the La Costa South sub-basin during the 2008 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and in the 2008 Field Screening and Analytical Monitoring Results Table in Appendix C-4. Figure 4.6 illustrates the La Costa South sub-basin. Photographs of all of the monitoring sites are available in Appendix C-3.

Figure 4.6



La Costa South Sub-basin

4.4 Leucadia Sub-basin

Dry weather monitoring in the Leucadia sub-basin (LUC) included a total of seven locations; five primary sites and two alternate sites. Land uses in this area include both residential and commercial with significant, albeit decreasing, numbers of commercial nurseries and growers. All monitoring sites located in the Leucadia sub-basin drain to the Batiquitos Lagoon.

Dry weather monitoring in the Leucadia sub-basin included monitoring a total of seven locations (five primary sites and two alternate locations). These sites all covered distinct drainage areas throughout the basin. Six of the seven sample locations had water to sample at the time of monitoring, one location was dry. Alternate site LUC-4 was monitored as a substitute for the primary dry site at LUC-6. All six locations with water were field screened, one sample at LUC-8 was collected for full laboratory analysis and LUC-7 was analyzed for bacteria to assure continuity from previous years of monitoring and to retain long-term trend analysis.

Of the six locations where routine field screening was performed the resulting exceedances were variable. Two of the sample sites (LUC-1 and LUC-10) had elevated nitrates. One site, LUC-4 had elevated pH results. Two sites, LUC-7 and LUC-8 had elevated total coliform and fecal coliform results. LUC-7 also had elevated Ortho-phosphate, Turbidity and Enterococcus bacteria results.

Table 4.6 below summarizes the action levels exceeded in the Leucadia sub-basin.

Table 4.6 Leucadia Sub-basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LUC-1	7/15/09	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10
LUC-4	9/30/09	Ponded	pH	9.35	pH	<6.5 or >9.0
LUC-7	9/30/09	Flowing	Ortho-phosphate	3.96	mg/L	2.0
LUC-7	9/30/09	Flowing	Turbidity	15.5	NTU	5
LUC-7	9/30/09	Flowing	Total Coliform	81,000	cfu/100 ml	50000
LUC-7	9/30/09	Flowing	Fecal Coliform	36,000	cfu/100 ml	20,000
LUC-7	9/30/09	Flowing	Enterococcus	31,000	cfu/100 ml	10,000
LUC-8	8/10/09	Flowing	Fecal Coliform	30,000	cfu/100 ml	20,000
LUC-8	8/10/09	Flowing	Enterococcus	10,000	cfu/100 ml	10,000

LUC-1

LUC-1 is located in a detention basin in the lowest elevations of the Leucadia sub-basin. The basin is located 773 feet from the Pacific Ocean Shoreline and 250 feet from Batiquitos Lagoon. The water sample at LUC-1 was taken from flowing water and was field screened. The water sample at LUC-1 contained elevated nitrates. No other constituents analyzed at this site exceeded action levels. Confirmation sampling on the next business day concluded that nitrate concentrations continued to exceed action levels at this site. Concurrent monitoring of the next dry weather monitoring site upstream (LUC-10) revealed that this site also contained elevated nitrates. Table 4.7 below summarizes the results of the confirmation sampling for LUC-1.

Table 4.7 LUC-1 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LUC-1	7/16/09	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10

Upon receipt of the exceedance results from the confirmation samples at LUC-1 and LUC-10, the Clean Water Program's storm water inspector was notified of the exceedances and the potential sources in the area. Refer to the discussion in LUC-10 for complete details of the investigation related to the nitrate exceedances at LUC-1 and LUC-10.

LUC-4

LUC-4 is located in a concrete detention basin in the upper reaches of the Leucadia sub-basin. The water sample at LUC-4 was taken from ponded water and was field screened. The water sample at LUC-4 contained slightly elevated pH results and a slightly elevated temperature. No other constituents analyzed at this site exceeded action levels. Because pH levels increase with rising temperature, the elevated pH was not indicative of any illicit discharges at this site. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity was not warranted and was not performed.

LUC-7

LUC-7 is an alternate monitoring site located in a manhole that drains north into Batiquitos Lagoon**.** The land use upstream of this site consists of a golf course, residential area and an open space park. The water sample at LUC-7 was taken from flowing water and was field screened and analyzed for bacteria in order to further characterize bacteria concentrations in this sub-basin. The water sample at LUC-7 contained elevated ortho-phosphate, turbidity, total coliform, fecal coliform and Enterococcus bacteria results.

Despite an exceedance for multiple analytes on the first sampling event, the confirmation

samples on 10/01/09 were significantly below the initial sampling results and the action levels, indicating a transient nature of the source(s). No obvious residential, golf course or park related activities were found to be contributing to the initial exceedance during the confirmation investigation. Table 4.8 below summarizes the results of the confirmation sampling for LUC-7.

Table 4.8 LUC-7 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LUC-7	10/01/09	Flowing	Ortho-phosphate	0.26	mg/L	2.0
LUC-7	10/01/09	Flowing	Turbidity	0	NTU	5
LUC-7	10/01/09	Flowing	Total Coliform	3,300	cfu/100 ml	50000
LUC-7	10/01/09	Flowing	Fecal Coliform	1,500	cfu/100 ml	20,000
LUC-7	10/01/09	Flowing	Enterococcus	1,000	cfu/100 ml	10,000

LUC-8

LUC-8 is located in a manhole that drains north into Batiquitos Lagoon**.** The land use upstream of this site consists of a golf course, residential area and an open space park area. LUC-8 was one of the sites selected for full analytical monitoring in 2009. The water sample at LUC-8 was taken from flowing water that contained elevated fecal coliform and Enterococcus bacteria results. No other constituents analyzed at this site exceeded action levels.

Despite an exceedance for two bacteria indicators on the first sampling event, the confirmation samples on 8/12/09 were significantly below the initial sampling results and the action levels, indicating a transient nature of the source(s). No obvious residential, golf course or park related activities were found to be contributing to the initial exceedance during the confirmation investigation. Table 4.9 below summarizes the results of the confirmation sampling for LUC-8.

Table 4.9 LUC-8 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LUC-8	8/12/09	Flowing	Fecal Coliform	6,450	cfu/100 ml	20,000
LUC-8	8/12/09	Flowing	Enterococcus	5,100	cfu/100 ml	10,000

LUC-10

LUC-10 is located in a manhole that drains north into the detention basin where LUC-1 is located before ultimately draining into the Batiquitos Lagoon. The water sample at LUC-10 was taken from flowing water and was field screened. The water sample at LUC-10 contained elevated nitrates. No other constituents analyzed at this site exceeded action levels. Confirmation sampling on the next business day concluded that nitrate concentrations continued to exceed action levels at this site. Concurrent monitoring of the next dry weather monitoring site downstream (LUC-1) revealed that it also had elevated nitrates. Table 4.10 below summarizes the results of the confirmation sampling for LUC-10.

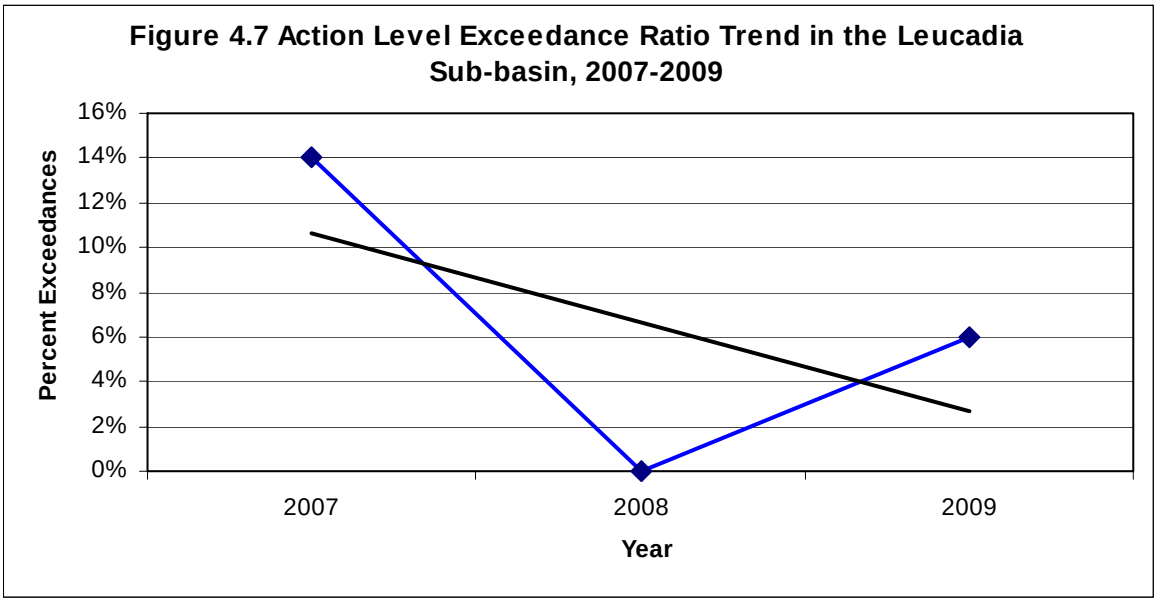
Table 4.10 LUC-10 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LUC-10	7/16/09	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10

Upon receipt of the exceedance results from the confirmation samples at LUC-1 and LUC-10, the Clean Water Program's storm water inspector was notified of the exceedances and the potential sources in the area. Several storm water facilities were inspected upstream to try to trace the flow of water in the storm drain system and to try and identify the nitrate source(s) upstream of LUC-10. Although much of the storm water system in this sub-basin is 30 ft underground, the inspector noted that half a mile upstream from LUC-10 the system was completely dry.

A review of historical data at LUC-1 and LUC-10 indicates that the only exceedances at these locations have been for nitrate. It has been reasoned that groundwater flows are the cause for the nitrate exceedances at these locations. In consideration of these factors and supported by best professional judgment, no further source investigations for the elevated nitrate was performed.

Five of the eight sampling sites (LCS-1, LCS-2, LCS-4, LCS-5 and LCS-7) in this sub-basin have consistently been field screened during dry weather monitoring from 2007 to 2009. Figure 4.7 illustrates the trend in water quality exceedances in the La Costa South sub-basin over the past three years based on the analysis from these sites. Overall, the trend of water quality exceedances is down over the three year monitoring period, indicating improvements in water quality in this sub-basin.



Data collected in the Leucadia sub-basin during the 2009 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and in the 2009 Field Screening and Analytical Monitoring Results Table in Appendix C-4. Figure 4.8 illustrates the Leucadia sub-basin. Photographs of all of the monitoring sites are available in Appendix C-3.

Figure 4.8


Carlsbad
Batiquitos Lagoon
LUC-6
LUC-7
LUC-8
LUC-10
LUC-4
LUC-3
Pacific Ocean
Leucadia Sub-basin
0
1,200
2,400
Feet
N

4.5 Encinitas Sub-basin

Dry weather monitoring in the Encinitas sub-basin (ENC) included a total of fourteen locations; thirteen primary sites and one alternate site. This sub-basin covers the oldest area of development in the city and consists primarily of residential and commercial land uses including many nurseries. This sub-basin has the most monitoring locations in the city as it has historically had the most water quality exceedances. Sample locations were chosen based on sampling sites established in the previous dry weather monitoring program and other special studies. The locations monitored in this sub-basin are primarily located along Cottonwood Creek with a few sites located on tributaries to Cottonwood Creek. All run-off in the Encinitas sub-basin drains to the Pacific Ocean via Cottonwood Creek.

Of the 13 primary locations, 10 sites had flowing water to sample, two sites had ponded water (ENC-6 and ENC-12) and one site (ENC-17) was dry. One alternate site (ENC-14) in this sub-basin was selected as a replacement for the dry site at ENC-17. All 14 locations with water were field screened. Four sites were collected for full laboratory analysis, and another four sites were analyzed for bacteria indicators at the laboratory. Of the 14 locations sampled and tested, ten of those sites exceeded water quality standards for various field screened analytes. In total, five of the sample sites had elevated conductivity, six sites had elevated nitrates, four sites had elevated ortho-phosphates, two sites had elevated ammonia, one site exceeded for turbidity and bacteria indicators and another site had elevated pH. Table 4.11 below summarizes all of the action levels exceeded in the Encinitas sub-basin during routine monitoring.

Table 4.11 Encinitas Sub-basin Action Level Exceedances						
Station ID	**Date**	**Water Flow**	**Analyte**	**Result**	**Unit**	**Action Level**
ENC-1	7/20/09	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10.0
ENC-3	7/22/09	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10.0
ENC-3	7/22/09	Flowing	Conductivity	5.59	mS/cm	5.00
ENC-3	7/22/09	Flowing	Turbidity	19.3	NTU	5.00
ENC-5*	7/22/09	Flowing	Ammonia	1.22	mg/L	1.0
ENC-5	7/22/09	Flowing	Conductivity	5.11	mS/cm	5.00
ENC-5	7/22/09	Flowing	Nitrate (NO3-N)	10.09	mg/L	10.0
ENC-6*	7/22/09	Ponded	Ammonia	2.29	mg/L	1.0
ENC-6	7/22/09	Ponded	Conductivity	7.55	mS/cm	5.00
ENC-6	7/22/09	Ponded	Nitrate (NO3-N)	>11.3	mg/L	10.0
ENC-8	7/22/09	Flowing	Nitrate (NO3-N)	23.06	mg/L	10
ENC-10	7/29/09	Flowing	Ortho-phosphate	3.73	mg/L	2.0
ENC-10	7/29/09	Flowing	Turbidity	22.1	NTU	5.00
ENC-10	7/29/09	Flowing	Total Coliform	121,000	cfu/100 ml	50000
ENC-10	7/29/09	Flowing	Fecal Coliform	110,000	cfu/100 ml	20,000
ENC-10	7/29/09	Flowing	Enterococcus	78,000	cfu/100 ml	10,000
ENC-11	8/05/09	Flowing	Conductivity	7.14	mS/cm	5.00
ENC-11	8/05/09	Flowing	Nitrate (NO3-N)	16.34	mg/L	10
ENC-12	8/03/09	Ponded	Orthophosphate	3.73	mg/L	2.0
ENC-14	8/17/09	Ponded	Conductivity	17.4	mS/cm	5.00
ENC-14	8/17/09	Ponded	Ortho-phosphate	2.14	mg/L	2.0
ENC-14	8/17/09	Ponded	pH	9.13	pH	<6.5 or >9.0
ENC-18	8/05/09	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10
ENC-18	8/05/09	Flowing	Ortho-phosphate	3.53	mg/L	2.0

*This was an erroneous exceedance due to chemistry interference in the instrumental kit (K-1503). Please refer to discussion in Section 4.0.

ENC-1

ENC-1 is located at an outfall that drains to the Pacific Ocean via Cottonwood Creek. ENC-1 was one of the sites selected for full analytical monitoring in 2009. The water sample was taken from a flowing outfall. The water sample at ENC-1 contained elevated nitrates. No other constituents analyzed at this site exceeded action levels. Confirmation sampling on the next business day concluded that nitrate concentrations continued to exceed action levels at this site. Table 4.12 below summarizes the results of the confirmation sampling for ENC-1.

Table 4.12 ENC-1 Confirmation Sampling Results						
Station ID	**Date**	**Water Flow**	**Analyte**	**Result**	**Unit**	**Action Level**
ENC-1	7/21/09	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10

It is believed that elevated nitrates are a result of groundwater infiltration that is often observed in this sub-basin (refer to Section 5.4 Nitrate Exceedances for a more detailed discussion of groundwater). In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity and nitrates was not warranted and was not performed.

ENC-3

ENC-3 is located in a natural channel in Cottonwood Creek that drains west toward the Pacific Ocean. Land use in this sub-basin is primarily commercial. The water sample was taken from low flowing water and it was field screened and analyzed for bacteria indicators. The water sample at ENC-3 contained elevated nitrates, conductivity and turbidity. No other constituents analyzed at this site exceeded action levels. Follow-up sampling on the next business day concluded that nitrate, conductivity and turbidity concentrations still exceeded action levels at this site. Table 4.13 below summarizes the results of the confirmation sampling for ENC-3.

Table 4.13 ENC-3 Confirmation Sampling Results						
Station ID	**Date**	**Water Flow**	**Analyte**	**Result**	**Unit**	**Action Level**
ENC-3	7/23/08	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10
ENC-3	7/23/08	Flowing	Conductivity	5.62	mS/cm	5.00
ENC-3	7/23/08	Flowing	Turbidity	55.2	NTU	5.00

It is believed that elevated nitrates and conductivity are a result of groundwater infiltration that is often observed in this sub-basin (refer to Section 5.4 Nitrate Exceedances for a more detailed discussion of groundwater).

ENC-5

ENC-5 is located in a natural channel in Cottonwood Creek that drains west toward the Pacific Ocean. Land use in this sub-basin is primarily commercial. The water sample was taken from flowing water and it was field screened using the original instrumental kit (K-1503) for ammonia and analyzed for bacteria indicators. The water sample at ENC-5 contained elevated ammonia, conductivity and nitrates. No other constituents analyzed at this site exceeded action levels. A confirmation sample for ammonia was analyzed with the K-1503 kit on the next business day and the results exceeded action levels again. An

additional confirmation sample for conductivity and nitrate revealed that there were slightly elevated levels of conductivity levels at this site but the nitrate levels had dropped below the action level benchmark. Table 4.14 below summarizes the results of the confirmation sampling for ENC-5.

Table 4.14 ENC-5 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ENC-5*	7/23/08	Flowing	Ammonia (K-1503 Kit)	1.23	mg/L	1.0
ENC-5	7/23/08	Flowing	Conductivity	5.34	mS/cm	5.00
ENC-5	7/23/08	Flowing	Nitrate (NO3-N)	8.95	mg/L	10

*This was an erroneous exceedance due to chemistry interference in the instrumental kit (K-1503). Please refer to discussion in Section 4.0.

Upon receipt of the continued exceedance for ammonia at ENC-5 and ENC-6, the Clean Water Program notified the Clean Water Program's storm water inspector and also contacted the City's Public Works Department to ask them about storm drain maintenance activities upstream. Refer to the discussion at the end of ENC-6 for complete details of the follow-up activities related to the ammonia exceedances at ENC-5 and ENC-6.

ENC-6

ENC-6 is located in a natural channel in Moonlight Creek that drains south toward Cottonwood Creek and ultimately drains into the Pacific Ocean. Land use upstream from this site is primarily residential. The water sample was taken from ponded water and it was field screened using the original instrumental kit (K-1503) for ammonia and analyzed for bacteria indicators. The water sample at ENC-6 contained elevated ammonia, conductivity and nitrates. No other constituents analyzed at this site exceeded action levels. A confirmation sample for ammonia was analyzed with the K-1503 kit on the next business day and the results exceeded action levels again. Additional confirmation samples for conductivity and nitrate revealed that there were still exceedances for these analytes at this site. Table 4.15 below summarizes the results of the confirmation sampling for ENC-6.

Table 4.15 ENC-6 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ENC-6*	7/23/09	Ponded	Ammonia (K-1503 Kit)	1.84	mg/L	1.0
ENC-6	7/23/09	Ponded	Conductivity	7.49	mS/cm	5.00
ENC-6	7/23/09	Ponded	Nitrate (NO3-N)	>11.3	mg/L	10

*This was an erroneous exceedance due to chemistry interference in the instrumental kit (K-1503). Please refer to discussion in Section 4.0.

These results for elevated conductivity and nitrate are consistent with elevated results in

prior monitoring years (Refer to Table 5.3). It has been well reasoned that the elevated nitrates are a result of groundwater infiltration that is often observed in this sub-basin (refer to Section 5.4 Nitrate exceedances for a more detailed discussion of groundwater). In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity and nitrates was not warranted and was not performed.

Upon receipt of the continued exceedance for ammonia at ENC-5 and ENC-6, the Clean Water Program notified the Clean Water Program's storm water inspector to initiate follow-up investigations and also contacted the City's Public Works Department to ask them about storm drain maintenance activities upstream. One informal inspection in the nearby commercial facility was conducted however there were no violations observed and no explicit sources were identified. The Public Works Department had also reported recently cleaning large amounts of trash out of the storm drain which is directly upstream of ENC-5. They reported that the trash and debris may have contained human sewage due to littering from local day laborers that visit the area on a daily basis. Since the maintenance activity had occurred within days of the sampling events at ENC-5 and ENC-6 no further investigations were performed at these sites.

Table 4.16 below summarizes all of the investigation activities that were performed in the area.

Table 4.16 Investigation Activities for ENC-5 and ENC-6

Name	Address	Date of Inspection	Results
Commercial Facility	102-160 Encinitas Blvd.	7/27/09	No violations noted.
Municipal inspection of storm drain system	135 Encinitas Blvd.	7/27/09	Removal of large amounts of trash possibly containing human sewage and other organic debris from the storm drain directly upstream of ENC-5.

ENC-8

ENC-8 is located in a natural channel in Cottonwood Creek that drains west toward the Pacific Ocean. Land use surrounding this site is primarily commercial. The water sample

was taken from flowing water and it was field screened and analyzed for bacteria indicators. The water sample at ENC-8 contained elevated nitrates. No other constituents analyzed at this site exceeded action levels. Follow-up sampling on the next business day concluded that nitrate concentrations still exceeded action levels at this site. Table 4.17 below summarizes the results of the confirmation sampling for ENC-8.

Table 4.17 ENC-8 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ENC-8	7/23/08	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10

These results are consistent with elevated conductivity and nitrate results at this site in previous monitoring years. Since there were no other exceedances, an upstream investigation for the elevated nitrate and conductivity was not performed. It has been well reasoned that the elevated nitrates are a result of groundwater infiltration that is often observed in this sub-basin (refer to Section 5.4 Nitrate-nitrogen exceedances for a more detailed discussion of groundwater).

ENC-10

ENC-10 is located in a natural channel in Cottonwood Creek that drains west toward the Pacific Ocean. Land use upstream from this site is comprised of both residential and commercial areas. ENC-10 was one of the sites selected for full analytical monitoring in 2009. The water sample was taken from flowing water in a naturally vegetated area. The water sample at ENC-10 contained elevated ortho-phosphate, turbidity and bacteria indicators. Follow-up sampling on the next business day concluded that the water sample contained slightly elevated turbidity. There were no other action level exceedances. Table 4.18 below summarizes the results of the confirmation sampling for ENC-10.

Table 4.18 ENC-10 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ENC-10	7/31/08	Flowing	Ortho-phosphate	0.63	mg/L	2.0
ENC-10	7/31/08	Flowing	Turbidity	12.9	NTU	5.00
ENC-10	7/31/08	Flowing	Total Coliform	9,450	cfu/100 ml	50000
ENC-10	7/31/08	Flowing	Fecal Coliform	3,300	cfu/100 ml	20,000
ENC-10	7/31/08	Flowing	Enterococcus	7,500	cfu/100 ml	10,000

The confirmation samples for ortho-phosphate and bacteria were significantly below the initial sampling results and the action levels indicating a transient nature of the source. There were no other follow-up activities performed.

ENC-11

ENC-11 is located in a natural channel in Cottonwood Creek that drains west toward the Pacific Ocean. Land use upstream from this site is primarily residential. The water sample was taken from flowing water and it was field screened and analyzed for bacteria indicators. The water sample at ENC-11 contained elevated conductivity and nitrates. No other constituents analyzed at this site exceeded action levels. A confirmation sample for conductivity and nitrate revealed that there were slightly elevated levels of conductivity levels at this site but the nitrate levels had dropped just below the action level benchmark. Table 4.19 below summarizes the results of the confirmation sampling for ENC-11.

Table 4.19 ENC-11 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ENC-11	8/10/09	Flowing	Conductivity	6.55	mS/cm	5.00
ENC-11	8/10/09	Flowing	Nitrate (NO3-N)	9.79	mg/L	10

Elevated conductivity and nitrate results at this site are consistent with documented exceedances for these constituents in previous monitoring years. It is has been well reasoned that the elevated conductivity is a result of groundwater infiltration that is often observed in this sub-basin (refer to Section 5.4 Nitrate-nitrogen exceedances for a more detailed discussion of groundwater). In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity and nitrates was not warranted and was not performed

ENC-12

ENC-12 is located in a manhole that drains west toward the Pacific Ocean. Land use upstream from this site is primarily residential. The water sample was taken from shallow ponded water in the storm drain and was field screened only. The water sample at ENC-12 contained elevated ortho-phosphate. No other constituents analyzed at this site exceeded action levels. When Clean Water Program field staff returned to collect a confirmation sample at ENC-12 the next business day, the site was completely dry. No further follow-up was conducted.

ENC 14

ENC-14 is located in a storm drain that drains south towards Cottonwood Creek. Land use upstream from this site is primarily residential. The water sample was taken from shallow ponded water in the storm drain and was field screened only. The water sample contained elevated ortho-phosphate. No other constituents analyzed at this site exceeded action levels. When Clean Water Program field staff returned to collect a confirmation sample at ENC-14 the next business day, the site was completely dry. No further follow-up was conducted.

ENC-18

ENC-18 is located in a manhole in the upper reaches of the Encinitas sub-basin. Land uses near this site include residential areas, a golf course and significant, albeit decreasing numbers of commercial nurseries and growers. The water sample was taken from flowing water and was field screened only. The water sample contained elevated concentrations of nitrates and ortho-phosphate. No other constituents analyzed at this site exceeded action levels. The confirmation samples were significantly below the initial sampling results and the action levels indicating a transient nature of the source(s). No obvious residential, golf course or nursery activities were found to be contributing to the initial exceedance during the confirmation investigation. Table 4.20 below summarizes the results of the confirmation sampling for ENC-18.

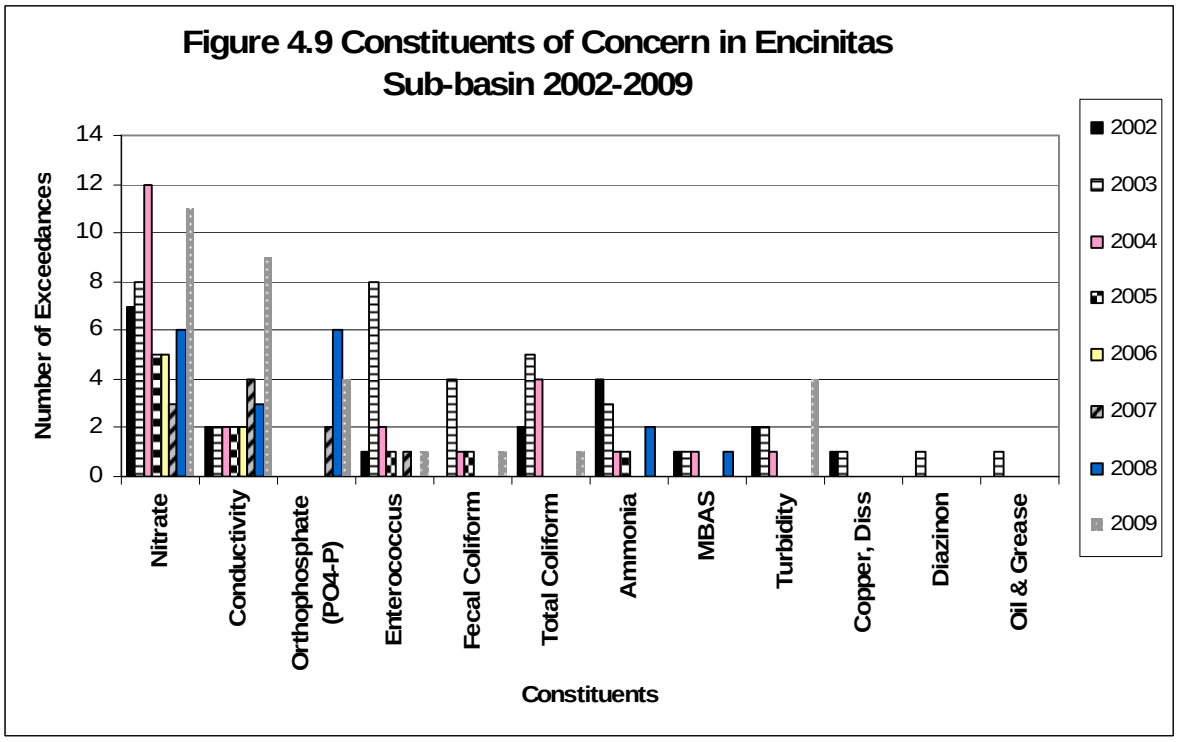
Table 4.20 ENC-18 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
ENC-18	8/10/09	Flowing	Nitrate	0.82	mg/L	10.0
ENC-18	8/10/09	Flowing	Ortho-phosphate	2.5	mg/L	2.0

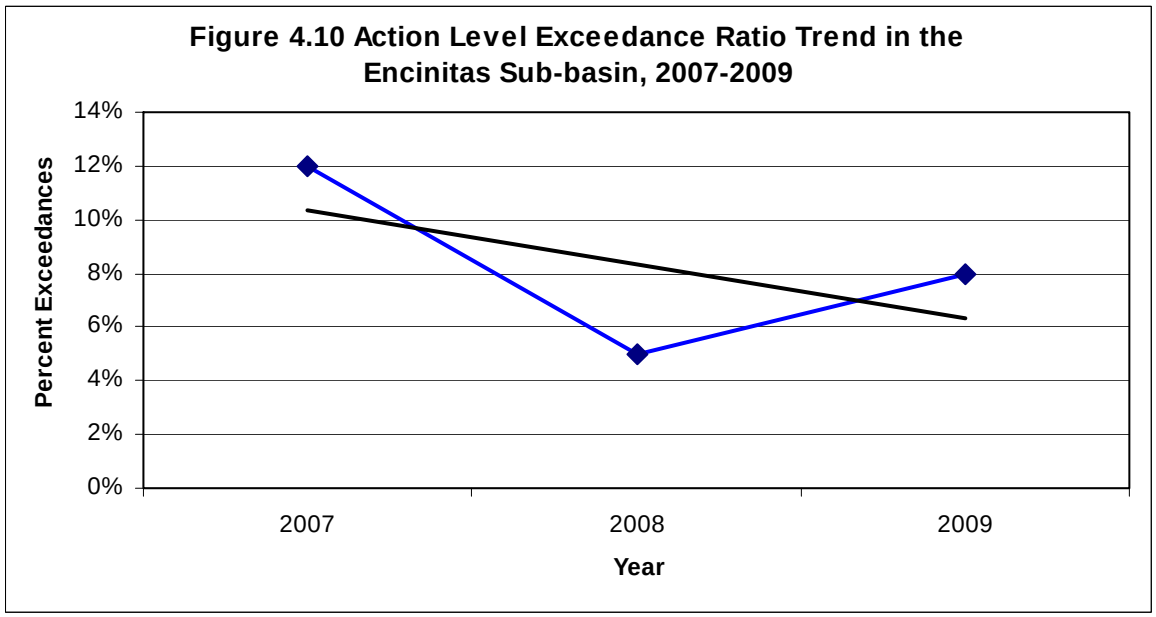
Groundwater in the Encinitas Sub-basin

Historically consistent nitrate and conductivity exceedances in the Encinitas sub-basin support a groundwater source. As such, in 2009 it has been reasoned that groundwater flows are the cause for the exceedances in nitrate at ENC-1, ENC-3, ENC-5, ENC-6, ENC-8, and ENC-11 and ENC-18 and the exceedances of conductivity at ENC-3, ENC-5, ENC-6, ENC-11, and ENC-14. The locations of the conductivity exceedances are persistent from year to year and have been detected at the primary groundwater tributaries in the sub-basin where ENC-6 and ENC-11 are located. A historical analysis of these sites show that they have exceeded for nitrates multiple times since 2002 (refer to Table 5.3). The conductivity exceedances have been consistently accompanied by elevated levels of nitrate. The eleven nitrate exceedances are all located downstream of the confluence of the groundwater tributaries and the other flows in Cottonwood Creek. Three of these stations, ENC-1, ENC-3 and ENC-6, are all located west of Pacific Coast Highway 101 and samples at these locations are collected within 1,500 feet of each other. All of these sampling locations are near the topographic low point in this sub-basin near the coast. Nitrate concentrations remain consistent in the reach along Moonlight Creek and Cottonwood Creek. Further discussion of nitrate and conductivity exceedances is located in Section 5.3 of this report.

Figure 4.9 below illustrates the parameters in which water quality criteria were exceeded in the Encinitas Sub-basin from 2002-2009.

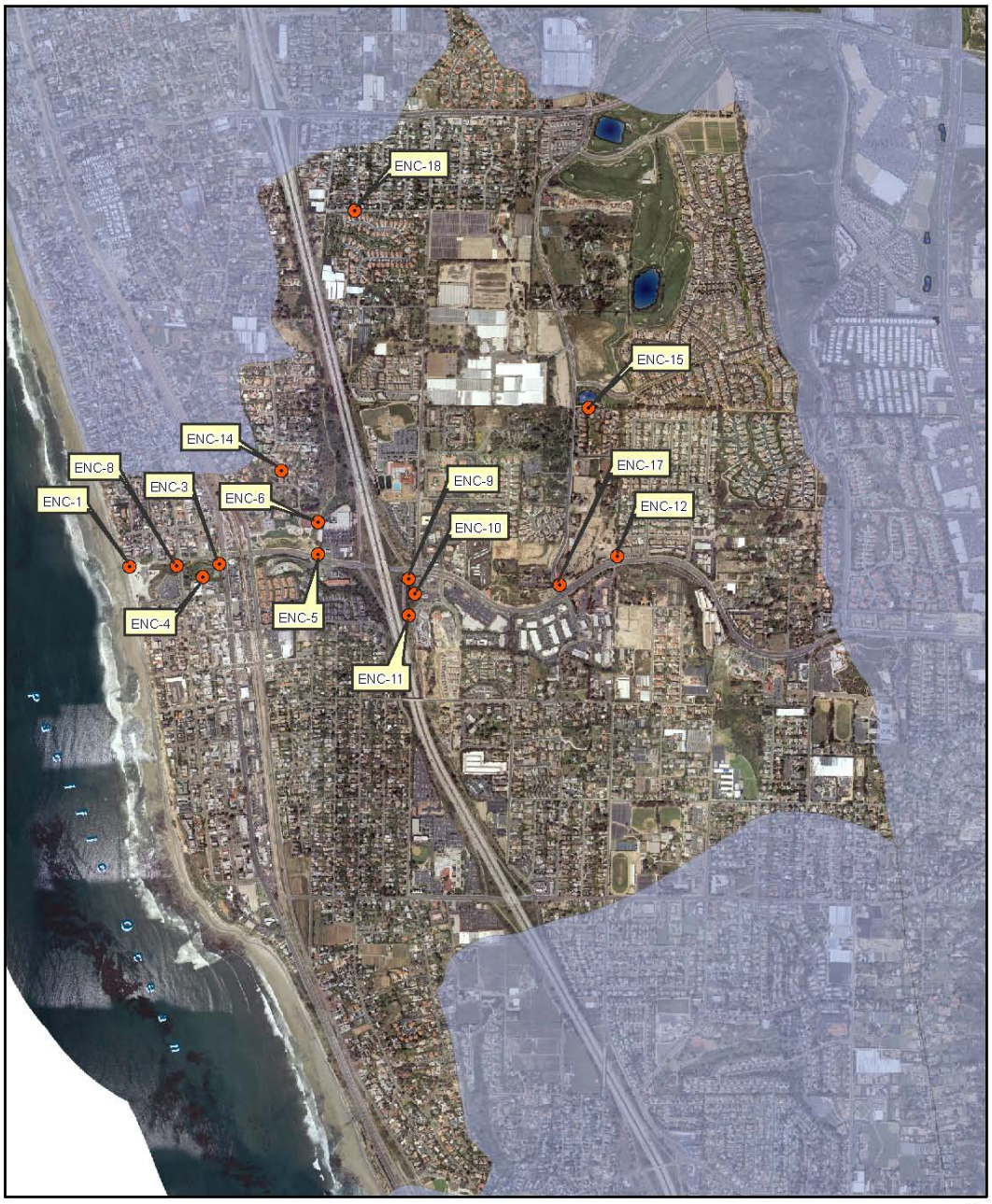


Nine of the fourteen sampling sites (ENC-1, ENC-3, ENC-4, ENC-5, ENC-6, ENC-8, ENC-10, ENC-11 and ENC-15) in this sub-basin have consistently been field screened during dry weather monitoring from 2007 to 2009. Figure 4.10 illustrates the trend in water quality exceedances in the Encinitas sub-basin over the past three years based on the analysis from these sites. Although several water quality exceedances have been typical for the Encinitas sub-basin, overall water quality has been improving over the past few years of dry weather monitoring.



Data collected in the Encinitas sub-basin during the 2009 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and in the 2009 Field Screening and Analytical Monitoring Results Table in Appendix C-4. Figure 4.11 illustrates the Encinitas sub-basin. Photographs of all of the monitoring sites are available in Appendix C-3.

Figure 4.11


ENC-18
ENC-15
ENC-14
ENC-8
ENC-3
ENC-1
ENC-6
ENC-9
ENC-17
ENC-12
ENC-10
ENC-4
ENC-5
ENC-11
Encinitas Sub-basin
Feet
0
1,200
2,400
N

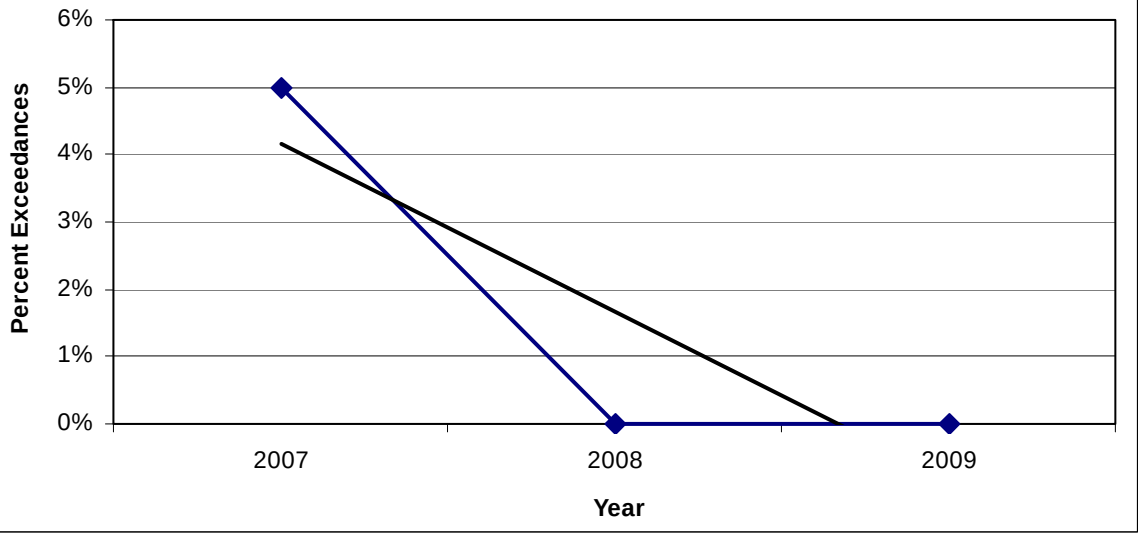
4.6 Rancho Santa Fe Sub-basin

The dry weather monitoring locations included two primary sites in the Rancho Santa Fe (RSF) sub-basin. Land use in this area is primarily residential with few commercial facilities also located in the sub-basin. All run-off in this sub-basin drain to Escondido Creek which feeds into the San Elijo Lagoon.

Of the two designated locations for routine monitoring in 2009, one location (RSF-4) was observed to have ponded water and one location (RSF-1) was dry. Both field screening and analytical lab samples were collected at RSF-4. There were no water quality exceedances in this sub-basin in 2009.

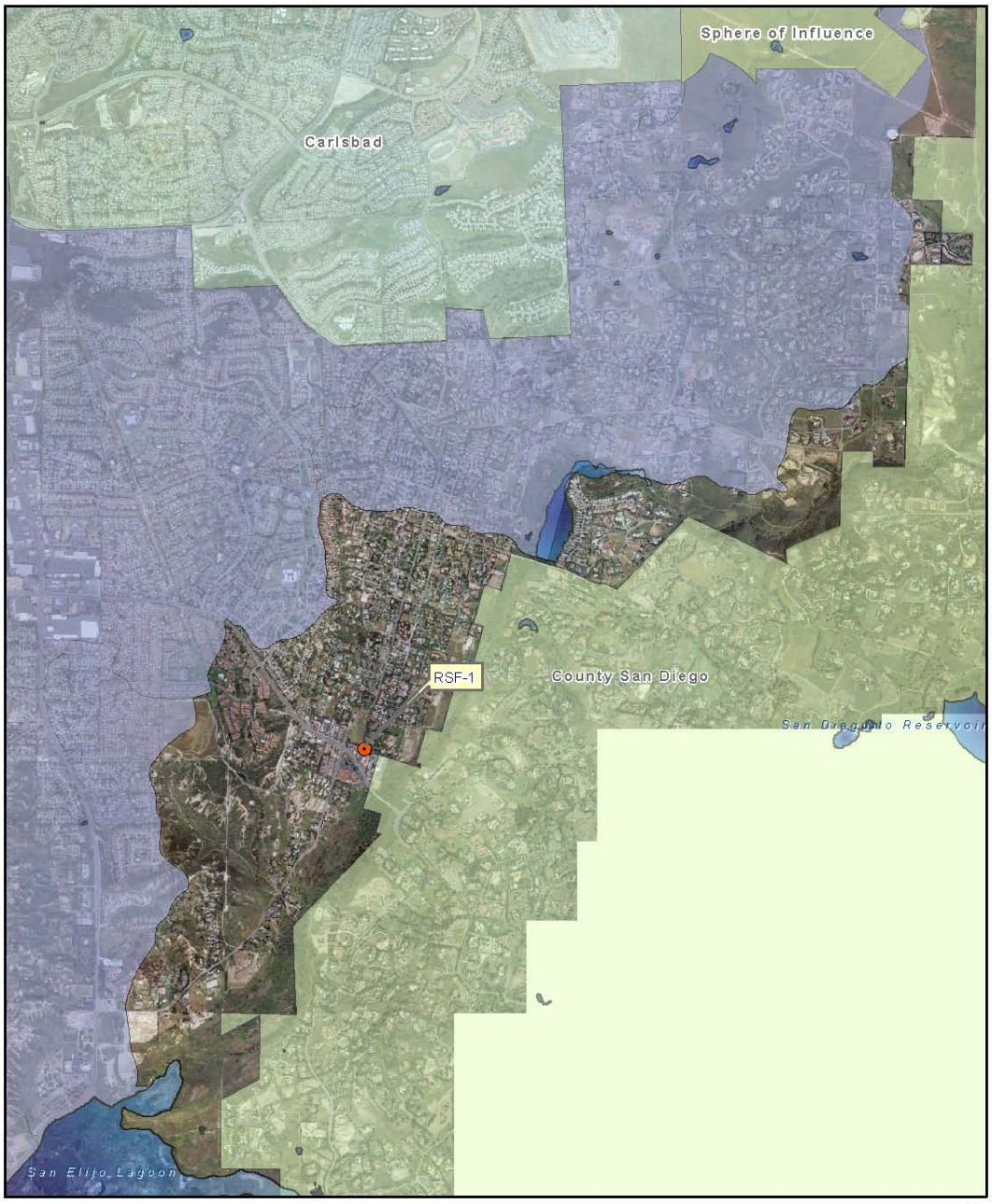
Only one of the two sampling sites (RSF-4) in this sub-basin has consistently been field screened during dry weather monitoring from 2007 to 2009. Figure 4.5 illustrates a downward trend in water quality exceedances in the Rancho Santa Fe sub-basin over the past three years based on the analysis from this site.

Figure 4.12 Action Level Exceedance Ratio Trend in the Rancho Santa Fe Sub-basin, 2007-2009



Data collected in the Rancho Santa Fe sub-basin during the 2009 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and in the 2009 Field Screening and Analytical Monitoring Results Table in Appendix C-4. Figure 4.13 illustrates the Rancho Santa Fe Sub-basin. Photographs of all of the monitoring sites are available in Appendix C-3.

Figure 4.13


Sphere of Influence
Carlsbad
RSF-1
County San Diego
San Elijo Lagoon
Rancho Santa Fe Sub-basin
N
Feet
0
1,500
3,000

4.7 Lux Canyon Sub-basin

The dry weather monitoring locations included two primary sites and one alternate site in the Lux Canyon sub-basin (LUX). Land use in this area is primarily residential with a few commercial facilities located in the sub-basin. All run-off in the Lux Canyon sub-basin drains to the San Elijo Lagoon.

Of the three designated locations for routine monitoring in 2009, LUX-2 had ponded water and LUX-1 and LUX-3 were completely dry. There were no analytical lab samples collected in this sub-basin, LUX-2 was only field screened. Table 4.21 summarizes the action level exceedances in the LUX Canyon sub-basin.

Table 4.21 LUX Canyon Sub-basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LUX-2	8/17/09	Ponded	Turbidity	27.9	NTU	5.00

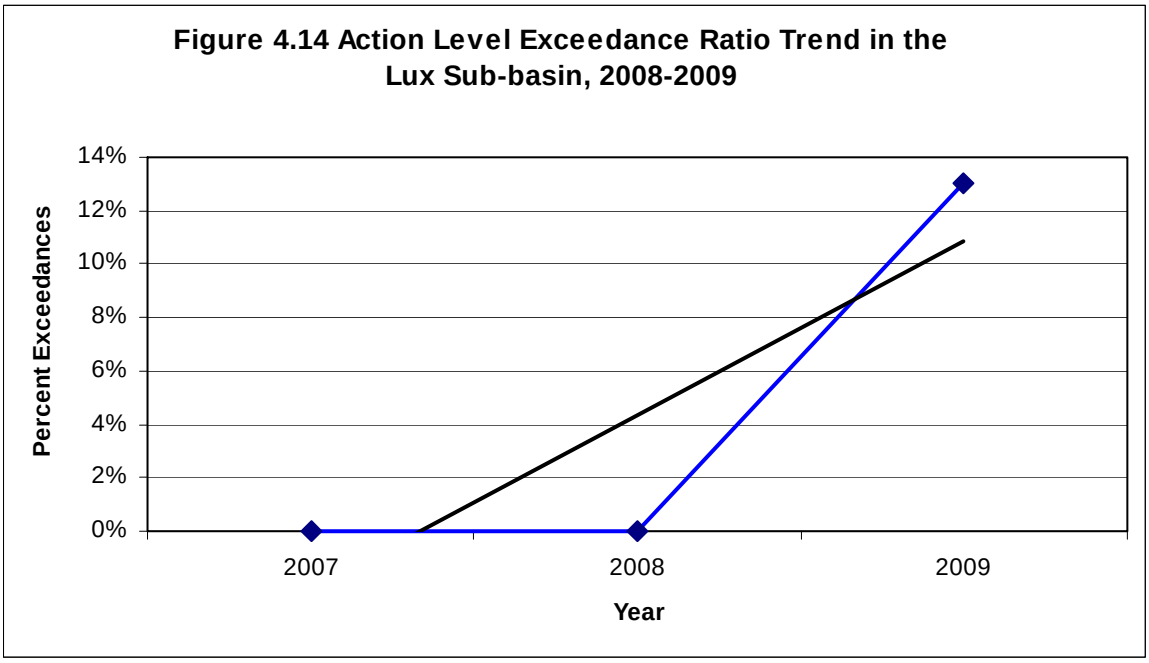
LUX-2

LUX-2 is located in a natural creek in the Lux Canyon sub-basin. Land uses near this site include primarily residential areas. The water sample was taken from shallow ponded water and was field screened only. The water sample contained elevated turbidity. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed. Table 4.22 below summarizes the results of the confirmation sampling for LUX-2.

Table 4.22 LUX-2 Confirmation Sampling Results

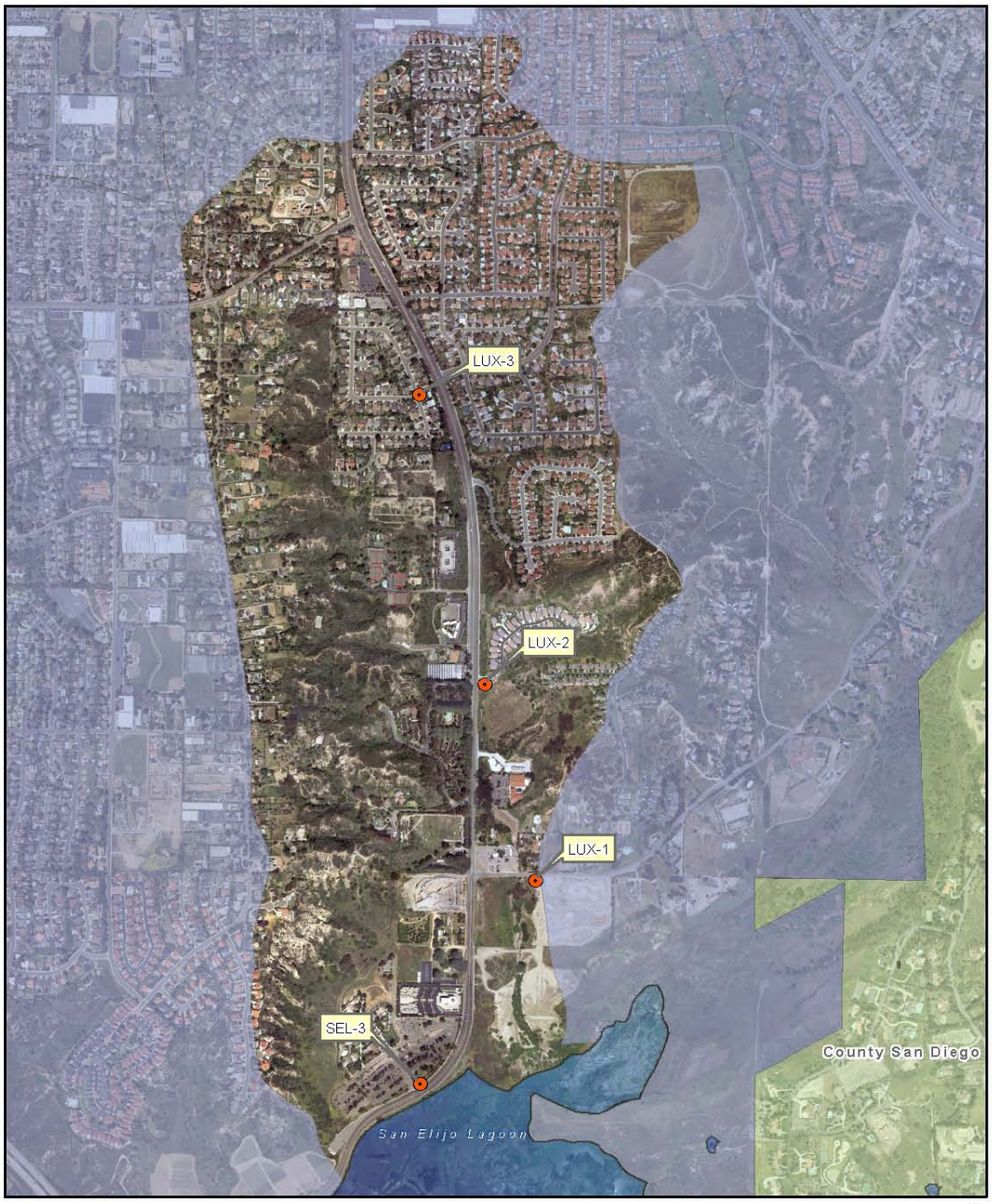
Station ID	Date	Water Flow	Analyte	Result	Unit	Action Level
LUX-2	8/19/09	Ponded	Turbidity	27.4	NTU	5.00

Only one sampling site (LUX-2) in this sub-basin has consistently been field screened during dry weather monitoring from 2007 to 2009. Figure 4.5 has been prepared to illustrate a notable trend in water quality exceedances in the Lux Canyon sub-basin over the past three years of monitoring.



Data collected in the Lux Canyon sub-basin during the 2009 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and in the 2009 Field Screening and Analytical Monitoring Results Table in Appendix C-4. Figure 4.15 illustrates the Lux Canyon sub-basin. Photographs of all of the monitoring sites are available in Appendix C-3.

Figure 4.15



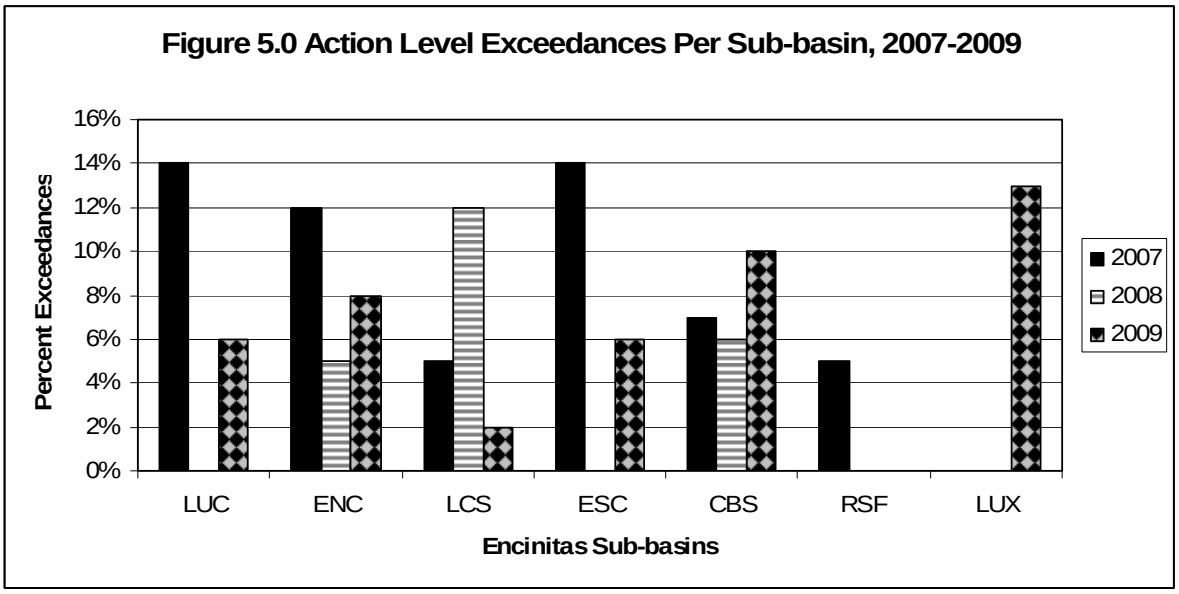
Lux Canyon Sub-basin

5.0 Summary

The City's comprehensive dry weather water quality monitoring conducted in 2009 meets all of the Dry Weather Monitoring requirements as established in the Municipal Storm Water Permit (Order 2007-01) in section II.B.3 of the Receiving Water and Urban Runoff Monitoring and Reporting Program. The data that was collected served to monitor local storm drain facilities and creeks for illicit connections and illicit discharges, allows for characterization of the water quality in the City and subsequent prioritization of sub-basins in the watershed and pollutants of concern in those sub-basins. This section presents a summary of all the dry weather monitoring results.

5.1 Water Quality Exceedances and Trends

The City of Encinitas can be sub-divided into seven distinct drainage sub-basins. Figure 5.0 illustrates the percent of analytes exceeding action levels in each sub-basin according to dry weather monitoring data collected from 2007 through 2009.



Data from Figure 5.0 illustrates that despite some increasing exceedance trends this year over last year; water quality on the whole has been improving since 2007. Steady improvements in water quality are evident in five out of seven sub-basins throughout Encinitas. In 2009, there were increasing exceedance trends in the Cardiff sub-basin (CBS) due to conductivity exceedances and in the Lux Canyon sub-basin (LUX) due to two turbidity exceedances. Notably, this year there were no exceedances in the Rancho Santa Fe Sub-basin (RSF).

Figure 5.1 illustrates the total exceedance rate for all sites sampled during each dry weather monitoring year since the inception of the Dry Weather Monitoring Program in 2002. In 2009, the total exceedance rate was 9%, a slight increase over last year. Overall, the trend of dry weather water quality exceedances city wide has been decreasing since 2002.

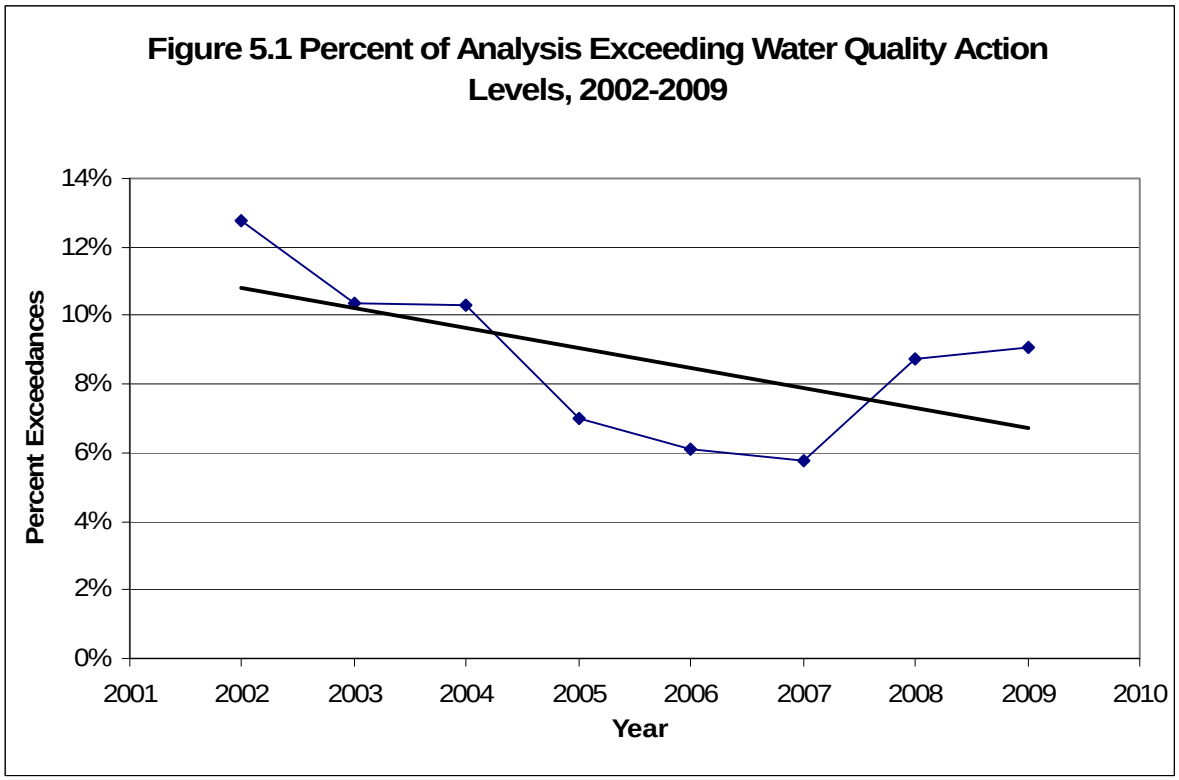
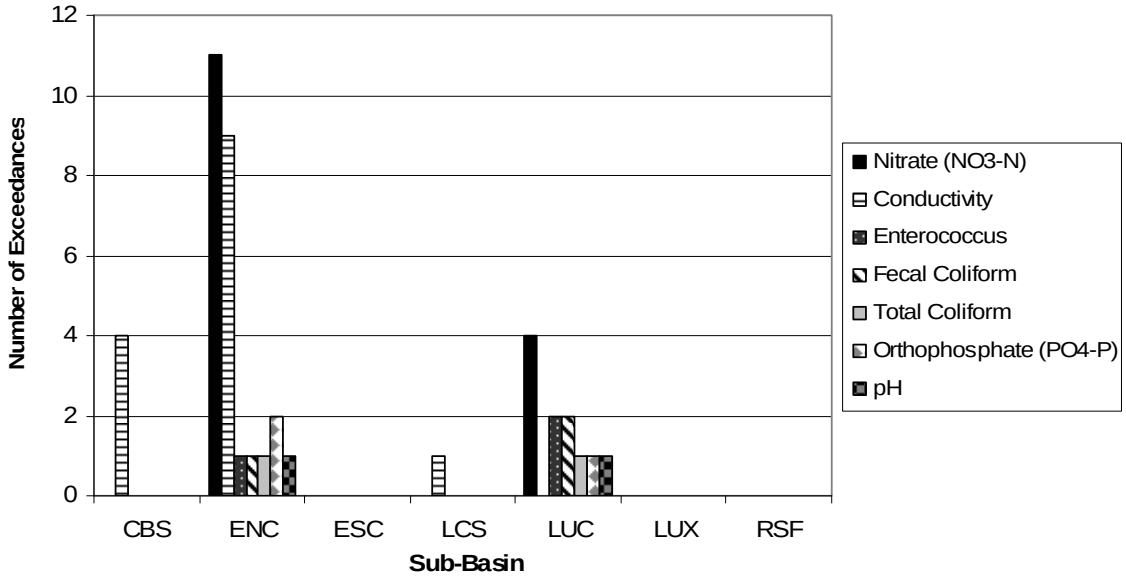


Figure 5.1 Percent of Analysis Exceeding Water Quality Action Levels, 2002-2009
Percent Exceedances
14%
12%
10%
8%
6%
4%
2%
0%
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Year

5.2 Prioritization of Constituents of Concern (COCs)

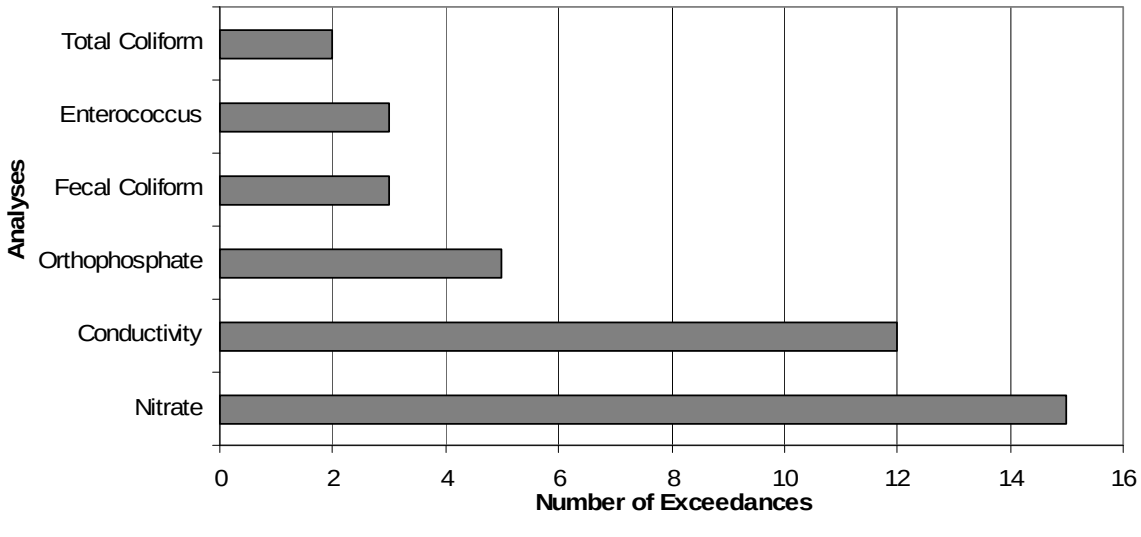
Figure 5.2 illustrates all water quality exceedances for each sub-basin in 2009.

Figure 5.2 Analyte Exceedances per Sub-Basin, 2009



To further prioritize water quality issues in the sub-basins, the COCs were stratified by exceedances per COC in 2009 as illustrated in Figure 5.3.

Figure 5.3 Priority COCs Exceeding Water Quality Action Levels During Dry Weather Monitoring in 2009



The COCs can be divided into three priority categories of low, medium and high. Table 5.0 is a matrix of criteria for selecting COC priorities.

Table 5.0 Constituents of Concern Prioritization Criteria

	Criteria	Priority	Recommended Action*
I	Exceedance Ratio <10% and trends are not increasing	Low	Continue routine monitoring and place COC on watch list.
II	Exceedance Ratio greater than 10%, less than 50%	Medium	Increase Monitoring Frequency in Following Dry Weather Program
III	Persistent Exceedances	Medium	Increase Monitoring Frequency in Following Dry Weather Program
IV	Impacting Receiving Waters, 303d listed	High	Special Study, ICID Investigations, BMP implementation
V	Exceedance Ratio >50%	High	Special Study/Investigations
VI	II and III	High	Special Study/Investigations

*Best professional judgment may indicate otherwise.

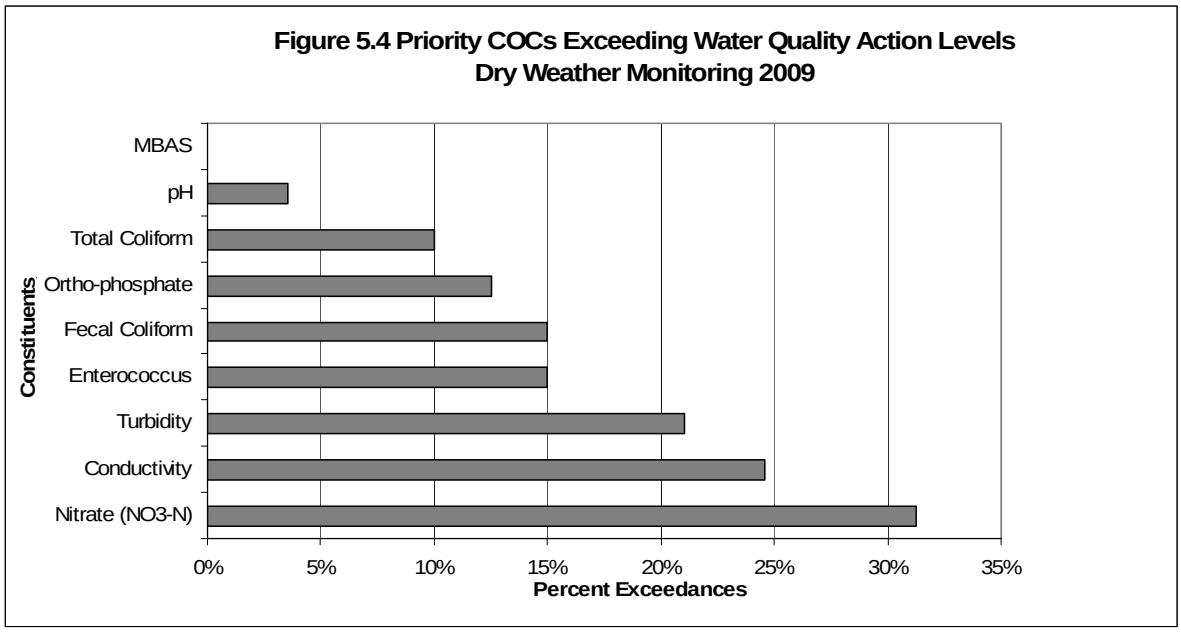
In order to lower the priority for a constituent from one year to the next, the COC must qualify for the next lower category according to the criteria listed above and not show an increasing trend in exceedances. A constituent may only decrease one step per year and may be removed from the list if the constituent was ranked low the previous year and had no exceedances in monitoring for the current year. Figure 5.4 below illustrates the exceedance ratios per COC in the 2009 monitoring period. The exceedance ratio is calculated by the following formula:

$$E=x/y*100$$

where,

E = exceedance ratio
x = total number of exceedances for selected COC
y = total number of analyses for the COC

This method allows for a comparison of the exceedance rates for each indicator. For 2009, exceedance ratios for nitrate were higher than the exceedance ratios of the other constituents. The exceedance ratios for conductivity and ortho-phosphate ranked second and third. The indicator exceedance ratios in Figure 5.4 define the prioritizations assigned to each constituent.



The City of Encinitas COCs were selected and prioritized according to criteria in Table 5.0 and the data presented in Figure 5.4. The high priority COCs are presented below in Table 5.1.

Table 5.1 2009 High Priority Constituents of Concern

COC	Priority	Action Plan
Bacteria •Total Coliform •Fecal Coliform •Enterococcus	High	• Continuing encampment removals • BMP implementation (grease removal equipment, coverage/containment for grease bins) • Maintain the Ultra Violet Treatment Facility • Continue to assess bacteria data by land use and by conveyance type
Nitrate-nitrogen	High	• Number of nitrate exceedances have been trending downward since 2002, however, San Elijo Lagoon is on 303(d) list of impaired water bodies for nutrients • Focus on education targeting irrigation runoff and inspections of nurseries. • Analyze the Carlsbad Watershed Lagoon TMDL monitoring data to identify activities which will lead to reduced water quality impacts in the San Elijo Lagoon.

The justification for the 2009 COC prioritization and the reasons supporting any changes are listed in Table 5.2 below.

Table 5.2 Annual Prioritization of Constituents of Concern, 2003-2009

Constituent	2003 Priority	2004 Priority	2005 Priority	2006 Priority	2007 Priority	2008 Priority	2009 Priority	Reason for Change
Conductivity	None	Low	Medium	Medium	Medium	Medium	Medium	Conductivity exceedances in 2009 were 25% and the exceedances are persistent from year to year at the same locations. However, criteria in evaluating conductivity exceedances are based on best professional judgment and high values of conductivity where groundwater is confirmed are not considered problematic from an IC/ID standpoint. Because this persistence is likely due to a constant source of groundwater flow in many locations, conductivity remains a medium priority.
Ammonia	High	Medium	Low	None	None	Low	Low	It was not possible to obtain exceedance rates for ammonia in 2009 due to the positive interference in the ammonia K-1503 instrumental kit and the erroneous results. All data for this constituent have been flagged and isolated from data assessments conducted in this report. The constituent will maintain a low priority and will be placed on the COC watch list and will be monitored in 2010.
MBAS	Medium	Medium	Low	None	None	Low	None	There were no exceedances for MBAS in 2009. This constituent is being removed from the list of COCs.
pH	None	None	Low	None	Low	Low	Low	In 2009, there were two exceedances for pH. The constituent will continue to be monitored in 2010 and remains on the COC watch list.
Orthophosphate				None	Low	Medium	Medium	Ortho-phosphate exceeded action levels 5 out of 40 analyses and has an exceedance ration of 13% in 2009. The constituent will continue to be routinely monitored and remains on the COC watch list at a medium priority.
Turbidity					Low	None	Medium	Turbidity percent exceedances increased to 21% in 2009. The constituent will continue to be monitored in 2010 and has been placed on the COC watch list.

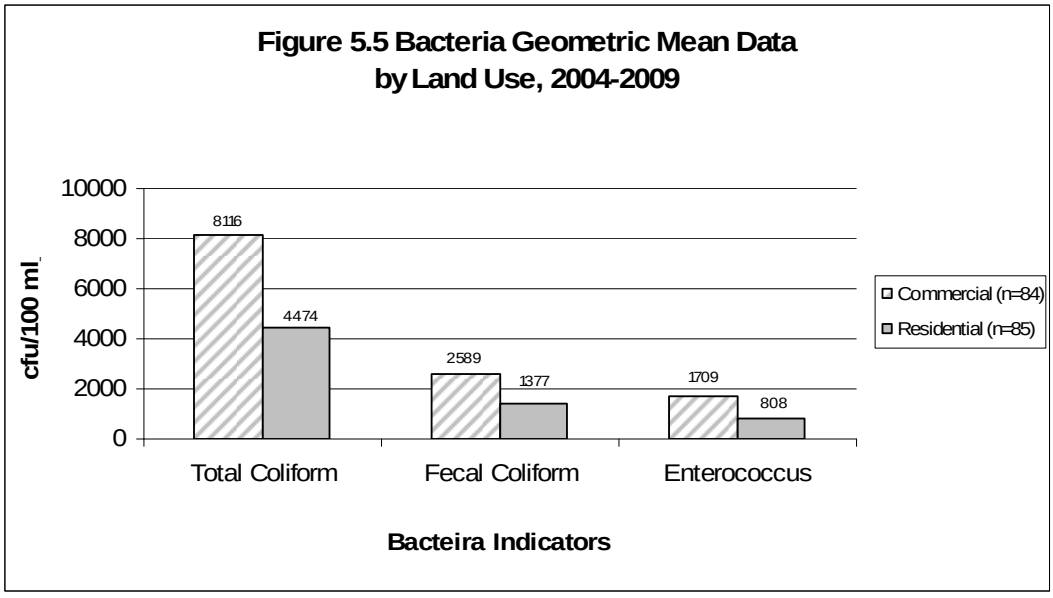
Using the prioritization methodology described above, bacteria and nitrate remain high

priority COCs. Conductivity has increased in priority over the preceding monitoring periods. After factoring in all potential sources, groundwater is the most prevalent; therefore, conductivity remains a medium priority. Ammonia, MBAS and orthophosphates were raised in priority this year, as a result of 14 exceedances. The COCs that were removed from the list of COCs in 2009 include temperature and oil and grease. There were no exceedances for temperature during the past two monitoring years and it has been removed from the list of COCs. Oil and grease was added to the watch list in 2006; however, with no exceedances in the past three years of monitoring, it was lowered in prioritization and removed from the list of COCs this year.

5.3 Bacteria Indicator Exceedances

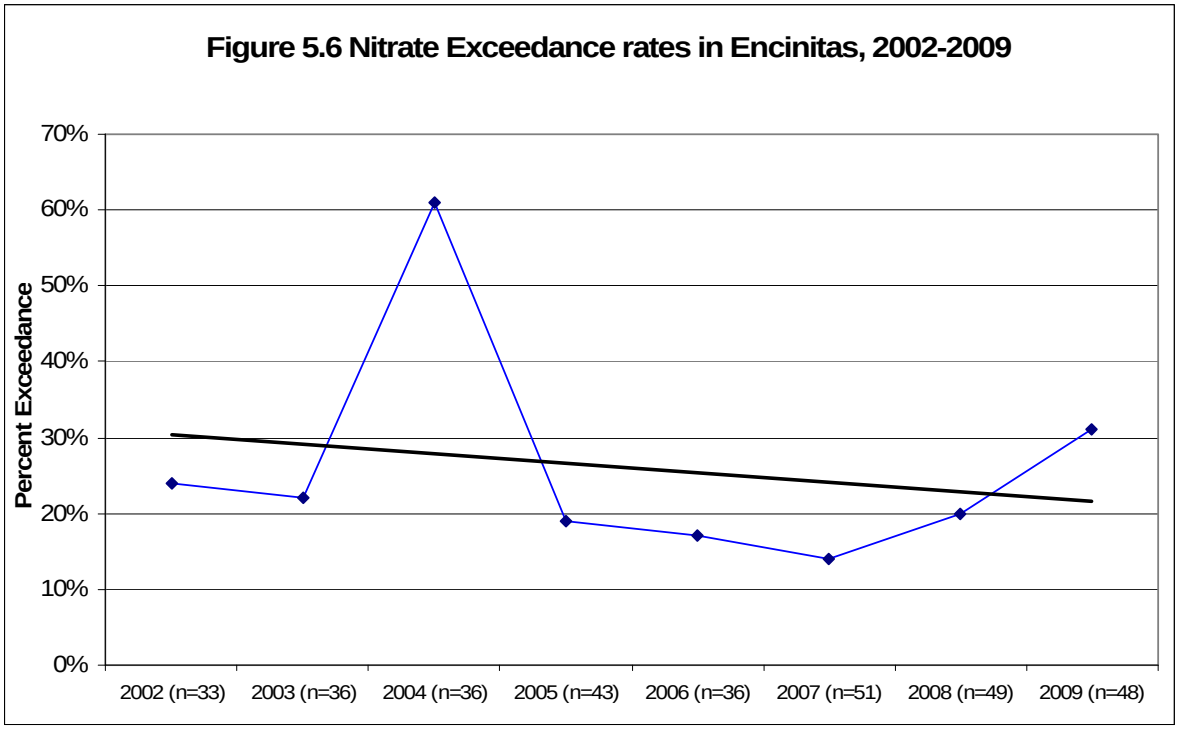
Extensive bacteria data has been collected for the past six dry weather seasons, allowing for a better overall characterization of bacteria sources and loading in the City. Enough data has been collected to attempt to characterize bacteria concentrations based on land use. The additional data collection at 7 sites located throughout the City also allows for long term trend assessments of bacteria concentrations in the City.

The two major land uses in Encinitas are commercial and residential and are often not distinct to a drainage basin but are mixed. The assessment of bacteria loading from these areas is based on primary land use as listed in the data set. Figure 5.5 illustrates the geometric mean concentrations of total coliform, fecal coliform and Enterococcus based on land use. According to the data collected from 2004 to 2009, the commercial areas contribute more bacteria to the MS4 for all three indicators, as calculated based on concentration only. The total coliform concentrations are approximately 45% higher, fecal coliform are approximately 47% higher, and Enterococcus concentrations are approximately 53% higher in commercial areas. The differences between commercial and residential areas are illustrated in Figure 5.5.



5.4 Nitrate Exceedances

The exceedance rates for nitrate increased from 20% in 2008 to 31% in 2009. Overall, the exceedance rates for nitrate have declined from 2004 to 2009 across all sub-basins. Exceedance rates for nitrate for all eight years of dry weather monitoring are illustrated in Figure 5.8.



Over the five years of monitoring, groundwater remains a constant source of dry weather flow within Moonlight Creek and Cottonwood Creek in the Encinitas Sub-basin. There are six monitoring locations in the City's dry weather monitoring program that are located within this geographical area. Since 2002, five primary monitoring sites, ENC-1, ENC-3, ENC-6, ENC-8 and ENC-11 have consistently exceeded for nitrates and are often accompanied by elevated conductivity. Over the monitoring periods, other nitrate exceedances have been present on occasion, most notably in 2004. Reasons for the increase in nitrate exceedances in 2004 are unknown. The spike in exceedances that year may have been due to residential and nursery runoff affecting nutrient concentrations. Often concentrations of pollutants such as elevated concentrations of ammonia, orthophosphate and nitrate with low conductivity and higher bacteria levels are consistent at locations with irrigation runoff from nurseries.

Most of the nitrate exceedances in the Encinitas sub-basin are consistent with elevated nitrate results from previous years of monitoring and have been reasoned to be a result of groundwater in the region. The San Diego region has elevated concentrations of nitrates in the groundwater as documented in the 1997 Groundwater Report by the San Diego County Water Authority and most recently in the 2007 Groundwater Assessment Study by the

Metropolitan Water District of Southern California. It is common to find elevated nitrates in groundwater in regions of agriculture and it is likely that the sources of nitrogen in the groundwater in Encinitas are from historical agricultural land uses. It should be noted, however, that local water authorities do not consider Encinitas groundwater a viable source of drinking water because it is subject to sea water intrusion. As a result, there is little groundwater quality data specific to Encinitas. Since the inception of the dry weather monitoring program, all of the dry weather monitoring sites throughout the city have been analyzed for nitrates. Table 5.3 summarizes all the sites in Encinitas with consistent exceedances for nitrates and their suspected sources.

Table 5.3 Nitrate Exceedances, 2002-2009

Site	Nitrate Exceedances								Suspected Source
	2002	2003	2004	2005	2006	2007	2008	2009	
CBS-1			X						Groundwater
CBS-2				X					Combination
CBS-3N			X					NS	Irrigation
CBS-3S			X					NS	Irrigation
CBS-8*							X	NS	Groundwater
ENC-1	X	X	X	X	X			X	Groundwater
ENC-3	X	X	X	X	X		X	X	Groundwater
ENC-4			X						Irrigation
ENC-5	X	X	X			X		X	Groundwater
ENC-6	X	X	X	X	X	X	X	X	Groundwater
ENC-8	X	X	X	X	X		X	X	Groundwater
ENC-9			X		NS				Irrigation
ENC-10	X		X						Irrigation
ENC-11	X	X	X	X	X	X		X	Groundwater
ENC-12		X			NS				Irrigation
ENC-14			X		NS				Irrigation
ENC-15		X	X						Irrigation
ENC-17		X	X					NS	Irrigation
ENC-18								X	Irrigation
ESC-1			X						Groundwater
ESC-2			X						Irrigation
LCS-1			X			X			Irrigation
LCS-2			X						Irrigation
LCS-5						X			Irrigation
LUC-1	NS	NS	X	X	X	X	X	X	Groundwater
LUC-7			X	NS	NS				Groundwater
LUC-9*							X	NS	Groundwater
LUC-10							X	X	Groundwater
LUX-2			X		NS			NS	Irrigation
SEL-2						X			Combination
SEL-5	NS	NS	NS	X	NS				Irrigation

NS=No sample, Combination = Groundwater and Irrigation, *New site Added in 2008

The sites with nitrate exceedances attributable to groundwater are typically not causing water quality problems in the receiving waters. These locations do not contribute excessive bacteria, other nutrients, or metals to the waters downstream due to the natural filtration occurring within the sub-surface soils. In 2009, all nitrate exceedances except one location (ENC-18) appeared to be attributable to groundwater. A more detailed discussion of nitrate and conductivity exceedances was included in Appendix J of the City of Encinitas' 2007 Dry Weather Monitoring Assessment.

5.5 Water Quality Trends in Receiving Waters

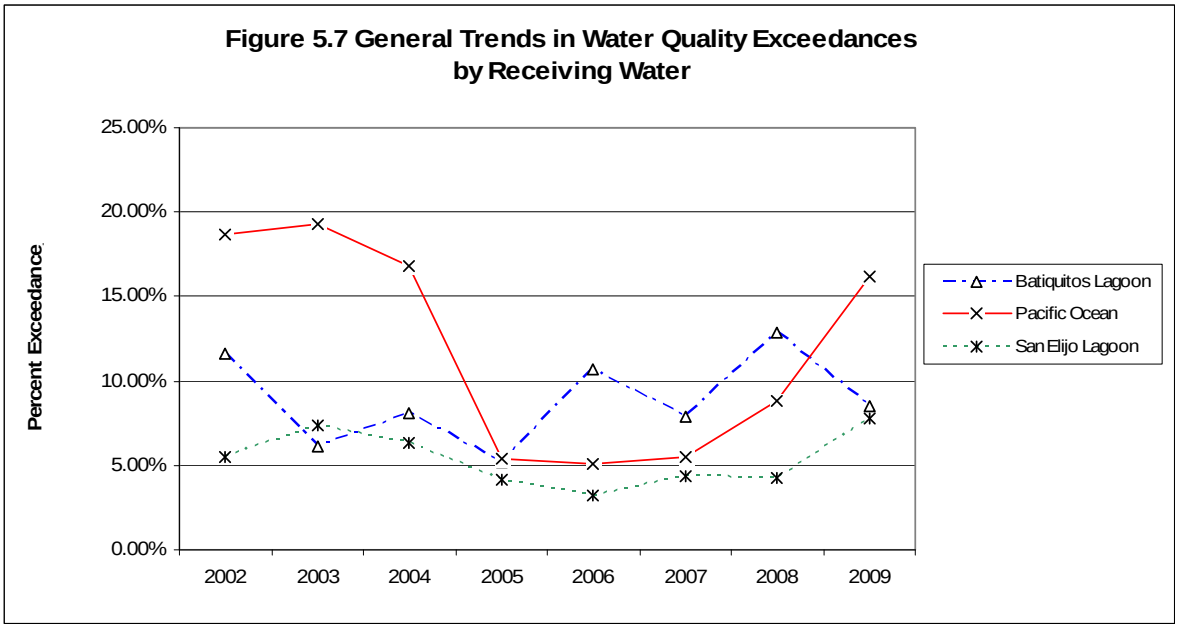
Finally, the sub-basins can be divided by respective receiving waters. Run-off in the City of Encinitas drains either north to Batiquitos Lagoon, south to San Elijo Lagoon, or west to the Pacific Ocean at Moonlight Beach.

Table 5.4 shows the all of the sub-basins in the City of Encinitas and their associated receiving water.

Table 5.4 Receiving Waters and Associated Sub-basins

Batiquitos Lagoon	Pacific Ocean	San Elijo Lagoon
Leucadia	Encinitas	Cardiff
La Costa South		Lux Canyon
		Lower Escondido Creek
		Rancho Santa Fe

In dividing the City of Encinitas into receiving water drainage areas, general conclusions as to the water quality entering these waters can be inferred. In order to compare the water quality across these three drainage areas, a ratio of the number of water quality exceedances to analytes tested is calculated. Figure 5.7 presents the exceedance ratios calculated for the three drainage areas over the past eight years of dry weather monitoring.



According to these ratios, the waters flowing west to the Pacific Ocean exceeded action levels more than flows to the Batiquitos Lagoon or the San Elijo Lagoon. The primary COCs draining to the Pacific Ocean continue to be nitrates, conductivity and bacteria. In 2009, all of the nitrate exceedances in the sub-basin except for one site appeared to be attributable to groundwater. The bacteria are mitigated by an Urban Runoff Treatment Facility which utilizes ultra-violet light to reduce bacteria in the creek discharge. This facility is located near the mouth of Cottonwood Creek and effectively eliminates bacteria from 85% of the creek flow volume.

6.0 Conclusions

Throughout the eight years of dry weather monitoring the City of Encinitas has succeeded in identifying jurisdictionally significant water quality COCs. The sources of these COCs have been identified and eliminated where possible. Ongoing monitoring for the Dry Weather Monitoring Program will allow for continuous trend assessments within each of the sub-basins and the receiving waters in future years. Currently, these trends are captured in the exceedance ratios which are delineated by sub-basin and by land use.

The high priority COCs in Encinitas are nitrates and bacteria indicators (total and fecal coliform and Enterococcus bacteria). High bacteria levels occur most often in commercial land use areas throughout the City of Encinitas. Sources for bacteria have been identified in several instances in years past and have included natural loading from wildlife, bacteria re-growth in the MS4, and various illegal connections to the MS4. Bacteria indicators in the MS4 have been trending downward since 2003 for both residential and commercial areas in Encinitas.

It is not known if the elevated nitrates observed throughout Encinitas are entirely from

anthropogenic sources. The most likely sources of nitrates have been identified as groundwater, nursery irrigation run-off and residential irrigation run-off containing fertilizers. With the exception of a few nitrate exceedances in 2004, most exceedances appear to be groundwater and have been relatively consistent (Refer to Figure 5.6). In 2009, 7 out of 9 nitrate exceedances were determined to be caused by groundwater intrusion. In these locations, the high nitrate concentrations are accompanied by elevated conductivity and no other COC exceedances. Nitrate is a constituent of concern for the groundwater in the San Diego region, and historical agricultural land uses in Encinitas are likely sources of nitrogen in the groundwater. The elevated conductivity may be from various minerals entering the groundwater from the sedimentary soils and in some locations in the lower reaches of the city are due to seawater intrusion. The City's Clean Water Program continues to focus on residential and commercial education targeting irrigation runoff and routine inspections of nurseries to minimize the amount of runoff to the maximum extent practicable.

Using the COC prioritization method described in Table 5.0, City staff has evaluated and ranked water quality concerns in the City, which will allow appropriate attention in the upcoming year. The City of Encinitas Clean Water Program shall continue to focus on illicit discharges and connections as a means to improve water quality, as well as broadly focused programmatic areas to protect water quality and ensure ongoing improvements. The dry weather monitoring program assists the City in focusing efforts targeting identifiable pollution problems throughout the City. Efforts, including targeting specific audiences for education, enforcement activity, and Best Management Plan (BMP) implementation, have expanded as a result of the water quality characterization gained from the Dry Weather Monitoring Program.

In 2009, the City of Encinitas initiated two notable activities that will help to better identify, prioritize and manage COCs specific to our area. First, the City collaborated with the Carlsbad Watershed Copermittees to assess all monitoring data across the Carlsbad Hydrologic Unit in order to improve the development of appropriate watershed-based stormwater BMPs. Secondly, in FY 2008-09, monitoring was conducted in the San Elijo Lagoon as part of the Carlsbad Watershed Lagoons TMDL Investigative Order (IO). With lagoon monitoring results recently becoming available for more focused analysis, and as the regulatory process evolves and TMDL priorities are identified in the region, it is anticipated that hydrologic area (watershed), hydrologic sub-area (sub-watershed), and local (sub-basins) water quality priorities will become clearer. With water quality priorities translated across watershed areas, more effective and efficient activities will evolve to better address these issues.

In 2009, the following recommendations for future dry weather monitoring include:

1. Assess the San Elijo Lagoon TMDL monitoring data collected in FY 2007-08 to support adaptive management of the City of Encinitas' Dry Weather Monitoring Program.

2. Continued assessment of all monitoring data within the watershed to compare constituents of concern across the Carlsbad Hydrologic Unit and develop appropriate BMPs and watershed activities as a group.

The Dry Weather Monitoring Program provides the City with a valuable snapshot of water quality in various drainage areas and receiving waters, and a directional mechanism to the establishment of Clean Water Program priorities. In order to maximize the full potential of these data, as various monitoring efforts, regulatory processes, and watershed priorities have evolved over the past year, it has become clearer that a collective assessment of available data sets would provide a more meaningful picture. A more complete data evaluation would enlighten the interrelationship between sources, transport mechanisms, practices to best address them, and local and watershed programmatic activities.

7.0 Trash Assessment

7.1 Regulatory Requirements

Section II.B.3.c.(7) of the Municipal Permit's Receiving Waters and Urban Runoff Monitoring and Reporting Program requires Copermittees to assess the presence of trash in receiving waters and urban runoff at each dry weather field screening site. This trash assessment program is designed to provide information on the spatial extent and relative amount of trash present, as well at the nature and origin of the trash at the site.

7.2 Procedure and Definitions

The San Diego County Copermittee Dry Weather Monitoring Workgroup developed a two-page Trash Assessment Form (Appendix C-4) to document the amount and extent of trash and the threat to human and aquatic health. The first page is completed at every site. The second page, which includes information about the types, prevalence, potential routes, and sources of trash, is also completed at sites where a larger amount of trash is observed.

A qualitative estimate of the abundance of trash is made based upon a general impression of the site. The Trash Assessment Form includes five categories to describe the amount and extent of trash. The definitions are primarily qualitative, although numbers of trash pieces are also included in each category as a rough guideline. The five categories are listed below.

- *Optimal:* On first glance, no trash is visible. Little or no trash (<10 pieces) is evident when the evaluated area is closely examined for litter and debris.
- *Suboptimal:* On first glance, little or no trash is visible. After close inspection, small levels of trash (~10-50 pieces) are evident in the evaluated area.
- *Marginal:* Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing are present.
- *Submarginal:* Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing are present.
- *Poor:* Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human health and threat to aquatic health is assessed at each site using the following definitions:

- *Threat to Human Health* - Presence of more than one of, or a combination of, the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle

batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard), or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.

- *Threat to Aquatic Health* – Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of, the following items: toxic items such as vehicle batteries or spray cans; any evidence of large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

In the event that a site is noted as potentially posing a threat to human or aquatic health, additional descriptive comments are recorded in the "Comments" section of the Trash Assessment Forms.

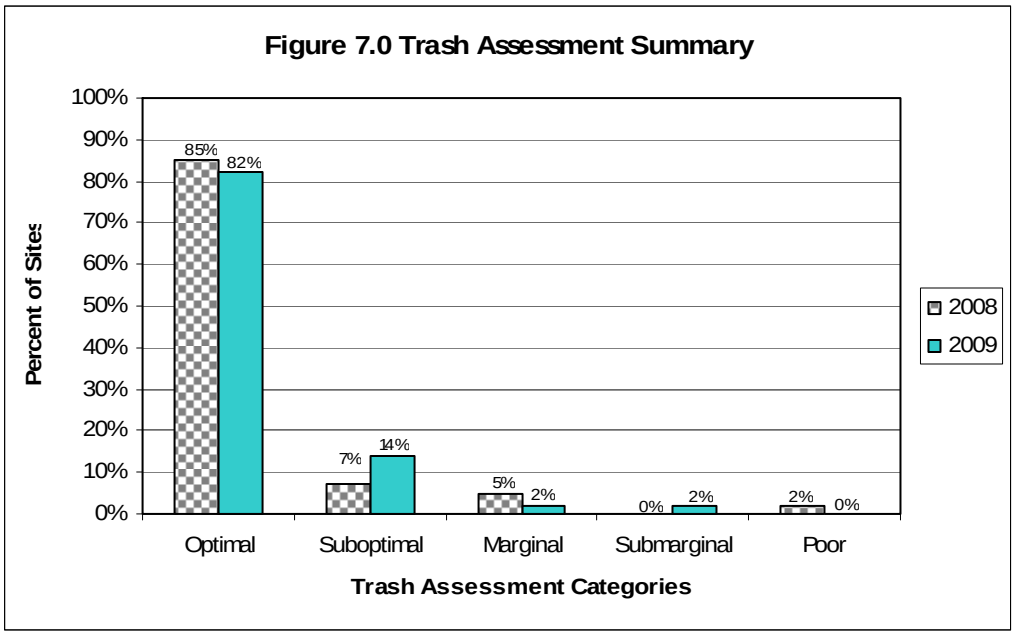
If a site is labeled as submarginal or poor, it is then assessed for types of trash present (e.g., automotive, biohazard, food waste), which are ranked based on the prevalence and potential threat to water quality of the items. Lastly, the potential mechanism through which trash reached the site (e.g., dumping, littering, upstream sources) and the potential source of the trash (e.g., construction, commercial, transient) are also identified on the Trash Assessment Form

7.3 Trash Assessment Results

Trash assessments were conducted at 39 primary dry weather monitoring sites and 11 alternate dry weather monitoring sites throughout the monitoring period (May 1, 2009 – September 30, 2009). In FY 2008-09, there were no sites identified as poor or a threat to aquatic health. However, there was one site (LCS-1) identified as a threat to human health (Refer to discussion in Section 7.3.1 below). Table 7.0 summarizes all of the trash assessment results for this fiscal year and Figure 7.0 compares the trash assessments with the previous year. Figure 7.1 provides a map of all the sampling sites in the City of Encinitas and their corresponding trash assessment.

TABLE 7.0 TRASH ASSESSMENT RESULTS

Optimal (41 sites)	**Suboptimal** (7 sites)	**Marginal** (1 site)	**Submarginal** (1 site)	**Poor** (0 sites)
CBS-1 CBS-3S CBS-4 CBS-5 CBS-7 CBS-8 CBS-9 ENC-1 ENC-3 ENC-4 ENC-5 ENC-8 ENC-9 ENC-11 ENC-12 ENC-15 ENC-17 ENC-18 ESC-1 ESC-2 ESC-3 ESC-4 ESC-5 LCS-1 LCS-3 LCS-4 LCS-5 LCS-8 LCS-9 LUC-1 LUC-3 LUC-4 LUC-6 LUC-7 LUC-8 LUC-10 LUX-1 LUX-2 LUX-3 SEL-2 SEL-3	CBS-2 ENC-6 ENC-14 LCS-2 LCS-7 RSF-1 RSF-4	CBS-3N	ENC-10	None



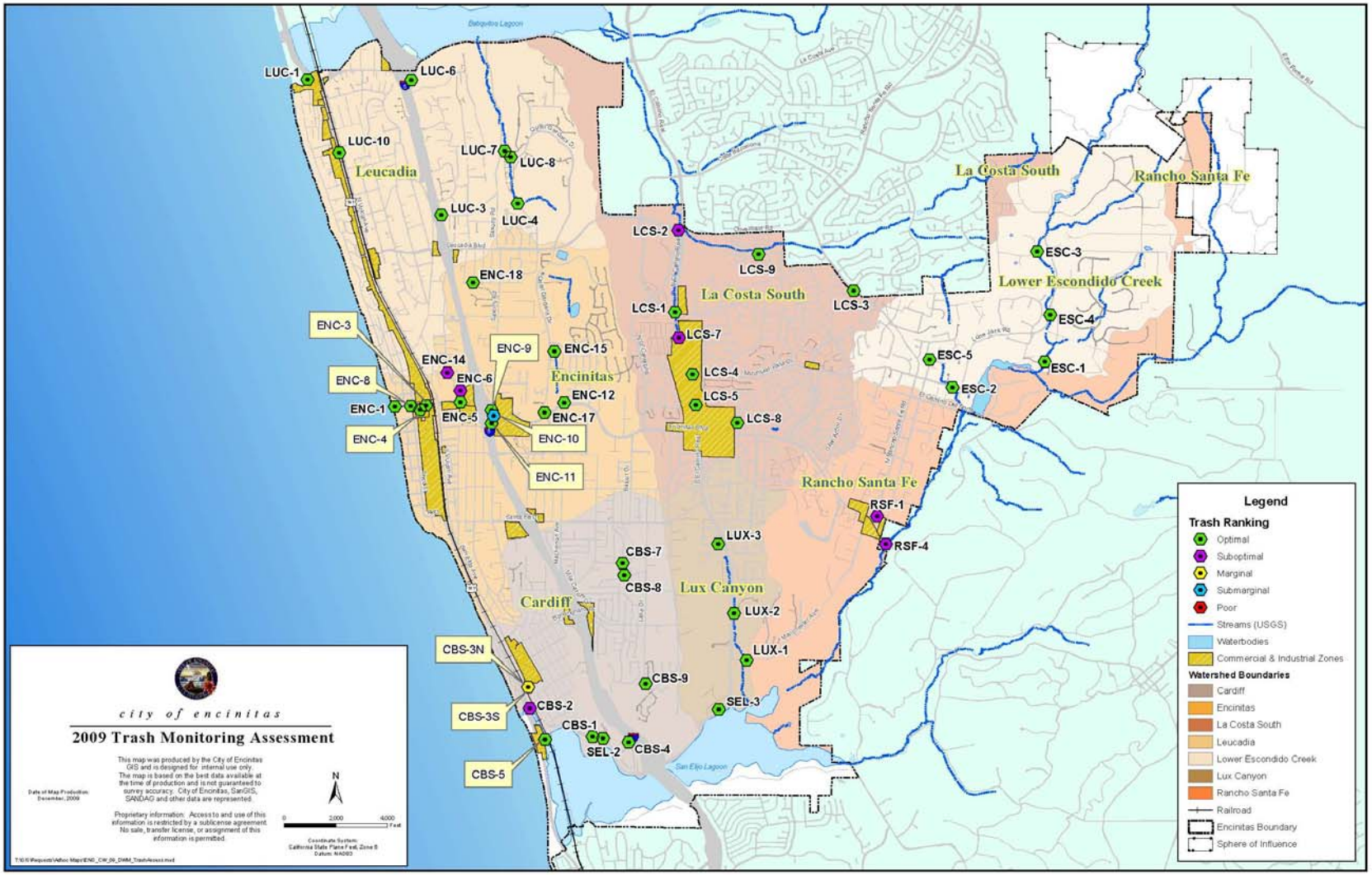
7.3.1 Threat to Human or Aquatic Health

In FY 2008-09 there was one site (LCS-2) identified as a threat to human health. LCS-1 is located in an open channel that drains northward into Encinitas Creek. Water flow at LCS-1 was significantly constrained due to excessive vegetation and organic matter decay at this site. As a result, this site was designated as a mosquito breeding site by the County of San Diego's Vector Control Program and recognized as a threat to human health for the purposes of this assessment.

7.3.2 Trash Assessment - Poor Sites

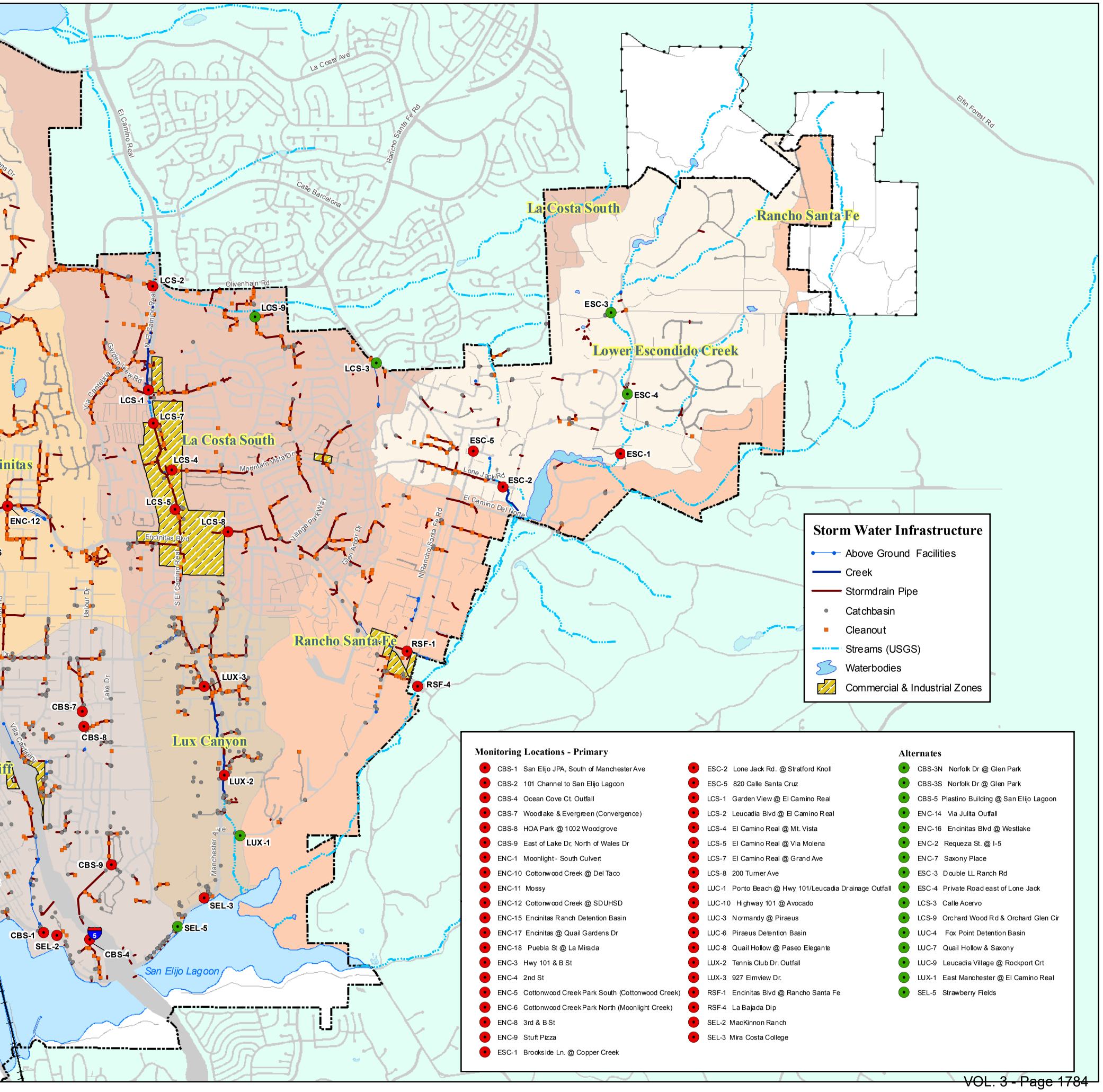
In FY 2008-09, there were no sites identified as poor.

Figure 7.1


LUC-1
LUC-6
LUC-10
LUC-7
LUC-8
LUC-3
LUC-4
Leucadia
ENC-18
ENC-3
ENC-8
ENC-1
ENC-4
ENC-14
ENC-6
ENC-5
ENC-9
ENC-15
ENC-12
ENC-17
ENC-10
ENC-11
Encinitas
LCS-2
LCS-9
LCS-1
LCS-7
LCS-4
LCS-5
LCS-8
La Costa South
LCS-3
La Costa South
Rancho Santa Fe
ESC-3
Lower Escondido Creek
ESC-4
ESC-5
ESC-1
ESC-2
Rancho Santa Fe
RSF-1
RSF-4
LUX-3
CBS-7
CBS-8
Lux Canyon
LUX-2
LUX-1
Cardiff
CBS-3N
CBS-9
CBS-2
CBS-3S
CBS-1
SEL-3
SEL-2
CBS-4
CBS-5
San Elijo Lagoon
city of encinitas
2009 Trash Monitoring Assessment
Legend
Trash Ranking
Optimal
Suboptimal
Marginal
Submarginal
Poor
Streams (USGS)
Waterbodies
Commercial & Industrial Zones
Watershed Boundaries
Cardiff
Encinitas
La Costa South
Leucadia
Lower Escondido Creek
Lux Canyon
Rancho Santa Fe
Railroad
Encinitas Boundary
Sphere of Influence

Appendix C-1

2009 MS4 and Dry Weather Monitoring Stations Map


La Costa South
Rancho Santa Fe
Lower Escondido Creek
La Costa South
Rancho Santa Fe
Lux Canyon
San Elijo Lagoon
La Costa Ave
El Camino Real
Rancho Santa Fe Rd
Calle Barcelona
Elfin Forest Rd
Olivenhain Rd
Garden View Rd
Via Cantera
Mountain Vista Dr
Lone Jack Rd
El Camino Del Norte
Village Park Way
Glen Arbor Dr
N Rancho Santa Fe Rd
Encinitas Blvd
S El Camino Real
Lake Dr
Manchester Ave
LCS-2
LCS-9
LCS-3
LCS-1
LCS-7
LCS-4
LCS-5
LCS-8
ENC-12
ESC-3
ESC-4
ESC-5
ESC-1
ESC-2
RSF-1
RSF-4
LUX-3
LUX-2
LUX-1
CBS-7
CBS-8
CBS-9
CBS-1
SEL-2
CBS-4
SEL-3
SEL-5
Storm Water Infrastructure
Above Ground Facilities
Creek
Stormdrain Pipe
Catchbasin
Cleanout
Streams (USGS)
Waterbodies
Commercial & Industrial Zones
Monitoring Locations - Primary
CBS-1 San Elijo JPA, South of Manchester Ave
CBS-2 101 Channel to San Elijo Lagoon
CBS-4 Ocean Cove Ct. Outfall
CBS-7 Woodlake & Evergreen (Convergence)
CBS-8 HOA Park @ 1002 Woodgrove
CBS-9 East of Lake Dr, North of Wales Dr
ENC-1 Moonlight - South Culvert
ENC-10 Cottonwood Creek @ Del Taco
ENC-11 Mossy
ENC-12 Cottonwood Creek @ SDUHSD
ENC-15 Encinitas Ranch Detention Basin
ENC-17 Encinitas @ Quail Gardens Dr
ENC-18 Puebla St @ La Mirada
ENC-3 Hwy 101 & B St
ENC-4 2nd St
ENC-5 Cottonwood Creek Park South (Cottonwood Creek)
ENC-6 Cottonwood Creek Park North (Moonlight Creek)
ENC-8 3rd & B St
ENC-9 Stuft Pizza
ESC-1 Brookside Ln. @ Copper Creek
ESC-2 Lone Jack Rd. @ Stratford Knoll
ESC-5 820 Calle Santa Cruz
LCS-1 Garden View @ El Camino Real
LCS-2 Leucadia Blvd @ El Camino Real
LCS-4 El Camino Real @ Mt. Vista
LCS-5 El Camino Real @ Via Molena
LCS-7 El Camino Real @ Grand Ave
LCS-8 200 Turner Ave
LUC-1 Ponto Beach @ Hwy 101/Leucadia Drainage Outfall
LUC-10 Highway 101 @ Avocado
LUC-3 Normandy @ Piraeus
LUC-6 Piraeus Detention Basin
LUC-8 Quail Hollow @ Paseo Elegante
LUX-2 Tennis Club Dr. Outfall
LUX-3 927 Elmview Dr.
RSF-1 Encinitas Blvd @ Rancho Santa Fe
RSF-4 La Bajada Dip
SEL-2 MacKinnon Ranch
SEL-3 Mira Costa College
Alternates
CBS-3N Norfolk Dr @ Glen Park
CBS-3S Norfolk Dr @ Glen Park
CBS-5 Plastino Building @ San Elijo Lagoon
ENC-14 Via Julita Outfall
ENC-16 Encinitas Blvd @ Westlake
ENC-2 Requeza St. @ I-5
ENC-7 Saxony Place
ESC-3 Double LL Ranch Rd
ESC-4 Private Road east of Lone Jack
LCS-3 Calle Acervo
LCS-9 Orchard Wood Rd & Orchard Glen Cir
LUC-4 Fox Point Detention Basin
LUC-7 Quail Hollow & Saxony
LUC-9 Leucadia Village @ Rockport Crt
LUX-1 East Manchester @ El Camino Real
SEL-5 Strawberry Fields

Appendix C-2

2009 Dry Weather Monitoring Field Datasheets

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-1	**Latitude**	(e.g., 33.41174) 33.013611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	SEJPA Outfall	**Longitude**	(e.g., -117.35213) -117.27305555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/3/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:38 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☑ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.11	NH_3-N (mg/L)	3.09	NO_3-N (mg/L)	6.02	Ortho-PO_4 (mg/L)	0.61
pH (pH units)	8.18	TURB (NTU)	3.2	COND (mS/cm)	4.42	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	2	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑**Confirmation For** NH3-N ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-1	**Latitude**	(e.g., 33.41174) 33.013611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	SEJPA Outfall	**Longitude**	(e.g., -117.35213) -117.27305555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/5/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	15:34	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☑Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.85	NH_3-N (mg/L)	3.34	NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)	8.31	TURB (NTU)	2.5	COND (mS/cm)	1.91	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	2	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** NH_3 - N ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-2	**Latitude**	(e.g., 33.41174) 33.01666	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Highway 101 Channel @ San Elijo Lagoon	**Longitude**	(e.g., -117.35213) -117.28138		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/9/09	**TB Page**			**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	16:40	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☑ Algae ☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)		NH_3-N (mg/L)	1.03	NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	
						Dissolved Oxygen (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	1	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-2	**Latitude**	(e.g., 33.41174) 33.01666	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Highway 101 Channel @ San Elijo Lagoon	**Longitude**	(e.g., -117.35213) -117.28138		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/8/09	**TB Page**			**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	12:45 pm	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☑ Algae ☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	32.49	NH_3-N (mg/L)	1.25	NO_3-N (mg/L)	0.88	Ortho-PO_4 (mg/L)	0.10
pH (pH units)	8.81	TURB (NTU)	4.9	COND (mS/cm)	6.93	MBAS (mg/L)	0.75
						Dissolved Oxygen (mg/L)	7.6

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	1	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-3N	**Latitude**	(e.g., 33.41174) 33.01861111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Glen Park (North Pipe)	**Longitude**	(e.g., -117.35213) -117.28111		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/14/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:42	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☐ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-3S	**Latitude**	(e.g., 33.41174) 33.01861111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Glen Park (South Pipe)	**Longitude**	(e.g., -117.35213) -117.28111		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/14/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:43	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-4	**Latitude**	(e.g., 33.41174) 33.009722222222	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Cardiff Cove	**Longitude**	(e.g., -117.35213) -117.26722222222		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/14/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:24 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☑ Algae ☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.5	NH_3-N (mg/L)	0.18	NO_3-N (mg/L)	4.54	Ortho-PO_4 (mg/L)	0.06
pH (pH units)	8.08	TURB (NTU)	0.5	COND (mS/cm)	7.65	MBAS (mg/L)	0.6

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Ammonia Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	1.5	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Sampled with new NH3-N 1403 kit. Old NH3-N 1503 Kit = 2.78

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-5	**Latitude**	(e.g., 33.41174) 33.01444444	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Plastino Building	**Longitude**	(e.g., -117.35213) -117.27972		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/29/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:01 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☐ N/A ☐ Low ☐ Incoming ☐ High ☑ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☐ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Alternate location for CBS-9. Site was dry- no flow to sample.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-7	**Latitude**	(e.g., 33.41174) 33.031111111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Woodlake and Evergreen	**Longitude**	(e.g., -117.35213) -117.2825		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/14/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:15	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Not enough H2O flow to pump sample. Alternate location at CBS-3N

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-8	**Latitude**	(e.g., 33.41174) 33.03062	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	HOA Park at 1002 Woodgrove	**Longitude**	(e.g., -117.35213) -117.26909		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/14/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:20	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal _____

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Not enough flow to pump sample- dry. Sample alternate location at CBS-3S.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	CBS-9	**Latitude**	(e.g., 33.41174) 33.08005	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Lake Dr. and Wales	**Longitude**	(e.g., -117.35213) -117.29813		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/14/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:00	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☑ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 0.0** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Dry, choose alternate. CBS-5 dry. LCS-3.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-1	**Latitude**	(e.g., 33.41174) 33.04805	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Moonlight Beach	**Longitude**	(e.g., -117.35213) -117.29861		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/20/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:02	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 2.2** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☑ Other Organic matter
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	27.00	NH_3-N (mg/L)	1.72	NO_3-N (mg/L)	> 11.3	Ortho-PO_4 (mg/L)	0.37
pH (pH units)	7.65	TURB (NTU)	2.0	COND (mS/cm)	4.88	MBAS (mg/L)	0.5
						Dissolved Oxygen (mg/L)	7.31

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	30	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** NH_3-N and NO_3-N ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-1	**Latitude**	(e.g., 33.41174) 33.04805	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Moonlight Beach	**Longitude**	(e.g., -117.35213) -117.29861		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/2109	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:35 am	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 2.2** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other		
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other		
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other		
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other		
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☑ Other	Organic matter	
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other		
Biology	☐ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.48	NH_3-N (mg/L)	1.6	NO_3-N (mg/L)	> 11.3	Ortho-PO_4 (mg/L)	
pH (pH units)	7.65	TURB (NTU)	2.1	COND (mS/cm)	4.97	MBAS (mg/L)	
						Dissolved Oxygen (mg/L)	7.72

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	30	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** NH3-N, PO4 ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-10	**Latitude**	(e.g., 33.41174) 33.047777777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Cottonwood Creek @ Del Taco	**Longitude**	(e.g., -117.35213) -117.28583333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/31/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:12 a.m.	**Observer**	MP/SN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.99	NH_3-N (mg/L)	0.25	NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	0.63
pH (pH units)	7.06	TURB (NTU)	12.9	COND (mS/cm)	2.93	MBAS (mg/L)	0.50

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	7.5	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-10	**Latitude**	(e.g., 33.41174) 33.047777777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Cottonwood Creek @ Del Taco	**Longitude**	(e.g., -117.35213) -117.28583333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/28/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:17 a.m.	**Observer**	MP/MM		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☑ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☑ Yes ☐ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.77	NH_3-N (mg/L)	>7.0	NO_3-N (mg/L)	9.26	Ortho-PO_4 (mg/L)	>8.0
pH (pH units)	7.55	TURB (NTU)	22.1	COND (mS/cm)	2.17	MBAS (mg/L)	0.50

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	7.5	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Sheriff escort. Active encampment found at this location. Homeless resident asked to clean up encampment and given a citation by sheriff dept.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** NH3-N, NO3-N ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-11	**Latitude**	(e.g., 33.41174) 33.047222222222	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Requeza Channel – West of Public Works Yard	**Longitude**	(e.g., -117.35213) -117.28583333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/10/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	UNK	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.6	NH_3-N (mg/L)	1.4	NO_3-N (mg/L)	9.79	Ortho-PO_4 (mg/L)	
pH (pH units)	7.79	TURB (NTU)	5.0	COND (mS/cm)	6.55	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	7.5	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **1:5 dilution on ammonia 0.28x5=1.4**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-11	**Latitude**	(e.g., 33.41174) 33.047222222222	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Requeza Channel – West of Public Works Yard	**Longitude**	(e.g., -117.35213) -117.28583333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/5/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:09 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.73	NH_3-N (mg/L)	1.59	NO_3-N (mg/L)	>11.3	Ortho-PO_4 (mg/L)	0.0
pH (pH units)	7.94	TURB (NTU)	1.8	COND (mS/cm)	7.14	MBAS (mg/L)	0.50

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **QA/QC + Bacteria**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	7.5	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** _Ortho-PO4_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-12	**Latitude**	(e.g., 33.41174) 33.048611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Encinitas Blvd @ SDUHSD	**Longitude**	(e.g., -117.35213) -117.27777777778		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/5/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	15:20	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Small puddle at bottom of storm drain could not be sampled.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-12	**Latitude**	(e.g., 33.41174) 33.048611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Encinitas Blvd @ SDUHSD	**Longitude**	(e.g., -117.35213) -117.27777777778		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/3/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:20	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	28.79	NH_3-N (mg/L)	0.6	NO_3-N (mg/L)	4.51	Ortho-PO_4 (mg/L)	3.73
pH (pH units)	8.35	TURB (NTU)	11.6	COND (mS/cm)	0.452	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Sampled puddle at the bottom of storm drain. Observed sediment at the bottom. Ran 1:5 dilution on NH3-N.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** _Ortho-PO4_____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-14	**Latitude**	(e.g., 33.41174) 33.05194444	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Via Julita	**Longitude**	(e.g., -117.35213) -117.29167		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/19/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:58 a.m.	**Observer**	KR/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Site too dry to collect sample.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-14	**Latitude**	(e.g., 33.41174) 33.05194444	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Via Julita	**Longitude**	(e.g., -117.35213) -117.29167		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/17/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:39 a.m.	**Observer**	CN/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.9	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)	2.43	Ortho-PO_4 (mg/L)	2.14
pH (pH units)	9.13	TURB (NTU)	2.2	COND (mS/cm)	1.74	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Alternate site for Enc-17.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** NH3-N ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-15	**Latitude**	(e.g., 33.41174) 33.055	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Encinitas Ranch Detention Basin	**Longitude**	(e.g., -117.35213) -117.27833333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/21/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:55 a.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☑ Other OM
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.98	NH_3-N (mg/L)	0.7	NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)	8.07	TURB (NTU)	3.4	COND (mS/cm)	4.12	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	8.0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-15	**Latitude**	(e.g., 33.41174) 33.055	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Encinitas Ranch Detention Basin	**Longitude**	(e.g., -117.35213) -117.27833333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/20/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:51 a.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other **O+M**
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.37	NH_3-N (mg/L)	1.15	NO_3-N (mg/L)	6.65	Ortho-PO_4 (mg/L)	1.60
pH (pH units)	8.13	TURB (NTU)	4.2	COND (mS/cm)	3.68	MBAS (mg/L)	0.50

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	8.0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-17	**Latitude**	(e.g., 33.41174) 33.047777777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Sunshine Gardens (NE Corner of Enc. Blvd. and Quail Gardens Dr.)	**Longitude**	(e.g., -117.35213) -117.27833333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/3/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:35	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Alternate site: ENC-14

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** NO3-N, PO4 ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-18	**Latitude**	(e.g., 33.41174) 33.06155	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Puebla St. and La Mirada St.	**Longitude**	(e.g., -117.35213) -117.28860		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/10/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	16:15	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.92	NH_3-N (mg/L)		NO_3-N (mg/L)	0.82	Ortho-PO_4 (mg/L)	1.42
pH (pH units)	8.18	TURB (NTU)	2.1	COND (mS/cm)	1.97	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-18	**Latitude**	(e.g., 33.41174) 33.06155	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Puebla St. and La Mirada St.	**Longitude**	(e.g., -117.35213) -117.28860		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/5/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:07 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.67	NH_3-N (mg/L)	0.10	NO_3-N (mg/L)	>11.3	Ortho-PO_4 (mg/L)	3.53
pH (pH units)	8.11	TURB (NTU)	3.1	COND (mS/cm)	1.78	MBAS (mg/L)	0.5

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Trickle flow, manhole > 20 ft. deep, confined space with unknown flow.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** Nitrate ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☑ **Receiving Water**

Site ID	ENC-3	**Latitude**	(e.g., 33.41174) 33.048333333333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Pacific Coast Highway and B St.	**Longitude**	(e.g., -117.35213) -117.29416666667		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/23/09	**TB Page**	**1147**		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:06 am	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☐ Clear ☑ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No **Nitrate Only**

Water Temp (°C)	22.91	NH_3-N (mg/L)		NO_3-N (mg/L)	> 11.3	Ortho-PO_4 (mg/L)	
pH (pH units)	6.79	TURB (NTU)	55.2	COND (mS/cm)	5.62	MBAS (mg/L)	
						Dissolved Oxygen (mg/L)	4.35

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	125	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☑ **Receiving Water**

Site ID	ENC-3	**Latitude**	(e.g., 33.41174) 33.048333333333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Pacific Coast Highway and B St.	**Longitude**	(e.g., -117.35213) -117.29416666667		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/22/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:58.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☑ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.74	NH_3-N (mg/L)	0.7	NO_3-N (mg/L)	> 11.3	Ortho-PO_4 (mg/L)	0.11
pH (pH units)	6.84	TURB (NTU)	19.3	COND (mS/cm)	5.59	MBAS (mg/L)	.50
						Dissolved Oxygen (mg/L)	2.31

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	125	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: One Coke bottle floating in the water. Area is frequented by homeless people. An active encampment was observed nearby. Sample is yellow in color, ran a 1:5 dilution for Ammonia.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-4	**Latitude**	(e.g., 33.41174) 33.048055555556	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Second St.	**Longitude**	(e.g., -117.35213) -117.295		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/20/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:23	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.67	NH_3-N (mg/L)	0.05	NO_3-N (mg/L)	9.56	Ortho-PO_4 (mg/L)	0.88
pH (pH units)	8.19	TURB (NTU)	0.3	COND (mS/cm)	2.21	MBAS (mg/L)	0.25
						Dissolved Oxygen (mg/L)	8.01

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Cannot determine the flow at this site because it is ponded.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** Ammonia, Nitrate ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☑ **Receiving Water**

Site ID	ENC-5	**Latitude**	(e.g., 33.41174) 33.048611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Cottonwood Creek Park South	**Longitude**	(e.g., -117.35213) -117.29		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/23/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	15:20	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☑ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other- Birds

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.87	NH_3-N (mg/L)	1.23	NO_3-N (mg/L)	8.95	Ortho-PO_4 (mg/L)	
pH (pH units)	7.24	TURB (NTU)	2.7	COND (mS/cm)	5.34	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	10	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☑ **Receiving Water**

Site ID	ENC-5	**Latitude**	(e.g., 33.41174) 33.048611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Cottonwood Creek Park South	**Longitude**	(e.g., -117.35213) -117.29		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/22/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:45	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☑ Insect/ Algae ☐ Insect/ Snail ☑ Other- Birds

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.23	NH_3-N (mg/L)	1.22	NO_3-N (mg/L)	10.09	Ortho-PO_4 (mg/L)	0.08
pH (pH units)	7.18	TURB (NTU)	3.5	COND (mS/cm)	5.11	MBAS (mg/L)	0.60

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	10	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Sandblasting of the red curb.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** NH3-N, NO3-N ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-6	**Latitude**	(e.g., 33.41174) 33.048888888889	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Moonlight Creek	**Longitude**	(e.g., -117.35213) -117.29		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/23/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:28 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☑ Other- crawdads

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.54	NH_3-N (mg/L)	1.84	NO_3-N (mg/L)	>11.3	Ortho-PO_4 (mg/L)	
pH (pH units)	7.31	TURB (NTU)	5.3	COND (mS/cm)	7.49	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	10	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-6	**Latitude**	(e.g., 33.41174) 33.048888888889	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Moonlight Creek	**Longitude**	(e.g., -117.35213) -117.29		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/22/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:03	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☑ Other- crawdads

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	26.31	NH_3-N (mg/L)	2.29	NO_3-N (mg/L)	>11.3	Ortho-PO_4 (mg/L)	0.0
pH (pH units)	7.33	TURB (NTU)	3.7	COND (mS/cm)	7.55	MBAS (mg/L)	0.75

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	10	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** NH3-N, NO3-N ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑**MS4** ☐ **Receiving Water**

Site ID	ENC-8	**Latitude**	(e.g., 33.41174) 33.048333333333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Third St. and B St.	**Longitude**	(e.g., -117.35213) -117.29611111111		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/23/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:52 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☑ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☑ Other- birds

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.10	NH_3-N (mg/L)	4.01	NO_3-N (mg/L)	>11.3	Ortho-PO_4 (mg/L)	
pH (pH units)	7.53	TURB (NTU)	6.4	COND (mS/cm)	4.7	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	50	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑**MS4** ☐ **Receiving Water**

Site ID	ENC-8	**Latitude**	(e.g., 33.41174) 33.048333333333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Third St. and B St.	**Longitude**	(e.g., -117.35213) -117.29611111111		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/22/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:55 a.m.	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☑ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae ☐ Insect/ Snail	☑ Other- amphibian

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	24.62	NH_3-N (mg/L)	4.02	NO_3-N (mg/L)	>11.3	Ortho-PO_4 (mg/L)	0.20
pH (pH units)	7.48	TURB (NTU)	4.5	COND (mS/cm)	4.75	MBAS (mg/L)	0.50

Analytical Lab Samples Collected? ☑ **Yes** ☐**No** **Bacteria Only and QA/QC**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	50	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **QA/QC: NH3-N=1.83 mg/L, NO3-N=23.06, Ortho-PO4=0.05.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ENC-9	**Latitude**	(e.g., 33.41174) 33.048055555556	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Enc. Blvd. @ Saxony Rd	**Longitude**	(e.g., -117.35213) -117.28583333333		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/5/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:33 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.57	NH_3-N (mg/L)	0.45	NO_3-N (mg/L)	2.46	Ortho-PO_4 (mg/L)	0.72
pH (pH units)	8.04	TURB (NTU)	4.4	COND (mS/cm)	0.052	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ESC-1	**Latitude**	(e.g., 33.41174) 33.05388	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Brookside Ln. @ Copper Creek	**Longitude**	(e.g., -117.35213) -117.21638		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/22/09	**TB Page**	1148		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:36 a.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.64	NH_3-N (mg/L)	0.14	NO_3-N (mg/L)	1.52	Ortho-PO_4 (mg/L)	0.14
pH (pH units)	7.49	TURB (NTU)	2.4	COND (mS/cm)	3.81	MBAS (mg/L)	0.40

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No Ammonia Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	100	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Ammonia K-1503 = 1.42

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ESC-2	**Latitude**	(e.g., 33.41174) 33.05138	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Lone Jack Rd. @ Stratford Knoll	**Longitude**	(e.g., -117.35213) -117.22861		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/16/09	**TB Page**	1148		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:55	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 2.2** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ ☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other Algae
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☑ Other O + M
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.20	NH_3-N (mg/L)	0.41	NO_3-N (mg/L)	2.39	Ortho-PO_4 (mg/L)	0.28
pH (pH units)	7.83	TURB (NTU)	16	COND (mS/cm)	7.61	MBAS (mg/L)	0.5

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No Ammonia Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	118	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Ammonia K1503 = 3.69

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ESC-3	**Latitude**	(e.g., 33.41174) 33.05138	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Double LL Ranch Rd	**Longitude**	(e.g., -117.35213) -117.22861		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/22/09	**TB Page**	1148		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	12:14	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 2.2** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ ☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.95	NH_3-N (mg/L)	0.14	NO_3-N (mg/L)	0.91	Ortho-PO_4 (mg/L)	0.21
pH (pH units)	7.93	TURB (NTU)	1.4	COND (mS/cm)	3.00	MBAS (mg/L)	0.15

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No Ammonia Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Ammonia K1503 = 1.97
Alternate location for RSF-1

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ESC-4	**Latitude**	(e.g., 33.41174) 33.05138	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location		**Longitude**	(e.g., -117.35213) -117.22861		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/29/09	**TB Page**			**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:30 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 2.2** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ ☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.68	NH_3-N (mg/L)	0.12	NO_3-N (mg/L)	0.29	Ortho-PO_4 (mg/L)	0.11
pH (pH units)	8.05	TURB (NTU)	0.0	COND (mS/cm)	3.75	MBAS (mg/L)	0.15

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No Ammonia Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Ammonia K1503 = 1.95 mg/L

Alternate location for LUC-6

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	ESC-5	**Latitude**	(e.g., 33.41174) 33.05334	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Calle Santa Cruz	**Longitude**	(e.g., -117.35213) -117.22926		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/11/09	**TB Page**	1148		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:05 a.m.	**Observer**	MP/BT		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height: 2.2** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.95	NH_3-N (mg/L)	0.22	NO_3-N (mg/L)	2.10	Ortho-PO_4 (mg/L)	0.76
pH (pH units)	8.02	TURB (NTU)	1.2	COND (mS/cm)	3.72	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Ammonia K-1503 = 2.09

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** NH3-N ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑**MS4** ☐ **Receiving Water**

Site ID	LCS-1	**Latitude**	(e.g., 33.41174) 33.058611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Garden View @ El Camino Real	**Longitude**	(e.g., -117.35213) -117.288605555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/31/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:00 a.m.	**Observer**	MP/MM		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)		NH_3-N (mg/L)	0.95	NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑**No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑**MS4** ☐ **Receiving Water**

Site ID	LCS-1	**Latitude**	(e.g., 33.41174) 33.058611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Garden View @ El Camino Real	**Longitude**	(e.g., -117.35213) -117.288605555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/29/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:50 a.m.	**Observer**	MP/MM		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.53	NH_3-N (mg/L)	1.95	NO_3-N (mg/L)	0.28	Ortho-PO_4 (mg/L)	0.52
pH (pH units)	7.31	TURB (NTU)	13.6	COND (mS/cm)	3.58	MBAS (mg/L)	0.50

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-2	**Latitude**	(e.g., 33.41174) 33.068055555556	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Leucadia Blvd. @ El Camino Real	**Longitude**	(e.g., -117.35213) -117.26222222222		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/6/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	15:20	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.43	NH_3-N (mg/L)	0.0	NO_3-N (mg/L)	0.13	Ortho-PO_4 (mg/L)	1.44
pH (pH units)	7.44	TURB (NTU)	3.4	COND (mS/cm)	2.94	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	200	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-3	**Latitude**	(e.g., 33.41174) 33.06111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Sun Vista Park	**Longitude**	(e.g., -117.35213) -117.24056		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/29/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:00 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☑ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	21.41	NH_3-N (mg/L)	0.16	NO_3-N (mg/L)	0.158	Ortho-PO_4 (mg/L)	0.19
pH (pH units)	5.43	TURB (NTU)	0.0	COND (mS/cm)	0.792	MBAS (mg/L)	0.30

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Ammonia only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Very low flow- unable to determine. K-1503 Ammonia = 1.31 mg/L
Alternate location for CBS-9.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** NH3-N ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-4	**Latitude**	(e.g., 33.41174) 33.051944444444	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	ECR @ Mtn. Vista (NE corner of intersection)	**Longitude**	(e.g., -117.35213) -117.26055555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/8/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	16:10	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.86	NH_3-N (mg/L)	3.30	NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)	7.01	TURB (NTU)	5.8	COND (mS/cm)	4.0	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☐ **Confirmation For** _____ ☑ **IC/ID Follow-Up For** **NH3-N**

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-4	**Latitude**	(e.g., 33.41174) 33.051944444444	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	ECR @ Mtn. Vista (NE corner of intersection)	**Longitude**	(e.g., -117.35213) -117.26055555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/9/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:40	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)		NH_3-N (mg/L)	2.85	NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Ammonia result from location behind 257 ECR was over range. Test kit range = 0.50-7.00ppm. Drainage was observed coming up from cement. Storm drain at SE corner of ECR and Mtn. Vista was dry. Sample from NE corner of Jolina Way & Mtn. Vista @ 15:39 = 5.77mg/L. Smells of sewage #2458.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-4	**Latitude**	(e.g., 33.41174) 33.051944444444	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	ECR @ Mtn. Vista (NE corner of intersection)	**Longitude**	(e.g., -117.35213) -117.26055555556		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/6/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:10	**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.63	NH_3-N (mg/L)	3.78	NO_3-N (mg/L)	0.49	Ortho-PO_4 (mg/L)	0.41
pH (pH units)	6.96	TURB (NTU)	5.9	COND (mS/cm)	3.13	MBAS (mg/L)	0.5

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Trickle flow, manhole conveyance, confined space with unknown flow.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-5	**Latitude**	(e.g., 33.41174) 33.048888888889	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Via Molena @ El Camino Real	**Longitude**	(e.g., -117.35213) -117.26027777778		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/10/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:15	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☐ No ☑ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.37	NH_3-N (mg/L)	0.35	NO_3-N (mg/L)	1.09	Ortho-PO_4 (mg/L)	0.29
pH (pH units)	7.71	TURB (NTU)	1.7	COND (mS/cm)	5.08	MBAS (mg/L)	0.50

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Landscapers currently irrigating lawns @ commercial property site. They are using fertilizers and some over-irrigation observed in curb and gutter at time of sampling. *2nd time ammonia test run with dilution 1:5.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-7	**Latitude**	(e.g., 33.41174) 33.055833333333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	El Camino Real (South of La Entrada Lane)	**Longitude**	(e.g., -117.35213) -117.2625		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/16/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:30	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.17	NH_3-N (mg/L)	0.17	NO_3-N (mg/L)	4.57	Ortho-PO_4 (mg/L)	0. 10
pH (pH units)	7.79	TURB (NTU)	8.4	COND (mS/cm)	3.41	MBAS (mg/L)	0.60

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Ammonia only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	61	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Ammonia K-1503 = 2.41.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑**Confirmation For** **Ortho-P** ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-8	**Latitude**	(e.g., 33.41174) 33.04693	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	200 Turner Ave.	**Longitude**	(e.g., -117.35213) -117.25507		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/14/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time		**Observer**	MP/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.52	NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	0.33
pH (pH units)	7.03	TURB (NTU)	3.4	COND (mS/cm)	4.78	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-8	**Latitude**	(e.g., 33.41174) 33.04693	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	200 Turner Ave.	**Longitude**	(e.g., -117.35213) -117.25507		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/11/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:35 a.m.	**Observer**	MP/BT		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☑ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☑ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.35	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)	4.89	Ortho-PO_4 (mg/L)	2.37
pH (pH units)	7.27	TURB (NTU)	1.4	COND (mS/cm)	2.46	MBAS (mg/L)	0.40

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: 1:5 dilution- 0.06x5=0.3
Ammonia K-1503: 0.31x5=1.55

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LCS-9	**Latitude**	(e.g., 33.41174) 33.04693	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Orchard Wd Rd & Orchard Glenn	**Longitude**	(e.g., -117.35213) -117.25507		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/30/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:30 a.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☐ > 72 hours ☑ < 72 hours

Rainfall ☐ None ☑ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☑ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☑ Other OM

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.77	NH_3-N (mg/L)	0.13	NO_3-N (mg/L)	0.54	Ortho-PO_4 (mg/L)	0.07
pH (pH units)	6.43	TURB (NTU)	9.9	COND (mS/cm)	4.18	MBAS (mg/L)	0.5

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Ammonia Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Alternate for LUX-3

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** Nitrate ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-1	**Latitude**	(e.g., 33.41174) 33.082777777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Ponto Beach Detention Basin	**Longitude**	(e.g., -117.35213) -117.30944444444		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/16/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:55 a.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☑ Other- Crawdads

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.56	NH_3-N (mg/L)		NO_3-N (mg/L)	>11.3	Ortho-PO_4 (mg/L)	0.16
pH (pH units)	7.36	TURB (NTU)	0.0	COND (mS/cm)	2.89	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-1	**Latitude**	(e.g., 33.41174) 33.082777777778	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Ponto Beach Detention Basin	**Longitude**	(e.g., -117.35213) -117.30944444444		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/15/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:53	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☑ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☑ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☐ Insects ☐ Algae ☑ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☑ Other- Crawdads

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.39	NH_3-N (mg/L)	0.59	NO_3-N (mg/L)	>11.3	Ortho-PO_4 (mg/L)	0.16
pH (pH units)	7.24	TURB (NTU)	0.0	COND (mS/cm)	2.89	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** Nitrate ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

				Watershed		
Site ID	LUC-10	**Latitude**	(e.g., 33.41174) 33.07522		**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	101 @ Avocado St.	**Longitude**	(e.g., -117.35213) -117.30565		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/16/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:15 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.52	NH_3-N (mg/L)		NO_3-N (mg/L)	>11.3	Ortho-PO_4 (mg/L)	
pH (pH units)	6.58	TURB (NTU)	0.0	COND (mS/cm)	2.90	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Manhole >20 ft. deep, confined space, cannot determine the flow**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-10	**Latitude**	(e.g., 33.41174) 33.07522	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	101 @ Avocado St.	**Longitude**	(e.g., -117.35213) -117.30565		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/15/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:25	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.70	NH_3-N (mg/L)	0.48	NO_3-N (mg/L)	>11.3	Ortho-PO_4 (mg/L)	0.21
pH (pH units)	6.93	TURB (NTU)	0.0	COND (mS/cm)	2.89	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Manhole >20 ft. deep, confined space, cannot determine the flow**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-3	**Latitude**	(e.g., 33.41174) 33.068611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Normandy @ Piraeus	**Longitude**	(e.g., -117.35213) -117.29388888889		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/21/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:32 a.m.	**Observer**	MP/PCR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.41	NH_3-N (mg/L)	0.08	NO_3-N (mg/L)	1.27	Ortho-PO_4 (mg/L)	0.02
pH (pH units)	8.04	TURB (NTU)	1.6	COND (mS/cm)	1.206	MBAS (mg/L)	0

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Ammonia Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	1	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Ammonia K-1503 = 0.76 mg/L
Possible illegal connection at this location.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-4	**Latitude**	(e.g., 33.41174) 33.068611111111	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Fox Point Detention Basin	**Longitude**	(e.g., -117.35213) -117.29388888889		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/30/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	14:00	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☑ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☐ > 72 hours ☑ < 72 hours

Rainfall ☐ None ☑ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☑ Other OM
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	32.01	NH_3-N (mg/L)	0.12	NO_3-N (mg/L)	0.21	Ortho-PO_4 (mg/L)	0.53
pH (pH units)	9.35	TURB (NTU)	0	COND (mS/cm)	4.2	MBAS (mg/L)	0.8

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Ammonia Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Alternate for CBS-8

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-6	**Latitude**	(e.g., 33.41174) 33.081666666667	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Piraeus Detention Basin	**Longitude**	(e.g., -117.35213) -117.29666666667		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/21/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:00 a.m.	**Observer**	MP/PCR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☑ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☑ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Site was completely dry. Use ESC-4 as alternate.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** _O-PO4 & Bacteria_ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-7 Alt	**Latitude**	(e.g., 33.41174) 33.081666666667	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Quail Hollow Dr (upstream)	**Longitude**	(e.g., -117.35213) -117.29666666667		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	10/1/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:40	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑> 72 hours ☐< 72 hours

Rainfall ☑ None ☐< 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑Yes ☐ No

Water Temp (°C)	25.39	NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	0.26
pH (pH units)	6.81	TURB (NTU)	0.0	COND (mS/cm)	6.79	MBAS (mg/L)	

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Ammonia & Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Cannot determine flow; manhole > 20ft deep.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-7 Alt	**Latitude**	(e.g., 33.41174) 33.081666666667	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Quail Hollow Dr (upstream)	**Longitude**	(e.g., -117.35213) -117.29666666667		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/30/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:11 a.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☑ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☐ > 72 hours ☑ < 72 hours

Rainfall ☐ None ☑ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☑ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.67	NH_3-N (mg/L)	0.67	NO_3-N (mg/L)	2.06	Ortho-PO_4 (mg/L)	3.96
pH (pH units)	7.97	TURB (NTU)	15.5	COND (mS/cm)	2.54	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Ammonia & Bacteria Only**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Cannot determine flow; manhole > 20ft deep.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** Bacteria, NH3-N ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-8	**Latitude**	(e.g., 33.41174) 33.07496	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Quail Hollow Dr.	**Longitude**	(e.g., -117.35213) -117.28397		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/12/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	11:34 a.m.	**Observer**	KR/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☑ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.23	NH_3-N (mg/L)	2.30	NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)	8.27	TURB (NTU)	1.3	COND (mS/cm)	5.49	MBAS (mg/L)	

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Manhole > 20 ft deep. Confined space- cannot determine flow.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUC-8	**Latitude**	(e.g., 33.41174) 33.07496	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.51
Location	Quail Hollow Dr.	**Longitude**	(e.g., -117.35213) -117.28397		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/10/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:43 a.m.	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☑ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☑ Other O.M.
Deposits	☐ None	☑ Sediment/Gravel	☑ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☑ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	25.54	NH_3-N (mg/L)	2.40	NO_3-N (mg/L)	4.81	Ortho-PO_4 (mg/L)	0.36
pH (pH units)	8.23	TURB (NTU)	2.0	COND (mS/cm)	5.80	MBAS (mg/L)	0.50

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Exceeded for bacteria per Encina. Need to resample 8/12.
Manhole > 20 ft deep. Confined space- cannot determine flow.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUX-1	**Latitude**	(e.g., 33.41174) 33.02833	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	East Manchester @ ECR	**Longitude**	(e.g., -117.35213) -117.25527		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/17/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:30 a.m.	**Observer**	KR/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Dry- no sample taken.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑ **Confirmation For** NH3-N, Turbidity ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUX-2	**Latitude**	(e.g., 33.41174) 33.02833	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Sage Canyon Dr.	**Longitude**	(e.g., -117.35213) -117.25527		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/19/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:16 a.m.	**Observer**	KR/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☑ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☑ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.2	NH_3-N (mg/L)	0.3	NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)	7.56	TURB (NTU)	27.4	COND (mS/cm)	2.71	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: 1:5 dilution for Ammonia. 0.06 x 5 = 0.3
QA/QC taken to Encina.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUX-2	**Latitude**	(e.g., 33.41174) 33.02833	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Sage Canyon Dr.	**Longitude**	(e.g., -117.35213) -117.25527		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/17/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:41 a.m.	**Observer**	KR/CN		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☑ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☑ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☑ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.4	NH_3-N (mg/L)	1.05	NO_3-N (mg/L)	1.73	Ortho-PO_4 (mg/L)	0.96
pH (pH units)	7.22	TURB (NTU)	27.9	COND (mS/cm)	3.47	MBAS (mg/L)	0.5

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: 1:5 dilution for Ammonia. 0.21 x 5 =1.05

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	LUX-3	**Latitude**	(e.g., 33.41174) 33.03404	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	927 Elmview Dr.	**Longitude**	(e.g., -117.35213) -117.25972		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/15/09	**TB Page**	1147		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:36 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☑ None

Conveyance (Check one only) ☑ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **No flow to sample.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

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   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	RSF-1	**Latitude**	(e.g., 33.41174) 33.0375	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Peppertree Lane	**Longitude**	(e.g., -117.35213) -117.23861		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/8/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:40 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects	☐ Algae	☐ Fish	☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☐ Ponded ☑ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☑ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☑ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)		MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	0	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: Outlet was dry. Alternate site: ESC-3.

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

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   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☐ **MS4** ☑ **Receiving Water**

Site ID	RSF-4	**Latitude**	(e.g., 33.41174) 33.03444	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	La Bajada Dip	**Longitude**	(e.g., -117.35213) -117.23583		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	7/8/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	10:12 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☑ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☑ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☑ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☐ None ☐ Sediment/Gravel ☑ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☑ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.33	NH_3-N (mg/L)	0.51	NO_3-N (mg/L)	4.65	Ortho-PO_4 (mg/L)	0.38
pH (pH units)	7.93	TURB (NTU)	4.8	COND (mS/cm)	2.65	MBAS (mg/L)	0.25

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **Difficult to determine flow. Water was ponded at sample location.**

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

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   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☐ **Field Screening** ☑**Confirmation For** NH3-N ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	SEL-2	**Latitude**	(e.g., 33.41174) 33.01333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	MacKinnon Ranch Rd	**Longitude**	(e.g., -117.35213) -117.27167		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/12/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	12:59	**Observer**	KR/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☑ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☑ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☑ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☑ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☑ Excessive		☐ Other
Biology	☐ None	☑ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☑ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.19	NH_3-N (mg/L)	2.1	NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)	7.38	TURB (NTU)	60.5	COND (mS/cm)	2.22	MBAS (mg/L)	

Analytical Lab Samples Collected? ☐ **Yes** ☑ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: 1:5 dilution on ammonia. 0.42x5=2.1

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

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   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

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3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	SEL-2	**Latitude**	(e.g., 33.41174) 33.01333	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	MacKinnon Ranch Rd	**Longitude**	(e.g., -117.35213) -117.27167		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	8/10/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	13:52	**Observer**	MP/ME		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☑ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☑ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other

Color ☐ None ☑ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other

Clarity ☑ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other

Floatables ☑ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other

Deposits ☑ None ☐ Sediment/Gravel ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other

Vegetation ☐ None ☐ Limited ☐ Normal ☑ Excessive ☐ Other

Biology ☐ None ☑ Insects ☐ Algae ☐ Fish ☐ Snails ☐ Mussels/ Barnacles ☐ Insect/ Algae ☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☑ Ponded Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	22.97	NH_3-N (mg/L)	1.05	NO_3-N (mg/L)	0.70	Ortho-PO_4 (mg/L)	0.22
pH (pH units)	7.25	TURB (NTU)	56.3	COND (mS/cm)	7.05	MBAS (mg/L)	0.5

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow	Unknown	gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: 1:5 dilution on ammonia. 0.21x5=1.05

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

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   Single- and multi-family homes, mobile home parks, etc.

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3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

   Vacant and undeveloped lands, etc.

San Diego Stormwater Copermittees
Dry Weather Monitoring Field Datasheet

☑ **Field Screening** ☐ **Confirmation For** _____ ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place) ☑ **MS4** ☐ **Receiving Water**

Site ID	SEL-3	**Latitude**	(e.g., 33.41174) 33.01639	**Watershed**	**Hydrologic Unit**	(e.g., 7.00) 904.61
Location	Mira Costa College Detention Basin	**Longitude**	(e.g., -117.35213) -117.25694		**Hydrologic Area**	(e.g., 7.10) Carlsbad
Date	9/15/09	**TB Page**	1167		**Hydrologic Subarea** (Optional)	(e.g., 7.11)
Time	9:50 a.m.	**Observer**	MP/KR		**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☑ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☑ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☑ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☑ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☑ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:** ft.

Last Rain ☑ > 72 hours ☐ < 72 hours

Rainfall ☑ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☑ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☑ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☑ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☑ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☑ Other O + M
Vegetation	☐ None	☑ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☑ Insect/ Algae ☐ Insect/ Snail	☐ Other

Water Flow ☐ Flowing ☑ Ponded Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☑ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☑ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☑ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☑ Yes ☐ No

Water Temp (°C)	23.06	NH_3-N (mg/L)	0.65	NO_3-N (mg/L)	0.71	Ortho-PO_4 (mg/L)	0.42
pH (pH units)	7.67	TURB (NTU)	68.4	COND (mS/cm)	9.73	MBAS (mg/L)	0.75

Analytical Lab Samples Collected? ☑ **Yes** ☐ **No** **Ammonia <1.0**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: **New (K-1403) ammonia kit- 1:5 dilution. 0.13x5=0.65**
Old (K-1503) ammnoia kit- 1:5 dilution. 0.67x5=3.35

San Diego Stormwater Copermittees

Land Use Types for Dry Weather Monitoring

(Adopted by the Dry Weather Monitoring Workgroup, April 20, 2004)

1. **Residential**

   Residential (general)
   Single- and multi-family homes, mobile home parks, etc.

   Rural residential (For the County of San Diego and other appropriate Copermittees)
   Single family homes located in rural areas with lot sizes of approximately 1 to 10 acres. Rural residential estates may have small orchards, fields or small storage buildings associated with the residential dwelling unit, etc.

2. **Commercial**

   Offices, schools, shopping centers, auto dealerships, government/civic centers, cemeteries, churches, libraries, post offices, fire/police stations, military use, jails, prisons, border patrol holding stations, dormitories, hotels, motels, resorts, and casinos, etc.

3. **Agricultural**

   Orchards, vineyards, nurseries, greenhouses, flower fields, dairies, livestock, poultry, equine ranches, row crops and grains, pasture, fallow, etc.

4. **Industrial**

   Shipbuilding, airframe, aircraft manufacturing, industrial parks, manufacturing uses such as lumber, furniture, paper, rubber, stone, clay, and glass; auto repair services/recycling centers; warehousing, wholesale trade; mining, sand and gravel extraction, salt evaporation; junkyard, dumps/landfills; auto wrecking/dismantling and recycling centers, etc.

5. **Parks**

   Recreation areas and centers, neighborhood parks, wildlife and nature preserves, golf courses, accessible sandy areas along the coast or major water bodies allowing swimming and picnicking, etc.

6. **Open**

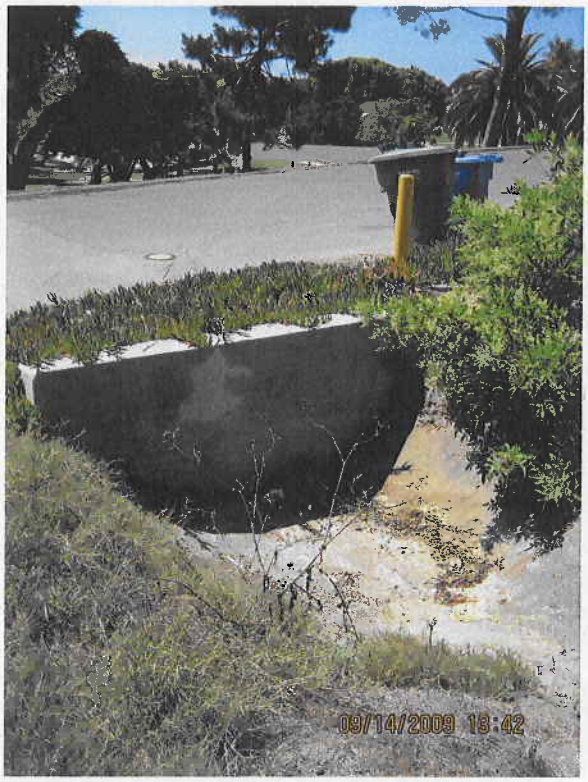
   Vacant and undeveloped lands, etc.

Appendix C-3

2009 Dry Weather Monitoring Site Photos



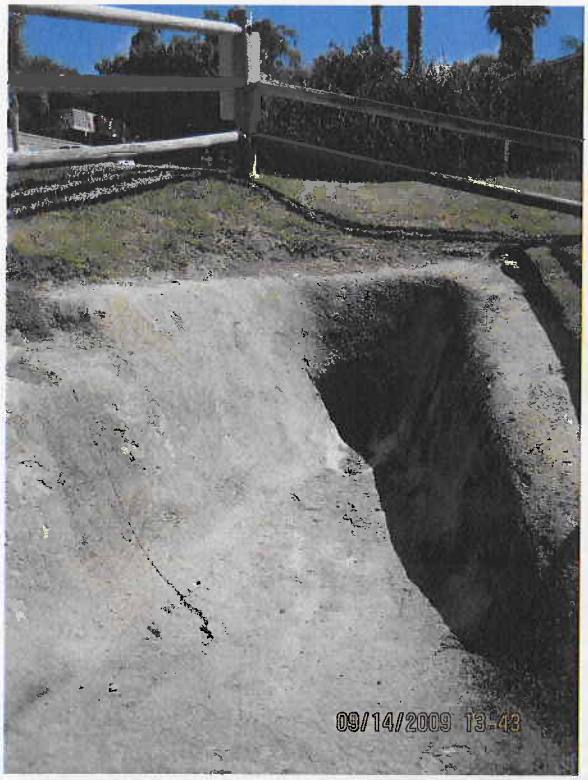
CBS-1



CBS-3N



CBS-2



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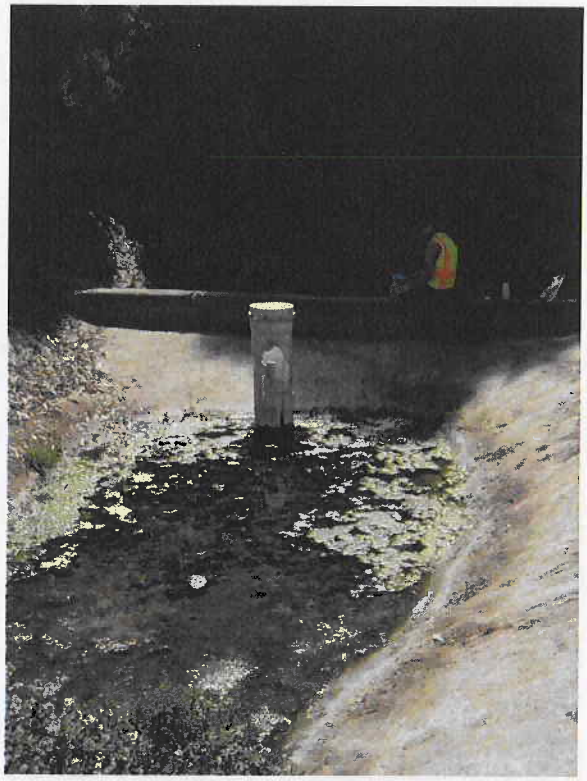
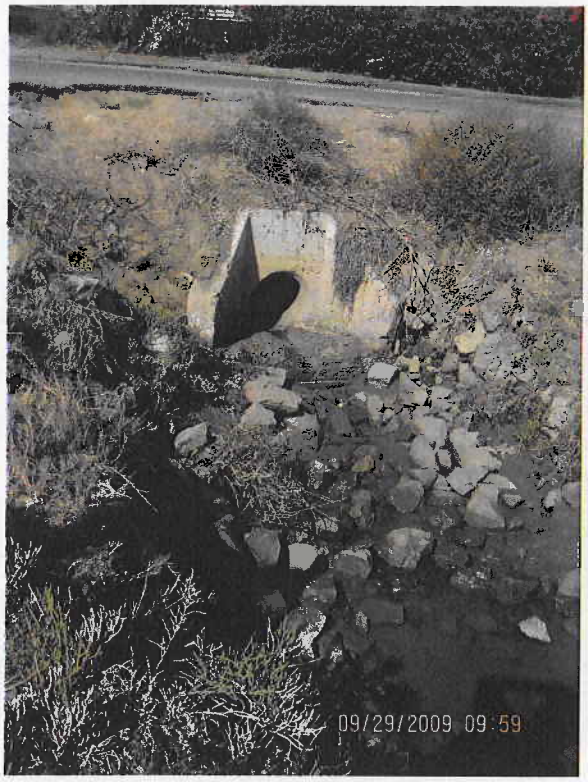


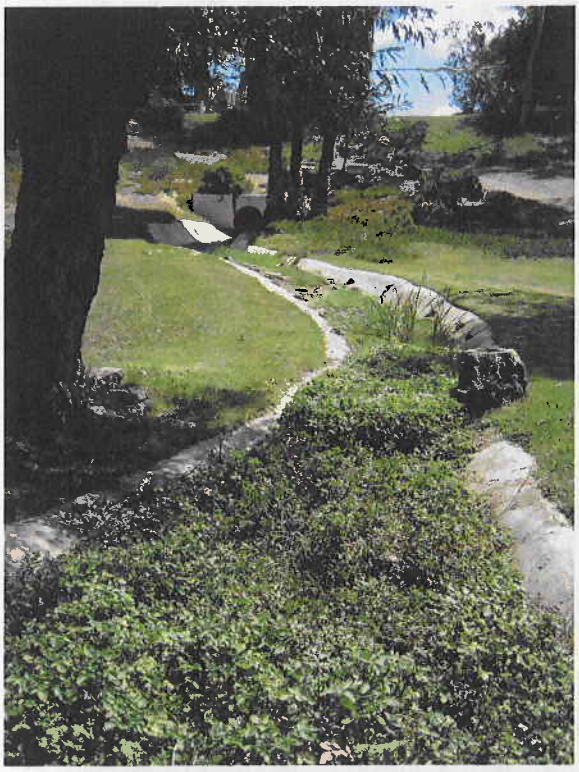
CBS-4



CBS-5



CBS-7



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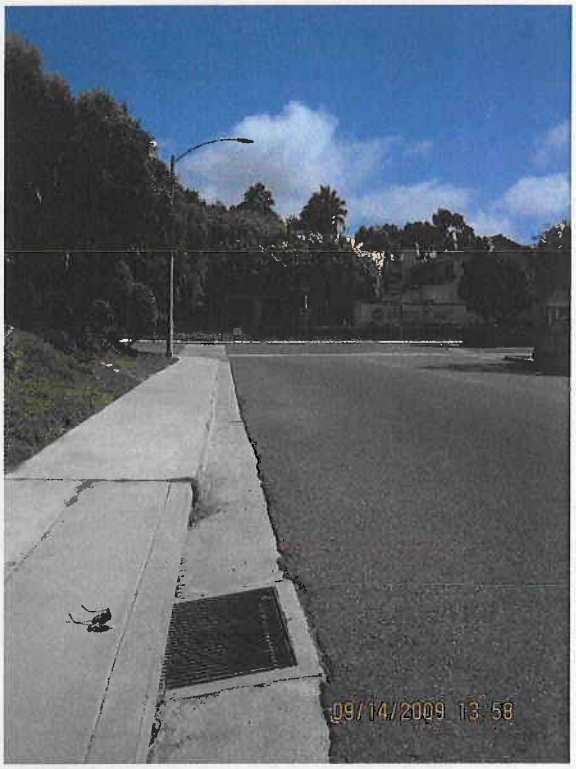
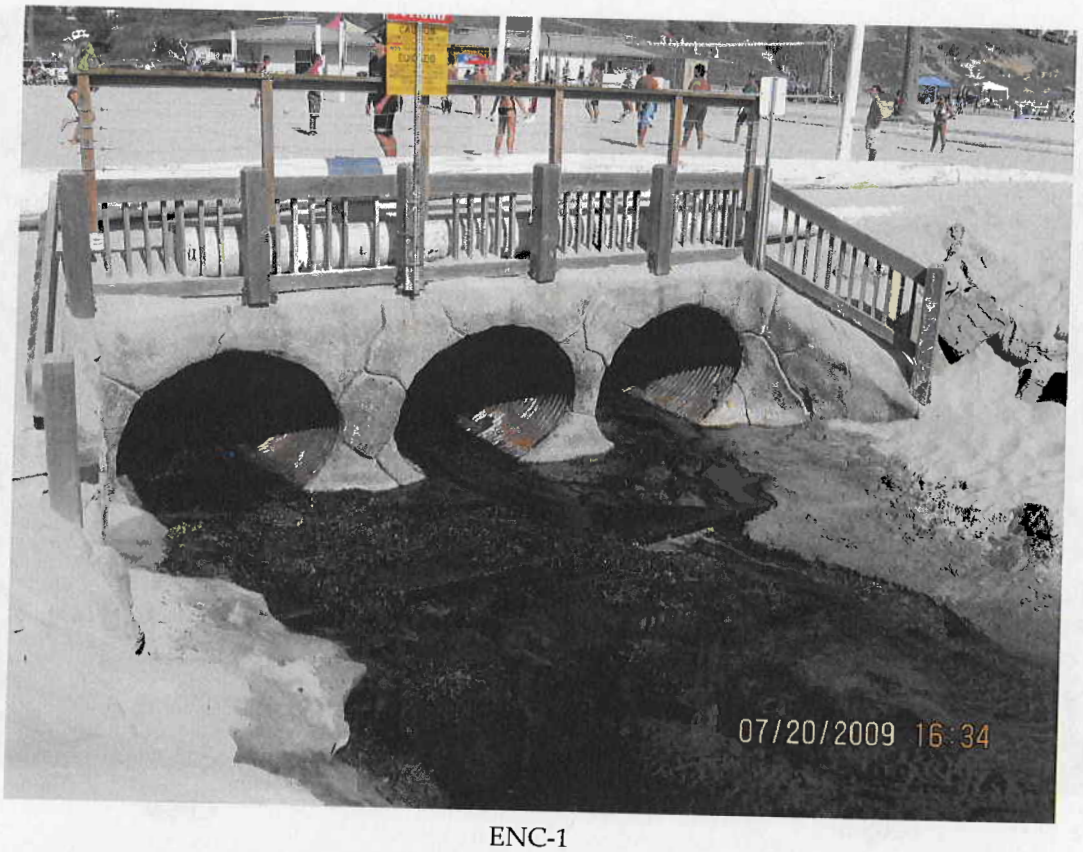


CBS-9



SEL-3



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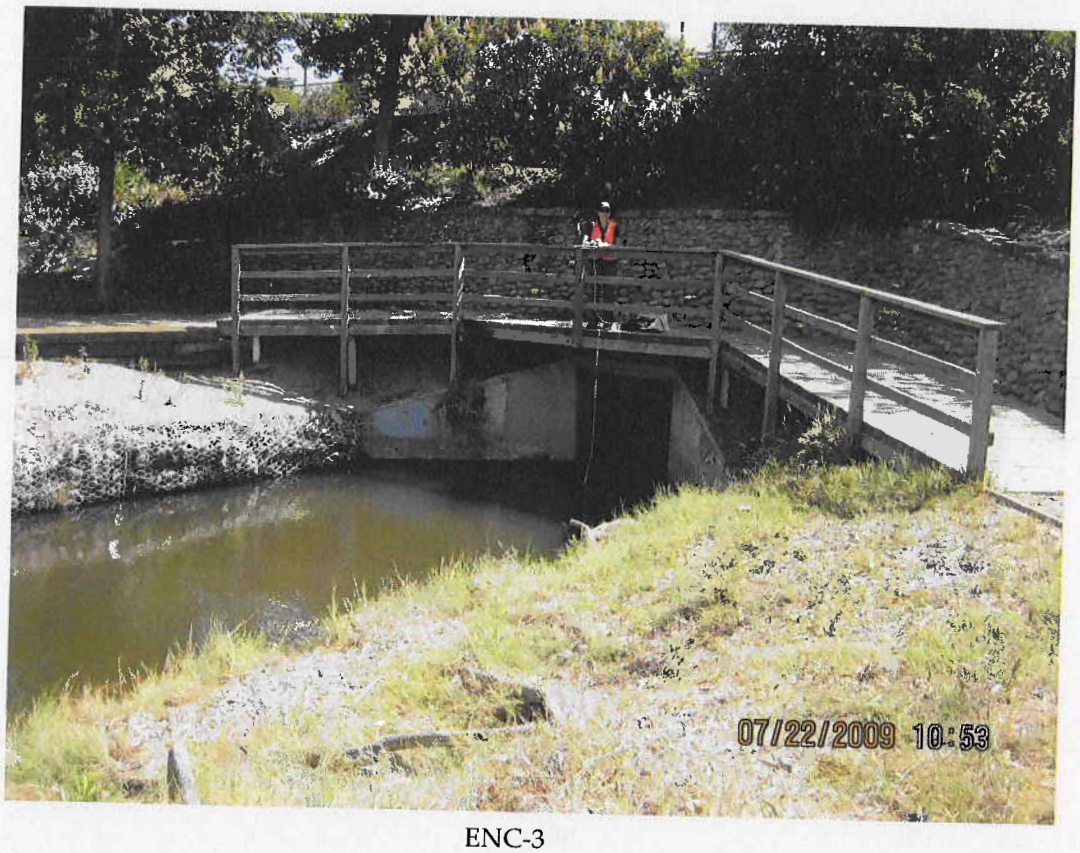


ENC-3



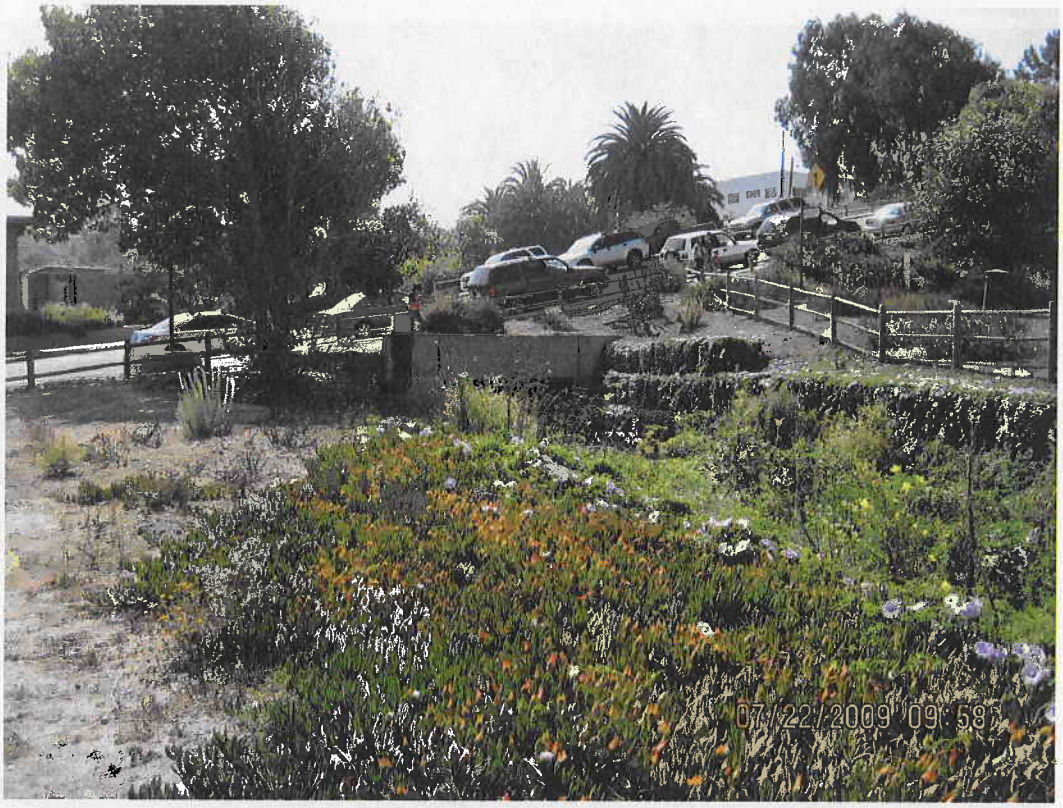
ENC-4



ENC-5



ENC-6



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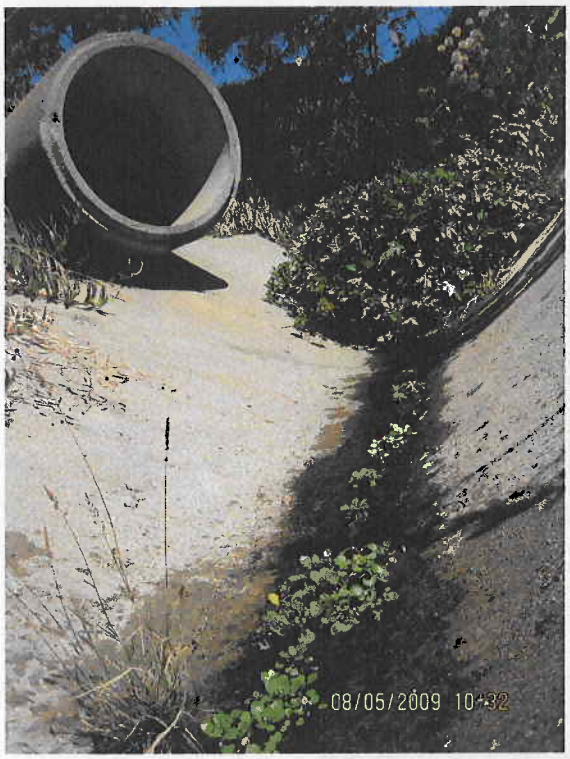

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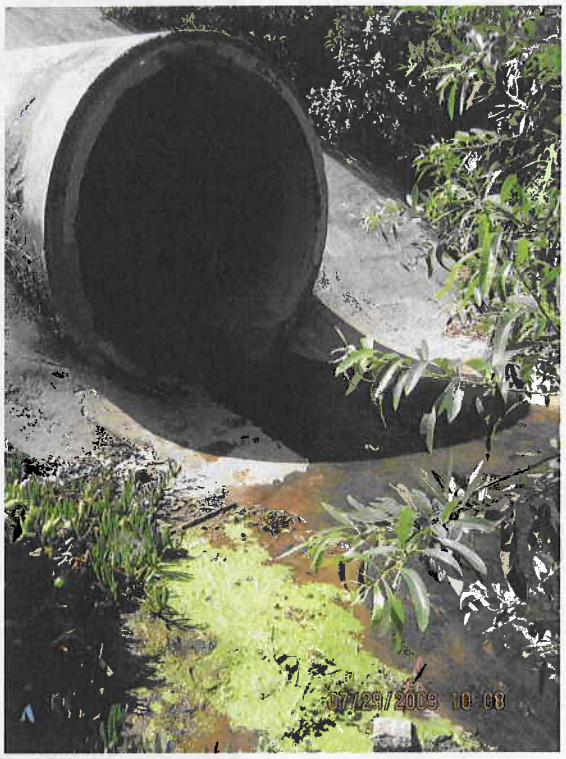
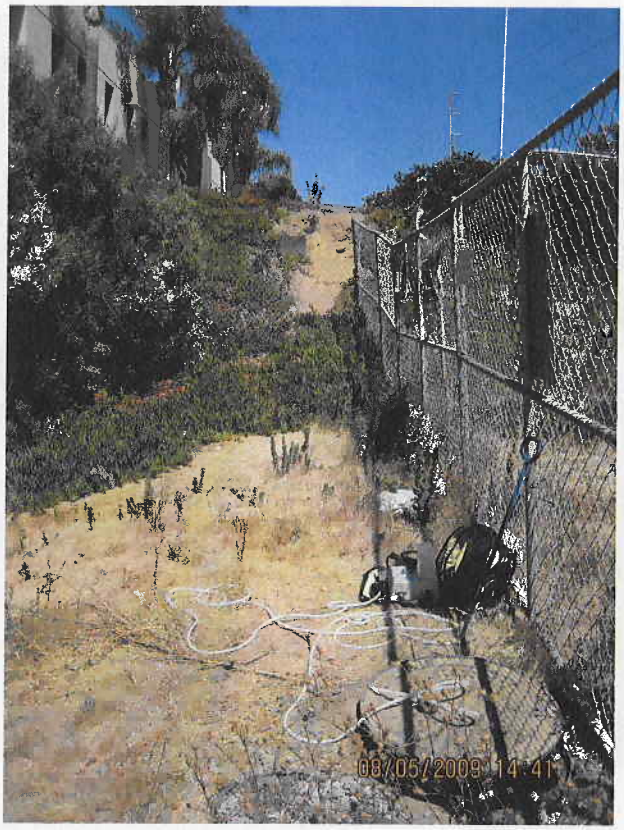


ENC-10



ENC-11



ENC-12



ENC-14



ENC-15

ENC-17

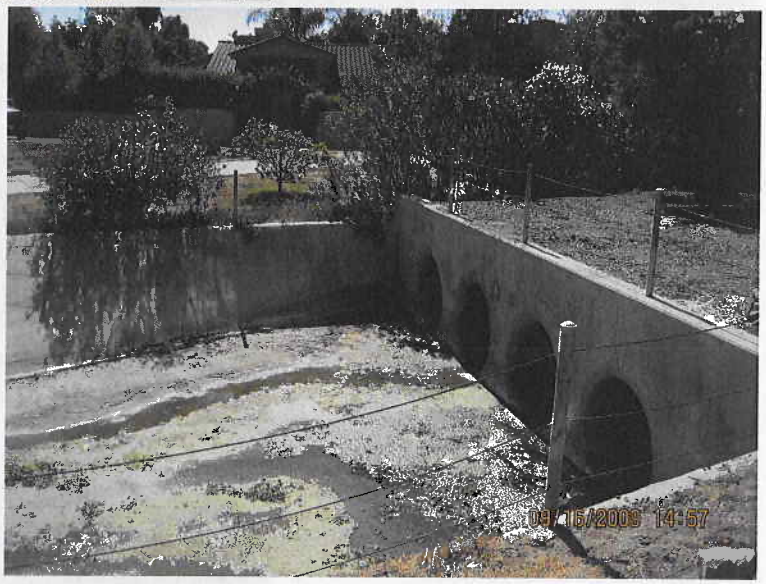




ENC-18



ESC-1



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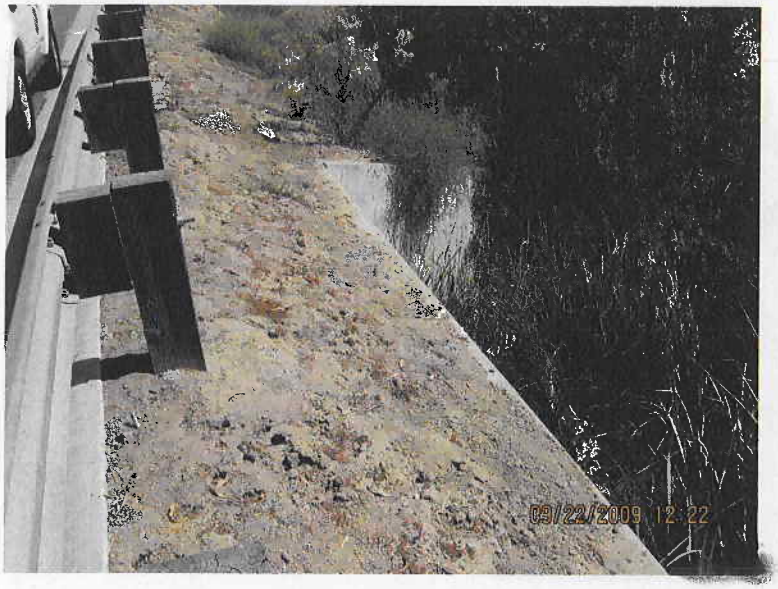


ESC-3



ESC-4



ESC-5



LCS-1



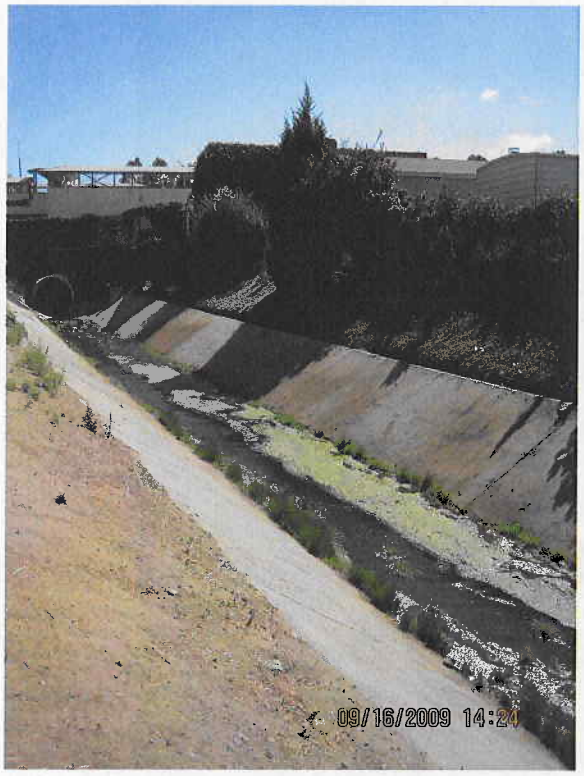
LCS-3



LCS-4



LCS-5



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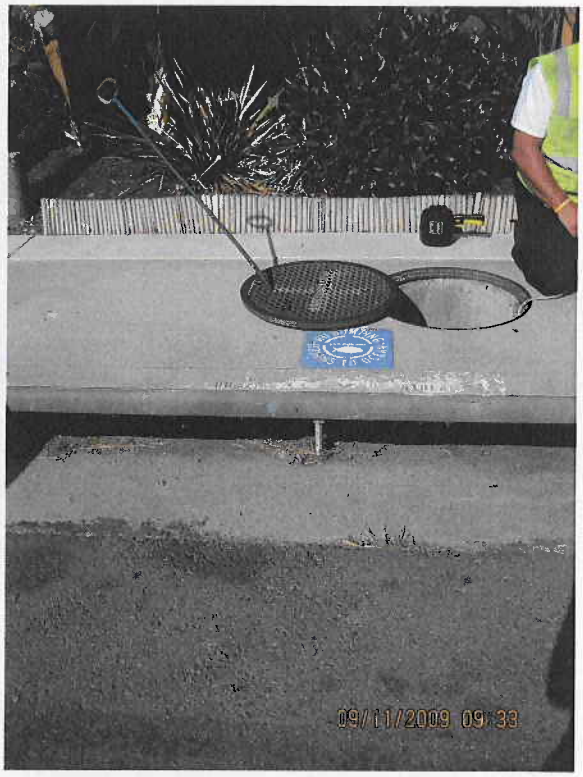


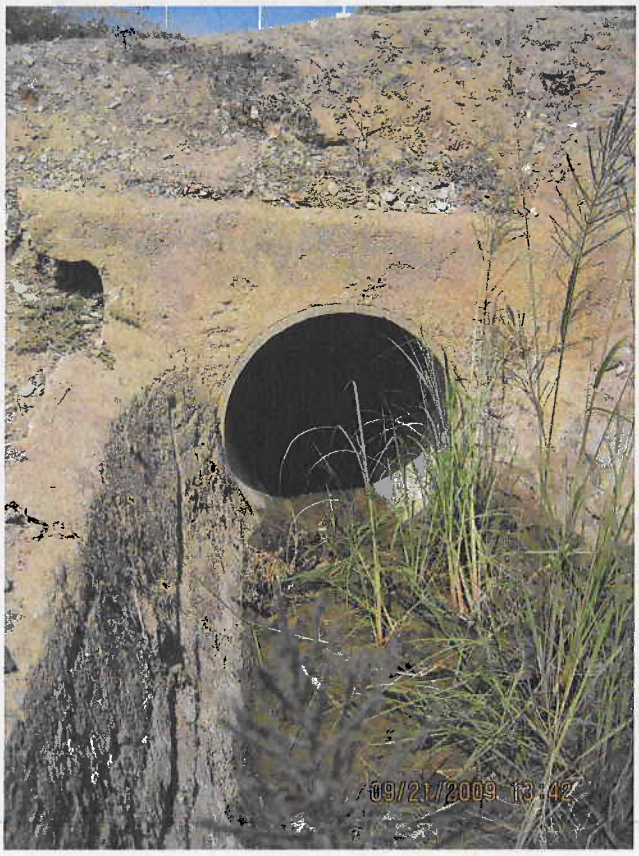
LCS-8



LCS-9



LUC-1



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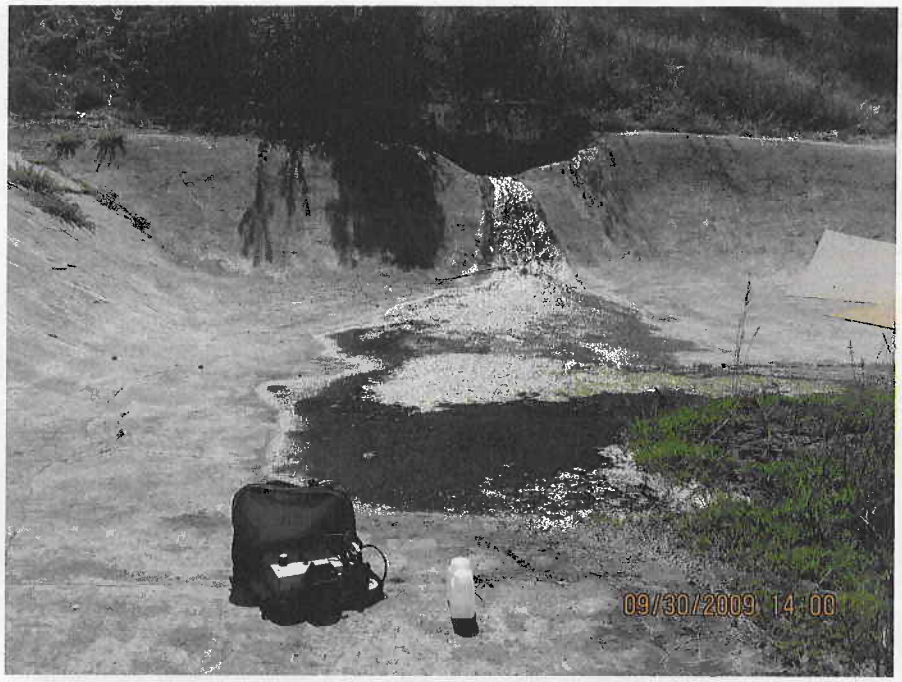

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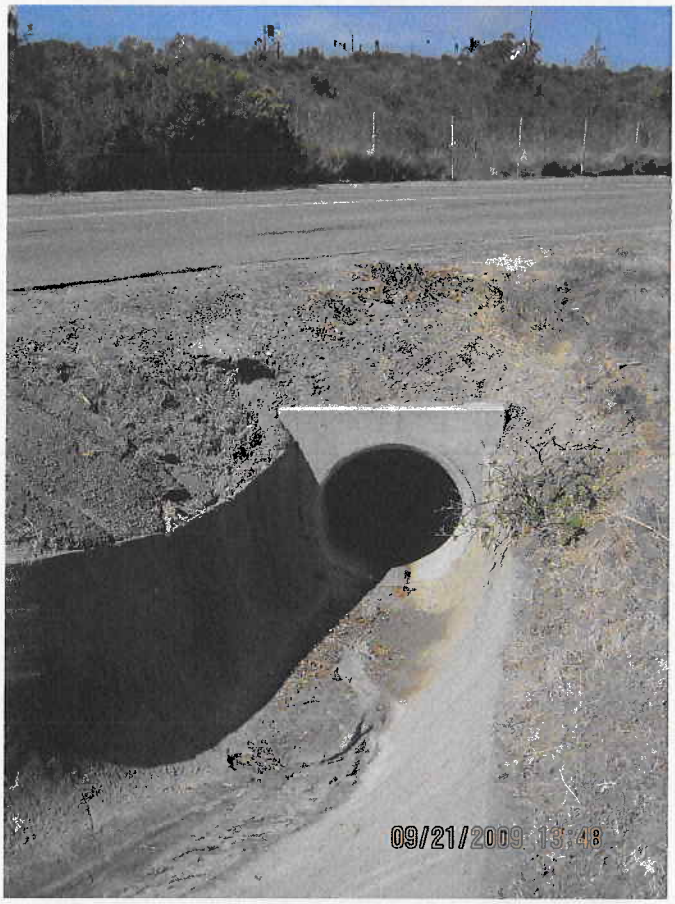
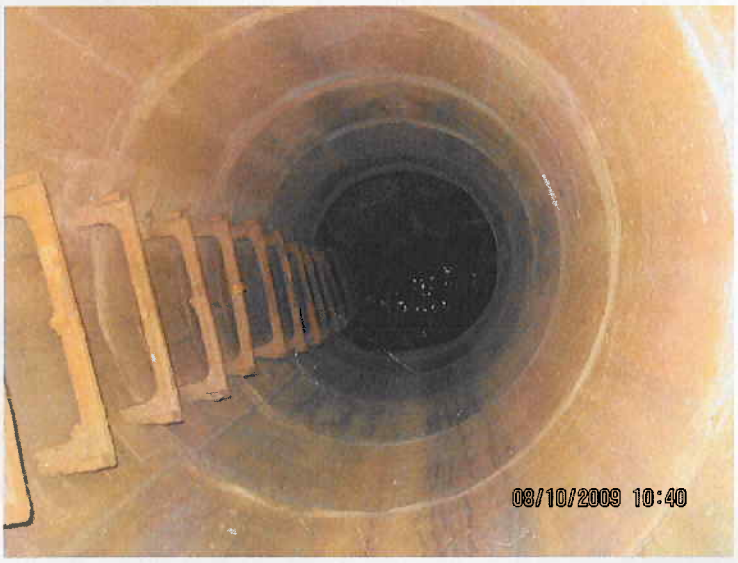


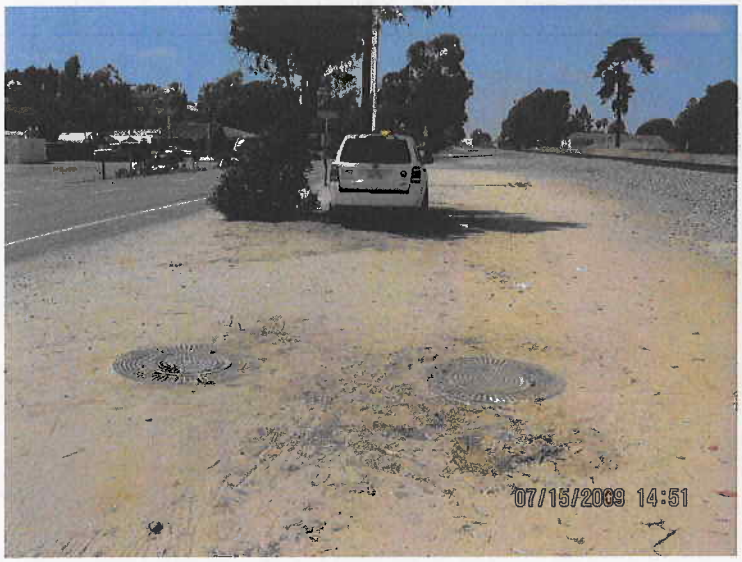
LUC-6



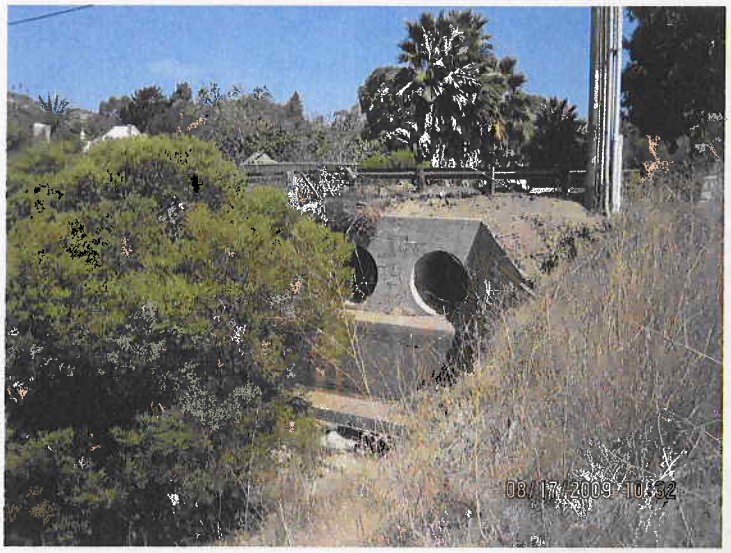
LUC-7

LUC-8





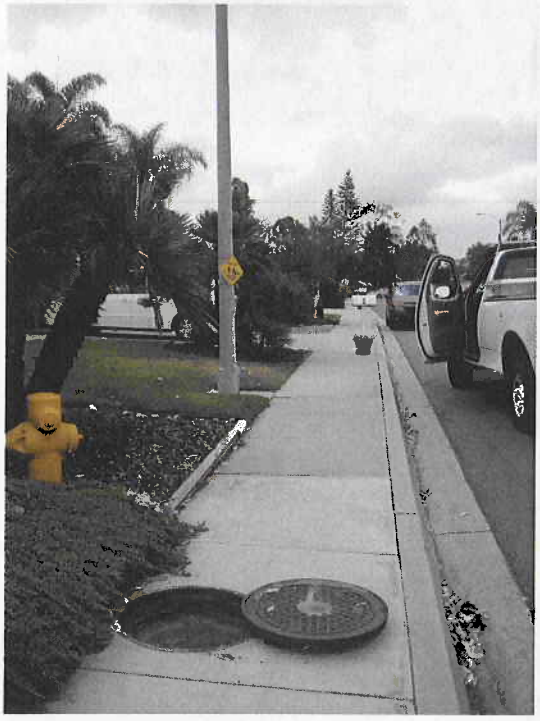
LUC-9



LUX-1

LUX-2





LUX-3



RSF-1

RSF-4



Appendix C-4

2009 Field Screening and Analytical Monitoring Results Table

Appendix C-4 2009 Dry Weather Monitoring Analytical Results

Station ID	Sample Date	Ammonia (mg/L) K-1503 Old kit	Ammonia (mg/L) K-1403 New kit	QA/QC Ammonia (mg/L)	Conductivity (mS/cm)	QA/QC Conductivity (mS/cm)	MBAS (mg/L)	Nitrate (mg/L)	QA/QC Nitrate (mg/L)	Orthophosphate (mg/L)	QA/QC Orthophosphate (mg/L)	pH (pH)	QA/QC pH	Water Temperature (oC)	Turbidity (NTU)	QA/QC Turbidity (NTU)	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)	Hardness, Total (mg/L)	Oil & Grease (mg/L)	Chlorpyrifos (ng/L)	Diazinon (ng/L)	Enterococcus (cfu/100 ml)	Fecal Coliform (cfu/100 ml)	Total Coliform (cfu/100 ml)
CBS-1	8/3/2009	**3.09**	NT	NT	4.42	NT	0.25	6.02	NT	0.61	NT	8.18	NT	25.11	3.2	NT	NT	NT	NT	NT	NT	NT	NT	NT	1300	1400	1800
CBS-1	8/5/2009	**3.34**	NT	NT	1.91	NT	NT	NT	NT	NT	NT	8.31	NT	26.85	2.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
CBS-2	7/8/2009	**1.25**	NT	NT	**6.93**	NT	0.75	0.88	NT	0.1	NT	8.81	NT	32.49	4.9	NT	ND	ND	ND	ND	780	ND	ND	ND	1500	300	400
CBS-2	7/9/2009	**1.03**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
CBS-3N (Alt)	9/14/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CBS-3S (Alt)	9/14/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CBS-4	9/14/2009	**2.78**	0.18	0.12	**7.65**	NT	0.6	4.54	NT	NT	NT	8.08	NT	25.5	0.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
CBS-5 (Alt)	9/29/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CBS-7	9/14/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CBS-8	9/14/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CBS-9	9/14/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ENC-1	7/20/2009	**1.72**	NT	NT	4.88	NT	0.5	**>11.3**	NT	0.37	NT	7.65	NT	27	2	NT	ND	0.004	0.002	0.02	1100	ND	ND	ND	1200	3000	8400
ENC-1	7/21/2009	**1.6**	NT	NT	4.97	NT	NT	**>11.3**	NT	NT	NT	7.65	NT	24.48	2.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-10	7/29/2009	**>7.0**	NT	NT	2.17	NT	0.5	9.26	NT	**>8.0**	NT	7.55	NT	23.77	**22.1**	NT	ND	0.009	0.001	0.02	510	ND	ND	ND	**78000**	**110000**	**121000**
ENC-10	7/31/2009	0.25	NT	NT	2.93	NT	NT	NT	NT	0.63	NT	7.06	NT	23.99	**12.9**	NT	NT	NT	NT	NT	NT	NT	NT	NT	7500	3300	9450
ENC-11	8/5/2009	**1.59**	NT	0.42	**7.14**	7.55	0.5	**>11.3**	**16.34**	0	ND	7.94	NT	24.73	1.8	1.05	NT	NT	NT	NT	NT	NT	NT	NT	700	2350	3550
ENC-11	8/10/2009	**1.4**	NT	NT	**6.55**	NT	NT	9.79	NT	NT	NT	7.79	NT	24.6	5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
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ENC-15	7/20/2009	**1.15**	NT	NT	3.68	NT	0.5	6.65	NT	1.6	NT	8.13	NT	25.37	4.2	NT	ND	0.01	ND	0.03	840	ND	ND	ND	900	2500	13000
ENC-15	7/21/2009	0.7	NT	NT	4.12	NT	NT	NT	NT	NT	NT	8.07	NT	24.98	3.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-17	8/3/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
ENC-18	8/5/2009	0.1	NT	NT	1.78	NT	0.5	**>11.3**	NT	**3.53**	NT	8.11	NT	24.67	3.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-18	8/10/2009	NT	NT	NT	1.97	NT	NT	0.82	NT	1.42	NT	8.18	NT	23.92	2.1	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-3	7/22/2009	0.7	NT	NT	**5.59**	NT	0.5	**>11.3**	NT	0.11	NT	6.84	NT	24.74	**19.3**	NT	NT	NT	NT	NT	NT	NT	NT	NT	200	8300	17800
ENC-3	7/23/2009	NT	NT	NT	**5.62**	NT	NT	**>11.3**	NT	NT	NT	6.79	NT	22.91	**55.2**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-4	7/20/2009	0.05	NT	NT	2.21	NT	0.25	9.56	NT	0.88	NT	8.19	NT	26.67	0.3	NT	ND	0.03	ND	0.03	300	ND	ND	ND	<100	100	600
ENC-5	7/22/2009	**1.22**	NT	NT	**5.11**	NT	0.6	**10.09**	NT	0.08	NT	7.18	NT	23.23	3.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	800	1300	2400
ENC-5	7/23/2009	**1.23**	NT	NT	**5.34**	NT	NT	8.95	NT	NT	NT	7.24	NT	25.87	2.7	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-6	7/22/2009	**2.29**	NT	NT	**7.55**	NT	0.75	**>11.3**	NT	0	NT	7.3	NT	26.31	3.7	NT	NT	NT	NT	NT	NT	NT	NT	NT	650	4450	7700
ENC-6	7/23/2009	**1.84**	NT	NT	**7.49**	NT	NT	**>11.3**	NT	NT	NT	7.31	NT	22.54	5.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-8	7/22/2009	**4.02**	NT	**1.83**	4.75	4.66	0.5	**>11.3**	**23.06**	0.2	0.05	7.48	7.64	24.62	4.5	4.27	NT	NT	NT	NT	NT	NT	NT	NT	400	2300	2900
ENC-8	7/23/2009	**4.01**	NT	NT	4.7	NT	NT	**>11.3**	NT	NT	NT	7.53	NT	23.1	6.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-9	8/5/2009	0.45	NT	NT	0.052	NT	0.25	2.46	NT	0.72	NT	8.04	NT	23.57	4.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ESC-1	9/22/2009	**1.42**	0.14	ND	3.81	NT	0.4	1.52	NT	0.14	NT	7.49	NT	23.64	2.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ESC-2	9/16/2009	**3.69**	0.41	ND	7.61	NT	0.5	2.39	NT	0.28	NT	7.83	NT	25.2	**16**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ESC-3 (Alt)	9/22/2009	**1.97**	0.14	0.11	3	NT	0.15	0.91	NT	0.21	NT	7.93	NT	23.95	1.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ESC-4 (Alt)	9/29/2009	**1.95**	0.12	ND	3.75	NT	0.15	0.29	NT	0.11	NT	8.05	NT	21.68	0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ESC-5	9/11/2009	**2.09**	0.22	0.1	3.72	NT	0.25	2.1	NT	0.76	NT	8.02	NT	23.95	1.2	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-1	7/29/2009	**1.95**	NT	NT	3.58	NT	0.5	0.28	NT	0.52	NT	7.31	NT	23.53	**13.6**	NT	ND	0.004	ND	0.005	740	ND	ND	ND	800	20000	46000
LCS-1	7/31/2009	0.95	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-2	7/6/2009	0	NT	NT	2.94	NT	0.25	0.13	NT	1.44	NT	7.44	NT	21.43	3.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-3 (Alt)	9/29/2009	**1.31**	0.16	0.36	0.792	NT	0.3	0.158	NT	0.19	NT	5.43	NT	21.41	0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-4	7/6/2009	**3.78**	NT	NT	3.13	NT	0.5	0.49	NT	0.41	NT	6.96	NT	22.63	5.9	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-4	7/8/2009	**3.3**	NT	NT	4	NT	NT	NT	NT	NT	NT	7.01	NT	22.86	5.8	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-4	7/9/2009	**2.85**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-5	8/10/2009	0.35	NT	NT	5.08	NT	0.5	1.09	NT	0.29	NT	7.71	NT	25.37	1.7	NT	ND	0.004	ND	0.018	710	ND	NT	NT	3700	4100	9600
LCS-7	9/16/2009	**2.41**	0.17	0.74	3.41	NT	0.6	4.57	NT	0.1	NT	7.79	NT	25.17	8.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-8	9/11/2009	**1.55**	0.3	0.27	2.46	NT	0.4	4.89	NT	2.37	NT	7.27	NT	25.35	1.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-8	9/14/2009	NT	NT	NT	4.78	NT	NT	NT	NT	0.33	NT	7.03	NT	23.52	3.4	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-9 (Alt)	9/30/2009	NT	0.13	0.18	**23.77**	NT	0.5	0.54	NT	0.07	NT	6.43	NT	23.77	9.9	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-1	7/15/2009	0.59	NT	NT	2.89	NT	0.25	**>11.3**	NT	0.16	NT	7.24	NT	22.39	0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-1	7/16/2009	NT	NT	NT	2.89	NT	NT	**>11.3**	NT	NT	NT	7.36	NT	22.56	0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-10	7/15/2009	0.48	NT	NT	2.89	NT	0.25	**>11.3**	NT	0.21	NT	6.93	NT	23.7	0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-10	7/16/2009	NT	NT	NT	2.9	NT	NT	**>11.3**	NT	NT	NT	6.58	NT	23.52	0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-3	9/21/2009	0.76	0.08	0.43	1.21	NT	0	1.27	NT	0.02	NT	8.04	NT	25.41	1.6	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-4 (Alt)	9/30/2009	NT	0.12	0.16	4.2	NT	0.8	0.21	NT	0.53	NT	**9.35**	NT	32.01	0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-6	9/21/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
LUC-7 (Alt)	9/30/2009	NT	0.67	0.9	2.54	NT	0.25	2.06	NT	**3.96**	NT	7.97	NT	25.67	**15.5**	NT	NT	NT	NT	NT	NT	NT	NT	NT	**31000**	**36000**	**81000**
LUC-7 (Alt)	10/1/2009	NT	NT	NT	6.79	NT	NT	NT	NT	0.26	NT	6.81	NT	25.39	0	NT	NT	NT	NT	NT	NT	NT	NT	NT	1000	1500	3300
LUC-8	8/10/2009	**2.4**	NT	NT	5.8	NT	0.5	4.81	NT	0.36	NT	8.23	NT	25.54	2	NT	ND	0.005	ND	0.029	1600	ND	NT	NT	**10000**	**30000**	48000
LUC-8	8/12/2009	**2.3**	NT	NT	5.49	NT	NT	NT	NT	NT	NT	8.27	NT	25.23	1.3	NT	NT	NT	NT	NT	NT	NT	NT	NT	5100	6450	11050
LUX-1 (Alt)	8/17/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
LUX-2	8/17/2009	**1.05**	NT	NT	3.47	NT	0.5	1.73	NT	0.96	NT	7.22	NT	23.4	**27.9**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUX-2	8/19/2009	0.3	NT	E 0.05	2.71	NT	NT	NT	NT	NT	NT	7.56	NT	22.2	**27.4**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUX-3	9/15/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
RSF-1	7/8/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
RSF-4	7/8/2009	0.51	NT	NT	2.65	2.46	0.25	4.65	NT	0.38	NT	7.93	NT	22.33	4.8	5.6	ND	ND	ND	ND	800	ND	ND	ND	700	800	3900
SEL-2	8/10/2009	**1.05**	NT	NT	**7.05**	NT	0.5	0.7	NT	0.22	NT	7.25	NT	22.97	**56.3**	NT	ND	0.008	0.001	0.009	2080	NT	NT	NT	<100	100	600
SEL-2	8/12/2009	**2.1**	NT	NT	2.22	NT	NT	NT	NT	NT	NT	7.38	NT	22.19	**60.5**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
SEL-3	9/15/2009	**3.35**	0.65	0.32	**9.73**	NT	0.75	0.71	NT	0.42	NT	7.67	NT	23.06	**68.4**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Notes :

ND	Indicates Analyte was Not Detected above the reporting limit
NS	Indicates No Sample was taken
NT	Indicates analyte was Not Tested at that site
J	Indicates associated value is an estimated quantity
E>	Indicates associated value is an estimate
Bold	Indicates value exceeded Action Levels

Appendix C-5

2009 Trash Assessment Forms

Trash Assessment Form

SITE ID: _____**CBS-1**_____ **DATE:** _____**8/3/09**_____

LOCATION: _____**SEJPA OUTFALL**_____ **TIME:** _____**11:38**_____

OBSERVER: _____**MP/KR**_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**10X10**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Complete the following section for Submarginal, and Poor Evaluations ONLY

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

_____

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2009 Trash Assessment Form

SITE ID: _____CBS-2_____ **DATE:** _____7/8/09_____

LOCATION: __HIGHWAY 101 CHANNEL_____ **TIME:** _____12:45 PM_____

OBSERVER: _____MP/KR_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):___SUBOPTIMAL_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____40 X 10_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts	**2**		x			x						
Construction												
Fabric/Clothing												
Food Packaging	**1**		x	x		x		x				
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:

Trash Assessment Form

SITE ID: _____CBS-3N_____ **DATE:** _____9/14/09_____

LOCATION: ___GLEN PARK (NORTH PIPE)_____ **TIME:** _____13:42_____

OBSERVER: _____MP/CN_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): ___N/A_____

ESTIMATED AREA OF ASSESSMENT L X W (FT): _____10X40_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☑ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____CBS-3S_____ **DATE:** _____9/14/09_____

LOCATION: _____GLEN PARK (SOUTH PIPE)_____ **TIME:** _____13:43_____

OBSERVER: _____MP/CN_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____N/A_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____10X40_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____CBS-4_____ **DATE:** _____9/14/09_____

LOCATION: _____CARDIFF COVE_____ **TIME:** _____11:24_____

OBSERVER: _____MP/CN_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____OPTIMAL_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____20X20_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:

Trash Assessment Form

SITE ID: _____CBS-5_____ **DATE:** _____9/29/09_____

LOCATION: _____PLASTINO BUILDING_____ **TIME:** _____10:01_____

OBSERVER: _____MP/KR_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____N/A_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: Site was dry.

Trash Assessment Form

SITE ID: _____CBS-7_____ **DATE:** _____9/14/09_____

LOCATION: _____WOODLAKE AND EVERGREEN____ **TIME:** _____13:15_____

OBSERVER: _____MP/CN_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____OPTIMAL_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____100X10_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**CBS-8**_____ **DATE:** _____**9/14/09**_____

LOCATION: _____**HOA PARK @ 1002 WOODGROVE**____ **TIME:** ____**13:20**_____

OBSERVER: _____**MP/CN**_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**100X10**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: Hand broom inside storm drain.

Trash Assessment Form

SITE ID: _____CBS-9_____ **DATE:** _____9/14/09_____

LOCATION: _____LAKE DR & WALES____ **TIME:** ____14:00_____

OBSERVER: _____MP_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____OPTIMAL_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____5X5_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: Leaf litter.

Trash Assessment Form

SITE ID: ___ENC-1_____ **DATE:** __7/20/09_____

LOCATION: _MOONLIGHT BEACH_____ **TIME:** __13:02_____

OBSERVER: __MP/ME_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):__MARGINAL_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):___30X10_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☐ **RECEIVING WATER** ☑ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:

Trash Assessment Form

SITE ID: ____ENC-10_____ **DATE:** _____7/29/09_____

LOCATION: _COTTONWOOD CREEK @ DEL TACO__ **TIME:** ___10:17_____

OBSERVER: ___MP/MM_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):__POOR_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____20X20_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☐ **RECEIVING WATER** ☑ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☑ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing	**1**		☑								☑	
Food Packaging	**2**		☑								☑	
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: Evidence of active encampments at site. Trash included blankets and food packaging.

Trash Assessment Form

SITE ID: _____**ENC-11**_____ **DATE:** _____**8/5/09**_____

LOCATION: _____**REQUEZA CHANNEL**____ **TIME:** _____

OBSERVER: _____**MP/KR** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**20X20**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**ENC-12**_____ **DATE:** _____**8/3/09**_____

LOCATION: _____**ENCINITAS BLVD @ SDUHSD**____ **TIME:** ____**14:20**_____

OBSERVER: _____**MP/KR** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**5X5**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____ENC-14_____ **DATE:** _____8/17/09_____

LOCATION: _____VIA JULITA____ **TIME:** ____11:39_____

OBSERVER: _____KR/CN _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____N/A_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____4X2_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: Styrofoam, possible sewage debris- alerted Wastewater.

Trash Assessment Form

SITE ID: _____**ENC-15**_____ **DATE:** _____**7/20/09**_____

LOCATION: _____**ENC RANCH DETN BASIN**____ **TIME:** ____**10:51**_____

OBSERVER: _____**MP/ME** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**10X10**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**ENC-17**_____ **DATE:** _____**8/3/09**_____

LOCATION: _____**SUNSHINE GARDENS**____ **TIME:** ____**14:35**_____

OBSERVER: _____**MP/KR** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**5X5 MANHOLE**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: _____**ENC-18**_____ **DATE:** _____**8/5/09**_____

LOCATION: _____**PUEBLA ST. & LA MIRADA**____ **TIME:** ____**11:07**_____

OBSERVER: _____**MP/KR** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**5X5 MANHOLE**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**ENC-3**_____ **DATE:** _____**7/22/09**_____

LOCATION: _____**COAST HWY & B ST**____ **TIME:** _____**10:58**_____

OBSERVER: _____**MP/KR** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**50X30**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**ENC-4**_____ **DATE:** _____**7/20/09**_____

LOCATION: _____**SECOND ST**____ **TIME:** _____**14:23**_____

OBSERVER: _____**MP/ME** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**10X10**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: _____**ENC-5**_____ **DATE:** _____**7/22/09**_____

LOCATION: _____**COTTONWOOD CREEK PARK SOUTH**____ **TIME:** _____**14:45**_____

OBSERVER: _____**MP/CN** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**50X30**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☐ **RECEIVING WATER** ☑ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: _____**ENC-6**_____ **DATE:** _____**7/22/09**_____

LOCATION: _____**MOONLIGHT CREEK**____ **TIME:** _____**14:03**_____

OBSERVER: _____**MP/CN** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**30X15**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: Plastic bottles and tennis balls from nearby tennis courts.

Trash Assessment Form

SITE ID: _____**ENC-8**_____ **DATE:** _____**7/22/09**_____

LOCATION: _____**3RD ST & B ST**____ **TIME:** _____**9:55**_____

OBSERVER: _____**MP/CN** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**50X30**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**ENC-9**_____ **DATE:** _____**8/5/09**_____

LOCATION: _____**ENC. BLVD & SAXONY**____ **TIME:** ____**10:33**_____

OBSERVER: _____**MP/KR** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**40X10**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**ESC-1**_____ **DATE:** _____**9/22/09**_____

LOCATION: _____**BROOKSIDE LN_@ COPPER CK**___ **TIME:** _____**11:36**_____

OBSERVER: _____**MP/ME** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**ESC-2**_____ **DATE:** _____**9/16/09**_____

LOCATION: _____**LONE JACK RD @ STRATFORD KNOLL**____ **TIME:** _____**14:55**_____

OBSERVER: _____**MP/KR**_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**50X20**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: _____**ESC-3**_____ **DATE:** _____**9/22/09**_____

LOCATION: _____**DOUBLE LL RANCH RD**____ **TIME:** _____**12:14**_____

OBSERVER: _____**MP/ME**_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**NA**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: _____**ESC-4**_____ **DATE:** _____**9/29/09**_____

LOCATION: __**PRIVATE RD (OLIVENHAIN)**___ ____ **TIME:** _____**10:30**_____

OBSERVER: _____**MP/KR**_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**NA**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**30X10**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**ESC-5**_____ **DATE:** _____**9/11/09**_____

LOCATION: _____**CHELSEA @ CALLE SANTA CRUZ**____ **TIME:** _____**10:05**_____

OBSERVER: _____**MP/BT** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**5X5**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**LCS-1**_____ **DATE:** _____**7/29/09**_____

LOCATION: _____**GARDEN VIEW @ ECR**____**TIME:** _____**10:50**_____

OBSERVER: _____**MP/MM** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):____**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**30X10**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☑ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Complete the following section for Submarginal, and Poor Evaluations ONLY

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:

The County of San Diego Vector Control Program identified this site as a mosquito breeding site.

Trash Assessment Form

SITE ID: _____**LCS-2**_____ **DATE:** _____**7/6/09**_____

LOCATION: _____**LEUCADIA BLVD @ ECR**____ **TIME:** _____**15:20**_____

OBSERVER: _____**MP/CN**_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):____**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**20X20**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑**MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑**Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Complete the following section for Submarginal, and Poor Evaluations ONLY

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:

Trash Assessment Form

SITE ID: _____**LCS-3**_____ **DATE:** _____**9/29/09**_____

LOCATION: _____**SUN VISTA PARK**____ **TIME:** _____**11:00**_____

OBSERVER: _____**MP/KR**_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):____**NA**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Complete the following section for Submarginal, and Poor Evaluations ONLY

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:

Trash Assessment Form

SITE ID: _____**LCS-4**_____ **DATE:** _____**7/6/09**_____

LOCATION: _____**ECR @ MOUNTAIN VISTA**____ **TIME:** _____**14:10**_____

OBSERVER: _____**MP/CN**_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):____**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**10X10**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Complete the following section for Submarginal, and Poor Evaluations ONLY

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:

Trash Assessment Form

SITE ID: _____**LCS-5**_____ **DATE:** _____**8/10/09**_____

LOCATION: _____**VIA MOLENA @ ECR**____ **TIME:** _____**13:15**_____

OBSERVER: _____**MP/ME**_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):____**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**5X5 MANHOLE**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Complete the following section for Submarginal, and Poor Evaluations ONLY

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:

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Trash Assessment Form

SITE ID: _____LCS-7_____ **DATE:** _____9/16/09_____

LOCATION: _____EL CAMINO REAL (SOUTH OF LA ENTRADA LN.)___ **TIME:** ___14:30____

OBSERVER: _____MP/KR_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____ _____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Complete the following section for Submarginal, and Poor Evaluations ONLY

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:

Trash Assessment Form

SITE ID: _____**LCS-8**_____ **DATE:** _____**9/11/09**_____

LOCATION: _____**200 TURNER AVE**___ **TIME:** ___**9:35**____

OBSERVER: _____**MP/BT**_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):___**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____ ___**5X5 MANHOLE**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Complete the following section for Submarginal, and Poor Evaluations ONLY

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:

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Trash Assessment Form

SITE ID: _____LCS-9_____ **DATE:** _____9/30/09_____

LOCATION: _____200 TURNER AVE___ **TIME:** ___10:30____

OBSERVER: _____MP/ME_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):___NA_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____ ___5X5 MANHOLE_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑MS4 ☐ RECEIVING WATER ☐ BOTH	
☑**Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Complete the following section for Submarginal, and Poor Evaluations ONLY

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:

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Trash Assessment Form

SITE ID: _____**LUC-1**_____ **DATE:** _____**7/15/09**_____

LOCATION: _____**PONTO BEACH DETN BASIN**____ **TIME:** ____**14:53**_____

OBSERVER: _____**MP/ME** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**30X30**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**LUC-10**_____ **DATE:** _____**7/15/09**_____

LOCATION: _____**HWY 101 & AVOCADO**____ **TIME:** _____**13:25**_____

OBSERVER: _____**MP/ME** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):___**5X5**_**MANHOLE**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____LUC-3_____ **DATE:** _____9/21/09_____

LOCATION: _____NORMANDY @ PIRAEUS____ **TIME:** ____9:32_____

OBSERVER: _____MP/PCR_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____OPTIMAL_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____100X10_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**LUC-4**_____ **DATE:** _____**9/30/09**_____

LOCATION: _____**FOX POINT DETENTION BASIN**____ **TIME:** ____**14:00**_____

OBSERVER: _____**MP/ME** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**NA**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**20X40**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____LUC-6_____ **DATE:** _____9/21/09_____

LOCATION: _____PIRAEUS DETN BASIN____ **TIME:** ____11:00_____

OBSERVER: _____MP/PCR_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____OPTIMAL_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____100X10_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:

Evidence of dumping upstream along Piraeus on the east side of street.

Trash Assessment Form

SITE ID: _____LUC-7_____ **DATE:** _____9/30/09_____

LOCATION: _____QUAIL HOLLOW DR (UPSTREAM)____ **TIME:** ____11:11_____

OBSERVER: _____MP/ME _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____N/A_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____5X5 MANHOLE_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____**LUC-8**_____ **DATE:** _____**8/10/09**_____

LOCATION: _____**QUAIL HOLLOW DR**____ **TIME:** ____**10:43**_____

OBSERVER: _____**MP/ME** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**OPTIMAL**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**5X5 MANHOLE**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

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Trash Assessment Form

SITE ID: _____**LUX-1 (ALT)**_____ **DATE:** _____**8/17/09**_____

LOCATION: _____**EAST MANCHESTER @ ECR**____ **TIME:** _____**10:30**_____

OBSERVER: _____**KR/CN** _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____**N/A**_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____**30X30**_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____LUX-2_____ **DATE:** _____8/17/09_____

LOCATION: _____SAGE CANYON DR____ **TIME:** _____10:41_____

OBSERVER: _____KR/CN _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____OPTIMAL_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____50X50_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:

Styrofoam, paper

Trash Assessment Form

SITE ID: _____LUX-3_____ **DATE:** _____9/15/09_____

LOCATION: _____927 ELMVIEW DR____ **TIME:** _____9:36_____

OBSERVER: _____MP/KR _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):____OPTIMAL_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____5X5 MANHOLE_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: ___RSF-1_____ **DATE:** __7/8/09_____

LOCATION: _PEPPERTREE LANE_____ **TIME:** __10:40_____

OBSERVER: __MP/KR_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):__MARGINAL_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):___50X20_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:

Trash Assessment Form

SITE ID: _____RSF-4_____ **DATE:** _____7/8/09_____

LOCATION: ___LA BAJADA DIP_____ **TIME:** _____10:12_____

OBSERVER: _____MP/KR_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):__SUBOPTIMAL_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____20X50_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☑ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☑ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments:

Trash Assessment Form

SITE ID: _____SEL-2_____ **DATE:** _____8/10/09_____

LOCATION: _____MACKINNON RANCH RD___ **TIME:** _____13:52_____

OBSERVER: _____MP/ME _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____OPTIMAL_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____10X10_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☐ **RECEIVING WATER** ☑ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Trash Assessment Form

SITE ID: _____SEL-3_____ **DATE:** _____9/15/09_____

LOCATION: _____MIRA COSTA COLLEGE DETN____ **TIME:** ____9:50_____

OBSERVER: _____MP/KR_____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE):_____OPTIMAL_____

ESTIMATED AREA OF ASSESSMENT L X W (FT):_____30X30_____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☑ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☑ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

TYPE	Ranking or Count by Type *	POTENTIAL ROUTE (CHECK UP TO 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:_____

Appendix D

Administrative Citation Form

City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024
TELEPHONE NO.: (760) 633-2600
FAX NO: (760) 633-2818
www.ci.encinitas.ca.us

Citation #CW-

Administrative Citation

Date of Violation:

☐ **WARNING** ☐ 1st Citation $100 per violation ☐ 2nd Citation $200 per violation
☐ 3rd Citation $500 (per violation and each subsequent violation within a 12-month period)

Payment of $0.00 is due no later than (see reverse side for payment and appeal information)

This citation prohibits the continuation or repeated occurrence of the violation described below. Payment of the fine shall not excuse the failure to correct the violation nor shall it bar further enforcement by the City.

Violation Address	**Assessor's Parcel Number**
Person Cited	**Relationship of person being cited**
Mailing Address	**Business (if applicable)**

Code Section Violated	**Description of Violation**

As per the City of Encinitas Municipal Code Section 20.08.110 the following corrective actions must be implemented:

Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

Enforcing Officer	**Phone Number** (760) –	**Signature**	**Date issued**
Person Cited (Print Please)		**Acknowledgement of Receipt-Signature**	**Date**

Method of Delivery
☐ **In Person** ☐ **Posted on Property** ☐ **By Mail** ☐ **Certified Mail** ☐ **Other**

CC:

ADMINISTRATIVE CITATIONS

Encinitas Municipal Code Chapter 1.08.080 provides for the issuance of an administrative citation for violations of the Code. There are four levels of citations that may be issued progressively for a violation. The levels, as indicated on the front of the citation, are a Warning, a $100 First Citation, a $200 Second Citation, and a $500 Third and subsequent Citations. These fines are per violation and are cumulative. A warning, if issued, does not incur a fine and, therefore, cannot be appealed.

A. RIGHTS OF APPEAL

You have the right to appeal this citation within 15 calendar days from the date the citation was issued. An appeal must be made in writing, including a return address, a basis for the appeal in detail must be included, and be accompanied by the fine amount. An appeal will result in an administrative hearing.

Failure of any person to properly file a written appeal within 15 calendar days shall constitute a waiver of his or her right to an administrative hearing and adjudication of the citation or any portion thereof and the total amount of the fine.

B. HOW TO PAY FINE

The amount of the fine is indicated on the front of the administrative citation and is due within 30 calendar days of the issue date of the citation. You may pay by mail or in person. Payment should be made by credit card, personal check, cashier's check, or money order payable to the City of Encinitas. Payment should be made at the address below. Please write the citation number on your check or money order.

City of Encinitas
505 S. Vulcan Ave.
Encinitas, CA 92024
Attention: Finance Department / Administrative Citations

If the fine is not paid within 30 calendar days of the issue date of the citation, you will receive a Delinquent Notice from the Finance Department and there will be a 100% penalty fee assessed in addition to the original fine.

Payment of any fine shall not excuse the failure to correct the violation nor shall it bar further enforcement by the City.

C. CONSEQUENCES FOR FAILURE TO PAY THE FINE

The failure of any person to pay the fine assessed by a citation within 30 calendar days of the issuing date of the citation or the due date on a Delinquent Notice may result in turning the account over to a collection agency, filing a claim with Small Claims Court, a lien against your property, or any other available legal remedy to collect such money. The City has the authority to collect all costs associated with the filing of such actions.

D. CONSEQUENCES OF FAILURE TO CORRECT VIOLATIONS

There are numerous other enforcement options that may be used to encourage correction of violations. These options include, but are not limited to: criminal prosecution, civil litigation, abatement, recording the violation with the County Recorder, and forfeiture of certain benefits for substandard residential rental property.

If you need further information about the violation and/or how to comply, please call the officer designated on the front of the citation.

Appendix E

JURMP Annual Report Requirements Checklist

Appendix E
JURMP Annual Report Requirements Checklist

IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	**Location in Report**
i. Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.	7.4.3.1, Appendix C (Section 2.0), Appendix C-1
ii. Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.	Appendix C
iii. Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.	N/A
iv. A brief description of any other investigations and follow-up activities for illicit discharges and connections.	Appendix C
v. The number and brief description of illicit discharges and connections identified.	7.5.2
vi. The number of illicit discharges and connections eliminated.	7.5.2
vii. Identification and description of all spills to the MS4 and response to the spills.	Appendix H-1
viii. A description of activities implemented to prevent sewage and other spills from entering the MS4.	7.3.1, 7.3.4
ix. A description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received.	7.2.1
x. Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	7.2.3, 7.2.4, Appendix H-1
xi. A description of efforts to publicize and facilitate public reporting of illicit discharges.	7.2.3
xii. The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	7.5.2, 7.5.3, Appendix H-1

IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	**Location in Report**
xiii. A description of notable activities conducted to manage illicit discharges and connections.	Appendix C (Section 6.0) Appendix H-1

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	**Location in Report**
Meets applicable standard monitoring and reporting requirements listed in Municipal Permit Attachment B.	Appendix C
c. (1) Determining Sampling Frequency: Dry weather field screening and analytical monitoring shall be conducted at each identified station at least once between May 1st and September 30th of each year or as often as the Copermittee determines is necessary to comply with the requirements of section D.4 of Order No. R9-2007-0001.	Appendix C
c. (2) If flow or ponded runoff is observed at a dry weather field screening or analytical monitoring station and there has been at least seventy-two (72) hours of dry weather, make observations and collect at least one (1) grab sample. Record general information such as time since last rain, quantity of last rain, site descriptions (i.e., conveyance type, dominant watershed land uses), flow estimation (i.e., width of water surface, approximate depth of water, approximate flow velocity, flow rate), and visual observations (i.e., odor, color, clarity, floatables, deposits/stains, vegetation condition, structural condition, and biology).	Appendix C (Section 3.0), Appendix C-2
c. (3) At a minimum, collect samples for analytical laboratory analysis of the following constituents for at least twenty five percent (25%) of the dry weather monitoring stations where water is present: (a) Total Hardness, (b) Oil and Grease, (c) Diazinon and Chlorpyrifos, (d) Cadmium (Dissolved), (e) Lead (Dissolved), (f) Zinc (Dissolved), (g) Copper (Dissolved), (h) Enterococcus bacteria, (i) Total Coliform bacteria, (j) Fecal Coliform bacteria	Appendix C, Section 3.0
c.(4) At a minimum, conduct field screening analysis of the following constituents at all dry weather monitoring stations where water is present:	Appendix C, Appendix C-3
c. (a) Specific conductance (calculate estimated Total Dissolved Solids), (b) Turbidity, (c) pH, (d) Reactive Phosphorus, (e) Nitrate Nitrogen, (f) Ammonia Nitrogen, (g) Surfactants (MBAS)	Appendix C, Appendix C-3
c. (5) If the station is dry (no flowing or ponded runoff), make and record all applicable observations and select another station from the list of alternate stations for monitoring.	Appendix C
c. (6) Develop and/or update criteria for dry weather field screening and analytical monitoring results whereby exceedance of the criteria will require follow-up investigations to be conducted to identify and eliminate the source causing the exceedance of the criteria.	Appendix C

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	**Location in Report**
c. (7) Assess the presence of trash in receiving waters and urban runoff at each dry weather field screening or analytical monitoring station. Assessments of trash shall provide information on the spatial extent and amount of trash present, as well as the nature of the types of trash present.	Appendix C (Section 7.0), Appendix C-4
c. (8) Dry weather field screening and analytical monitoring stations identified to exceed dry weather monitoring criteria for any constituents shall continue to be screened in subsequent years.	Appendix C, Table 5.0
c. (9) Develop and/or update procedures for source identification follow up investigations in the event of exceedance of dry weather field screening and analytical monitoring result criteria. These procedures shall be consistent with procedures required in section D.4.d of Order No. R9-2007-0001.	Appendix C (Section 3.0)
c. (10) Develop and/or update procedures to eliminate detected illicit discharges and connections. These procedures shall be consistent with each Copermittees Illicit Discharge and Elimination component of its Jurisdictional Urban Runoff Management Plan as discussed in section D.4 of Order No. R9-2007-0001.	7.5.2
d. The Copermittees shall commence implementation of dry weather field screening and analytical monitoring under the requirements of this Order by May 1, 2008. Each Copermittee shall conduct dry weather analytical and field screening monitoring in accordance with its storm water conveyance system map and dry weather analytical and field screening monitoring procedures as described in section II.B.3 above. If monitoring indicates an illicit connection or illegal discharge, conduct the follow-up investigation and elimination activities as described in submitted dry weather field screening and analytical monitoring procedures and sections D.4.d and D.4.e of Order No. R9-2007-0001. Until the dry weather field screening and analytical monitoring program is implemented under the requirements of this Order, each Copermittee shall continue to implement dry weather field screening and analytical monitoring as it was most recently implemented pursuant to Order No. 2001-01.	Appendix C (Section 1.0)

CITY OF ENCINITAS

Clean Water Program



ENGINEERING SERVICES

Jurisdictional Urban Runoff Management Program Annual Report

FY 2009-10

CITY OF ENCINITAS

Clean Water Program



ENGINEERING SERVICES

Jurisdictional Urban Runoff Management Program Annual Report

FY 2009-10

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EXECUTIVE SUMMARY

Section J.3 of Water Quality Order No. R9-2007-0001, adopted January 24, 2007, requires the City of Encinitas to prepare a JURMP Annual Report describing all activities conducted by the City to comply with the provisions of the Order. The following report covers the implementation period for Fiscal Year 2009-2010 with a defined reporting period from July 1, 2009 through June 30, 2010. This reporting period is marked by the application and refinement of newly developed program elements, and the assimilation of core components for a broadly effective and efficient set of actions. Reporting for this annual report has been prepared in compliance with standards established in Water Quality Order No. 2007-0001, and is based upon the most current information available at the time of document preparation. This report is presented in the standardized annual reporting format developed collectively by the San Diego Region Municipal Stormwater Copermittees.

On March 24, 2008, the City of Encinitas submitted, as required by Order No. 2007-0001, an updated JURMP. The JURMP was prepared as a foundational program document to detail programs, process, procedure, and implementation strategies employed by the City to improve and protect the quality of local surface and receiving waters. As part of the JURMP update process, the following list of objectives was established to set baseline guidance for overall program success:

- Develop programmatic elements to ensure compliance with regulatory standards and provisions mandated in Order No. R9-2007-001.
- Establish management processes and procedures to ensure accountability for program actions and activities.
- Establish and support a set of effective and efficient strategies to address Encinitas water quality concerns.
- Build program elements around integrated assessment approaches in order to evaluate overall performance and effectiveness of program components.

Programmatic reporting, represented in this document, serves as a critical self assessment tool in consideration of the objectives outlined above. However, it should be noted that the value added outcomes, both to the program and to the community of Encinitas, of each program area are in constant review as local, regional, and discipline specific technical and scientific knowledge advances. It is important to recognize the iterative nature of stormwater and surface water quality management, as such programs are comprehensive in nature, and each individual component contributes to the overall effectiveness of program actions. The information presented in this report captures the development and implementation of program components within the defined reporting period and represents the state of program elements as defined by that period. Future reporting years will provide opportunity to express refinement and acuity of program

features and the City's overall progression in the field of stormwater and surface water quality management.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Phil Cotton

9-22-10

Phil Cotton, City Manager
City of Encinitas

Date

1.0 INTRODUCTION

The Clean Water Act of 1972 established the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the discharge of pollutants from point sources to the waters of the United States. In 1987, the Clean Water Act was amended to include non-point source pollution such as urban runoff, and established a framework for regulating urban storm water runoff and other non-point source pollutants through establishment of various general and individual permits issued to local governments and other agencies.

In 2002, the City of Encinitas (City) developed a Jurisdictional Urban Runoff Management Program (JURMP) document as required by the San Diego Regional Water Quality Control Board (RWCQB) Order No. 2001-01 (2001 Permit). On January 24, 2007, Order No. R9-2007-0001 (Order, Permit, 2007 Permit or Municipal Stormwater Permit), was adopted by the RWQCB, regulating the discharge of urban runoff from municipal separate storm sewer systems (MS4) draining the watersheds of the County of San Diego, the San Diego Unified Port District, the San Diego County Regional Airport Authority, and the incorporated cities of San Diego County, including the City of Encinitas (Copermittees). Under the requirements of Order No. R9-2007-0001, the City prepared and submitted on March 24, 2008 an updated JURMP document describing enhancements to existing programs, as well as newly developed programmatic elements to meet the provisions of the adopted permit.

Section J.3 of Water Quality Order No. R9-2007-0001, requires the City to prepare a JURMP Annual Report describing all activities conducted by the City to comply with the provisions of the Order. The following report covers the implementation period for Fiscal Year 2009-2010 (FY 2009-10) with a defined reporting period from July 1, 2009 through June 30, 2010.

1.1 BACKGROUND

The City of Encinitas encompasses an overall area of nearly 20 square miles and is located along six miles of Pacific coastline in northern San Diego County. The City is characterized by coastal beaches, cliffs, flat-topped coastal areas, steep mesa bluffs and rolling hills. Incorporated in 1986, drawing together the communities of New Encinitas, Old Encinitas, Cardiff-by-the-Sea, Olivenhain and Leucadia, the City has an approximate population of 60,000. Encinitas is bordered by the Pacific Ocean to the west, Batiquitos Lagoon to the north, and the San Elijo Lagoon to the south.

The City of Encinitas is situated entirely within the Carlsbad Hydrologic Unit and is split between the San Marcos Watershed to the north and the Escondido Creek Watershed to the south. The City is naturally divided by eight (8) distinct drainage areas (sub-basins): Cardiff, Lower Escondido, La Orilla, La Costa South, Leucadia, Encinitas, Rancho Santa Fe, and Lux Canyon sub-basins. Encinitas receives an average annual rainfall of approximately ten (10) inches.

The City owns and maintains improved and open storm water channels, underground pipes of varying material, storm water detention basins, catch basins, and a variety of other MS4 facilities.

In general, the City drains to three blue-line creeks: Cottonwood Creek, Encinitas Creek and Escondido Creek. Cottonwood Creek drains the heart of Encinitas and discharges to the Pacific Ocean at Moonlight Beach. In 2006, Cottonwood Creek was 303(d) listed for DDT, phosphorous, and sediment toxicity stressors. Further, the Pacific Ocean is listed as a 303(d) impaired water body at Moonlight Beach for bacteria indicators due to urban runoff from Cottonwood Creek. Encinitas Creek drains the north-central portion of the City, and drains into Batiquitos Lagoon, which is designated as a Critical Coastal Area in the State of California 2002 Critical Coastal Areas Strategic Plan. In 2006, Encinitas Creek was 303(d) listed for phosphorous impairments. Escondido Creek, listed in 2006 for DDT, phosphorous, sediment toxicity, manganese, phosphate, selenium, sulfates, and total dissolved solids, drains the southern and northwest (Olivenhain) portion of the City and drains into San Elijo Lagoon. San Elijo Lagoon is 303(d) listed as an impaired water body for sediment/siltation, bacteria indicators, and eutrophic conditions.

1.2 PURPOSE AND OBJECTIVES

The purpose of the 2009-2010 JURMP Annual Report is to provide a comprehensive account of programmatic activities conducted by the City of Encinitas to meet the requirements of the Order No. 2007-0001. Additionally, the annual reporting process is used to evaluate the overall effectiveness and efficiency of program elements. Notably, a comprehensive program update occurred through the JURMP update process in 2008; therefore, only significant augmentation of program elements or planned changes will be captured in the following annual report. Any program modifications will be for the advancement of the City's program and will comply with all regulations as presented in the Municipal Permit.

2.0 DEVELOPMENT PLANNING

2.1 INTRODUCTION

Being a coastal community, environmental protection and water quality are of utmost importance to the City of Encinitas. As a result, the City has established strong water quality protection policies which are reflected in development planning documents and procedures. Through the implementation of the Development Planning Component of the City's JURMP and other related planning documents, the City aims to reduce the discharge of pollutants from development projects to the Maximum Extent Practicable (MEP) to protect receiving water bodies and manage increases in runoff and erosion from development projects.

This section describes the City's actions during FY 2009-10 which contributed to the successful implementation of the City's Development Planning Component. Included in this section is a summary of recent updates made to land use policies and procedures, a description of the update of the City's Standard Urban Stormwater Mitigation Plan (SUSMP), the development of the San Diego region Hydromodification Management Plan, a review of the development projects approved in the reporting year, and a summary of the second year of implementation of the BMP installation, verification, and inspection programs.

2.2 LAND USE PLANNING

The City's land use planning process facilitates (1) the reduction of development project discharges of pollutants from the MS4 to the MEP, (2) the prevention of development project discharges from the MS4 from causing or contributing to a violation of water quality standards, and (3) management of increases in runoff discharge volumes, rates, and durations from development projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force.

The City's land use planning process is fundamentally structured around the following planning, guidance, and enforcement documents:

- General Plan
- Jurisdictional Urban Runoff Management Plan
- Watercourse Protection, Storm Water Management and Discharge Control Ordinance (Municipal Code Chapter 20.08)
- Grading, Erosion and Sediment Control Ordinance (Municipal Code Chapter 23.24), adopted March 2009
- Encinitas Stormwater Manual (Local SUSMP), adopted March 2010
- Storm Water Best Management Practices Manual II , updated March 2010

The consistent application and regular update, as required or necessary, of each of these documents enables the City to successfully conform to the requirements of section D.1 of the Municipal Permit. The following sections describe the City's land use planning process and the documents in more detail.

2.2.1 BACKGROUND

The City of Encinitas was incorporated in 1986, drawing together the communities of Cardiff-By-The-Sea, Leucadia, Olivenhain, and old and new Encinitas. The City's General Plan was adopted in 1989 and is amended on a limited, as needed basis. The City's JURMP, the Storm Water Ordinance, and the Storm Water BMP Manual II were each originally developed in 2002 as required by Order 2001-01. Each of these documents were reviewed and updated as needed in fiscal year 2007-08 as part of the JURMP update process and as required by the new Municipal Permit. Notably, in FY 2009-10 the City of Encinitas developed and adopted the Encinitas Stormwater Manual (ESM), serving as the City's new local SUSMP document.

2.2.2 SOURCE CHARACTERIZATION

The City addresses seven major land use categories in its General Plan: residential, office professional, commercial, industrial, public / semi-public, transportation, and ecological / open space / parks. Each of these land uses is associated with different combinations of pollutants and activities that have the potential to negatively affect the surrounding environment. A detailed discussion of the potential threats to water quality associated with existing residential, commercial, industrial, and municipal land uses can be found in their designated sections within this document.

Through the implementation of the land use planning policies, procedures, and requirements established in the General Plan, JURMP, Storm Water Ordinance, Grading Ordinance, BMP Manual II, and the new Encinitas Stormwater Manual, the City aims to reduce the potential for pollutant discharges from all planned development and redevelopment land use sources.

2.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

During FY 2007-08, the City of Encinitas updated its land use planning BMPs as required by Order 2007-0001. As part of the 2008 JURMP update process, these BMPs were incorporated into Storm Water BMP Manual II. In FY 2009-10, Clean Water Program staff completed the process of updating the City's local SUSMP to meet the minimum standards established in the recently updated and approved regional Model SUSMP. The City's new local SUSMP document, titled the Encinitas Stormwater Manual, was adopted in March 2010. The most current version of the City's BMP Manual II and the Encinitas Stormwater Manual can be accessed through the Clean Water Program webpage at: http://cwp.cityofencinitas.org. For more detail regarding the development and adoption of

the Encinitas Stormwater Manual and the regional Model SUSMP refer to Section 2.2.4.4 and 2.4.4.1 below.

2.2.4 PROGRAM IMPLEMENTATION

2.2.4.1 GENERAL PLAN

The City of Encinitas General Plan addresses multiple water quality and watershed protection principles. Included within the General Plan are a number of proactive policies that pertain to water pollution and land use decisions. Many of the policies directly specify preservation and acquisition of riparian corridors, wetlands, and buffer zones providing important water quality benefits. The policies place limits on disturbances to natural bodies of water and drainage systems caused by developments and strive to avoid developing in areas susceptible to erosion and sediment loss. The General Plan also discourages the use of large amounts of impervious surfaces in new development areas, minimizing the transport of urban runoff and pollutants. The breadth of the City's General Plan policies are such that they cross reference each other and have been determined to comprehensively comply with the Municipal Permit.

The City's General Plan document serves as the blueprint for the long-range, orderly, physical development of the City and contains stated community goals and policies designed to protect its environmental, social, cultural and economic resources as the City develops. The General Plan consists of an integrated and internally-consistent set of goals, policies, and standards that address a number of issue areas which include land use, circulation, housing, noise, safety, recreation, conservation, and open space.

Portions of the General Plan also encompass the City's Local Coastal Program (LCP) Land Use Plan, which guides development in the City's Coastal Zone pursuant to the Coastal Act. As a result, the City's General Plan and LCP are a combined single document.

The City implements the policies in the General Plan using a variety of resources including: the JURMP, Municipal Code, Storm Water BMP Manual II, the Encinitas Stormwater Manual, Development Agreements, and other various land use plans and permits. Section 2.4 of this document describes how the water quality and watershed policies are implemented through the City's development planning process.

As a component of the 2008 JURMP update (prepared in FY 2007-08) an assessment of the City of Encinitas General Plan was conducted to determine the City's consistency with the watershed protection policies and principles found in the Municipal Permit. The analysis found that the City's General Plan goals and policies are consistent with the Municipal Permit, and no amendments to the General Plan were required as a part of the JURMP update.

Notably, in FY 2009-10, the City of Encinitas and Clean Water Program staff have been actively involved in a Comprehensive General Plan Update (CGPU) process that is anticipated to take approximately 2-3 years. In February 2009, the City released a request

for proposal (RFP), inviting proposals from professional planning and design firms to provide services associated with the General Plan Update. The scope of the RFP included direction to address new policy issues such as sustainable communities, healthy communities, climate change, green building, surface water quality, and stormwater management. As part of the selection process, and to represent water quality, stormwater management, and interrelated disciplines, the Clean Water Program Manager was invited to participate as an interview panel member. This effort is significant both to the City of Encinitas and the Clean Water Program, as it will provide opportunity to shape and marry citywide policy as it directly relates to water quality and stormwater management in the City of Encinitas.

As the comprehensive General Plan Update process has taken shape over the past year, the Clean Water Program has capitalized on the opportunities that it has presented. Clean Water staff participated in a number of community workshop events, gaining valuable insight into community priorities and views on environmental and water quality issues throughout the community. In addition, Clean Water staff has represented program interests in the development of process summary documents and identified those areas in the existing General Plan that could be strengthened in consideration of current and emerging discipline specific trends. The various levels of participation in the process will prove valuable in the shaping of draft and ultimately final policy statements in the forthcoming City of Encinitas General Plan Update anticipated for 2012.

2.2.4.2 JURMP

In compliance with the new Municipal Permit, the City's JURMP document underwent a major update during FY 2007-08. The JURMP document serves as the City's foundational storm water program management tool, capturing the development process, procedure, and implementation strategies for described elements. The purpose of this document is to present an integrated approach to reducing the discharge of pollutants from the MS4 to the MEP, and to protect and improve the quality of water bodies in Encinitas.

2.2.4.3 STORM WATER ORDINANCE AND GRADING ORDINANCE

As required by section J.a.(3)(b)iii of the Municipal Permit, the City's Watercourse Protection, Stormwater Management and Discharge Control Ordinance *(EMC Chapter 20.08)*, also called the Storm Water Ordinance, was updated during FY 2007-08 to comply with the Municipal Permit. The Storm Water Ordinance sets up the legal framework which enables the City to enforce the water quality and watershed protection principles established in the General Plan and the JURMP. The Storm Water Ordinance also references the City's Storm Water BMP Manual II and enables the City to enforce the minimum BMPs and SUSMP requirements that are outlined in BMP Manual II and extended to the Encinitas Stormwater Manual. The ordinance is periodically reviewed and updated on an as needed basis to ensure that potential discharges of pollutants may be addressed appropriately.

The Grading, Erosion, and Sediment Control Ordinance *(EMC Chapter 23.24)* was thoroughly reviewed and updated in FY 2007-08, approved by City Council on February 25, 2009, and subsequently approved by the California Coastal Commission. The update largely addressed engineering related revisions, but also included some updates which serve to further strengthen the City's legal authority in meeting the provisions of the Municipal Permit related to both construction and post-construction activities. Specifically, the grading ordinance was updated to require that all Priority Projects acquire a grading permit, and that any project proposing 500 square feet or more of impervious surface is reviewed for conformance with City stormwater regulations.

2.2.4.4 STORM WATER BMP MANUAL II AND ENCINITAS STORMWATER MANUAL (LOCAL SUSMP)

Storm Water BMP Manual II Update

As part of the 2008 JURMP update, Storm Water BMP Manual II was also updated; the City's revised SUSMP and regionally adopted Interim Hydromodification Criteria were incorporated into the Storm Water BMP Manual II as required by the Municipal Permit, during FY 2007-08. As a component of this update, the City also integrated the interim SUSMP provisions into local land use planning and development process and procedure as outlined in the BMP Manual II.

The City originally created the Storm Water BMP Manual II in 2002 to be used by individuals involved with development projects within the City. BMP Manual II prescribes minimum stormwater BMPs for Land Development and Construction activities, and is enforceable through reference by the Stormwater Ordinance and the Grading Ordinance. BMP Manual II also includes various tables to help identify which requirements are applicable to each unique development project.

Standard Urban Storm Water Mitigation Plan (SUSMP) Update

Within the defined reporting period of this report, the City of Encinitas updated the City's local SUSMP based on the recently approved San Diego Regional Model SUSMP. The revised Model SUSMP was developed to address post-construction urban runoff pollution from development projects and defines the minimum required Low Impact Development (LID), source control, and treatment control BMPs. Update of the City's local SUSMP involved significant revisions to BMP Manual II and the creation of the Encinitas Stormwater Manual (the City's new local SUSMP document). Details about the completed update to these two documents can be found in Section 2.4.4.1. As required by Order No. 2007-001, all new updates to the San Diego Regional Model SUSMP were incorporated into the City's local SUSMP and land development process and procedures before March 24, 2010. The Encinitas Stormwater Manual and the updated BMP Manual II were adopted by City Council on March 17, 2010.

2.3 ENVIRONMENTAL REVIEW PROCESS

As part of the 2008 JURMP update, the City's environmental review staff evaluated the City's environmental review process and confirmed that the current process accurately evaluates water quality and cumulative impacts and identifies appropriate measures to avoid, minimize, and mitigate those impacts for all development projects.

The California Environmental Quality Act (CEQA) requires environmental review of discretionary applications for development projects. Environmental initial studies are conducted to determine whether the project may have a significant impact on the environment. This review process evaluates a project's potential for significant impacts on water quality. In compliance with the Municipal Permit, additional questions have been provided in the initial study checklist, a tool utilized to evaluate the environmental effects of a project. To evaluate potential water quality impacts of projects requiring discretionary review, the following questions have been included as part of the initial study checklist:

Would the project:

- *Substantially conflict with city-adopted water quality standards or waste discharge requirements?*
- *Substantially alter the existing drainage pattern of the site or area, including the alteration of a stream or river course, in a manner which would result in substantial erosion or siltation on- or offsite?*
- *Result in a substantial degradation of receiving water quality during construction activities?*
- *Propose a land use or an on-site activity that would substantially degrade receiving water quality?*
- *Substantially increase any pollutant for which* a *tributary water body is listed on the Clean Water Act Section 303(d) list?*
- *Substantially degrade surface water quality within wetland, fresh, marine, or recreational waters?*
- *Substantially degrade groundwater quality?*

The environmental review process ensures that a project's impact on water quality is addressed early in the planning process. If a project is determined to have a significant environmental effect, mitigation measures are required under CEQA to avoid or reduce the effect to below a level of significance. The mitigation measures will normally take the form of adopted permanent Best Management Practices to be incorporated into project plans prior to discretionary approval.

2.4 DEVELOPMENT PROJECT APPROVAL AND VERIFICATION PROCESS

2.4.1 BACKGROUND

As discussed in the previous sections, the City of Encinitas has an established multi-departmental review process for all new development and redevelopment projects. Through the application of the City's Storm Water Ordinance, Grading Ordinance, Storm Water BMP Manual II, Encinitas Stormwater Manual, and development project review process, the City aims to mitigate the negative impacts of urban runoff from development projects to the MEP.

Each proposed discretionary and ministerial project is subject to the City's Development Project Approval and Verification Process. The following sections describe this process in detail.

2.4.2 SOURCE CHARACTERIZATION

As discussed in Section 2.2.2, development projects have the potential to discharge different types and amounts of pollutants based on the project's size and intended land use. Pollutants such as trash and debris are anticipated from all developments, regardless of land use; however, pollutants like bacteria and viruses are more likely to originate from restaurants and residential developments rather than from parking lots and automotive repair shops. Since the potential for a site to discharge pollutants is unique to each development, the City's design requirements for development projects vary according to size, project characteristics, and anticipated land use.

The City's SUSMP (Encinitas Stormwater Manual), which was developed and adopted as required during FY 2009-10, describes specific categories for Priority Projects. A Priority Project must implement Low Impact Development techniques, source control components, Treatment Control Best Management Practices, and Hydromodification Management Practices to address potential pollutants.

In the City of Encinitas, all development projects, including Standard projects (projects not subject to SUSMP standards), are required to meet the minimum BMP requirements, which are discussed below in Section 2.4.3.

2.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City's minimum BMP requirements for all development projects are summarized here and are included in the new Encinitas Stormwater Manual. These minimum BMPs are based on BMPs established in the regional Model SUSMP. All development projects are required to include the following minimum BMPs:

- Implementation of source control BMPs as listed in Appendix A of the Encinitas Stormwater Manual.

- Inclusion of Low Impact Design (LID) features that conserve natural features, set back development from natural water bodies, minimize imperviousness, maximize infiltration, and retain and slow runoff. (Specific LID requirements are dependent on the type of project that is proposed.)
- Compliance with requirements for construction-phase controls on sediment and other pollutants.

SUSMP Priority Projects must submit a grading plan, which includes identification of proposed LID features, source control and treatment control BMPs, calculations for sizing the treatment control BMPs, and a maintenance agreement that will be recorded with the County. The grading plan must also address how the project will manage increases in runoff discharge rates and durations associated with the project, where such increases could cause impacts downstream of the project.

2.4.3.1 HYDROMODIFICATION MANAGEMENT PLAN AND INTERIM HYDROMODIFICATION CRITERIA

To reduce the negative impacts to beneficial uses and stream habitats that are attributed to increased runoff rates and in compliance with Order No. 2007-0001, during the defined reporting period of this report, the City was collaborating with the other Copermittees to adopt a detailed Hydromodification Management Plan (HMP) for the San Diego Region.

In FY 2007-08 and FY 2008-09, the Copermittees—in cooperation with a Technical Advisory Committee, the Southern California Coastal Water Research Project and the Regional Board—were actively involved in conducting scientific research and gathering the necessary data in order to prepare the final HMP. The final draft HMP was submitted to the Regional Board for review and approval in December 2009.

In FY 2007-08, the City established Interim Hydromodification Criteria that will be in effect until the final HMP is approved and ultimately incorporated in the Encinitas Stormwater Manual. The City requires all Priority Projects disturbing 50 or more acres to comply with the Interim Hydromodification Criteria, except for those sites that are considered exempt as described in Section D.1.(g)(6) of the Municipal Permit. The details of the Interim Hydromodification Criteria are presented in the Encinitas Stormwater Manual and BMP Manual II, and are consistent with the regionally adopted interim Hydromodification standards. A time table for development of the final HMP can be found in Section 2.4.4.1 and Table 2-2.

The City does not issue permits to development projects until all minimum BMP requirements are met. Any changes made to a development project's proposed storm water BMPs during project construction must be approved by the City before being implemented.

2.4.4 PROGRAM IMPLEMENTATION

As required by the Municipal Permit, the City of Encinitas has implemented a program to ensure that development and redevelopment projects comply with SUSMP requirements, including Low Impact Development, source control, treatment control BMPs, and Hydromodification Management. The Municipal Permit further requires that the City ensure proper installation of treatment control BMPs and their maintenance into perpetuity through such procedures as BMP verification, maintenance agreements, and annual inspections.

The following section provides an overview of the City's SUSMP implementation (including project tracking) during FY 2009-10.

2.4.4.1 MODEL AND LOCAL SUSMP UPDATES

As a part of the 2008 JURMP update process, the City updated its current SUSMP document to meet the interim requirements outlined in the new Municipal Permit. The City's update followed the recommended language developed by the regional SUSMP update group. All required interim SUSMP updates were incorporated into Storm Water BMP Manual II (see Section 2.2.4.4). In compliance with the interim SUSMP update standards established in Order No. 2007-0001, the following tasks were performed during the review and interim update of the SUSMP:

- Priority Project categories were updated.
- The document was reviewed to ensure no obsolete or ineffective BMPs were retained.
- LID requirements and additional source control requirements were added to meet or exceed Municipal Permit requirements.
- LID BMPs that can be used as treatment control BMPs were added to appropriate tables and discussions of treatment control options were updated accordingly.
- Pollution removal efficiencies of treatment control BMPs were reviewed and updated where necessary.

In addition to the changes discussed above, a comprehensive regional Model SUSMP update was completed by the copermittees during FY 2008-09 and submitted to the Regional Board for approval on January 26, 2009. After incorporation of revisions based on Regional Board comments the Model SUSMP was approved by the Regional Board on March 24, 2009. The comprehensive Model SUSMP update includes the following as required by the Municipal Permit:

- Inclusion of LID, source control, and treatment control BMPs that meet or exceed the minimum requirements of the Municipal Permit.
- Establishment of site, design, and maintenance criteria for each LID and treatment control BMP listed in the Model SUSMP.
- Addition of criteria to help determine conditions where implementation of each LID BMP included in the Model SUSMP is applicable and feasible.

- Addition of a requirement for Priority Projects with low traffic areas and appropriate soil conditions to use permeable surfaces.
- Addition of any necessary restrictions for infiltration BMPs from Priority Projects that generate high levels of pollutants.

During FY 09-10, the City completed the update of its Local SUSMP (Encinitas Stormwater Manual) to meet the requirements established in the regional Model SUSMP. The local update was completed and adopted by City Council on March 17, 2010, within one year after the adoption of the Model SUSMP. Development of the Encinitas Stormwater Manual (local SUSMP) involved extensive coordination between several City departments, including Engineering, Planning, Public Works, Parks & Recreation, and the San Dieguito Water District. Involving all appropriate departments in the development of the Encinitas Stormwater Manual provided interdepartmental ownership and awareness of applicable standard and helped to ensure that implementation of the new SUSMP requirements would go smoothly. Clean Water Program staff hosted bi-weekly Stormwater Quality Workgroup sessions from July 2009 through February 2010, providing a collaborative forum for the development of the local SUSMP (Encinitas Stormwater Manual). At these workshop meetings, staff from several departments actively participated in the development of Encinitas-specific document language, implementation tools (such as the Stormwater Checklist and Certification form), template maintenance agreements, and detailed Integrated Management Practice (IMP) design guidelines. The workshop meetings were very successful and allowed for each department to be involved in the integration of the new SUSMP requirements into existing practices and procedures. After commencement of the workshop series, each department was well aware of the new SUSMP requirements and how these requirements would be presented in the Encinitas Stormwater Manual.

The City's new updated Local SUSMP is titled the Encinitas Stormwater Manual. The Encinitas Stormwater Manual serves as an implementation guide for stormwater standards to assist the professional development community and the general public in understanding the City of Encinitas SUSMP requirements. The Encinitas Stormwater Manual establishes a regionally consistent and systematic BMP design procedure intended to meet complex and overlapping water quality requirements, including stormwater treatment controls, Low Impact Development (LID) standards, control of potential pollutant sources, and control of runoff peak and duration (hydrograph management).

The Encinitas Stormwater Manual is comprised of five interrelated document sections, each supporting and defining the background, regulatory drivers, process, and procedure necessary to guide project applicants toward compliance with defined stormwater quality requirements.

Section 1 – Policies and Procedures, summarizes all City requirements and subsequent procedural elements pertaining to proposed new development and redevelopment projects.

Section 2 – Concepts & Criteria, describes the water quality science, engineering standards, and regulatory framework that form the basis of stormwater requirements for land development.

Section 3 – Preparing Your Project Submittal, details a procedure for determining applicable project requirements, and drafting and submitting associated materials required for a proposed development project.

Section 4 – Low Impact Development Design Guide, instructs applicants on how to plan, design, and size (engineer) treatment facilities and LID features to meet stormwater requirements.

Section 5 – Operation & Maintenance of Stormwater Facilities, outlines the long-term operation and maintenance requirements for stormwater treatment facilities and establishes the process by which applicants will develop an operation and maintenance agreement for the proposed stormwater facilities.

In addition, the Encinitas Stormwater Manual contains a series of appendices specific to the material presented in each of the sections outlined above, including a stormwater quality checklist and certification, design specification sheets for various facility types, and template maintenance agreements for a variety of project types. Notably, the template maintenance agreements, designed to be used as models for legal agreements between the responsible party and the City of Encinitas for long-term operation and maintenance of the proposed stormwater facilities, have been reviewed by the City's legal counsel.

The Encinitas Stormwater Manual is intended to complement the existing BMP Manual II. While BMP Manual II establishes minimum BMP standards for development projects and construction activities, the Encinitas Stormwater Manual defines implementation policy and procedure by which to plan, select, design, construct, and ultimately maintain required stormwater BMP facilities in the City of Encinitas. Complete versions of the updated BMP Manual II and the new Encinitas Stormwater Manual are available on the City's Clean Water Program webpage at http://cwp.cityofencinitas.org.

As required by Order No. 2007-0001 the City will also incorporate a Hydromodification Management Plan (HMP) into the City's Local SUSMP. Development of the final draft HMP was completed by the copermittees in FY 09-10 and submitted to the Regional Board for review in December 2009. Final Regional Board approval of the HMP occurred on July 14, 2010. All necessary SUSMP updates described above and their projected completion dates are presented in Table 2-1.

Table 2-1
Time Schedule for Model and Local SUSMP Updates

SUSMP Update	Time Schedule	Status
Final Model SUSMP update	January 2009 (submitted) March 2009 (RB Approved)	Completed
Local SUSMP update	March 2010	Completed
HMP Progress Report	July 2008	Completed
Draft HMP	January 2009	Completed
Final HMP	December 2009	Completed

SUSMP Update	Time Schedule	Status
Regional Board Approval of Final HMP	Summer of 2010	Completed
Adoption of HMP into Local SUSMP (ESM)	180 days after RWQCB approval of the final HMP	January 14, 2011

2.4.4.2 DEVELOPMENT PROJECT APPROVAL PROCESS

The following section includes a summary of the City's updated development review process which has been implemented since the adoption of the Encinitas Stormwater Manual (local SUSMP).

DISCRETIONARY PROJECTS

Projects requiring a discretionary permit are subject to a three-tier review process that includes an initial predevelopment review prior to submittal to the City, a written self-certification of the BMP requirements for the project, and the application of project conditions of approval to meet storm water pollution control requirements. Those projects requiring an additional, ministerial permit are also subject to engineering plancheck review as described in the Ministerial Project section.

Predevelopment Process

The stormwater element of the predevelopment process is geared toward disseminating information on stormwater pollution control and the City's SUSMP requirements. During this preliminary design phase, engineers and applicants are guided by City staff to provide adequate post-construction BMP facilities in conceptual form and to document those facilities on the site plans upon the initial discretionary permit application submittal. This process results in better designed and integrated post-construction BMPs, since the facilities are included in the project design even in the earliest phases of the project.

Priority Projects (defined by the City of Encinitas as those projects subject to SUSMP requirements), which require more stringent stormwater pollution control methods, are first identified during the predevelopment process. The categories of development falling under the Priority Project classification can be found in the Encinitas Stormwater Manual and are consistent with the requirements of the Municipal Permit. During the predevelopment meeting, applicants proposing Priority Projects learn that they must implement LID and source control BMPs and must install treatment control BMPs which meet the numeric sizing criteria required by the Municipal Permit. City staff also informs applicants at the predevelopment meeting that installed post-construction BMP facilities must be maintained in good working order into perpetuity. City staff and the applicant and/or engineer discuss options for meeting the numerical post-construction treatment requirements, including volume-based systems and flow-based systems. The applicant is also directed to follow the guidelines detailed in the Encinitas Stormwater Manual when designing post-construction BMPs and submitting plans and documents to Engineering

for review. In Encinitas, mechanical treatment systems are discouraged and when accepted may only account for a maximum of 50% of the treatment requirement, with the remainder of the treatment being provided by a natural system.

Stormwater Pollution Control Checklist and Certification

All development project applicants are required to complete a written self-certification of the post-construction BMPs proposed with their project. This certification is required to accompany the initial submittal of each discretionary permit application. The checklist walks the applicant through the process of determining whether their project is a Priority Project and outlines the minimum submittal requirements for Priority Project applicants. The checklist is designed to assist applicants in:

- Classifying their projects as Priority, Standard, or Exempt from SUSMP
- Certifying that their project will be designed, constructed, and maintained in conformance with the City's stormwater quality requirements detailed in the Encinitas Stormwater Manual.

The stormwater checklist must be completed by the party responsible for the development project and submitted with the project's permit applications. The stormwater checklist is an appendix of the Encinitas Stormwater Manual. A copy of the checklist is provided in this annual report as Appendix A-11

The Development Review Process

The Engineering Department has established specific Conditions of Development Approval to assure compliance with the City's stormwater pollution control standards. These conditions include construction requirements as well as post-construction BMP standards for effective stormwater pollution control facilities. Once the predevelopment meetings are conducted and the stormwater checklist has been completed, the applicant must follow the requirements established in the Encinitas Stormwater Manual when designing stormwater controls for the proposed project. Once the proposed plan is submitted, the Engineering Department reviews the adequacy of the project's proposed stormwater facilities shown on the site plan and issues Conditions of Approval to ensure implementation of satisfactory LID, source control, and treatment control BMP measures. The Conditions of Approval take into account the nature of each project site and the work proposed. The Conditions of Approval are then recorded in a covenant against the property.

Applicants not showing adequate construction or post-construction BMP measures on their initial development review submittals are asked to revise their plans and resubmit prior to approval. Stormwater pollution control facilities for Standard projects must meet the minimum requirements established in the Encinitas Stormwater Manual. Priority Projects must additionally show LID, source control, and treatment control BMPs on the project plans. Within the defined reporting period of this report, if the project is greater than 50 acres, interim Hydromodification Management requirements also need to be met. The project plans must also show a feasible solution with substantiating calculations for numerically-sized treatment control BMPs. The process of designing appropriately sized

treatment control BMPs is detailed in the Encinitas Stormwater Manual, which is available to all applicants through the City website.

MINISTERIAL PROJECTS

Projects requiring a ministerial permit such as a grading, improvement, or building permit are also required to include post-construction stormwater pollution control facilities in the project design. These BMP facilities must be considered adequate before the project's plans are approved by Engineering staff. Often the project has been scrutinized at the discretionary permit level and the project is already conditioned to provide specific treatment facilities. For those projects not requiring a discretionary permit, the review of the storm water pollution control treatment facilities begins at the Engineering plancheck stage.

The Plancheck Process

City plancheck engineers are trained in the design of stormwater pollution control facilities and serve as resources to the general public and to design engineers. During the plancheck process, every project is reviewed for stormwater construction and post-construction BMPs.

Every plan in plancheck is initially reviewed to determine if it meets the City's definition of a Priority Project. In addition to meeting standard BMP requirements, Priority Projects must provide LID, source control, and numerically-sized treatment control BMPs as required by the Municipal Permit and the Encinitas Stormwater Manual (City's local SUSMP).

The Encinitas Stormwater Manual details the process which must be followed in order to design proposed stormwater treatment control facilities for Priority Projects. The manual also identifies specific design details and documents which must be submitted for review by the City's plancheck engineers. The Encinitas Stormwater Manual and City plancheck engineers emphasize to applicants the variety of natural solutions that may be used in providing stormwater pollution control. Any areas used as post-construction BMPs must be clearly marked on the project plans along with the following associated note: "Stormwater Best Management Practice to be privately maintained and not to be modified without a permit from City". The permitted drawing will become public record; therefore documentation of the designated treatment areas is maintained. Engineers are also required to complete the Sources and Source Control BMP Checklist and incorporate all of the applicable permanent controls and operational BMPs into the project plans. Potential source control BMPs may include stormwater education, materials storage, erosion control, and waste management in order to meet the minimum SUSMP requirements.

All Priority Projects must comply with the numeric sizing criteria for treatment control BMPs in order to be approved by the City Engineer. Plancheck engineers review the project's hydrology calculations to determine the adequacy of the treatment system proposed. The project applicant is required to assume maintenance responsibility and identify the maintenance mechanism for the treatment system prior to project approval. A

covenant ensuring adequate maintenance into perpetuity is recorded against the property. Those projects with the potential for substantial erosion are often required to provide an additional plan for permanent landscaping and irrigation and to place bonds with the City to guarantee successful implementation of the measures shown thereon. Such bonds are retained until all components of the project have been completed (including installation of treatment control BMPs) and the landscaping has become fully established.

During the plancheck process, erosion control plans are also carefully reviewed to ensure compliance with construction BMP measures. Gravel bags, silt fences, stabilized construction entrances, and other methods must be provided where appropriate. Inlets to drainage facilities must be protected from sediment. Additionally, all exposed slopes need to be protected by a combination of hydroseed, permanent landscaping, and other erosion control measures. For more information regarding temporary construction BMPs, refer to Section 3 of this document.

Post-Construction BMP Maintenance Agreements

All Priority Projects under review for ministerial permits must execute a stormwater maintenance agreement guaranteeing the maintenance of permanent BMPs as necessary into perpetuity. The maintenance agreement or covenant includes an attachment depicting the location of specific project BMPs and their detailed maintenance requirements. The agreement is then recorded against and runs with the property. The City of Encinitas has developed, and included as an appendix in the new Encinitas Stormwater Manual, template maintenance agreements for a variety of project ownership scenarios including single family homeowners, Home Owners Associations (HOAs), agents, or commercial entities.

CAPITAL IMPROVEMENT PROJECTS

The City's Capital Improvement Projects (CIP) are subject to the same post-construction BMP requirements as private development. Because many projects are redevelopment, linear, or repair projects, often only construction BMPs are necessary. However, qualifying Priority SUSMP projects must also install post-construction BMPs. Priority CIP Projects are designed to incorporate LID, source control, and treatment control BMPs as required by the Municipal Permit and detailed in the Encinitas Stormwater Manual. The City takes responsibility for long-term maintenance and regular inspection of any installed permanent BMPs. Section 4 of this document provides a description of the City's MS4 maintenance and inspection program.

2.4.4.3 SUSMP PROJECT APPROVAL

During the planning process and prior to project review, the **two** projects listed in Table 2-2 were identified as Priority SUSMP Projects and approved during FY 2009-10. All applicable SUSMP BMP requirements specified in the City's local SUSMP were applied to each of the projects in Table 2-2. All of the development projects approved in FY 2009-10 were less than fifty acres in size; therefore none of the projects were required to meet Interim

Hydromodification Criteria. All treatment control BMPs met the treatment control BMP sizing requirements outlined in the City's local SUSMP; therefore, the City did not initiate a waiver mitigation program and did not issue any waivers of infeasibility during FY 2009-10.

Table 2-2
SUSMP Priority Projects approved in FY 2009-10

Permit No.	Location	Approval Date
10211 G	211 Saxony Rd	2/11/2010
94 G	1020 Calle Anacapa	4/12/2010

The extensive expansion of the assisted living facility at 211 Saxony Rd provides a good example of the typical Priority SUSMP projects that are permitted by the City of Encinitas. The proposed project consisted of the construction of more than 10 additional units of assisted living housing and was identified as a priority redevelopment project. As a result, several Integrated Management Practices (IMPs) were incorporated into the design of the project in order to meet SUSMP requirements. The IMPs that will be installed during construction include two flow-through planters (Filtera units), one underground detention system, one fossil filter, and several landscaped areas. These IMPs have been situated on the site plan to collect and treat runoff from roofs and driveways in the proposed development prior to the runoff entering the storm drain system.

2.4.4.4 SUSMP PROJECT AND TREATMENT CONTROL BMP TRACKING

In FY 2007-08, Clean Water Program staff worked with GIS staff to implement a comprehensive watershed-based SUSMP tracking system. The GIS data management system was designed to track the SUSMP Priority Projects and the long-term maintenance of all approved treatment control BMPs installed at development sites. As required by the Municipal Permit, the database is capable of tracking the following information:

- Type of treatment control BMP
- Location of the BMP
- Watershed within which the BMP is located[1]
- Date of construction of the BMP
- The party responsible for maintenance of the BMP
- Maintenance certifications or verifications
- Inspection findings
- Any corrective actions issued

During FY 2007-08, a beta version of the GIS tracking system was put into use. Since the initial introduction, the City has been working to continually refine this database, and new projects with treatment control BMPs are added to the database on a routine basis.

[1] The entire City of Encinitas is within the Carlsbad watershed.

Database improvements are a result of a thorough review of plans for proposed and built projects, a quality check of the existing data, and coordination with the GIS department. A hardcopy version of the most current inventory of treatment Control BMPs in the City's SUSMP Project and Treatment Control BMP Database is available in Appendix A-1. The inventory includes all operational treatment control BMPs installed at SUSMP priority projects as well as approved proposed treatment control BMPs which may be in various stages of construction. For a map of all the SUSMP Priority Development Projects approved within the City of Encinitas, refer to Appendix A-2.

With the aid of the City's Treatment Control BMP Inspection Priority flowchart (see Appendix A-3), all development projects with approved treatment control BMPs were prioritized as high, medium, or low Threat to Water Quality (TTWQ) during the 2008 JURMP update, as required by the Permit. In addition, prioritization of each BMP was further refined during subsequent annual Operation and Maintenance Inspections and review of Self-Verification submittals. For new projects with treatment control BMPs that are added to the inventory, prioritization of the project occurs during the first treatment control BMP inspection. When the construction of a new project with treatment control BMPs is completed, the City requires that the treatment control BMP(s) are inspected within the first year and prior to the next rainy season in order to determine prioritization for future inspection frequency. This allows the City to determine TTWQ based on a visual inspection of the project as well as the following criteria:

- Type of project
- Sensitivity of the receiving water body
- Proximity to ESAs
- Size of the BMP
- Recommended maintenance frequency
- Likelihood of operational and maintenance issues associated with the BMP(s)
- Location of the BMP(s)
- Other pertinent factors

The BMP Inspection Priority flow chart addresses basic site and treatment control BMP characteristics that can influence a site's TTWQ such as receiving water body sensitivity and the removal efficiencies of the installed treatment controls. Note that not all development projects and treatment control BMPs are the same; each may have unique water quality risks associated with it. The City considered additional relevant factors beyond those included in the flow chart as necessary.

2.4.4.5 BMP INSTALLATION VERIFICATION

Beginning in January 2008, the City of Encinitas began tracking the verification of post-construction BMPs that were installed on projects throughout the City. Upon project completion, the engineering inspector now requires that the project engineer submit a grading certification letter to the City verifying that all the Low Impact Development, Source Control,

and Treatment Control Best Management Practices, as shown on the approved project plans and required by the Encinitas Stormwater Manual, were constructed and are operational, together with the required maintenance covenant(s).

A sample grading certification letter is provided as Appendix A-4. Table 2-3 provides a list of the BMP verifications conducted for priority development projects completed in FY 2009-10.

Table 2-3
BMP Verifications for Priority Development Projects
Completed in FY 2009-10

Permit No.	Location	Construction Date
385 G	1555 Crest Dr	7/13/2009
169 G	510 S. El Camino Real	7/15/2009
705 G	3354 Wildflower Valley Dr	7/16/2009
7847 G	2300 8th St	7/23/2009
6813 G	155 Saxony Rd	7/23/2009
912 G	416 N Rancho Santa Fe Rd	9/24/2009
704 G	230 Quail Gardens Dr	10/19/2009
7800 G	3542 Jasmine Crest	11/19/2009
943 G	211 Saxony Road	1/2/2010
983 G	1320 Encinitas Blvd	2/4/2010
10187 G	1603 Crest Dr	4/13/2010
713 G	3003 Wildflower Dr	4/29/2010
61 G	801 Orpheus Ave	6/7/2010
7893 G	Christine Place	6/7/2010
9278 G	490 and 494 Latigo Row	6/17/2010

Subsequent to the submittal of the grading certification letter, engineering inspection staff inspect the project site to verify that LID, source control, and treatment control BMPs proposed for the project were constructed in compliance with all approved plans, City permits, and ordinances. Inspections of Priority Project sites prior to occupancy allow the City to verify that all BMPs are in place before any anticipated pollutants associated with the occupied site are generated. Engineering inspectors also check to ensure that BMPs have been built according to plans before signing off on each stage of construction. The inspectors use the project's grading plans to identify any missing or incorrectly installed BMPs and deny approval for sites with observed problems. If the engineering inspector is satisfied that the post-construction BMPs were installed as required, the inspector verifies

the project engineer's letter with their signature and a date and takes photos of the completed BMP installation. Hardcopies of these signed and certified verification letters and the photos of the BMPs are retained by the Clean Water Program.

2.4.4.6 ANNUAL TREATMENT CONTROL BMP OPERATION AND MAINTENANCE SELF-VERIFICATION

As required by the new Municipal Permit, all treatment control BMPs installed at development projects must be self-verified annually and maintained in perpetuity by a responsible party. As part of the JURMP update, the City of Encinitas established a Treatment Control BMP Operation and Maintenance Self-Verification Program.

During FY 2007-08, Clean Water Program staff prepared the essential elements of the Treatment Control BMP Operation and Maintenance Self-Verification Program. First, a comprehensive list of mailing addresses for completed projects with treatment control BMPs was pulled from the newly developed SUSMP Project and Treatment Control BMP GIS Database. Then, a formal letter was developed to notify property owners of their verification responsibility. An informative Treatment Control BMP brochure was also created to help property owners identify the BMPs that were installed as a part of their development project. Finally, a self-verification form was developed for responsible parties to use to report annual verification of Operation and Maintenance of their treatment control BMPs. In FY 09-10, the BMP verification letter was updated in an effort to promote a greater inspection response rate and self-verification return rate. An example of the updated verification letter, brochure, and form can be found in Appendices A-5a, A-6, and A-7, respectively. In some cases additional notifications were required; with these letters, finaled grading plans were also included in order to assist responsible parties in identifying the location of BMPs.

In FY 2009-10, the City determined that only those projects that were not designated as requiring a City inspection of their BMPs would be required to conduct a self-verification of their BMPs and submit self-verification documentation. It was reasoned that it would be redundant to require those responsible parties who were already receiving an inspection of their BMPs by City staff to also have to conduct a self-verification. When conducting an inspection, City staff thoroughly assesses the condition of all BMPs on a site and typically the responsible party is present when the inspection is conducted, providing an opportunity to educate the property owner about the function of the facilities on site and their obligations to maintain and preserve them. If deficiencies are identified, corrective actions are noted on the inspection form, and the responsible party is required to complete corrective actions by a specified deadline. Additional detail regarding the City's Treatment Control BMP Operation and Maintenance Inspection Program can be found in Section 2.4.4.7.

All required self-verifications must include an evaluation of <u>all</u> treatment control BMPs by the party responsible for maintenance prior to the start of the rainy season. Within the defined reporting period of this report, the City mailed annual self-verification

notifications to each party responsible for the maintenance of treatment control BMPs constructed within the City of Encinitas who was not scheduled to receive a City inspection. The notification package included a letter informing the responsible parties of their inspection and maintenance obligations, a brochure explaining the program and providing examples of common BMPs, a blank inspection / maintenance verification form (to be completed and returned to the City), and a self addressed stamped envelope. Responsible parties were directed to complete the self-verification form and submit photos showing that all BMPs on their property have been maintained and are in good working order.

Self-Verification Results and Findings

In the first year of implementation, the City efforts focused on information gathering and validation. In the second year of implementation, the City expected that the responsible parties would be more aware of the Treatment Control BMP inspection and maintenance program and that self-verification forms would be returned promptly. However, even after issuance of two notifications, some responsible parties still did not respond (see Table 2-4). In the event that a self-verification form was not returned, City staff made every attempt to conduct a City Inspection in lieu of a Self-Verification. A total of **12** City inspections were completed in lieu of Self-Verification. Copies of the two BMP Operation and Maintenance verification letters issued to responsible parties in FY 09-10 may be found in Appendices A-5a and A-5b.

Table 2-4
Summary of Notifications Sent and Self-Verification Forms Returned

Number of Self-Verification Notifications Issued	49
Number of forms returned after **1 notification**[1]	17
Number of forms returned after **2 notifications**[2]	14
Number of Forms **Not** Returned[3]	(15)
Total Number of Self-Verifications Completed (includes 12 in-lieu inspections)	43

Upon receipt of a self-verification packet from responsible parties, City staff reviews the completed forms and the required photos and maintenance documentation (if any). Staff determines whether the information is complete or if any further maintenance was

[1] The first notification included a letter (Appendix A-5a), the BMP Operation and Maintenance Brochure, the Self-Verification Form, and a self addressed, stamped envelope (SASE).

[2] The second notification included a letter (Appendix A-5b) explaining that since this was the final notification attempt, the responsible party's BMPs would be inspected by City staff.

[3] In the event that a self-verification for was not returned, City staff made every attempt to conduct a City Inspection in lieu of a Self-Verification. A total of **12** City inspections were completed.

required. For a detailed summary of the results and findings of FY 2009-10 treatment control BMP inspections see Appendix A-8. Appendix A-8 includes more detailed information about each project, such as project location, inspection dates, inspection results, and any City action. As a result of the Self-Verification program (Section 2.4.4.7) there were **zero** properties with treatment control BMPs that warranted enforcement action. For a summary of enforcement action, refer to section 2.4.4.8.

The defined reporting period of this report represents the second year of implementation of the Permanent BMP Self-Verification Program. In an attempt to improve efficiency and the rate of return of self-verification documentation, City staff developed an online submittal form that was offered to responsible parties as an option to submitting their self-verification documentation. This provided responsible parties with four submittal options—online, email, regular mail, and hand delivery to City Hall. The majority of self-verification forms were submitted via regular mail; however, a number of responsible parties did take advantage of the online submittal option. Since this was the second year of implementation, the BMP and Priority Project inventories were more complete due to last year's efforts to validate current contact information and inform property owners of their maintenance responsibilities and submittal requirements. As described in Tables 2-4 and 2-5, the City's implementation process was generally successful.

Table 2-5
Summary of Self-Verification Results and City Actions

Self-Verification Results	**Frequency**
Unresponsive Owner	15
Verification Received	31
Requested City Inspection	3

City Actions	**Frequency**
City Inspected	12
Information Validated	20
Incomplete Submittal. (Incorrect BMPs listed, Documents Missing)	11
Maintenance Required. Enforcement action taken.	0
Validate Contact Info. FY 10-11 Inspection Recommended.	5
Suspected Foreclosure	1

2.4.4.7 TREATMENT CONTROL BMP OPERATION AND MAINTENANCE INSPECTIONS

During FY 2007-08, Clean Water Program staff developed the City's new Treatment Control BMP Operation and Maintenance Inspection Program. New inspection forms were created, and the Treatment Control BMP inventory database was designed and

quality checked. For a detailed description of the development of the GIS-based Treatment Control BMP Inventory and Tracking system refer to Section 2.4.4.4. Notably, unique to the development dynamic of the City of Encinitas, a large number of inventoried BMPs exist on private single-family residential lots. Therefore, the City of Encinitas Treatment Control BMP Operation and Maintenance Inspection program was developed with this condition in mind.

In FY 2009-10, as required by the Municipal Permit, 100% treatment control BMPs installed at high priority development projects, at least 50% of the medium priority development projects, a minimum of 20% of the total number of projects with approved treatment controls, and a maximum of 200% of the average number of projects with treatment control BMPs approved per year were inspected by the City's inspection staff prior to the rainy season. Implementation of the City's BMP Inspection Program was very effective. The City met, and in most cases far exceeded, all the inspection requirements outlined in Section D.1.e. of the Municipal Permit.

As of July 1, 2009, there were a total of **60** constructed Priority SUSMP projects (5 high, 27 medium, and 27 low priority) on the City's treatment control inventory (See Appendix A-1). With **12** Priority SUSMP projects approved in FY 2008-09, there was annual average of **11** projects with treatment control BMPs completed since permanent BMPs were first required on Priority Development Projects in 2003 (see Table 2-6). A total of **50** projects (5 high, 22 medium, and 23 low priority) with approved and constructed treatment control BMPs were inspected in FY 2009-10. This amounted to **100%** of the high priority sites, **81%** of the medium priority sites, **85%** of the low priority sites, **83%** of the total number of constructed Priority SUSMP sites, and **454%** of the average number of projects with treatment control BMPs approved per year that were inspected in FY 2009-10 (see Table 2-7). In addition, **93%** of the projects with drainage inserts were inspected in FY 2009-10.

Table 2-6
Average Number of Constructed Projects with Treatment Control BMPs

Fiscal Year	Completed Projects
2004-05	6
2005-06	8
2006-07	14
2007-08	15
2008-09	12
Average	11

When inspections are conducted in future years, inspection frequencies will be based on the project's assigned TTWQ priority as determined by City staff in FY 2008-09 or assessed during future treatment control inspections, and the criteria outlined in Section 2.4.4.4 of

this document. Table 2-7 below presents treatment control BMP TTWQ priorities and their corresponding inspection frequencies.

Table 2-7
Treatment Control BMP Inspection Frequencies

Development Project with Treatment Control BMPs TTWQ	Permit Mandated Inspection Frequency	FY 09-10 Inspection Frequency
High	Annually (prior to start of rainy season)	100%
Medium*	50% annually	81%
Low	As needed	85%

*Drainage insert controls are considered medium priority BMPs

FY 2009-10 inspections included an examination of all treatment control BMPs at the site to verify that each treatment control BMP was working, being maintained properly, and was in compliance with all applicable City ordinances and permits. Inspection findings were documented by the inspector using the Treatment Control BMP Inspection Form (Appendix A-9). If any deficiencies in operation and maintenance were noted during the inspection, the responsible party was notified and appropriate enforcement actions were taken (as described in Section 2.4.4.8 of this document) to achieve compliance.

Because the majority of the treatment control BMPs installed in the City of Encinitas are on single-family residential lots, great care was taken to educate homeowners of their maintenance, inspection, and self-verification obligations. As noted in section 2.4.4.6, packages mailed to responsible parties included information detailing the BMP operation and maintenance program. When working with homeowners, City stormwater staff devoted personal, specialized assistance as warranted in order to improve knowledge and awareness and achieve compliance.

For a detailed summary of the results and findings of the FY 2009-10 treatment control BMP inspections see Appendix A-10. Appendix A-10 contains information about each project, such as project location, inspection dates, inspection results, and additional City action. Depending on the findings during the course of initial inspections, follow-up inspections were conducted and enforcement action was taken as necessary. For a detailed summary of enforcement action taken as part of the treatment control BMP inspection program, refer to section 2.4.4.8.

Treatment control BMPs that are operated and maintained by the City are considered part of the City's MS4 and are maintained and inspected by Public Works staff on an annual basis. BMPs that are located in specialized public facilities such as parks and libraries may be inspected by City stormwater staff and maintained as necessary by Public Works staff. For more information regarding the maintenance and inspection of the City's MS4 refer to Section 4 of this document.

2.4.4.8 ENFORCEMENT MEASURES FOR DEVELOPMENT SITES

As required by the Municipal Permit, and depending on the severity of the violation, the City enforces its storm water ordinance for all development projects and permanent BMPs as necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. A more detailed description of the different enforcement measures used by the City to enforce its storm water regulations and their legal basis can be found in Section 2 of the 2008 JURMP update document.

As a result of post-construction treatment BMP verification inspections and self-verification results, the City determined that **six** out of 50 inspected projects were partially or totally deficient in the installation and or maintenance of post-construction BMPs. By the date of writing this report and as a result of communication with the responsible persons, all **six** projects were brought into compliance through a combination of written orders to correct and/or verbal warnings.

3.0 CONSTRUCTION

3.1 INTRODUCTION

The purpose of the City's construction component is to maintain an updated inventory of all construction projects, identify pollutant sources from construction projects, educate the construction community, implement construction site Best Management Practices (BMPs), inspect construction sites, provide proper enforcement of violations, and implement all of the requirements of the Municipal Permit as outlined in Section D.2.

3.2 SOURCE CHARACTERIZATION

3.2.1 SITE INVENTORY

Within the defined reporting period of this report, the City of Encinitas has compiled, maintained, and updated a watershed-based inventory of all construction sites within its jurisdiction. The construction inventory for FY 2009-10 included a total of **102** construction sites. During this period, there were **14** high priority sites that were inspected biweekly, **36** medium priority sites that were inspected monthly and **52** low priority sites that were inspected on a biannual basis. The City utilizes an industry standard Geographic Information System (GIS) to maintain an accurate and up-to-date inventory of all construction projects. The GIS inventory includes details on each construction site, including project name, location, sub-basin, type of construction permit, date of permit issuance, inspection prioritization, and the assigned storm water inspector. The City's Clean Water Program staff, in coordination with the City's IT department has designed a technical solution in GIS to inventory and prioritize all construction projects as permits are approved. A more detailed description of the prioritization process is provided below in Section 3.2.2. A fully prioritized construction inventory can be found in Appendix B-1 in addition to a map of all active construction sites located in Appendix B-2.

3.2.2 INVENTORY UPDATES

As required by Section D.2.b of the Municipal Permit the City's watershed-based inventory of construction sites is updated weekly by the Engineering department as new grading permits are approved. The Engineering department shares all approved permit information with the City's IT Department which also maintains an updated inventory of all active construction projects in a GIS database. As part of the 2008 Jurisdictional Urban Runoff Management Plan (JURMP) update process, and to ensure monthly construction inventory management, a construction specific GIS script was developed by the City's GIS staff in ESRI's ArcMap for prioritizing approved construction permits. This mechanism remains an efficient and effective tool in maintaining a current construction inventory, and is accessible via desktop to Clean Water Program staff to execute the GIS script and review the prioritizations on a monthly basis. Regular updates to the inventory include the addition of new construction projects, the removal

of completed construction projects, and re-assignment of inspection frequencies of active construction sites as determined by the City's Clean Water Program staff. A flow-chart that outlines the process by which the inspection frequency of construction projects is determined in GIS can be found in Appendix B-3.

3.3 ORDINANCE UPDATES

As required by Section D.2.a of the Municipal Permit, applicable City documents and ordinances were updated on March 12, 2008 by the City of Encinitas City Council to establish adequate legal authority to enforce applicable storm water requirements. As part of the comprehensive JURMP update completed in March 2008, the City also updated Municipal Code Section 20.08, the Watercourse Protection, Stormwater Management and Discharge Control Ordinance, including construction specific provisions. The City's legal authority related to construction activities was further strengthened on February 25, 2009 when the City Council adopted a revised Grading Ordinance, EMC Section 23.34. Subsequently, the California Coastal Commission approved the adopted changes and the following provisions for storm water pollution control have been incorporated into the City's grading ordinance:

- All grading permits shall comply with the provisions of the City's Best Management Practices (BMP) Manual Part II which provides design, construction, and operation requirements for minimizing storm water pollution related to construction activities (§ 23.24.071).

- Any removal of BMPs that were required for a priority project will require a grading permit for corrective or other action. A requirement may be imposed to replace the BMP with equivalent water quality protection (§ 23.24.080).

- Priority projects for storm water pollution control cannot be exempted from obtaining a grading permit (§ 23.24.090.I).

- Any project creating over 500 square feet of new impervious area has to obtain a construction permit and adhere to all standards in the City's BMP Manual Part II (§ 23.24.105).

- All grading plans shall contain the location, design, detail, and cross section of all erosion control and post construction BMPs (§ 23.24.140).

- If the approved grading plan does not show post construction BMPs in sufficient detail, a precise grading plan for development projects is required to include and accurately depict post construction BMPs for review and approval of the City Engineer. (§ 23.24.126).

- Both Interim and Final Erosion and Sediment Control Plans are required (§ 23.24.150, 23.24.160).

- A waste management plan is required to be submitted with all interim erosion control plans. The management of the waste on the construction site must be graphically and verbally described on the grading plan (§ 23.24.150F).

3.4 BEST MANAGEMENT PRACTICE REQUIREMENTS

3.4.1 UPDATED BMP REQUIREMENTS

Through the JURMP update process completed in March 2008, the City reviewed and updated a set of minimum BMPs that must be implemented at all construction sites. Every construction site within the City's jurisdiction is required to implement general site management BMPs and erosion and sediment control BMPs to reduce, retain, and manage pollutant discharges to the Maximum Extent Practicable (MEP). Construction BMP requirements are presented in the Encinitas Municipal Code Chapter 20.08, the City's Storm water Best Management Practices Manual, Parts I and II, and the City of Encinitas' 2008 JURMP Update.

3.4.1.1 SEASONAL SITE MANAGEMENT REQUIREMENTS

Construction sites are required to implement minimum construction BMPs to prevent pollution discharges to the MEP regardless of the season. However, the City also maintains requirements for erosion and sediment control BMPs that are different for the wet season (October 1st – April 30th) than they are for the dry season (May 1st – September 30th). The City's Storm Water Manual Parts I and II provide a detailed list of dry and wet season requirements for all construction sites. Prior to the beginning of the wet season, in September 2009, the City sent 74 Erosion Control letters (See Appendix B-5) to all property owners with active and inactive construction sites reminding them of the City's minimum BMP requirements. Additionally, the City also included a copy of the letter dated August 24, 2009, from the Executive Officer of the San Diego Regional Water Quality Control Board (RWQCB) titled *Regional Preparations for the 2009-10 Rainfall Season Throughout the San Diego Region* which reinforces regional stormwater management requirements as they relate to construction activities.

3.5 PROGRAM IMPLEMENTATION

3.5.1 CONSTRUCTION AND GRADING APPROVAL PROCESS

The City has an established and thorough interdepartmental review and approval process for local construction and grading permits. When a construction project comes to the City for approval, it is required to obtain a building permit, a grading permit, or both. A grading permit is required prior to any activity where the total volume of material disturbed, stored, disposed, or used as fill exceeds 50 cubic yards, obstructs a waterway, or occurs over an area of 10,000 square feet. All other projects require a building permit. Both grading and building permits require that plans be submitted and approved by the City.

The City's grading ordinance requires that all projects, whether subject to a grading plan or not, are required to minimize site runoff, erosion, and sedimentation. In addition, all projects requiring a grading permit are required to prepare an erosion and sediment control plan. All permits that go through the City's review and approval process are tracked within a citywide data management system called "HTE".

The grading permit outlines the regulatory (Federal, State, and City) conditions for new construction. The grading permit requires that grading plans be prepared, reviewed, approved, and signed by the City Engineer. As a part of this approval process, the City's Clean Water Program staff also reviews the grading plans to ensure compliance with applicable construction specific regulations.

The grading plan approval process consists of a series of plan checks, revisions, and final approvals. Plans are checked by both the Engineering and Clean Water Program staff. Engineering staff reviews the plans for overall compliance with the grading ordinance. Clean Water Program staff checks the plans for specific compliance with the Storm Water Management Ordinance and Federal and State regulations. If the site falls under jurisdiction of the State's General Construction Permit, staff follows up with the developer to ensure that a Storm Water Pollution Prevention Plan (SWPPP) is properly prepared and submitted. In addition, the SWPPP is reviewed and accepted by the Clean Water Program staff prior to final approval of the project grading plans. The City also requires proof that a Notice of Intent (NOI) has been submitted for sites that are subject to the General Construction Permit.

Prior to issuing construction and grading permits, the City's Engineering Department verifies that the proposed construction project plans to implement all applicable required BMPs to reduce pollutant discharges to the MEP.

It is notable that the general notes for the building plans have been amended to include erosion control, sediment control, and materials management practices. The Clean Water Program also reviews SWPPPs for all projects greater than five acres and sensitive projects between one and five acres. Staff reviewed and commented on SWPPPs for ten projects between July 1, 2009 and June 30, 2010. See Table 3-1 below for a summary of SWPPP reviews.

Table 3-1 Storm Water Pollution Prevention Plan Reviews, 2009-10

Project Name	Address	Size (acres)	Notice of Intent	Review Date
Quail Pointe	500 Block of Quail Pointe Lane	3.75	Yes	7/22/09

Project Name	Address	Size (acres)	Notice of Intent	Review Date
Citywide Concrete Repair	Various locations throughout the City of Encinitas	< 1	N/A	10/21/09
Citywide Concrete Repair CDBG	Various locations throughout the City of Encinitas	< 1	N/A	11/10/09
Regal Rd. Sidewalk Improvements	Regal Rd. at Santa Fe Dr.	< 1	N/A	11/25/09
Seacrest Village Retirement Communities	211 Saxony Rd.	1.7	Yes	12/22/09
Scripps Health	354 Santa Fe Drive	3.5	Yes	12/22/09
Cardiff Safe Routes to School	Summit Ave./Westminister Dr.	< 1	N/A	3/8/10
Paul Ecke Safe Routes to School	Vulcan Ave.	< 1	N/A	3/10/10
Encinitas Target	1010 N. El Camino Real	9.86	Yes	5/3/10
Parking Lot B	Vulcan Ave. and E St.	< 1	N/A	5/5/10

3.5.2 BMP IMPLEMENTATION

Clean Water Program staff spends a significant amount of time coordinating storm water management and BMP implementation at construction sites with the help of the City Engineering Inspectors. Construction BMP requirements are presented in the Encinitas Municipal Code Chapter 20.08 and the City's Storm Water Best Management Practices Manual, Parts I & II.

Clean Water Program staff constantly monitor weather patterns and storms in the Pacific through the National Weather Service. Weather reports and forecasts are emailed to all Engineering Inspectors to inform them of the possibility of incoming rain. When the forecast exceeds 40% over the coming five-day period, inspectors inform contractors that additional BMP implementation, maintenance, or replacement should take place, and where necessary, they require responsible parties to have additional BMPs in place at the end of each work day.

Through the review and plancheck process, and supported by the Watercourse Protection, Stormwater Management and Discharge Control Ordinance, staff maintains the authority to require additional or alternative BMPs to be implemented on individual projects as determined necessary. This allows the Clean Water Program to ensure that the proper sediment control, erosion control, and materials management BMPs are shown on the plans and are to be implemented on-site.

3.5.3 CONSTRUCTION SITES REQUIRING ADVANCED TREATMENT

There were no sites in FY 2009-10 that required advanced treatment. For the majority of the construction sites within the City's jurisdiction, the minimum required BMPs, if correctly installed and maintained, adequately control sediment discharges from the site. If it is determined that a project site possesses characteristics that could result in standard construction BMPs being ineffective in the treatment of sediment, resulting in an exceptional Threat To Water Quality (TTWQ), advanced treatment will be required. Standard criteria for determining projects that pose an exceptional TTWQ and a description of advanced treatment methods are included in the City's Storm Water BMP Manual II.

3.5.4 INSPECTIONS & BMP VERIFICATION

The City has an established inspection program to evaluate compliance with storm water regulations at all construction sites within the City's jurisdiction. The City of Encinitas' Engineering Department employs two Engineering Inspectors and three contract Engineering Inspectors who are responsible for inspections at all construction sites in the city. Storm water issues such as compliance with the grading and storm water ordinances in the Municipal Code have become one of their main focuses, especially during the wet season.

On January 24, 2008, the RWQCB adopted the 2007 Municipal Permit. Inspection activities for the construction program were updated and implemented at that time to meet the new Municipal Permit requirements as outlined in Order No. R9-2007-0001. During Fiscal Year 2009-10, consistent with required inspection frequencies as outlined in Sections 2.d.1-3 of the Municipal Permit, City staff conducted a total of **247** storm water inspections. Appendix B-1 details the complete Construction Inventory for FY 2009-10, the construction site prioritizations, and the number of inspections conducted at each site. Notably within the defined reporting period of this report, due to widespread slowdowns in the economy and development related activity, there were fewer active construction projects and therefore fewer site inspections than reported in previous years.

As part of the 2008 JURMP update process, and codified through BMP Manual II, the City of Encinitas established a maximum disturbed area for grading at 50 acres. Additionally, through this process, the City established advanced treatment criteria for construction activities. Within the defined reporting period of this report, no construction projects in the City of Encinitas were subject to maximum disturbed area or advanced treatment requirements, and therefore no required inspections related to this standard were completed.

The Engineering Inspectors captured all construction inspections on a form titled "Storm Water Quality Inspection for Construction Activities", included in Appendix B-4. The inspection form contains questions to ensure all the inspection components required by Section D.2.d.6 of the Municipal Permit are addressed. The form lists the minimum construction BMPs required by the City and includes boxes to document if BMP installation or maintenance is required or if other corrective actions are necessary. If required BMPs are missing or found to be improperly implemented, appropriate enforcement actions, as described in Section 3.5.5 below are taken.

3.5.5 COMPLIANCE AND ENFORCEMENT ACTIONS

3.5.5.1 GENERAL ENFORCEMENT

The City is responsible for enforcement of local ordinances and applicable local permits at all construction sites within its jurisdiction. Inspection and enforcement for construction projects is administered by the Engineering Inspectors and other City staff with inspection and enforcement authority.

The City typically employs a tiered, escalating enforcement system which includes verbal warnings and education, written warnings, and administrative citations. However, the City reserves the right to determine the most appropriate enforcement course for a given situation, as dictated by the specifics of each case. For example, a stricter initial enforcement measure may be applied where significant noncompliance is noted or when a potential rain event increases the potential for the violation to have a negative impact on water quality.

Verbal warnings and education will typically be the initial enforcement methods employed, assuming that a) the site or individual does not have a history of non-compliance with storm water regulations, and b) there has not been an observed illegal discharge to the MS4. The inspector will educate the violator on what actions need to be taken to prevent a violation from occurring or to correct the violation and document the violation and verbal warning in the inspection file. A time frame will be given for an identified violation to be corrected, and a follow-up inspection date will be scheduled, which will also be documented.

A written warning is typically issued to violators that are already aware of the City's storm water regulations or to those who have not corrected their actions after being given a verbal warning. Written warnings can be given using a variety of methods, including the issuance of a Notice of Violation (NOV) or Stop / Correct Work Notice. The NOV and Correct Work Notice provide a description of the violation to be corrected, the time frame for correction, and a follow-up inspection date. All Stop Work Notices issued by the City are reported to the RWQCB per the reporting requirements of the Municipal Permit.

Civil penalties for violations of the Encinitas Municipal Code (EMC) are established in EMC Chapter 1.08, and determined violations of storm water regulations may be subject to administrative citations and associated administrative fines, including those at construction sites. Administrative citations and fines are used in addition to other legal remedies as described in the paragraphs above.

All inspection personnel have the authority to take immediate enforcement actions when necessary. This facilitates timely correction of inadequate BMP implementation, reducing the risk of pollutants discharging from the site. City inspectors conduct follow-up inspections to determine if corrective actions have been taken to comply with City ordinances and minimum BMP requirements. The time frame for a violator to correct a documented violation is determined on a case-by-case basis at the discretion of the inspector.

3.5.5.2 REPORTING AND NON COMPLIANCE

During the FY 2009-10, **15** construction related complaint calls were received through the City's Clean Water hotline. A total of 13 complaints were investigated and 2 calls were referred to another department for further action. Of the 13 complaints investigated by Clean Water Program Staff, there were **12** violations. This resulted in **10** instances in which educational information was disseminated, **3** instances in which Notice of Violations notices were issued, and **1** instance in which a citation was issued. A complete summary of all construction related complaints can be found in Appendix H-1.

There were an additional **40** correct work notices and **1** (one) citation issued as a result of the routine City inspections at construction sites throughout the fiscal year. With immediate oversight from the City's Engineering Inspectors, contractors were quick to address all complaints and implement the appropriate BMPs to achieve compliance and avoid further enforcement. Appendix B-6 features a summary of all violations and enforcement actions for all regularly inspected construction sites in FY 2009-10.

4.0 MUNICIPAL

4.1 INTRODUCTION

The municipal component of the City's Clean Water Program includes proper management of facilities owned and operated by the City of Encinitas to eliminate or reduce the amount of pollutants that enter the storm drain system. The City maintains streets, the storm drain system, and municipally owned facilities, which includes 17 public parks, 11 parking lots, 6 beach access areas, 5 fire stations, 4 public works yards, 4 administration buildings, 4 open space areas, 3 viewpoints and 1 golf course. The updated municipal facilities inventory is included as Appendix C-1. The City also conducts high Threat to Water Quality (TTWQ) activities, as defined by the Municipal Stormwater Permit, such as power washing and other mobile activities including street and sidewalk repair, building cleaning, painting, graffiti cleaning, and fleet vehicle maintenance. Other prominent water quality related activities include street sweeping, inspections of municipal facilities, educational efforts geared toward municipal personnel and landscaping contractors, annual Municipal Separate Storm Sewer System (MS4) maintenance, and regular upkeep of the sanitary sewer system to prevent overflows.

Due to the large expanse of municipal areas, activities, and functions, City staff must carefully manage pollution prevention measures and Best Management Practices (BMPs) to reduce or potentially eliminate the discharge of pollutants into the MS4 from municipal areas and activities. To comply with the Municipal Stormwater Permit, the City has developed a comprehensive program designed to reduce the amount of pollutants that are transported in urban runoff from municipal areas, activities, and functions.

4.2 ROADS, STREETS, HIGHWAYS, AND PARKING FACILITIES

4.2.1 BACKGROUND

Roads, streets, highways, and parking facilities can collect a variety of pollutants due to routine vehicle use and have a tendency to collect litter and debris from neighboring areas and activities. Regular maintenance is necessary to control pollutants such as sediment, metals, litter, and debris on roads, streets, highways, and parking facilities.

4.2.2 SOURCE CHARACTERIZATION

The City of Encinitas maintains approximately 162 miles of roads, streets, and highways and 11 City owned and operated parking facilities. Roads, streets, highways, and parking facilities are included in the City's municipal inventory, which is included in Appendix C-1.

4.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

Both pollution prevention methods and BMPs are implemented for roads, streets, highways, and parking facilities throughout the City. The City utilizes both the City's BMP Manual Part I and the California Stormwater Quality Association (CASQA) Municipal Handbook to choose applicable BMPs to implement for roads, streets, highways, and parking facilities within the City. Street sweeping and cleaning is the main BMP that is implemented for road, street, highway, and parking facilities (both stand-alone and those associated with a municipal facility) maintenance. Treatment control BMPs are used for all roadway projects determined to be priority projects and subject to Standard Urban Storm Water Mitigation Plan (SUSMP) standards, described in more detail in Section 2.0. The City implements additional controls for roads, streets, highways, and parking facilities adjacent to or tributary to Environmentally Sensitive Areas (ESAs) when determined to be necessary.

4.2.4 PROGRAM IMPLEMENTATION

This section describes the steps that were taken in FY 2009-10 to require and verify the implementation of designated BMPs for all City maintained roads, streets, highways, parking areas, and related activities as outlined in the Municipal Permit Section D.3.a.(5)(a-c).

In compliance with street sweeping standards established in Order 2007-0001, the City implemented an aggressive sweeping schedule for roads, streets, highways, and parking facilities.

The frequency of street sweeping is as follows:

- All arterial roads, streets, highways, and parking facilities identified as consistently generating the highest volumes of trash and/or debris are swept weekly.
- All collector streets and parking facilities identified as consistently generating moderate volumes of trash and/or debris are swept bi-monthly.
- All residential (publicly owned) and parking facilities identified as generating low volumes of trash and/or debris are swept annually.

The City also maintains parking facilities at six local parks, four local beaches and the Encinitas Community Center. Four parking facilities at the local parks have been identified as generating low volumes of trash, sediment, and debris and are swept monthly from March through September. The remaining parking lots have been identified as generating moderate volumes of trash, sediment, and debris, and have been assigned a sweeping prioritization of medium priority. Each of these facilities is swept on a monthly basis throughout the year. The parking facilities at the beaches are swept every week from April through September to address the increased traffic, and monthly from October through March. In FY 2009-10, a total of **87.5 tons** of debris was collected from all City maintained parking lots.

In FY 2009-10, a total distance of **9,199 curb miles** was swept, and a total of **1,213 tons of debris** was collected. The total amount of material collected from both street and parking lot sweeping was **1,300.5 tons**.

Additionally, in FY 2009-10, the City's Public Works Department through coordinated efforts with Partners with Industry (PWI) collected and removed **106** 30-gallon bags of litter from all of the City's bus stops. The City also partnered with San Diego County probation crews to collect and remove **9,418** 30-gallon bags of over-grown vegetation from City right-of-ways based on visual observations and citizen complaints.

4.3 FIXED FACILITIES

4.3.1 BACKGROUND

The City owns and operates a variety of municipal fixed facilities that have been grouped in this section because these facilities receive formal inspections as part of the municipal program. Therefore, the program implementation for these facilities is generally the same. Municipal fixed facilities include the following:

- Parks and Recreational Facilities
- Public Works Facilities
- Potable Water Facilities
- Fire Stations
- Other Fixed Facilities

4.3.2 SOURCE CHARACTERIZATION

The Municipal Permit requires Copermittees to inspect high priority municipal areas and activities annually according to D.3.a.(7)(a). High priority facilities include parks and recreational facilities and other municipal areas and activities that the City determines may contribute a significant pollutant load to the MS4.

As part of the (Jurisdictional Urban Runoff Management Program) JURMP Update process in March 2008, all municipal facilities were assigned an inspection priority based on the Municipal Permit requirements and an evaluation of their threat to water quality. Each site and activity has been evaluated based on a variety of site-specific factors including size, location, type of activity, waste generated, pollutant discharge potential, non-storm water discharges, proximity to receiving water bodies, and any other relevant factors deemed appropriate. Using these criteria, a complete prioritized, watershed based inventory was developed and is included in Appendix C-1.

The City of Encinitas owns, operates, and maintains 53 fixed facilities within the City. Of these facilities, 28 have been designated with a high priority inspection priority and 25 were designated a low inspection priority. All high priority facilities are formally inspected on an annual basis and described further in Section 4.3.4. Both high and low priority facilities are visually inspected on a routine basis by City staff. Any illicit discharges or illegal connections are immediately referred to the Clean Water Program. All fixed municipal facilities are

included in the City's inventory located in Appendix C-1. Figure 4.1 illustrates the various municipal fixed facilities and their associated activities within the City of Encinitas.

Parks and Recreation Facilities

The City maintains 17 public parks, 6 beach access areas, 3 viewpoints, 40 miles of trails, and 70 acres of open space. All landscape maintenance activities are performed through the use of private contractors. Parks and Recreation Department Supervisors are responsible for monitoring contract activities for landscaping which includes; implementing BMPs for pesticide, herbicide, and fertilizer usage; waste removal and control; and maintenance at all municipal parks and recreation facilities.

Public Works Operations Facilities

Public Works operations facilities are important in maintaining the functionality of many publicly offered services. The City of Encinitas maintains a total of four public works facilities, including two public works yards, a vehicle maintenance facility, and a wastewater collection facility (Appendix C-1).

Potable Water Facilities

The means to provide residents of the City with potable water is an essential activity conducted by the City of Encinitas' San Dieguito Water District. The City maintains several underground fixed facilities which include pressure regulating stations as well as two water reservoir/water storage facilities. The City also maintains an above ground water recycling reservoir.

Fire Stations

Fire fighting capability is an essential element of municipal activities conducted in the City. The City of Encinitas maintains five fire stations, which are included in the municipal inventory (Appendix C-1). Two fire stations within the City, stations #3 and #4, have fueling stations on site.

Other Fixed Facilities

Other fixed municipal facilities include a community center, three administrative buildings, five pump stations, and an Ultra Violet Urban Runoff Treatment Facility (UV Facility). All of these facilities are considered a low priority because many of the activities at these facilities are conducted indoors and do not correspond with activities that are considered a high threat to water quality.

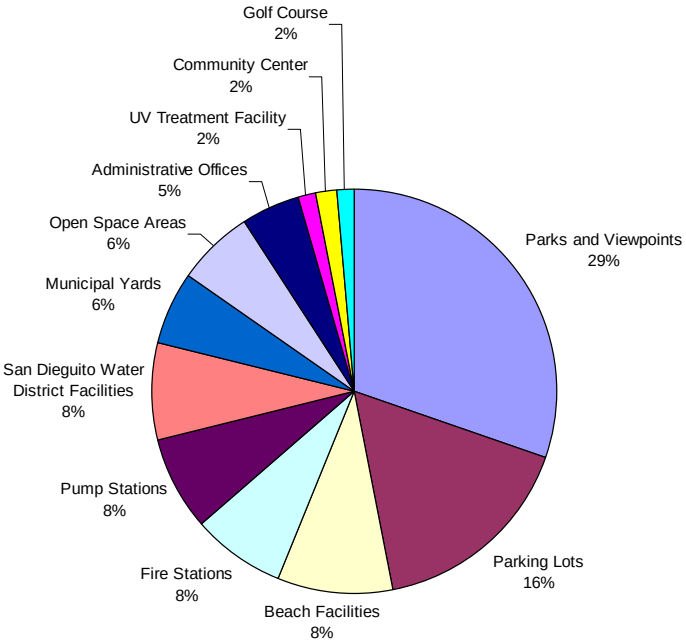


Figure 4.1 City of Encinitas Fixed Facilities

4.3.3 BEST MANAGEMENT PRACTICES

4.3.3.1 UPDATED BMPS

In FY 2007-08, the City established minimum BMPs for various municipal activities at all fixed municipal facilities. The BMPs are outlined in the City's 2008 JURMP Update and the City's BMP Manual Part I. The City also references the CASQA Municipal BMP Handbook when choosing appropriate BMPs for various fixed facility types. More detailed information about BMP implementation at specific facility types is included in the following sub-sections. The City implements additional BMPs as deemed necessary, and implements equivalent BMPs when it is determined that a specific BMP is not feasible at a particular site. In addition to implementing BMPs, the City utilizes pollution prevention measures to reduce or eliminate the amount of pollutants generated from City-owned fixed facilities.

Parks and Recreation Facilities

In FY 2009-10, the City implemented a variety of BMPs to reduce or eliminate the amount of pollutants entering the MS4 from municipal parks and recreation facilities and other open landscaped areas. City personnel implemented general waste management BMPs, and patrons of the facilities were encouraged to recycle and properly dispose of trash and pet waste. Notable activities during the fiscal year included the maintenance of 20 doggie bag dispensers at three public parks and along several trails. The City also posted recycling signs along with trash and recycling bag dispensers at four beaches during peak holiday weekends throughout the reporting period.

City staff continued operation and maintenance of post-construction BMPs at Cottonwood Creek Park. The park is a prime example of low impact development and includes the following post-construction BMPs: 90 feet of day lighting Cottonwood Creek, porous pavement for all parking areas and driveways, pervious walkways, surface drainage through earthen-bottom open channels, and drought tolerant plants in landscaping areas.

Due to their widespread outdoor use, pesticides, herbicides, and fertilizers can be common pollutants discharged to MS4s. Transport of these pollutants is often a result of the following: (1) runoff from improper irrigation after application; (2) application of chemicals during or prior to storm events; (3) use of chemicals that do not properly absorb to soil or plants; and (4) overspray from chemical applications that may eventually enter the MS4. The City of Encinitas Parks and Recreation Department has prepared and adopted a Policy and Procedures Manual for integrated pest management. Implementation of the policy includes:

- educating and training of staff and contractors on the policy,
- implementing a process of identifying pests and/or problems by site,
- monitoring and record keeping,
- establishing thresholds for pest problems,
- selecting a less toxic treatment, and
- evaluating the success of the treatment.

The Federal Pesticide, Fungicide, and Rodenticide Act and California Title 3, Division 6, Pesticides and Pest Control Operations place strict controls over pesticide application and handling. This Act also specifies training, annual refresher, and testing requirements. The regulations generally include: a list of approved pesticides and selected uses, updated regularly; general application information; equipment use and maintenance procedures; and record keeping. The California Department of Pesticide Regulations and the County Agricultural Commission coordinate and maintain the licensing and certification programs.

In FY 2009-10, the following BMPs were implemented at all municipal parks and recreation facilities, public streets, channels, and right of ways to reduce pollution from pesticides, herbicides, and fertilizers:

- Whenever practicable, integrated pest management techniques that rely on non-chemical solutions are implemented.
- City personnel who participate in the application of pesticides are properly trained, maintain Qualified Applicator Certifications and follow guidelines set by the California Department of Pesticide Regulations and the County Agricultural Commission.
- City staff records the applications of all chemical agents by noting the locations, types, and quantities of chemicals used. Records are reported monthly to the Department of Agriculture.
- Pesticide, fertilizer, and herbicide handling and safety refresher sessions are provided to City personnel involved with application.

- The use of fertilizers is minimized as much as possible; compost and soil amendments are used in place of fertilizer, where applicable.
- Employees are trained to handle pesticides, herbicides, and fertilizers properly.
- All federal, state, and local regulations are followed in the use of pesticides, herbicides, and fertilizers.
- Pesticides, herbicides, and fertilizers are applied only when necessary (typically during growing seasons) and not during or prior to anticipated storm events.
- Pesticides are not sprayed when there is a high possibility of the spray drifting into non-target areas or onto non-target vegetation, insects, or animals.
- The City maintains compliance with federal and state reporting law for pesticide use.
- Weeds, grass, and brush are cleared from building perimeters and fence lines to reduce the need for pesticides and herbicide use, when applicable.
- Native plants are used in landscaping, where applicable.
- Diseased plants are removed, and infected parts of plants are removed to minimize the need for pesticide and herbicide use, where applicable.
- Several evapotranspiration gauges located throughout the City are used to monitor microclimates to properly set irrigation systems for different areas of the City and reduce the potential of over-irrigation.
- Flow sensors and master valves prevent water loss in the event of a break in any of the main lines.
- One bilingual training session for the City's private landscaping contractors was conducted by Clean Water Program staff during the fiscal year. There were 21 participants at the training session on June 17, 2010.

Public Works Operations Facilities

City personnel implement appropriate BMPs for all activities that take place at public works facilities. Storm Water Pollution Prevention Plans (SWPPPs) have been developed for all four of the City's main operations facilities, which include the City of Encinitas Wastewater Collection Division Facility, Requeza Street Facility, the "A" Tank Site, and the Calle Magdalena Public Works Facility. The SWPPPs include a site description, a description of potential sources of pollutants, a summary of existing BMPs, a description of BMPs to be implemented, and a monitoring and record keeping plan. The SWPPPs are maintained at each facility, and all of the facilities are inspected by City staff on an annual basis. Additionally, all Public Works employees are annually trained in storm water management by the Clean Water Program. For more detail regarding municipal staff training refer to Section 8.2 of this document.

Potable Water Facilities

City personnel implement appropriate BMPs for all activities that take place at potable water facilities when deemed appropriate. San Dieguito Water District employees are trained in storm water management on an annual basis. For more detail regarding municipal staff training refer to Section 8.2 of this document.

Fire Stations

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by fire fighting activities both at fire stations in the City and locations throughout the City. In FY 2009-10, Fire Station #3 was redesigned to incorporate the following storm water BMPs: bio swales, pervious pavement and a roof cover for the fueling area. Two fire stations (#3 and #5) have permanent treatment control BMPs in place to treat any runoff which may be discharged from washing activities. The remaining stations utilize source control BMPs to minimize and control discharges related to washing activities. All fire fighting training activities which include aqueous film forming foam are conducted at a fire station outside of the City of Encinitas. In addition to implementing structural BMPs at the fire stations, all City of Encinitas Fire Department employees are trained in storm water management on an annual basis. More detailed information regarding municipal staff training and non-emergency fire fighting flows can be found in Sections 8.2 and Section 13 of this document.

Other Fixed Facilities

The City implements pollution prevention methods and BMPs to reduce or eliminate the amount of pollutants generated by the management of public buildings, other fixed facilities, and surrounding areas. The City implements BMPs to control erosion and sediment, during landscaping maintenance, and for waste management, as discussed in the City's BMP Manual Part I and the CASQA Municipal Handbook.

In FY 2009-10 the following pollution prevention practices were implemented at all three administrative office buildings (City Hall, Calle Magdalena Public Works Facility and the Wastewater Collections Division Municipal Yard):

- approval and implementation of an Environmentally Preferable Purchasing policy,
- approval and implementation of a Low Impact Cleaning policy which seeks to minimize the impact of the City's cleaning products and procedures on the environment, and
- the use of 100% recycled paper for all copiers and printers.

Additionally, there were a total of ten energy efficient Dyson hand dryers installed in all of the bathrooms at City Hall, the Encinitas Community Center and the Encinitas Branch Library. Other pollution prevention practices that are maintained at City Hall include the following:

- roof replacement and an energy efficiency improvement project consisting of the installation of solar photo voltaic panels, a high efficiency air conditioning system, and day lighting the building in certain areas.
- installation of an Automated Logic System (ALS) which controls the heating and ventilation,
- implementing a 9-80 work week so that City Hall is closed every other Friday,
- installing lighting controls and timers that time lights in specific areas of the building based on specific needs and maximizes the time when lights are out,
- implementing a battery collection and recycling program at City Hall,

- replacing large trash receptacles at each individual desk with mini size trash receptacles and providing large recycling containers for mixed paper and cans/bottles,
- placing recycling centers in conference rooms that include mixed paper, cans/plastic, and trash compartments, and
- use of seven alternative fuel vehicles.

4.3.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

Fertilizers which are used on landscaped areas in municipal parks and public right of way areas are considered a pollutant of concern for the San Elijo Lagoon and its larger drainage area. To mitigate potential discharges of nutrients to the Lagoon from Municipal activities, the City requires that the City's landscaping contractors implement an extensive fertilizer management program as described earlier in section 4.3.3.1. The City will continue to monitor the fertilizer management program, and if the existing measures are found to be deficient, the City may adjust the BMP implementation as needed to achieve a higher level of pollutant reduction.

Similarly, if the City identifies any potential sources of other constituents for which water bodies in the City are 303(d) listed that could be the result of activities at fixed municipal facilities, additional controls will be required to be implemented where applicable. The City will implement additional controls for municipal areas and activities adjacent to or tributary to ESAs when determined to be necessary. Presently, there are no other municipal fixed facilities that have been determined to be a source of pollutants for which water bodies within the City are on the Clean Water Act (CWA) 303(d) list.

4.3.4 PROGRAM IMPLEMENTATION

The City implements the municipal program using a variety of different processes, including maintenance, training and education, inspections, and if necessary, enforcement actions. Program implementation also includes the continuous assessment of municipal programs to ensure that they are designed and executed in a manner that is most effective to reducing, and potentially eliminating, the threat of pollution from fixed municipal facilities.

4.3.4.1 MAINTENANCE

In FY 2009-10, the City continued to conduct regular maintenance activities at fixed facilities, which included landscape maintenance, building maintenance, parking lot, and sidewalk repair, when necessary. Sweeping of the parking facilities associated with the municipal facility is conducted at these facilities during regular maintenance activities.

The City maintains a regular maintenance schedule for fixed facilities in the City. As previously discussed, City personnel are trained to implement the proper BMPs when at municipal facilities and when engaging in specific activities at those facilities. City personnel are also trained to dispose of any waste properly, and to report illegal discharges/illicit connections as they may come across them during normal work activities.

4.3.4.2 TRAINING AND EDUCATION

Municipal personnel are trained in implementing appropriate BMPs and preventing non-storm water discharges. In FY 2009-10, Clean Water Program staff conducted training for the following municipal departments: Engineering, Fire, Parks and Recreation, Planning, Public Works and the San Dieguito Water District. Additionally, the Streets Division of the Public Works Department discussed storm water issues at regular staff meetings throughout the reporting period. A detailed description of the municipal education program can be found in Section 8.2 of this document.

4.3.4.3 MUNICIPAL INSPECTIONS

City staff performs annual inspections at all of the high priority municipal facilities in the City of Encinitas. As part of the FY 2009-10 program City staff performed a total of **28** high priority inspections. The fixed facility inspection locations and inspection dates are summarized in Table 4-1 below.

Table 4-1
Fixed Facility Inspections

No.	Facility Name	Inspection Date
1	"A" Tank Site Public Works Yard	4/21/2010
2	Calle Magdalena Public Works Yard	4/21/2010
3	Requeza Street Public Works Yard	4/21/2010
4	San Elijo Wastewater Division Facility	4/21/2010
5	Beacon's Beach	6/9/2010
6	Cardiff Sports Park	6/2/2010
7	Cardiff Sports Park Expansion	6/2/2010
8	Cottonwood Creek Park	6/2/2010
9	Encinitas Viewpoint Park	5/18/2010
10	Glen Park	6/8/2010
11	Grandview Beach	6/10/2010
12	H St. Viewpoint	6/9/2010
13	Hawkview Park	6/3/2010
14	J St. Viewpoint	6/9/2010
15	Las Verdes Park	5/18/2010
16	Leo Mullen Sports Park	5/18/2010

No.	Facility Name	Inspection Date
17	Leucadia Oaks Park	6/3/2010
18	Leucadia Roadside Park	6/10/2010
19	Little Oaks Equestrian	6/4/2010
20	Mildred Macpherson Park	6/10/2010
21	Moonlight Beach	6/10/2010
22	Oakcrest Community Park	5/18/2010
23	Orpheus Park	6/10/2010
24	Paul Ecke Sports Park	5/18/2010
25	Scott Valley Park	5/18/2010
26	Sun Vista Park	6/4/2010
27	Swami's Beach	6/8/2010
28	Wiro Park	6/4/2010

The recommended BMPs and corrective actions are summarized in the City's Routine Inspection Summary located in Appendix C-6. Of the 28 sites inspected, a total of **4** facilities required corrective actions and/or follow-up inspections. As a result, all **4** facilities have implemented appropriate BMPs, and the Public Works and Parks and Recreations Departments have verified that the corrective actions have been completed. There were no enforcement actions for any of the Municipal fixed facilities during FY 2009-10.

Potable Water Facilities

All of these facilities are considered a low priority and do not receive formal inspections because the activities associated with these facilities are located underground and do not involve any other activities on site.

4.4 MS4

4.4.1 BACKGROUND

The primary functions of municipal separate storm sewer systems (MS4) are to collect and transport surface runoff to receiving waters during storms in order to prevent flooding. The entire MS4 system is considered a high priority due to its tendency to collect and convey pollutants to receiving waters. The City's MS4 consist of streets, curbs, catch basins, inlets, pipes of varying materials, natural creeks and streams, natural channels, concrete channels, culverts, desilting basins, and detention basins. The City also maintains a number of treatment control BMPs such as storm drain filter inserts and a UV treatment facility, which are included

in the regular maintenance of the MS4. In order to reduce the transportation of pollutants into receiving water bodies, the City of Encinitas regularly maintains its MS4 to ensure that it remains both fully functional and free of pollutants to the Maximum Extent Practicable (MEP).

4.4.2 SOURCE CHARACTERIZATION

The City maintains a variety of MS4 facilities which includes 1,591 catch basins and inlets, 61 miles of storm drain pipe, 2.25 miles of open channels, 14 desilting basins, and one UV Urban Runoff Treatment Facility located throughout its jurisdiction. The MS4, as one complete entity, is included in the municipal inventory located in Appendix C-1.

The City utilizes an industry standard Geographic Information System (GIS) to maintain an accurate and up-to-date inventory of the MS4. The GIS MS4 inventory includes inlets (i.e. catch basins, curb inlets, grate/inlet combos, etc.), outlets (i.e. curb outlets, headwalls, etc.), manholes, pumps, ditches, channels, storm drain pipes, and detention basins. To ensure that the City's GIS inventory is current and accurate, the MS4 inventory continually undergoes data (feature and attribute) review, quality control and validation by City staff from multiple departments. GIS staff also maintains storm infrastructure data by mapping new infrastructure through a combination of field work and Engineering Plans.

In FY 2009-10, the City in support of ongoing efforts to validate the MS4 inventory of facilities, continued through the first phase of the Channel Maintenance and Environmental Permitting project, completing an initial biological resources and constraints analysis. It is anticipated that this analysis will dictate future phases of the project, and clearly align citywide maintenance needs with related environmental permitting requirements. This effort has been prioritized by the City to support ongoing and critical maintenance of drainage facilities citywide.

4.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.4.3.1 UPDATED BMP REQUIREMENTS

The City has created and maintains a BMP Manual Part I which establishes the City's minimum BMP requirements for the following components: municipal, residential, industrial/commercial, construction, and new development. The City's JURMP also directs city staff to utilize the CASQA Municipal Handbook in addition to the BMP Manual to choose applicable BMPs for municipal areas and activities, including MS4 maintenance. All of these BMPs are designed to prevent waste from entering the MS4 system as well as ensuring that waste which is collected during maintenance of the City's MS4 does not re-enter the system.

The 2007 Municipal Permit requires that retrofitting flood management facilities be evaluated to determine the feasibility of providing additional pollutant removal from urban runoff and should only be conducted where determined to be effective. The City of Encinitas does not own or operate any flood management projects or flood control devices that may be retrofitted. However, in FY 2009-10 the City did maintain 10 detention basins throughout the City that serve a pollutant removal function, particularly for sediment and associated

pollutants bound to the sediment. These facilities are inspected on an annual basis and cleaned of debris and sediment as needed. A Municipal BMP map that depicts all of the City's structural BMPs, detention basins and storm drain filter locations can be found in Appendix C-3.

4.4.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS/ACTIVITIES

The City will implement additional controls for MS4 facilities adjacent to or tributary to ESAs when determined to be necessary.

4.4.4 PROGRAM IMPLEMENTATION

The City's MS4 management program includes responding to complaints received by the City's Clean Water Hotline {(760) 633-2787}; detecting and ceasing IC/IDs; inspecting and maintaining MS4s by cleaning, removing sediment, debris, and excessive vegetation, repairing and/or replacing damaged or failing MS4 structures; and by stenciling signs on storm drain inlets warning of effects of illegal dumping. The City trains field staff on implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance, emergency maintenance, and/or discharge control. The City utilizes a combination sewer and storm drain cleaner during MS4 maintenance to collect both dry and liquid debris from catch basins and inlets. Applicable BMPs are used during routine and emergency maintenance. City staff report on the maintenance of the MS4 through an industry standard asset inventory and a work management system that integrates with the City's GIS system. Maintenance is performed on the storm drain infrastructure and captured through work orders that are attached to the storm drain features represented in GIS. Any changes or updates to the MS4 inventory will be reported in future JURMP Annual Reports.

All maintenance activities this fiscal year met the Municipal Permit requirements as outlined in Order No. R9-2007-0001. The FY 2009-10 annual results for all municipal activities are summarized below and reported in detail in Appendix C-2.

4.4.4.1 MAINTENANCE

A summary of the City's MS4 operation and maintenance activities that occurred throughout the fiscal year is included below:

- Within the defined reporting period of this report, approximately **355.9 tons** of waste and litter were removed from the entire MS4. This included the removal of **45.6 tons** from the catch basins and inlets, **2.3 tons** from the City's storm drain filter inserts, and **159 tons** from open channels. All MS4 facilities observed to be collecting relatively high volumes of trash were cleaned between May 1 and September 30.

- Within the defined reporting period of this report, **308 tons** of litter and vegetation were removed from open channels by hand. Cleaning the open channels is conducted

annually/year round or more often when necessary. The City responds to observations or reports of anthropogenic litter in channels in a timely manner.

- Within the defined reporting period of this report the City inspected and cleaned **1,659** catch basins and inlets and removed a total of **47.9** tons of waste and litter. Storm drain inlets and catch basins that City personnel have identified as gathering a greater amount of trash and debris as compared to other areas of the City are inspected throughout the year and cleaned if necessary. The City's inspection and cleaning activities are sufficient in ensuring the catch basins do not reach one-third of capacity and that self-cleaning facilities remain free of trash and debris. Inspection and cleaning schedules are subject to change based on observations and records of City personnel.

- The City maintains a total of 56 storm drain filter inserts in 34 inlets (some larger inlets may contain more than one filter insert) located throughout its jurisdiction to remove sediment, debris, oil, and grease from the MS4. From July 1, 2009 through June 30, 2010, **2.3 tons** of sediment and litter were removed from all 34 inlets. These inserts are maintained on a quarterly basis by a specialty contractor. Table 4-2 below outlines the complete filter insert inventory. A Municipal BMP map that depicts all of the City's storm drain filter locations can be found in Appendix C-3.

- The City of Encinitas has a formal maintenance agreement with the San Elijo Joint Powers Authority to maintain the UV Facility. The scope of the agreement ensures daily monitoring and inspection, startup and shutdown of the facility as dictated by rain events, and preventative and regular maintenance. In FY 2009-10, over $16,083 was spent on the preventative and regular maintenance of the facility including, pump replacement, control screen and software updates, and other electronic equipment and parts. The UV Facility provides the City with a vital treatment function, and ongoing operations and maintenance activities are critical to ensure optimum performance and pollutant removal.

A complete report of all MS4 operation and maintenance activities can be found in Appendix C-2.

Table 4-2
Storm Drain Filter Inserts Inventory

Inlet ID Number	Number of Filters	Location	Inlet Type
1	1	194 El Camino Real @ Via Molena	Curb
2	1	1470 Neptune Ave. in driveway apron	Grate
3	2	337 El Camino Real, in front of Circuit City Mall	Curb

Inlet ID Number	Number of Filters	Location	Inlet Type
4	1	1638 Neptune in grass shoulder	Grate
5	2	1786 1/2 Highway 101	Curb
6	1	1650 Highway 101	Grate
7	1	970 Hwy 101 in alley, north of Jasper	Grate
8	1	918 N. Hwy 101 in alley	Grate
9	2	204 El Camino Real, in front of Blockbuster Video	Curb
10	1	914 Hwy 101 in alley @ Leucadia Blvd. north of the park	Grate
12	1	828 Hwy 101 in alley, behind building	Grate
13	1	802 Hwy 101 in alley, west of Europa St.	Grate
14	1	129 Cadmus at Highway 101	Grate
15	1	149 Basil St. at Highway 101	Grate
16	4	130 Basil St. at Highway 101	Curb
17	1	130 Athena at Highway 101	Grate
18	2	170 Athena at Highway 101	Curb
19	1	577 N. Vulcan north of Union	Grate
20	1	208 Cereus at Hygeia	Curb
21	3	501 El Camino Real, east side @ Garden View Rd.	Combo
22	1	321 Union at Hygeia	Grate
23	1	321 Union across from Hygeia St.	Grate
24	1	1750 Hwy 101 at Bishope Gate	Curb
25	1	750 G St. at Second St. alley	Grate
26	3	364 2nd St. at C Street	Grate
27	5	247 Hwy 101 at NE corner of Encinitas Blvd.	Curb
28	3	102 Encinitas Blvd.	Curb
29	2	485 Santa Fe Dr., west of I-5.	Curb
30	2	485 Santa Fe Dr., north side of street, west of I-5	Curb
31	1	2560 Manchester in alley	Grate
32	1	2582 Manchester across from alley	Grate

Inlet ID Number	Number of Filters	Location	Inlet Type
33	2	499 El Camino Real, SE corner @ Garden View Rd.	Curb
34	3	398 El Camino Real, SW Corner @ Garden View Rd.	Curb
35	1	398 El Camino Real, across from Circuit City mall	Curb

In FY 2009-2010, the Engineering Department was instrumental in conceptualizing and designing numerous drainage related capital improvement projects. These projects are outlined in Table 4-3 below.

Table 4-3
Storm Drain CIP Projects

Project Title	Budget	Goal	Status
Stratford Knoll Drainage Improvements	$650,000	Replace existing storm drain channel and increase capacity.	Under Construction
Cardiff Alley Improvements	$200,000	Build a perforated sub-drain to improve drainage in area.	Complete
Parking Lot B	$1,000,000	Implement Low Impact Designs (LIDs) including dry wells and flow through planters to treat storm water.	Under Construction
Encinitas Creek Drainage Channel	$1,100,000	Increase capacity and provide flood control	In Design
Melba Road Improvements	$250,000	Installation of drainage improvements including curb and gutter and an 8 inch storm drain.	In Design

4.5 SANITARY SEWER SYSTEM

4.5.1 BACKGROUND

Spills and/or leaks caused by a malfunction or failure of a component of the City's sanitary sewer system have the potential to introduce a significant volume of untreated sewage into

receiving water bodies. Untreated sewage can contain high concentrations of bacteria, viruses, and parasites, all of which have the potential to negatively impact the environment and pose a significant threat to human health. Untreated sewage also has the potential to contain a variety of hazardous chemicals, which also pose threats to environmental and human health. The City of Encinitas conducts routine inspections and maintenance of the sanitary sewer system to ensure that the system is functioning properly. Routine inspections and maintenance of the sanitary sewer system reduces the potential for an overflow and helps prevent and eliminate infiltration of seepage to the MS4. The City also responds to sanitary sewer overflows to reduce or eliminate the amount of untreated sewage that reaches nearby portals to the MS4 and aids in cleaning up and disposing of overflow residue.

4.5.2 SOURCE CHARACTERIZATION

The City of Encinitas Wastewater Collection Division maintains approximately 120 miles of public sanitary sewer collection pipes.

4.5.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.5.3.1 UPDATED BMP REQUIREMENTS

The City has created and maintains a BMP Manual Part I which establishes the City's minimum BMP requirements for the following components: municipal, residential, industrial/commercial, construction and new development. In March 2008, the City prepared a JURMP Update which directs city staff to utilize the CASQA Municipal Handbook in addition to the BMP Manual to choose applicable BMPs for municipal areas and activities, including maintenance of the sanitary sewer system.

Similar to the MS4 maintenance program, the City trains field staff on implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance and emergency maintenance and/or discharge control. Structural BMPs are used during routine and emergency maintenance, where applicable.

4.5.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City implements additional controls for sanitary sewer facilities adjacent to or tributary to ESAs, if applicable and when determined to be necessary. The City has a regular sanitary sewer maintenance program that minimizes sanitary sewer overflows (SSO) and is described in more detail below.

4.5.4 PROGRAM IMPLEMENTATION

The City's sanitary sewer management program includes responding to overflows and spills as necessary, identifying spills and leaks, containing and controlling spilled materials, repairing

damaged and leaking sewer lines, remediating existing sewer lines as necessary and proper disposal of hazardous waste.

4.5.4.1 MAINTENANCE

The City maintains a routine maintenance schedule for the sanitary sewer system. In FY 2009-10, the entire sewer system was cleaned, and known trouble spots were cleaned on a more frequent basis. The City seeks to reduce and eliminate the amount of seepage from the sanitary sewer system to the MS4 through routine preventative maintenance of both the sanitary sewer and the MS4 systems. Preventative maintenance of both systems allows City officials to detect and eliminate active seepage points before they become a larger problem, and also to repair areas of the system that have a high possibility of becoming a seepage point.

In FY 2009-2010, the Engineering Department was instrumental in conceptualizing and designing capital improvement projects (CIP) to prevent sewage spills by improving the wastewater collection system. Sewer and emergency repair projects initiated during FY 2009-10 are shown below in Table 4-4.

Table 4-4
Sewer CIP Projects

Project Title	Budget	Goal	Status
Olivenhain Sewer Pump Station	$ 5,300,000	Reduce sewage spills, increase capacity and capture first flush from Interstate 5.	In Design Phase

In FY 2009-10, the City took the following measures to reduce the seepage from the sanitary sewer system to the MS4:

- 4.7 miles of the sewer system was televised to check pipe conditions,
- 214 miles of sewer lines were cleaned,
- 11 storm drain and sewer pipes were repaired.

City staff report on the maintenance of the sewer system through an industry standard asset inventory and work order management system that integrates with the City's GIS system. Maintenance is performed on the sewer infrastructure and captured through work orders that are attached to the features represented in GIS. Any changes or updates to the sewer system inventory will be reported in future JURMP Annual Reports.

On August 8, 2009, the City implemented a Sewer System Management Plan (SSMP). The SSMP is a program that ensures that the sewer system is functioning properly and that the necessary maintenance is conducted. The SSMP also includes a spill response plan that establishes standard procedures for immediate response to all sanitary sewer system overflows (SSOs). In FY 2009-10 the City of Encinitas Wastewater Collection Division personnel were trained in detecting, reporting and responding to SSOs in accordance with the SSMP.

4.6 MOBILE MUNICIPAL ACTIVITIES, INCLUDING POWER WASHING

4.6.1 BACKGROUND

The City conducts a number of activities, which are not confined to any specific locations. Due to the nature of these mobile activities, temporary structural and source control BMPs are implemented as necessary.

4.6.2 SOURCE CHARACTERIZATION

The City conducts a number of activities that are not designated to a specific location. Such activities include, but are not limited to, the following:

- power washing, including graffiti removal,
- street and sidewalk repair and maintenance which includes street striping, street painting and pothole repair, and
- landscape maintenance

4.6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.6.3.1 UPDATED BMP REQUIREMENTS

The City implements good housekeeping and general pollution prevention measures during municipal maintenance activities, including the mobile activities discussed above. In March 2008, the City established minimum BMPs which were described in the City's 2008 JURMP Update. The JURMP Update directs city staff to utilize the City's BMP Manual Part I and the CASQA Municipal Handbook to choose applicable BMPs to implement for municipal areas and activities, including mobile activities. BMPs similar to those implemented for the management and maintenance of parks and landscaped areas are implemented for landscape maintenance in landscaped City right-of-way areas such as medians.

4.6.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City implements additional controls for municipal mobile activities adjacent to or tributary to ESAs when determined to be necessary. Presently, City related mobile activities have not been determined to be a source of pollutants for which water bodies within the City are on the CWA 303(d) list. Present BMP implementation activities have been evaluated as effectively reducing pollutant discharge to all receiving waters in the City to the MEP.

4.6.4 PROGRAM IMPLEMENTATION

In FY 2009-10, City field crews were trained to implement BMPs during all mobile activities. The Public Works Department Streets Division received training on storm water BMPs as they relate to mobile cleaning activities on five separate dates throughout the reporting period.

Additionally, the Public Works Wastewater Collections Division also received training from Clean Water Program staff on June 16, 2010. City field crews were trained to properly contain, control, and capture any discharge that was generated by a mobile activity. City field crews were also trained to use mobile equipment properly to ensure all wastewater is collected and that the equipment continues to function properly. For more detail regarding municipal staff training refer to Section 8.2 of this document.

4.7 SPECIAL EVENTS

4.7.1 BACKGROUND

The City of Encinitas hosts a variety of special events throughout the city. These events may include, but are not limited to, festivals, fairs, events for charitable causes, and special occasions. The City recognizes that many special events have the potential to generate significant trash and litter caused by the patrons and the associated activities that occur at the special events. The City has considered the controls that are described in the Municipal Permit and has chosen the BMPs listed in Section 4.7.3.1 below as most effective and efficient for the City's needs. These BMPs are implemented during and/or after special events, where applicable.

4.7.2 SOURCE CHARACTERIZATION

The City of Encinitas hosts a variety of special events at various locations throughout the city; including City sanctioned events and venues, as well as privately managed events. According to the Encinitas Municipal Code Chapter 6.12, any organized event coordinated for 25 people or more requires an Operations Permit (Special Events Permit). For the purpose of Special Event source characterization, events that require an Operations Permit (as defined by Encinitas Municipal Code Section 6.12) by the City have been identified as priority events.

4.7.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.7.3.1 UPDATED BMP REQUIREMENTS

The City has considered many of the controls specific to special events listed in the Municipal Permit. Before any special event permits are approved, applicants must fill out the City's "Special Events Permit P2 Questionnaire" (Appendix C-4) to assess the most appropriate BMPs for their event, and all applications must be reviewed by Clean Water Program Staff. Applications are evaluated to ensure that event organizers select an effective combination of BMPs to prevent trash or other pollutants from entering the storm drain system. The City has chosen the following BMPs as most effective and efficient for City needs. Notably, the City may require additional, event specific BMPs at any time as determined necessary.

Inlet Protection:

- Identify all storm drain inlets with appropriate signage and prohibitive language to deter illegal dumping and / or discharge.
- Protect all storm drains identified on their site plans. Fabric filters, gravel bags, or other approved inlet protection device over the drain opening are recommended.
- Visually inspect and clean, if necessary, all identified storm drain inlets impacted by the Special Event activities.

Trash and Debris:

- Adequate trash and recycling containers must be provided throughout the event venue, including at the exit and entry points.
- Regular collection of loose trash and debris must be applied as needed.
- Temporary fencing will be required to be put into place if the event, or any portion thereof, is determined to pose a threat of wind blown debris into any water bodies.
- Post event sweeping of the entire venue area and related staging areas is required.

Temporary Portable Restrooms:

- All temporary portable restrooms will be placed away from all storm drain inlets, drainage swales, water bodies, and any other locations that have the potential to impact the storm drain system.
- All temporary portable restrooms are required to have a secondary containment pan or additional BMPs in place around the stations for possible overflows.
- The contact information for the company responsible for the restrooms clearly marked on or around the restrooms.

In addition to the BMPs that are implemented by the applicant, The City of Encinitas implements the following during and/or after special events, where applicable.

- Proper management of trash and litter, including temporary trash receptacles for trash.
- Street sweeping following the special event.
- Other BMPs, as included in the Municipal Permit, when deemed necessary by City personnel.
- Other post clean-up activities, such as catch basin cleaning, when necessary.

The City may also set up storm water informational booths with educational handouts and watershed maps, which demonstrate the impacts of pollution on a watershed. The City will consider implementing additional BMPs depending on the site location, site conditions, and/or type of special event.

4.7.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City will implement additional controls for municipal special events adjacent to or tributary to ESAs when determined to be necessary. Presently, special events have not been determined

to be a significant source of pollutants for which water bodies within the City are on the CWA 303(d) list. Present BMP implementation activities have been evaluated for effectiveness in reducing pollutant discharge to all receiving waters in the City to the MEP.

4.7.4 PROGRAM IMPLEMENTATION

Events which require a discretionary Special Events Permit from the City, and completion of the BMP specific Special Events Permit P2 Questionnaire (Appendix C-4), must meet minimum pollution control standards as described above, and receive permit approval from the Clean Water Program. More refined event characterization as defined in Section 4.7.2 above, and improved event tracking enhanced the overall efficiency and effectiveness of Special Event oversight. In FY 20009-10, there were **54** special event applications processed by the Clean Water Program (see Appendix C-5).

The Clean Water Hotline is advertised on all Special Events Permit Applications and can be used to report spills during normal business hours. Additionally, the City has an after hours phone number that can be used to report any large or hazardous spills during special events that may occur on weekends or when the City offices are closed. City personnel are on call to respond to any emergency situations that may arise. During City sponsored events, trained City personnel are on hand to ensure that the event remains free of illegal discharges and/or illicit connections to the MS4.

In addition, the City maintains the authority to charge the applicant a Clean-up Fee and Deposit, depending on the size, location, and type of event. Following permitted events, post-event inspections are conducted by City staff, and the location of the event must be returned to pre-event conditions in order for the applicant to receive a full refund of deposited monies. If the City determines that more clean-up is necessary, the deposit will be used as reimbursement for City time and cleanup efforts including street and parking lot sweeping, and the event sponsors or organizers may be charged any excess clean-up fees the City may encounter beyond the amount of the deposit. In FY 2009-10, the City collected $600.00 in clean-up deposits (see Appendix C-5).

5.0 INDUSTRIAL AND COMMERCIAL

5.1 INTRODUCTION

Activities associated with industrial and commercial businesses can contribute pollutants to the City's MS4 (Municipal Separate Storm Sewer System). The City of Encinitas has implemented a program that aims to reduce industrial and commercial pollution discharges from the MS4 to the MEP, prevent industrial and commercial discharges from the MS4 from causing or contributing to a violation of water quality standards, protect local receiving water bodies, and comply with the Municipal Permit.

Commercial facilities within the City of Encinitas include a wide range of service oriented businesses from restaurants to nurseries. There are five main commercial areas within the City. The largest areas are downtown Old Encinitas and the Leucadia business district, along Highway 101 from Swami's Beach to La Costa Boulevard. This area contains many different commercial businesses ranging from restaurants to automotive outlets and is the oldest portion of Encinitas. Three industrial facilities are also located in the City: the San Dieguito Union High School District Transportation Cooperative, the San Elijo JPA Water Reclamation Facility, and the inactive Encinitas Landfill.

Within the defined reporting period of this report, Clean Water staff worked diligently to fulfill the requirements of the Order 2007-0001 related to commercial and industrial sectors. The City's GIS-based commercial inventory was updated and prioritized based on the new requirements of Order 2007-0001 and the guidelines established in the City's 2008 JURMP. FY 2009-10 commercial and industrial facility inspections were based on this prioritization scheme and the new inspection frequencies outlined in Order 2007-0001. Inspections, follow-up, and enforcement actions were tracked using CityWorks, the City's existing GIS-based Work Order tracking system. In addition, the City participated in the regional industrial/commercial workgroup and subgroups, and helped to shape the mobile commercial businesses database and inspection standards. The following section demonstrates the City's successful implementation of required programmatic activities related to the Industrial and Commercial Section of Order 2007-0001 (Section D.3.b) during FY 2009-10

5.2 INDUSTRIAL AND COMMERCIAL SITES/SOURCES ELEMENT

5.2.1 BACKGROUND

Each stationary industrial and commercial facility has the potential to discharge pollutants into the MS4 and consequently degrade local water quality. Often, the most cost effective and simple solution to reducing pollution is to implement pollution prevention techniques at the source. The Clean Water Program emphasizes the use of pollution prevention methods as a primary mechanism for reducing commercial discharges of pollutants into the City's MS4. Further, the City requires minimum site and activity specific BMPs to be implemented, and inspections and enforcement procedures will be conducted where necessary, to comply with the Municipal Permit.

For the rest of Section 5.2, "commercial facilities" will be used to refer to stationary commercial facilities that are not mobile. The mobile commercial site/sources component is described in Section 5.3.

5.2.2 SOURCE CHARACTERIZATION

A watershed-based inventory of the industrial and commercial sites/sources within the City's jurisdiction was compiled as part of the 2008 JURMP update. As required by the Municipal Permit, the inventory includes the following information for each site/source: facility name; address; pollutants potentially generated by the site/source (and identification of whether the site/source is tributary to a Clean Water Act section 303(d) water body segment and generates pollutants for which the water body segment is impaired); and a narrative description including SIC codes which best reflects the principal products or services provided by each facility. Inventories of commercial and industrial facilities within the City of Encinitas are included in Appendices D-1 and D-2. Mobile commercial businesses do not have a fixed address at which they operate; they are tracked within a separate, non-spatial database (refer to Section 5.3).

The commercial inventory is continually updated as facilities go out of business and new facilities are opened. The GIS department and the Clean Water Program both receive a monthly summary of new and renewed business registrations from the City Clerk's Department. Upon receipt of the monthly summary, a GIS Analyst updates the spatial facility database, and a Clean Water Program staff member updates the storm water inspection information for each business. In addition, Clean Water staff identifies businesses that are not on the facility inventory when complaints are filed about businesses that are not registered with the City. When this occurs, these facilities are added to the inventory. Additionally, when Clean Water staff conducts annual commercial and industrial inspections, they have the opportunity to identify new or closed businesses and update the inventory with these findings.

In FY 2007-08, commercial facility inspection priorities were established in consideration of inspection frequencies and prioritization standards outlined in Order 2007-0001. As part of the JURMP update and transition to complying with the current Municipal Permit, a new process to determine high priority facilities was formalized using GIS and put into effect in FY 2008-09. Section 5.2.4.1 provides a detailed description of the City's prioritization process for commercial facilities. As a result of this process, there were **114** commercial facilities identified as high priority and inspected in FY 2009-10. High priority facilities identified in FY 2009-10 included: (2) animal facilities, (8) auto repair shops, (83) eating/drinking establishments, (9) gas stations, (5) nurseries/greenhouses/landscapers, (3) industrial facilities, (2) masonry businesses, (1) building material supplier, and (1) golf course. Notably, the City of Encinitas' commercial inventory is dominated by eating/drinking facilities. As such, it is worth noting that the commercial businesses inventory in the City is dynamic, with considerable business turnover. Consequently, the City is constantly working to maintain and prioritize the commercial facilities inventory to dictate effective and efficient commercial inspection actions citywide.

Three industrial facilities are located in the City of Encinitas—the San Elijo JPA Water Reclamation Facility, San Dieguito Union High School District (SDUHSD) Transportation Cooperative, and the Encinitas Landfill. All three facilities are covered under the Industrial

Storm Water General Permit Order 97-03-DWQ. The industrial inventory is included as Appendix D-2. The San Elijo JPA Water Reclamation Facility is a wastewater treatment plant located at 2695 Manchester Avenue. The plant treats approximately 5.25 million gallons of raw sewage per day. The SDUHSD Transportation Cooperative is located at 1142 Bonita Drive and functions as the maintenance shop for the SDUHSD bus fleet as well as the parking area for the buses. The Encinitas Landfill is owned and operated by the County of San Diego. This facility is located at 2099 Encinitas Boulevard and is now closed. The JPA and SDUHSD are inspected by the City of Encinitas, and the Encinitas Landfill is inspected by the County of San Diego. Completed industrial facility inspection forms are available upon request.

As part of the 2008 JURMP update and the development of the SUSMP, the City collaborated with copermittees to identify the pollutant loading potentials of industrial and commercial sources. Table 5-1 lists the pollutants that may be generated by each category of business. The pollutants that may be generated by each individual business can be determined by matching the category of business noted for each of the businesses in the commercial inventory in Appendix D-1 with the category in Table 5-1 and its corresponding pollutants. Waste Discharge Identification Number (WDID) is also included for sites that are covered under the State of California Industrial General Permit (General Industrial Permit). The TTWQ prioritization of each facility is also included in the inventories. Prioritization was assigned via the process described in Section 5.2.4.1.

As required by Section D.3.b(1) of the Permit, all industrial and commercial facilities that meet at least one of the following criteria are included in the inventory:

Industrial Facilities

- Industrial Facilities, as defined at 40 CFR § 122.26(b)(14)
- Facilities subject to the statewide General Industrial Permit or other individual NPDES permit
- Operating and closed landfills
- Facilities subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)
- Hazardous waste treatment, disposal, storage, and recovery facilities

Commercial Facilities

- Automobile repair, maintenance, fueling, or cleaning
- Airplane repair, maintenance, fueling, or cleaning
- Boat repair, maintenance, fueling, or cleaning
- Equipment repair, maintenance, fueling, or cleaning
- Automobile and other vehicle body repair or painting
- Mobile automobile or other vehicle washing[1]
- Automobile (or other vehicle) parking lots and storage facilities
- Retail or wholesale fueling

[1] Mobile commercial businesses are discussed in more detail in Section 5.3.

Table 5-1
Pollutant Loading Potentials of Industrial and Commercial Sources

Site/Source Type	Heavy Metals*	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash
Airplane Repair	L	L	L	PO	UL	UL	PO	UL	PO
Animal Facilities	UL	UL	UL	PO	UL	L	L	L	PO
Auto Body Repair	L	L	PO	PO	UL	UL	PO	UL	PO
Auto Repair/Maintenance	L	L	L	PO	UL	UL	PO	UL	PO
Boat Repair	L	L	L	PO	UL	UL	PO	UL	PO
Botanical Garden	UL	PO	UL	PO	L	L	PO	L	PO
Building Materials	PO	UL	PO	L	PO	PO	PO	UL	L
Mobile Cleaning	UL	PO	UL	PO	UL	UL	PO	UL	PO
Cement Mixing/Cutting	UL	UL	PO	L	UL	UL	PO	UL	PO
Cemeteries	UL	UL	UL	PO	L	L	PO	PO	PO
Eating/Drinking Establishments	UL	UL	L	PO	UL	UL	L	L	L
Equipment Repair	L	L	L	PO	UL	UL	PO	UL	PO
Fueling	L	L	L	PO	UL	UL	PO	UL	PO
Golf Courses/Parks	UL	UL	UL	PO	L	L	PO	PO	PO
Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO
Marinas	L	PO	L	PO	UL	UL	PO	PO	PO
Masonry	UL	UL	PO	L	UL	UL	PO	UL	PO
Nursery/Greenhouses	UL	PO	UL	L	L	L	PO	PO	PO
Painting/Coating	PO	PO	PO	PO	UL	UL	PO	UL	PO
Pest Control	PO	PO	UL	PO	L	UL	PO	UL	PO
Pool/Fountain Cleaning	UL	UL	UL	PO	UL	UL	UL	UL	UL
Portable Sanitation	UL	PO	PO	PO	UL	L	PO	L	PO
Power Washing	PO	PO	PO	PO	UL	UL	UL	UL	UL
Auto Parking/Storage	L	L	L	L	UL	UL	PO	UL	PO
Mobile Auto Washing	PO	L	PO	PO	UL	UL	PO	UL	PO
Contractor (Mobile)	PO	PO	PO	PO	UL	UL	PO	UL	PO
Handyman (Mobile)	UL	PO	PO	UP	UL	UL	PO	UL	PO
Landfill	PO	PO	PO	L	PO	PO	L	L	L
Wastewater Treatment	UL	UL	L	PO	UL	L	L	L	PO

Notes

L = Likely, PO = Possible, UL= Unlikely

* Heavy metals are a possible pollutant for any facility that has a parking lot.

This table is based on the field experience of D-MAX Engineering and on tables in the Copermittees' Baseline LTEA. D-MAX has conducted more than 1,000 industrial and commercial inspections during which it assessed the pollutant discharge potentials of the inspected facilities.

- Pest control services
- Eating or drinking establishments, including food markets
- Mobile carpet, drape, or furniture cleaning[1]
- Cement mixing or cutting[1]
- Masonry[1]
- Painting and coating[1]
- Botanical or zoological gardens and exhibits
- Landscaping[1]
- Nurseries and greenhouses
- Golf courses, parks, and other recreational areas/facilities
- Cemeteries
- Pool and fountain cleaning[1]
- Marinas
- Portable sanitary services
- Building material retailers and storage
- Animal facilities
- Power washing services[1]

Both Industrial and Commercial facilities

- All other commercial or industrial sites/sources tributary to a CWA Section 303(d) impaired water body segment, where the site/source generates pollutants for which the water body segment is impaired
- All other commercial or industrial sites/sources within or directly adjacent to (i.e., within 200 feet of) or discharging directly to coastal lagoons or other receiving waters within an Environmentally Sensitive Area (ESA).
- All other commercial or industrial sites/sources that the City determines may contribute a significant pollutant load to the MS4.

5.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.2.3.1 UPDATED BMP REQUIREMENTS

As required by section D.3.b.(2) of the Permit, during the 2008 JURMP update, the City established a set of minimum BMPs for all industrial and commercial sites and incorporated these into the City's BMP Manual I. The list of minimum BMPs includes both structural and non-structural BMPs and is itemized specific to pollutant-generating activity. The City's set of minimum BMPs for industrial and commercial sites/sources also includes pollution prevention methods, where appropriate. A complete list of the City's minimum BMPs for industrial and commercial facilities can be found in the City's BMP Manual I. The BMP Manual I can be accessed through the Clean Water Program webpage at: http://cwp.cityofencinitas.org.

Industrial Facility Specific BMPs

Industries subject to the General Industrial Permit are required to prepare a SWPPP (Storm

Water Pollution Prevention Plan) and implement the BMPs prescribed therein. At a minimum, the SWPPP should include sections which describe the significant materials present on site, areas and activities that are potential sources of pollutants, and BMPs to address the identified pollutants' sources onsite. In addition, because of the small scale of the City's industrial program, the City is able to require site-specific BMPs at its industrial sites. These BMPs are determined based upon a review of the site's SWPPP and site inspections.

5.2.3.2 ADDITIONAL CONTROLS

As required by section D.3.b.(2)(e), the City of Encinitas requires the implementation of additional controls for industrial and commercial sites and sources that are 1) tributary to CWA Section 303(d) impaired water body segments (where a site/source generates pollutants for which the water body segment is impaired) or 2) directly adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas.

Clean Water Program staff utilizes a geographic information system (GIS) to maintain the commercial and industrial inventory and has the ability to spatially locate facilities relative to receiving waters and ESAs. Clean Water inspection staff is provided a hard copy map to use as a field reference to make appropriate determinations in consideration of these factors. Clean Water Program staff may prescribe additional controls during inspections of commercial and industrial facilities, as needed, in consideration of the proximity of the facility to the water body and the observed potential of the site to be a significant source of pollutants that may threaten the downstream water body as necessary and appropriate.

5.2.4 PROGRAM IMPLEMENTATION

This section describes the steps employed by Clean Water Program staff to require and verify the implementation of required designated BMPs for industrial and commercial sources. During FY 2009-10, the City of Encinitas implemented the following industrial and commercial program elements:

- provided education and outreach through inspection actions so that regulated businesses were aware of the City's stormwater requirements;
- inspected inventoried businesses to evaluate compliance with established minimum BMP requirements and the local stormwater ordinance;
- conducted follow-up inspections as necessary to ensure facility compliance with minimum BMP standards;
- and took enforcement action as necessary to bring violators into compliance.

5.2.4.1 INVENTORY PRIORITIZATION

As required by section D.3.b(1)(b), when evaluating threat to water quality, the City of Encinitas considered the following attributes of each industrial and commercial business to determine priority status (high or low):

i. Type of activity (SIC code);
ii. Materials used at the facility;

iii. Wastes generated;
iv. Pollutant discharge potential;
v. Non-storm water discharges;
vi. Size of facility;
vii. Proximity to receiving water bodies;
viii. Sensitivity of receiving water bodies;
ix. Whether the facility is subject to the General Industrial Permit or an individual NPDES permit;
x. Whether the facility has filed a No Exposure Certification/Notice of Non-Applicability;
xi. Facility design;
xii. Total area of the site, area of the site where industrial or commercial activities occur, and area of the site exposed to rainfall and runoff;
xiii. The facility's compliance history; and
xiv. Any other relevant factors.

Although not specifically required by the Municipal Permit, the City will continue to classify industrial facilities that have obtained coverage under the General Industrial Permit as high priority. The City's GIS data management system was used to prioritize commercial businesses based upon the following spatially referenced TTWQ criteria:

- proximity to a 303(d) listed water body
- pollutant potential of the facility type
- stormwater violation history

If a facility was identified as having a potential threat based on two or more of these criteria, the facility was determined to be a high priority commercial facility. For example, if the facility is tributary to the San Elijo Lagoon and received a Notice of Violation from the City in the past the facility would be considered high priority based upon the additional criteria that the City has established in determining TTWQ. In addition, if during the City's commercial inspection process or based on institutional knowledge, it was determined that additional sites that would otherwise have a low priority should be classified as high priority industrial or commercial facilities, then they were added to the inventory and were inspected.

The City's commercial inventory was updated and prioritized during the defined reporting period of this report and will be prioritized a least once per year prior to conducting annual inspections.

As a result of the City's threat to water quality analysis during FY 09-10, 26% of the industrial and commercial facilities were identified as high priority. The identified high priority facilities included all three industrial facilities and many of the City's restaurants and auto repair shops. For a complete list of prioritized facilities refer to Appendices D-1 and D-2.

5.2.4.2 INSPECTION FREQUENCY

FY 2009-10 commercial facility inspection priorities were established in consideration of inspection frequencies and prioritization standards outlined in Order 2007-0001. As part of the

2008 JURMP update and transition to complying with the current Municipal Permit a new process to determine high priority facilities was formalized using GIS and put into effect in FY 2008-09. The following steps were taken to determine which industrial and commercial sites were inspected:

1. Confirm that the current industrial and commercial inventories are up-to-date
2. Prioritize each facility based on the prioritization process described in section 5.2.4.1 of this document
3. Review the list of facilities that were inspected the previous year
4. Determine the facilities that will be inspected in the current year based on each site's prioritization and inspection history and other relevant factors, such as TMDLs and 303(d) listings.

In compliance with standards established in section D.3.b.(3)(b) & (c) of the Permit, in FY 2009-10, the City inspected 100% of the industrial and commercial facilities inventoried as high TTWQ and over 25% of all inventoried sites. Consistent with the Permit, mobile businesses are not included when determining the inspection requirements based on percentages of the inventory. The City tracked completed inspections throughout the reporting period to ensure that the minimum inspection frequencies required by the Municipal Permit were met.

In FY 2009-10, the City's industrial and stationary commercial inventories included a total of **438** facilities, of which **114** facilities were identified as having a high TTWQ (**111** stationary commercial facilities and **three** industrial facilities[2]). Rounding to the nearest whole number, 25% of the stationary industrial/commercial inventory would be **110** sites, and 100% of the high TTWQ facilities would be **114** sites.

During FY 2009-10, the City completed inspections for all high priority facilities identified on the industrial/commercial facility inventory. City of Encinitas stormwater specialists conducted **two** industrial and **138** commercial site inspections, of which **two** were high priority industrial facilities and **111** were high priority commercial facilities. Therefore, the City of Encinitas met the minimum inspection requirements established in Order 2007-0001 and inspected 100% of all the high TTWQ facilities and 32% of all facilities in the industrial and commercial stationary facility inventories.

[2] The Encinitas Landfill is regulated and inspected by the County of San Diego.

Table 5-2
Summary of Facility Prioritization and Inspections Conducted in FY 2009-10

TTWQ Prioritization	Number of Facilities	Order 2007-0001 Inspection Requirements	Inspections Completed	
			Total	Percent
High priority	114	100% (114)	114	100%
Low priority	324	as needed	27	8%
Total	438	25% (110)	141*	32%

*Total includes one industrial inspection conducted by the County of San Diego.

5.2.4.3 ROUTINE FACILITY INSPECTIONS

As required by section D.3.b.(3) of the Permit, commercial and industrial facilities in Encinitas are routinely inspected by the City's Clean Water Program staff. Inspections are intended to:

- identify facilities that are not in compliance with the City's Storm Water Management Ordinance and the Municipal Permit;
- provide facilities with information regarding the City's Clean Water Program;
- provide guidance in complying with stormwater regulations (City's Storm Water Management Ordinance, Municipal Permit, etc.); and
- validate and manage the inventory.

During FY 2009-10, City of Encinitas stormwater specialists conducted **two** industrial and **138** commercial site inspections for compliance with its ordinances, permits, manuals, and this Order. All inspections included, as applicable:

i. Review of BMP implementation plans, if the site uses or is required to use such a plan;
ii. Review of facility monitoring data, if the site monitors its runoff;
iii. Check for coverage under the General Industrial Permit (Notice of Intent (NOI) and/or Waste Discharge Identification No.), if applicable;
iv. Assessment of compliance with Copermittee ordinances and permits related to urban runoff;
v. Assessment of BMP implementation, maintenance and effectiveness;
vi. Visual observations for non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff; and
vii. Education and training on stormwater pollution prevention, as conditions warrant.

Specialists use a Storm Water Quality Inspection Form to document inspection activities (see Appendix D-3). The specialized form allows staff to document the above listed inspection steps, as applicable, to determine full compliance for each type of facility. In FY 2008-09, staff designed a new triplicate form called Commercial and Industrial Stormwater Quality Inspection Summary form, which is used in addition to the detailed industrial and commercial inspection form. The form summarizes the corrective actions that are required as a result of the detailed

inspection and acts as the responsible party's record of receipt upon completion of the inspection. This customer friendly form more effectively summarizes the inspection results, making corrective action requirements very clear to the business operation owner/manager. The form lists the most common corrective actions and requires a completion date to be met via the signature of the manager/owner. Further, the form effectively aids in the owner's understanding of stormwater regulations and compliance with current and future inspection actions. A copy of this form is included in Appendix D-4. When conducting inspections, specialists worked with site contacts to provide examples of BMP solutions that could be implemented when corrective actions were necessary to minimize threat to water quality. Effective, low-cost solutions were sought whenever possible, although in some cases more expensive BMPs were needed to reduce pollutant discharges to the MEP. For example a restaurant may be required to provide overhead coverage and secondary containment for outdoor grease storage. Each business was also evaluated for staff training procedures and the stormwater quality awareness of the contact person; educational information was provided as appropriate. Whenever possible, the findings of the inspection and related corrective actions were discussed with the responsible party while the specialist was at the site. The responsible party was always provided a copy of the inspection summary form, and a complete copy of the detailed inspection report is always available upon request.

For a complete summary and confirmation that the designated BMPs were implemented (or required to be implemented) for industrial and commercial sites inspected in FY 2009-10, see the routine inspections summary in Appendix D-5. This Appendix describes, in detail, actions taken by specialists to confirm or require that BMPs were implemented at each industrial and commercial site inspected. Appendix D-5 and the associated inspection forms completed for each routine inspection confirm that all inspections conducted in FY 2009-10 addressed all the required inspection steps. Completed forms are available upon request.

Inspection Tracking

Complaint and inspection documentation is filed in the City's GIS database and is kept up-to-date on a daily basis. The GIS database is also used to track the number of inspections conducted for the inventoried industrial and commercial sites/sources throughout the reporting period to verify that sites/sources are inspected at the minimum frequencies listed in section D.3.b.(3)(b)& (c) of the Municipal Permit. Clean Water Program staff reference the inspection data in the GIS to assist in preparing for annual inspections, follow-up inspections, or IDDE investigations.

Third Party Inspections

All commercial inspections conducted in FY 2009-10 were completed by City of Encinitas Clean Water Program staff. The City has one full-time stormwater specialist (and three backup specialists) dedicated to conducting routine commercial and industrial inspections and following up on stormwater complaint calls. A third party was not employed to conduct commercial and industrial inspections during this fiscal year. Therefore, verification of third party inspection effectiveness was not necessary.

City staff responsible for conducting stormwater compliance inspections and enforcement of industrial and commercial facilities are trained regularly on inspection and enforcement

procedures, BMP implementation, and assessment of monitoring data. Clean Water specialists attend available workshops and regularly receive training through staff meetings and direction from the Clean Water Program Manager. Further, Clean Water staff actively collaborates with inspection staff throughout the San Diego region to share methodologies and approaches that may be beneficial to each jurisdiction. Refer to Section 8.2 for a complete list of workshops, trainings, and conferences attended by Clean Water Program staff in FY 2009-10.

Inspection Follow-up and Enforcement

Clean Water Program staff conducted follow-up inspections at all facilities where deficiencies were identified and corrective actions were required. Follow-up investigations are conducted to ensure that the required BMPs were implemented and confirm full compliance of the facility. A total of **39** follow-up investigations were conducted as part of the FY 2009-10 routine inspection program. Depending on the severity of the infraction requiring corrective action, inspectors may elect to issue a Notice of Violation and/or monetary citation. In FY 2009-10, all inspected facilities complied with the corrective actions; therefore, **zero** Notices of Violation (NOVs) were required to obtain compliance. Appendix D-5 demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the appendix, Clean Water staff aims to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

5.2.4.4 NOTIFICATION

As required by section D.3.b.(2)(c) of the Permit, in FY 2009-2010, the City of Encinitas notified all inventoried industrial and commercial business of the City's minimum BMP requirements that are applicable to the site and/or activity. A copy of the notification letters (stationary and mobile) are included in Appendices D-7 and D-8 respectively. In addition, during FY 2009-10, the City continued notification efforts as part of routine facility inspections. All industrial and commercial facilities inspected in FY 2009-10 were notified of minimum BMP requirements applicable to their site/source. City of Encinitas stormwater specialists conduct thorough inspections with the owner/operator of each facility. During each inspection the stormwater specialist discusses the applicable BMP requirements in detail with the owner/operators.

5.2.4.5 COMPLAINT INVESTIGATIONS (VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE)

When a complaint is registered with the Clean Water Hotline, NPDES email, or when staff directly observes an illicit discharge involving a commercial facility, a complaint investigation is conducted. All complaints are investigated by City personnel with enforcement authority within a reasonable timeframe. Investigations typically include stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

As required by the Municipal Permit, and depending on the severity of the violation, the City enforces its stormwater ordinance for all commercial and industrial facilities as

necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's GIS work order database (CityWorks).

In FY 2009-10, there were **58** stationary commercial and **two** industrial ICID complaint investigations. Of those investigations, **27** required follow-up assessments, **10** NOVs and **four** citations were issued in order to achieve compliance. A summary of the commercial complaints, violations, and enforcement actions occurring in FY 2009-10 is available for review in Appendix H-1. As a component of complaint investigations, educational information is commonly provided to the owner/operator of commercial facilities to improve knowledge and awareness of stormwater regulations. Materials typically distributed included general stormwater education, BMP requirements, pollution prevention tips, as well as specific municipal code and clean water regulations. During **52** investigations educational information was provided to the business owner/operator by the Clean Water specialist.

Appendix H-1 demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the appendix, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

Complaint investigation procedures will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report that will be completed and submitted the RWQCB as required by December 15, 2010.

Reporting of Industrial Non-Filers

The City of Encinitas did not identify any industrial sites that may require coverage under the General Industrial Permit but which, to the City's knowledge, did not file NOIs.

5.3 MOBILE SOURCES

5.3.1 BACKGROUND

Illegal discharges tend to be the major area of concern with mobile businesses. Mobile businesses can be difficult to inventory because they may not be based in the City of Encinitas and do not maintain a permanent address. Additionally, new mobile businesses are started, and previously existing mobile businesses go out of business on a relatively regular basis. For the reasons listed, and also simply because they are not consistently present at a fixed location, regular inspections of mobile businesses are not a feasible option.

5.3.2 SOURCE CHARACTERIZATION OF MOBILE SOURCES

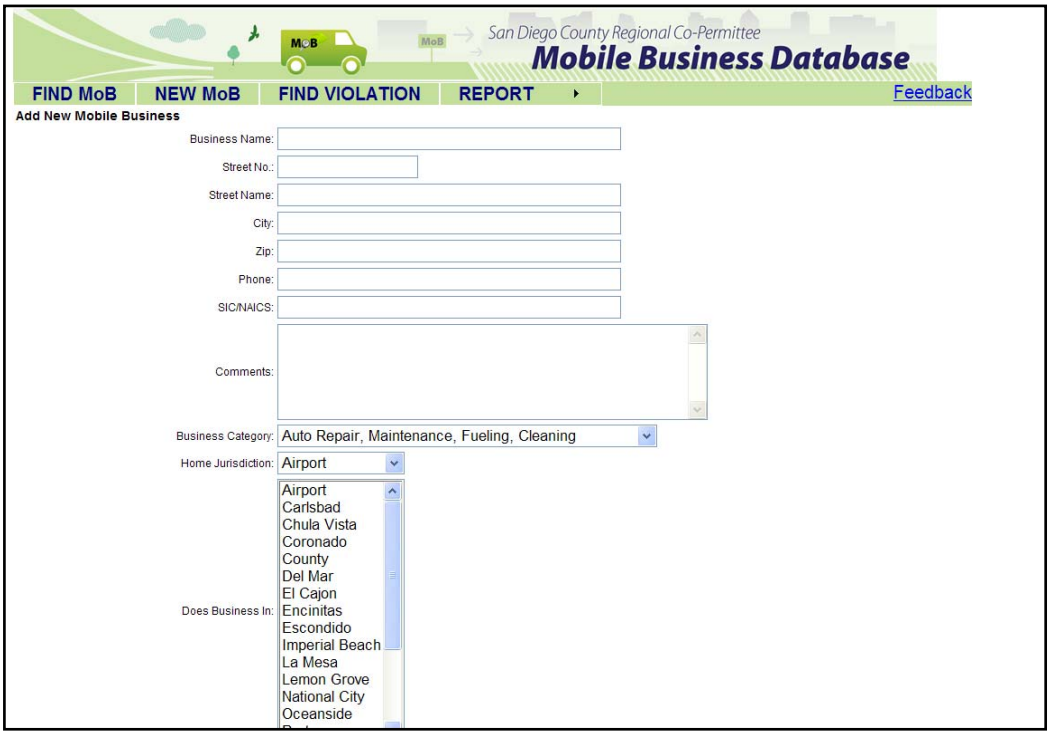
The mobile businesses known to operate within the City's jurisdiction are listed on an inventory separate from the stationary commercial inventory in Appendix D-6. This inventory was comprehensively reviewed and updated during FY 2009-10. The following business types are addressed by the mobile sources element of the City's industrial and commercial program:

- Mobile automobile or other vehicle washing
- Mobile carpet, drape, or furniture cleaning
- Mobile construction trades
  - Cement mixing or cutting
  - Masonry
  - Painting and coating
- Landscaping
- Pool and fountain cleaning
- Power washing services

In addition to the types of businesses listed above, any other mobile business that the City determines to have a significant threat to water quality will be added to the inventory. Because not all mobile businesses have obtained a City of Encinitas business registration certificate or have a base of operations outside the City of Encinitas, Clean Water Program staff is continually refining and updating the mobile commercial inventory. Sources for such inventory updates include reported incidents, general observations by City staff, and available business registration certificates.

In FY 2008-09, the City participated in the development of a regional inventory and tracking system for mobile businesses. The industrial/commercial workgroup worked with a consultant who specializes in database design to create and maintain a mobile businesses database for the region. Figure 5-1 depicts the online form used by copermittees to enter a new business into the regional mobile business database. It is anticipated that this regionally updated and shared database will aid in collaborative enforcement of stormwater violations caused by mobile businesses.

Figure 5-1
Mobile Business Database New Business Entry Form



5.3.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.3.3.1 UPDATED BMP REQUIREMENTS FOR MOBILE SOURCES

All BMPs required for stationary sources, described in Section 5.2.3.1 of this document and listed in detail in the City's BMP Manual, are also required for mobile businesses, where applicable. The most important BMPs for most mobile businesses are typically those that address non-stormwater discharge control and spill prevention, control, and cleanup.

5.3.3.2 ADDITIONAL CONTROLS FOR MOBILE SOURCES

Regardless of where the activity occurs, the City categorically prohibits illegal discharges from mobile businesses. If the City finds that the activities of a mobile business are contributing pollutants of concern to a CWA section 303(d) impaired water body segment or are negatively impacting ESAs, additional controls will be required for those activities as applicable. Further, if the City has reason to believe that any mobile business is generating significant illegal discharges in a given area of the City that is tributary to a 303(d) listed water body (and the discharges contain pollutants causing the impairment) or is within, directly adjacent to, or directly discharges to a water body within an ESA, City staff may more frequently visit those areas and/or take other actions to address the illegal discharges.

5.3.4 PROGRAM IMPLEMENTATION

5.3.4.1 EDUCATION/OUTREACH AND NOTIFICATION OF MOBILE SOURCES

In FY 2009-10, the City of Encinitas provided information and outreach regarding stormwater quality to mobile business owners and operators that were contacted as a result of a complaint call *(See Section 5.3.4.4 below for a summary of complaint calls related to mobile business activities)*. Contacted businesses were given educational materials with detailed pollution prevention methods and other related BMPs to aid in their compliance with the City's stormwater ordinance and the Municipal Permit.

In 2009-2010, the City completed a comprehensive mail out to all inventoried mobile businesses known to operate in the City of Encinitas, disseminating minimum BMP requirements to identified proprietors. This effort leveraged upon regional and jurisdictional efforts to develop an exhaustive inventory of mobile businesses conducting a variety of activities. Based upon this well developed effort, the City of Encinitas assuredly met Municipal Permit (Section D.3.b.(2)(c)) requirement to notify inventoried businesses of minimum BMP requirements.

5.3.4.2 INTER-JURISDICTIONAL COORDINATION

During FY 2007-08, the City of Encinitas participated with other Copermittees in a Mobile Business Subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the Copermittees have chosen to collaborate on a regional mobile business outreach and education strategy, which addresses the following elements:

- Inventory Development and Maintenance;
- Establishment of Minimum BMP Requirements; and
- Outreach and Education (Including Business Notifications).

As described above, in FY 2008-09, a consultant was obtained to develop and launch a mobile business database to assist with the implementation of this Mobile Business Program. Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this strategy. See Appendix F-1 for the complete Regional Mobile Business Strategy.

5.3.4.3 INSPECTIONS

The inspections for mobile businesses generally follow the same procedure described in Section 5.2.4.3 of this document. The main focus of most mobile business inspections is on discharge control BMPs. After thorough investigation, enforcement, and follow-up as needed, none of the mobile businesses investigated warranted a formal inspection. Notably, as part of standard response actions, Clean Water staff work directly with mobile business owners and employees to ensure that their business practices meet the City's minimum BMP standards.

5.3.4.4 COMPLAINT INVESTIGATIONS, VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE

Complaint response, follow-up investigation, and compliance of mobile commercial businesses are handled in the same fashion as stationary commercial facilities. For a general description of the City's complaint response procedures, refer to section 5.2.4.5.

In FY 2009-10, there were **33** mobile complaint investigations conducted. **30** resulted in dissemination of educational information to the business owner/operator; **nine** Notices of Violation and **five** citations were issued. Refer to Table 5-3 for a summary of the mobile commercial complaints and associated enforcement actions. This table includes complaint response to discharges from mobile businesses and discusses each violation and the follow-up actions taken. The table demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the table, Clean Water staff aims to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance. Appendix H-1 also includes a summary of violations and enforcement actions resulting from complaints about mobile businesses occurring in FY 2009-10.

Complaint investigation procedures, including those related to mobile business operations, will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report, which will be completed and submitted the RWQCB as required by December 15, 2010.

Table 5-3
FY 2009-10 Mobile Commercial Complaints and Enforcement Actions

Complaint Location	Mobile Business Type	Enforcement Action(s)
451 Neptune Ave	Mobile Auto Detailer	Education
929 Woodlake Dr	Landscaper	Education
1651 Landquist	Power Washing	NOV, Education
2240 Wales Dr	Power Washing	NOV, Education
2277 Lagoon View Dr	Power Washing	Education
2311 Lagoon View Dr	Power Washing	NOV, Education, Citation
2326 Lagoon View Dr	Power Washing	No Violation
2326 Lagoon View Ct	Power Washing	NOV, Education, Citation
1302 Encinitas Blvd	Mobile Auto Detailer	Education
279 Mangano Cir	Power Washing	Education
1660 N Coast Hwy 101	Landscaper	Education
1911 Saxony Rd	Auto Maintenance	NOV, Education
675 Balour Dr	Plumber	Education
380 N Willowspring Dr	Janitorial	Education
2136 Pleasant Grove Dr	Roofer	Education
2105 San Elijo Ave	Trash Hauler	Education
633 Birmingham Dr	Contractor	Education
251 N El Camino Real	Power Washing	NOV, Education, Citation
411 Encinitas Blvd	Contractor	No Violation
210 A Street	Mobile Auto Detailer	NOV, Education
1320 Encinitas Blvd	Contractor	Education, Citation
105 N Vulcan Ave	Power Washing	Education
765 S Coast Hwy 101	Janitorial	Education
765 S Coast Hwy 101	Landscapers	Education
233 N El Camino Real	Utility Provider	Education
501 N El Camino Real	Utility Provider	Education
316 Via Julita	Contractor	NOV, Education, Citation
225 4th Street	Contractor	Education
226 N Rancho Santa Fe Rd	Utility Provider	None
285 N El Camino real	Utility Provider	Education
276 N El Camino Real	Utility Provider	Education
396 N Coast Hwy 101	Utility Provider	Education
320 E Glaucus St	Contractor	NOV, Education

6.0 RESIDENTIAL

6.1 INTRODUCTION

Approximately 80 percent of the City's 19.4 square mile area is designated as residential in the City's General Plan map. Residential land use comprises a large area of the City, and residential activities can have a considerable effect on the water quality of receiving waters. The City's residential component of the Clean Water Program aims to reduce pollutant runoff from residential areas and activities to the MEP (Maximum Extent Practicable) and prevent residential discharges from the MS4 (Municipal Separate Storm Sewer System) from causing or contributing to a violation of water quality standards.

The overall goal of the program is to minimize the impact of discharges from residential areas on receiving waters in Encinitas and, where possible, to enhance the quality of these resources. The following sections will describe the program activities conducted during FY 2009-10 that contributed to the successful implementation of the City's Residential Component.

6.2 SOURCE CHARACTERIZATION

Residential high threat to water quality areas and activities within the City of Encinitas were identified during the 2008 JURMP update process and are described in detail in City's 2008 JURMP. The following section identifies the high threat to water quality residential areas and activities that were focused on during FY 2009-10. The Municipal Permit (Order R9-2007-0001) requires each Copermittee to identify and provide a list of the residential areas and activities within its jurisdiction that have been identified as having a high threat to water quality. The following section briefly summarizes this process.

6.2.1 HIGH THREAT TO WATER QUALITY ACTIVITIES

In consideration of the minimum required *high threat to water quality* residential activities listed in section D.3.c.(1) of Order No 2007-0001, the following residential activities were identified as residential activities that hold the greatest threat potential to local receiving water quality:

- Automobile Repair and Maintenance
- Automobile Washing
- Automobile Parking
- Home Improvement, Garden Care Activities, and Product Use
- Disposal of Trash, Pet Waste, Green Waste, and Household Hazardous Waste

6.2.2 HIGH THREAT TO WATER QUALITY AREAS

Section D.3.c. (1) of Order No 2007-001, requires that Copermittees identify all *high threat to water quality* residential areas. During the 2008 JURMP update, the City identified *high threat to water quality* residential areas using the following criteria (as defined in the Municipal Permit):

- Any residential areas tributary to a CWA section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired; and
- Any residential areas within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an environmentally sensitive area (as defined in Attachment C of the Municipal Permit).

The City of Encinitas has several Section 303(d) impaired water bodies and coastal lagoons within or directly adjacent to the City's jurisdictional boundary. The 303(d) impaired water bodies within the City of Encinitas include Cottonwood Creek, Encinitas Creek, Escondido Creek, San Elijo Lagoon, and the Pacific Ocean at Moonlight State Beach and the San Elijo Lagoon Outlet.

Based on the definition in Attachment C of the Order No 2007-0001, Environmentally Sensitive Areas within the City of Encinitas include those areas identified as Natural Resource Sensitive areas in the City's General Plan and the City's Wetland buffer layer. The City does not contain any Areas of Special Biological Significance, water bodies designated with the RARE beneficial use, or areas designated as preserves in the Multiple Species Conservation Program.

In the process of drafting the Regional Residential Education Program, the Regional Outreach Workgroup identified the major pollutants of concern from residential sources for the San Diego region. The major pollutants of concern for residential areas include: bacteria, nutrients, sediment, pesticides, and trash.

In consideration of identified 303(d) listed water bodies, the City's ESAs (Environmentally Sensitive Areas), and the primary pollutants of concern, Clean Water Program staff employed GIS analysis to determine the location of *high threat to water quality* residential areas. Based on this analysis the following residential areas within the City of Encinitas were identified as *high threat to water quality* residential areas:

- All residential areas within 500 feet of any 303(d) listed water body or lagoon
- All residential areas within, directly adjacent to, or discharging directly to a coastal lagoon or other receiving waters within an ESA
- The residential area to the west of Interstate 5 within the Cardiff sub-basin (drains to San Elijo Lagoon)
- The residential area south of Sylvia St, west of Second Street, and north of K Street (drains to Cottonwood Creek and Moonlight Beach)

Appendix E-1 includes a map of residential areas. The map was developed for Clean Water Program staff to utilize in the office and in the field to help identify residential discharges or

activities which could pose a threat to water quality due to their proximity to receiving water bodies and ESAs.

6.2.3 EVALUATION OF OVERSIGHT OF RESIDENTIAL AREAS AND ACTIVITIES

Through an evaluation of effectiveness assessment measures as part of this report (See Section 11.0), it has been reasoned that the City has achieved overall success as it related to the oversight of residential areas. Hotline complaint calls received, compliance achievement, and dry weather monitoring exceedances as they relate to residential sources all support this assessment. Continual evaluation in subsequent reporting years will be vital to assessing the overall efficacy of oversight related to residential activities.

6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

6.3.1 POLLUTION PREVENTION

Pollution prevention is the act of reducing or eliminating waste at the source by modifying production processes, promoting the use of non-toxic or less-toxic substances, implementing conservation techniques, and re-using materials rather than putting them into the waste stream. Pollution prevention methods have been integrated into the minimum BMPs established for *high threat to water quality* areas and activities.

6.3.2 LIST OF MINIMUM BMPS

As part of the City's 2008 JURMP update, the City designated the following minimum BMPs for *high threat to water quality* residential activities. The minimum BMPs are primarily nonstructural and are targeted at activities specified in Section 6.2 as having a *high threat to water quality*. Pollution prevention methods were incorporated into this set of BMPs, where appropriate. The list of minimum BMPs can also be found in the City's Storm Water BMP Manual I. The manual can be accessed through the City's Clean Water Program webpage at: http://cwp.cityofencinitas.org.

(a) Automobile Repair and Maintenance

Pollution Prevention

(1) Employ routine preventative maintenance practices
(2) Reduce vehicle use, whenever possible
- Change driving habits
- Carpool
- Increase the use of public transportation
- Bike or walk for short trips

(3) Make timely vehicle repairs

Leaks and Spills

(1) Prevent leaks and spills from contacting stormwater
- Use drip pans, plastic sheeting, or other materials to contain spills
- Work indoors or under shelter
- If working outdoors, don't work in the rain
- Immediately contain and clean up leaks and spills when they occur
- Use absorbent materials to clean up spills
- Establish cleanup standards
- Require that tools and parts be cleaned only in contained areas

Materials and Waste Management

(1) Properly manage and dispose of automotive wastes and materials
- Properly drain fluids from automobiles
- Dispose of wastes properly and lawfully and recycle used oil and antifreeze
- Store materials and wastes indoors or under cover
- Use secure and watertight containers when storing materials and wastes

(b) Automobile Washing

Management / Reduction* of *Wash Water

(1) Whenever possible, use commercial self-serve or full-serve car washes that properly dispose or recycle their wash water
(2) When washing a vehicle at a residence:
- Wash vehicles over porous surfaces (grass, dirt, etc.) whenever possible
- Use dry cleaning methods to avoid the generation of wash and rinse water
- Turn off the water when not in use or use a controllable spray nozzle
- Encourage the establishment of neighborhood wash areas where wash water and contaminants can be properly managed

Materials and Waste Management

(1) Properly dispose of soapy water or bucket rinse water to the sanitary sewer or soak into a landscaped area
(2) Use dry methods to degrease or clean especially dirty parts prior to wet washing and rinsing (e.g., remove grease or brake dust using towels, etc.)
(3) Refrain from degreasing or cleaning of engine parts in areas other than those designated for such purposes

(c) Automobile Parking

(1) Use routine preventative maintenance practices and make timely vehicle repairs to prevent leaks of automotive fluids
(2) Design and construct parking areas to minimize storm water impacts; covered garages should be plumbed to the sewer system

(d) Home and Garden Care Activities and Product Use

GARDEN AND YARD CARE

Pollution Prevention

(1) Use safe substitutes and alternative methods when gardening:
- Use integrated pest management techniques and biological controls
- Use native plants and drought tolerant species to reduce water use and green waste produced
- Implement planting techniques that attract beneficial insects
- Consider composting, vermiculture and yard waste recycling
- Recommend and encourage practical purchasing practices for pesticides and fertilizers
- Identify "pests" before attempting to eliminate them

(2) Always read label instructions and follow the instructions for garden care products
(3) Implement water conservation practices, whenever possible
(4) Consider xeriscape gardening, including: drip irrigation, soaker hoses, and micro-spray systems
(5) Repair and maintain irrigation systems to reduce excessive runoff
(6) Recycle lawn clippings and green waste through local programs
(7) Plant or mulch hillsides and slopes to prevent erosion

Leaks and Spills

(1) Immediately cleanup spills of gardening chemicals, fertilizers, and soils
(2) Return spilled materials to the container for future use or proper disposal

Materials and Waste Management

(1) Store lawn care products in closed labeled containers and in covered areas
(2) Refrain from using hazardous materials during windy or rainy days
(3) Cover stockpiles of soil, compost, or fertilizers with plastic tarps to prevent dispersal by wind or rain
(4) Dispose of household chemicals to the household hazardous waste collection facility or scheduled drop-off events
(5) Utilize dry sweeping techniques for clean up

Restrictions on Activities

(1) Do not hose off paved surfaces to the street or gutter
(2) Do not dispose of hazardous waste to the trash, landfill, or storm drain

HOME CARE AND MAINTENANCE

Pollution Prevention

(1) Utilize purchasing practices that reduce waste
(2) Use safe substitutes for home cleaning and maintenance

(3) Read and follow product labels
(4) Recycle unused or unwanted products
(5) Use water based paints when possible
(6) Recycle unwanted appliances and household equipment

Leaks and Spills

(1) Clean up hazardous materials spills immediately
(2) Properly dispose of waste from spill cleanup materials

Materials and Waste Management

(1) Store household hazardous materials in closed labeled containers and in a covered area
(2) Recycle latex paint through community programs
(3) Dispose of unwanted household hazardous waste through household hazardous waste collection facilities
(4) Dispose of trash in provided trash cans or shared dumpsters and keep dumpster and trash can lids closed when not in use

Restrictions

(1) Do not dispose of wash waters (carpet cleaning, mop water, paint wash-up, etc.) to the street, gutter, or storm drain

(e) **Disposal of Pet Waste**

Pollution Prevention

(1) Spay or neuter pets to reduce feral populations

Waste Management / Disposal

(1) Clean up after pets when walking them in public places
(2) If pets are allowed to defecate outside, clean up feces from yards
(3) Properly dispose of pet feces in the toilet or trash

Pet Management (Dogs and Cats)

(1) Whenever possible, do not allow pets to run free in residential neighborhoods

Manure Management (Horses and Other Large Animals)

(1) Properly manage manure (including the preparation of manure management plans when appropriate)
(2) Compost or properly dispose of manure
(3) Cover manure stockpiles with plastic tarp to prevent contact with rain

6.4 PROGRAM IMPLEMENTATION

This section describes the steps that were taken in FY 2009-10 to require and verify the implementation of designated BMPs for residential areas and activities.

6.4.1 OUTREACH AND TRAINING

The City has a comprehensive set of Education and Public Participation Programs, which are a component of the City's jurisdictional program. A significant element of these programs consists of educating and engaging residents about ways in which they can minimize their impact on local waterways. Education of the citizens who reside in the City of Encinitas contributes to the implementation of the Residential Component of the City's Clean Water Program. Outreach messages that are relayed to the public include, but are not limited to:

- Impacts of urban runoff on receiving waters
- Distinction between MS4s and sanitary sewers
- Pollution prevention and safe alternatives
- Household hazardous waste collection and recycling
- BMP implementation and BMP maintenance
- Pet and animal waste disposal
- Equipment and vehicle maintenance and repair
- Spill response, containment, and recovery
- Water conservation

During FY 2009-10, Clean Water program staff conveyed these messages to the public through a variety of mechanisms, including:

- Clean Water Program website
- Production and distribution of brochures and promotional items
- Public participation in community events, workshops, and trainings
- Presentations at local schools
- Media coverage
- Response to residential complaints (Clean Water Hotline or email)

Implementation of these mechanisms by the Clean Water Program helps to make the public aware of the types of activities that have the potential to impact water quality and the BMPs that can be implemented to reduce this impact. Awareness is the first step in the process towards behavioral change. A detailed description of the educational activities implemented by the Clean Water Program can be found in the Section 8.

6.4.2 USED OIL AND HHW COLLECTION SERVICES

The City of Encinitas facilitates the proper management and disposal of used oil, toxic chemicals, and other household hazardous wastes (HHW) through various mechanisms. The City offers its residents door-to-door home collection, two permanent collection facilities, and periodic, temporary collection events for all HHW. In addition, the City requires weekly curbside garbage, recycling, and yard waste pick-up for all residents. The various components

of the solid waste and hazardous waste collection services provided by the City are described in detail below.

HHW Home Collection Program - Door-to-door home collection service is available to all residents of the City of Encinitas. Qualifying homebound, elderly, and disabled citizens may request pickup at no charge. Residents not qualifying for free pickup service are charged a nominal fee of $10 for home collection. Materials accepted via the HHW Home Collection Program include:

- **Household Cleaners:** Drain openers, oven cleaners, wood and metal polish / cleaners, toilet bowl cleaners, and disinfectants
- **Automotive Products:** Oil and fuel additives, grease and rust solvents, carburetor and fuel injector cleaners, air conditioning refrigerants, starter fluid, lubricating fluids, radiator fluids and additives, waxes, polishes, cleaners, and transmission additives
- **Home Maintenance and Improvement Products:** Paint thinners, paint strippers, adhesives, paints, stains, varnishes, sealants, and wood preservatives
- **Lawn and Garden Products:** Pesticides, herbicides, and fungicides (poisons)
- **Miscellaneous:** Batteries, fingernail polish removers, pool and photo chemicals

Poway and Vista Permanent HHW Collection Facilities - In an agreement with the Cities of Vista and Poway, residents of the City of Encinitas may also drop off household hazardous waste at the Vista or Poway collection centers. The Vista collection center is located at 1145 East Taylor Street, at Laguna Lane. The Poway collection center is located in the South Poway Business Park, at 12325 Crosthwaite Circle off of Stowe Drive. These regional, permanent collection centers are open every Saturday (except holiday weekends) from 9:00am to 3:00pm. No fee is charged to Encinitas residents and no appointments are necessary. Waste collected is separated, packaged, secured, and temporarily stored at the permanent facilities. It is then removed on a regular basis for proper recycling or disposal. Material accepted at the Poway and Vista facilities are the same as those accepted through the Home Collection Program.

Used Oil Recycling Program - The City's used oil recycling program consists of a network of certified automotive waste recycling centers throughout the city. These facilities accept a range of used automobile products including used oil, oil filters, batteries, and antifreeze. A significant part of this program is the dissemination of educational information regarding the benefits of, and opportunities for, pollution prevention. This program is specifically for the residents of Encinitas and is funded through grants from the California Integrated Waste Management Board (CIWMB). A list of the participating oil recycling sites is provided in all oil recycling printed material and on the City's website. Residents may also opt to use the City's door-to-door HHW collection service to recycle their used oil and oil filters. However, most residents are accustomed to taking their used oil and oil filters to the certified centers and the permanent HHW facilities.

Trash and Recycling Services - For public health purposes, the City of Encinitas requires that all residents participate in the City's solid waste collection service. All residents and businesses are

liable for payment of fees for the mandatory service (see Municipal Code section 11.20.010, paragraph A). Residential service includes curbside green waste collection and recyclable materials collection in addition to regular garbage collection. The City of Encinitas has an exclusive franchise agreement with EDCO Waste Recycling Services to provide solid waste collection services in Encinitas for both residential and commercial customers.

Detailed information regarding used oil, HHW, and solid waste disposal is made available to residents through the City's website, ECDO's website, and other various environmental websites. In addition, brochures about household hazardous waste disposal options are available at outreach events staffed by the Clean Water Program, the Solana Center, and EDCO Waste Recycling Services. Brochures and information regarding HHW disposal are also available upon request at the City's main office.

Table 6-1 provides a summary of the used oil collected via the City's used oil recycling program. Table 6-2 identifies types and amounts of household hazardous waste collected from residents in Encinitas during this reporting period.

Table 6-1
Used Oil Collected in FY 2009-10

Collection Type	Quantity of Oil (Gallons)	Quantity of Filters (# of Filters)
Certified Centers	9,564	726
Permanent HHW Centers	570	119
Total	**10,134**	**845**

Table 6-2
Household Hazardous Waste Collected in FY 2009-10

Material Type	Description	HHW Collection Facilities*	Door-to-Door Program*
Flammable	Flammable solid/liquid	11,010	14,751
& Poison	Bulked flammable liquids	568	0
	Oil-base paint	9,166	9,025
	Poison (excl. aerosols)	1,090	0
	Reactive and explosive	24	0
	Subtotal	**21,858**	**23,776**
Acid	Inorganic & Organic acid	615	752
Base	Inorganic & Organic base	634	348
Oxidizer	Neutral oxidizers, Organic peroxides	374	68
	Subtotal	**1,623**	**1,168**
PCB-containing	PCB-containing paint	0	0
	Other PCB waste	14	0
	Subtotal	**14**	**0**
Reclaimable	Antifreeze	986	0
	Car batteries	1,978	457
	Latex paint	17,703	31,080
	Motor oil/oil products	4,278	0
	Oil filters	179	0
	Subtotal	**25,124**	**31,537**
Asbestos		**631**	**957**
Universal Waste (UW)	Mercury containing waste	0	7
	Thermostats/switches/thermometers	14	13
	Fluorescent Lamps	1,034	155
	Rechargeable batteries	344	23
	Household batteries	2,197	2,831
	Subtotal	*3,589*	*3,029*
Electronic Waste (UW)	SB20/50 video display devices	13,484	6,636
	Non SB20/50 video display devices	0	0
	Consumer electronic devices	12,809	3,475
	Subtotal	*26,293*	*10,111*
Aerosols (UW)	Non-empty aerosol containers	0	2,528
	Other	71	0
	All UW Subtotal	**29,953**	**15,668**
Other HHW	Home-generated sharps	229	32
	Pharmaceutical waste	0	0
	Compressed gas cylinder	530	248
	Non-UW aerosol containers	1,534	0
	Treated Wood	142	0
	Other	4,030	0
	Subtotal	**6,465**	**280**
Grand Total		**85,668**	**73,386**

*Waste measured in pounds.

6.4.3 COMPLAINT INVESTIGATIONS, VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE

When a complaint is registered with the Clean Water Hotline, NPDES email, or when staff directly observes an illicit discharge, a complaint investigation is conducted. All complaints are investigated by City personnel with enforcement authority within a reasonable timeframe. Investigation typically includes stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

As required by section D.3.c.(3) of Order No 2007-0001, and depending on the severity of the violation, the City enforces its storm water ordinance for all residential areas and activities as necessary to maintain compliance. Enforcement may include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's GIS work order database (CityWorks).

In FY 2009-10, there were **149** residential ICID complaint calls. Of these calls, **28** were either issues that were referred to other departments/agencies or requests for information only (requests for information may include car washing regulations, power washing requirements, etc). Of the **121** residential complaint investigations conducted, **85** resulted in dissemination of educational information to the homeowner or resident. Materials typically distributed included general storm water education, BMP requirements, pollution prevention tips, as well as specific municipal code and clean water regulations. In addition to education, FY 2009-10 complaint investigations resulted in **three** Notices of Violation and **two** citations.

A summary of the residential violations and enforcement actions occurring in FY 2009-10 is available for review in Appendix H-1. The tabular summary includes a brief discussion, which includes the follow-up actions taken, for each violation. The table demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the table, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

Complaint investigation procedures will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report that will be completed and submitted the RWQCB as required by December 15, 2010.

6.4.4 REGIONAL RESIDENTIAL EDUCATION PROGRAM

In prior reporting years, the City of Encinitas collaborated with other jurisdictions in the Education and Residential Sources Workgroup to develop the Regional Residential Education Plan. This Plan contains recommended strategies for the development and implementation of

the Regional Residential Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale. The complete Regional Residential Education Plan can be found in Appendix F-6. Details of the implementation of this Plan can be found in Section 8.3.4(d) of this annual report and in the Regional Urban Runoff Management Plan (RURMP) annual report to be submitted under separate cover by the County of San Diego on behalf of the San Diego County Stormwater Copermittees.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

In accordance with the September 10, 2008 Regional Water Quality Control Board adoption of Addendum No. 2 to Order No. R9-2007-0001, the City of Encinitas will submit the entire FY 2009-10 Illicit Discharge Detection and Elimination Component and attachments no later than December 15, 2010.

8.0 EDUCATION

8.1 INTRODUCTION

The City's outreach program includes an education component and a public participation component. The education component is focused on disseminating educational information to increase public knowledge of stormwater issues, while the public participation component, discussed in Section 9, provides opportunities for the public to become involved in the process of reducing pollutants of concern in stormwater and urban runoff. The education component is primarily implemented by the Engineering Services Department, Clean Water Program.

The Municipal Permit establishes the following five target communities which must be addressed by the education program:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The overall goal of the education element is to provide an education program that will:

(1) Measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience.

(2) Measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment.

The City conducted or participated in a wide variety of stormwater education activities during the FY 2009-10 reporting period. Education and outreach activities and opportunities are organized and implemented on three levels—Jurisdictional, Watershed, and Regional. For ease of reporting, activities occurring on all levels have been captured below.

8.2 MUNICIPAL STAFF TRAINING

As required by Municipal Permit section 5.b.1(d), activity specific training opportunities were provided to City staff. The summary below outlines departmental training activities conducted during the defined reporting period of this report.

Notably, in FY 2007-08, the Clean Water Program developed the "Clean Water Challenge" stormwater training game. This training element was created to address topics specifically identified in the Municipal Stormwater Permit, as well as activity and department specific topics. In FY 2009-10, variations of the Clean Water Challenge were utilized for municipal training activities as described below. The Clean Water Challenge has been well received by City staff and provides a competitive and informative format for training various departments

on a wide range of topics including low impact development, SUSMP standards, activity specific BMPs, impaired water bodies, stormwater code violations, potential sources of pollutants, and other department specific concepts.

Public Works, Streets Division. FY 2009-10 stormwater training was provided to the Streets Division during regular weekly staff meetings on the following dates:

- July 7, 2009; Parking/Storage Maintenance, SC-43; 11 attendees
- July 22, 2009; Water & Sewer Utility Maintenance, SC-76; 12 attendees
- July 30, 2009; Building & Grounds Maintenance, SC-41; 12 attendees
- August 11, 2009; Road & Street Maintenance, SC-70; 12 attendees
- August 20, 2009; Landscape Maintenance, SC-73; 12 attendees
- September 4, 2009; Spill Prevention, Control, and Cleanup, SC-11; 12 attendees
- October 8, 2009; Plaza Sidewalk Cleaning, SC-71; 11 attendees

Public Works, Wastewater Division. The Clean Water Program works closely with the Wastewater division to prevent illegal discharges from entering the City's waterways. Seven staff members from the Wastewater division were trained by Clean Water Program staff on June 16, 2010.

San Dieguito Water District. Ten staff members from the San Dieguito Water District were trained on June 23, 2010. Topics included stormwater regulations, activity specific BMPs, and the relationship between irrigation runoff and stormwater pollution.

City of Encinitas Fire Department. Within the defined reporting period of this report, stormwater training workshops were given to the Fire Department on three separate occasions. On June 17, 2010, nine fire personnel were in attendance; 13 fire personnel attended the training on June 18, 2010; and 14 fire personnel were at the June 21, 2010 training.

City of Encinitas Landscape Contractors. The City contracts with multiple landscaping companies to maintain our parks, beaches, and other public landscaped areas. In collaboration with the City's Parks and Recreation Department, training was given in Spanish to 21 staff from the City's landscape contractors on June 17, 2010. Topics of this training included activity specific BMPs, City stormwater regulations, and proper materials management.

Engineering Department. Staff from the Clean Water Program and other divisions of the Engineering Department attended the following trainings:

- Encinitas Stormwater Manual field training for inspectors- April 19, 2010
- Bioretention Design, Installation, and Maintenance- April 21, 2010
- Construction General Permit Training- May 4, 2010
- New Construction General Permit Requirements Webcast- June 23, 2010

Clean Water Program, Engineering Department. Clean Water Program staff regularly attend trainings, workshops, and conferences related to stormwater management. This fiscal year staff attended the following:

- StormCon 2009 – August 18 & 19, 2009
- 8-hour HAZWOPER Refresher Course – August 29, 2009
- Bacteria TMDL Workshop – September 23, 2009
- CASQA Conference – November 2009
- CA Construction General Permit: Session III- Post-construction BMPs, Hydromodification, and Regulatory Strategies – November 18, 2009
- SCCWRP Symposium – January 20, 2010
- CA Construction General Permit Web Conference: Session IV- New Regulation of the Rain Event Action Plan (REAP) – January 27, 2010
- Construction General Permit Training – February 25, 2010
- EPA Inspector Training – March 23, 2010
- Construction General Permit Training – April 8, 2010
- Vector Habitat Remediation Program Workshop – April 15, 2010
- CA Construction General Permit Web Conference: Session V- Understanding the Stormwater Multi-application, Reporting, and Tracking System (SMARTS) – April 28, 2010
- New SWPPP Regulations – June 9, 2010
- Water Quality Runoff Management & Agricultural Waiver Workshop for Nurseries and Agricultural Businesses – June 24, 2010

In addition to formal training, Clean Water Program staff is regularly informed of new and emerging water quality regulations, science, and technology through regional meetings, subscription to relevant scientific journals, and individual research.

Multiple City Departments.

- LID/BMP/ESM field training for Engineering and Planning staff – May 13, 2010

8.3 EDUCATIONAL OUTREACH

The following section describes education efforts conducted for each target community, as identified in the Permit and summarized above, during FY 2009-10.

8.3.1 UNDERSERVED TARGET AUDIENCES, HIGH-RISK BEHAVIORS, AND "ALLOWABLE" BEHAVIORS AND DISCHARGES

Underserved Target Audiences - Bilingual Education

For those that work in the City, and for segments of the community that do not speak English as their first language, the City provided bilingual (English/Spanish) brochures at all outreach events. The Clean Water Program utilized the bilingual brochures produced by the City that are targeted at specific trade groups/activities. These brochures include information about Best Management Practices for Yard and Garden Care, Restaurants, Home Improvement, Pesticides, Developers, and Automotive Care. Further, a bilingual Clean Water Program staff resource provided training and responded to complaint calls as needed in various community sectors.

High Risk Behaviors - Regional Mobile Business Outreach and Education Plan
During FY 2007-08, the City of Encinitas participated with other copermittees in a Mobile Business Subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. The Industrial/Commercial Workgroup will be overseeing the implementation of that Strategy throughout the permit cycle. A complete description of the education and outreach of mobile businesses and inter-jurisdictional coordination of notifications can be found in section 5.3. See Appendix F-1 for the complete Regional Mobile Business Outreach and Education Strategy.

8.3.2 NEW DEVELOPMENT AND CONSTRUCTION COMMUNITIES

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to the new development and construction communities.

- "A Pollution Prevention Guide for the Construction Industry" was distributed at public events, to engineering construction inspectors and the building department, and displayed at the City of Encinitas Engineering counter for the public. One hundred and twenty-one were disseminated during the 2009-10 fiscal year. This brochure was developed as part of the Carlsbad Watershed Urban Runoff Management Plan workgroup (Appendix F-2).
- Announcements at pre-construction meetings. Pre-construction meetings are attended by Engineering Department inspectors and Clean Water staff as determined necessary. For all projects, stormwater topics including required construction site BMPs, general site management, post-development BMP construction, and other relevant SUSMP requirements are discussed.
- Construction inspector stormwater coordination. Staff from the Clean Water Program attended inspector staff meetings to provide support and information to the City's construction inspectors.
- Printed materials were provided to contractors and developers in the form of the City's brochure, "Developers – Simple and Cost Effective Ways to Comply with Stormwater Regulations" (Appendix F-3). The brochure is available in Spanish and English.
- Special mailings of information (i.e., wet season erosion control letter). In September 2009, the City mailed 74 letters to local developers and contractors regarding BMP requirements for the upcoming rainy season (Appendix B-5). "A Pollution Prevention Guide for the Construction Industry" brochure was inserted into the annual Erosion Control Letter that went to contractors, developers, and job superintendents.

8.3.3 COMMERCIAL/INDUSTRIAL OWNERS AND OPERATORS

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to commercial and industrial sectors of the community:

- The tenth annual Integrated Pest Management training for landscape professionals was held at the Port of San Diego on May 27, 2010. The IPM Training Seminar offered insight into identification of landscape pests and diseases and cultural practices for improved plant health. There were also presentations on water quality and irrigation. Two Encinitas businesses and one resident were in attendance.

- The San Dieguito Water District hosted a Professional Landscape Series every Monday from January 25 through February 15, 2010. The series was taught in Spanish, and topics included irrigation systems and scheduling, plant identification, and water use requirements. Approximately 20-30 people attended each class.

- A Water Quality Runoff Management & Agricultural Waiver Workshop for Nurseries & Agricultural Businesses was held at the San Diego County Farm Bureau on June 24, 2010. Three people from Encinitas were in attendance.

- Stormwater quality inspections were performed at 138 commercial facilities and two industrial facilities during the FY 2009-10 reporting period. During these inspections individual one-on-one education was presented to each facility manager/owner. Information presented included general stormwater quality information and BMP requirements.

8.3.4 RESIDENTIAL COMMUNITY, GENERAL PUBLIC, AND SCHOOL CHILDREN

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to various residential, community, and school audiences:

a. Residential Community and General Public

- During FY 2009-10, San Dieguito Water District, in conjunction with Olivenhain Municipal Water District and Santa Fe Irrigation District, held four Water Conservation Classes at the Rancho Santa Fe Garden Club to help customers learn about efficient landscape design, maintenance, and irrigation technologies:

  1. Have a Green Thumb and a WaterSmart Landscape – August 15, 2009; 50 attendees.
  2. Designing with Water Smart Plants – September 14, 2009; 70 attendees.
  3. San Diego County Water Authority: Water Supply; Grangetto's Farm and Garden Supply: Irrigation Efficiency – October 7, 2009; 60 attendees.
  4. California Gardening for the Water Wise Gardener – March 13, 2010; 100 attendees.

- SDWD hosted "Water Awareness Week" from March 18- March 26, 2010 with many activities for residents, kids, and families. A Water Conservation Expo was held at the Encinitas Library on March 26. Guest speakers and vendors were on hand to provide information to residents on drought tolerant plants and sustainable gardens.
- A City of Encinitas Environmental Services Guide was created in FY 2006-07. It continues to be handed out at all public events throughout the City. It is a compilation of information regarding trash and recycling, HHW, electronics disposal and recycling, stormwater management, home composting, and general environmental contacts. The brochure is printed on 100% post-consumer recycled paper (Appendix F-4).
- The Solana Center for Environmental Innovation continued to sell compost bins and worm bins to residents of Encinitas throughout FY 2009-10. All of the bins were subsidized by the City and sold to residents at discounted rates. Bins could be purchased at the Solana Center or at composting events and workshops throughout the City. A total of 755 bins were sold in FY 2009-10.
- Individual Communication. There were 149 residential ICID complaint calls in FY 2009-10. Twenty-eight of those calls were either issues that were referred to other departments/agencies or requests for information only (requests for information may include car washing regulations, power washing requirements, etc). Of the 121 residential complaint investigations conducted, 85 resulted in education. During these inspections educational information was distributed to each homeowner/resident. Materials distributed included general stormwater education, BMP requirements, pollution prevention education, as well as specific municipal code and clean water regulations.
- Media Coverage (newspaper articles, press releases, etc.): See Table 8-1 below.

Table 8-1
Summary of Media Coverage in FY 2009-10

No.	Title	Date	Source
1	REGION: Beach cleanups produce huge haul	May 9, 2010	North County Times
2	REGION: Local beaches look good in latest water quality report	May 26, 2010	North County Times
3	Beach season is here!	Summer 2010	Encinitas NOW!

Workshops and events attended/hosted by the City of Encinitas and/or the Solana Center in FY 2009-10:

1. Rods and Woodies Car Show – July 16, 2009
2. Coastal Cleanup Day @ Swami's – September 19, 2009
3. Cardiff Green Expo – September 26 & 27, 2009
4. Oak Crest Field Study @ San Elijo Lagoon – November 19, 2009

5. Encinitas Fall Festival – November 22, 2009
6. Day Without a Bag @ Encinitas City Hall – December 17, 2009
7. Ocean Night @ Cardiff Elementary School – March 31, 2010
8. Encinitas Garden Festival – April 17, 2010
9. La Costa Canyon High School Earth Day – April 23, 2010
10. Creek to Bay Cleanup @ Moonlight Beach – April 24, 2010
11. Encinitas Street Fair – April 25, 2010
12. San Elijo Lagoon Day – May 15, 2010
13. Public Works Day – May 21, 2010
14. Encinitas Environment Day – June 6, 2010
15. Enviro Fair @ SD County Fair – June 19, 2010

b. School Children

- During Water Awareness Week, on March 23, 2010, the Splash Lab visited the Encinitas Library. Approximately 60 students were on hand to learn about the effects that pollution has on our environment.
- In the Fall of 2009, the Encinitas Union School District created a Green Team consisting of teachers, principals, parent volunteers, and environmental organizations in the community. The Green Team met once a month during the school year to discuss how to improve efficiency, reduce economic costs, and increase environmental awareness throughout the District. Topics discussed include waste management, composting, water conservation, energy use, environmental health, and stormwater pollution prevention. Clean Water Program staff attended six Green Team meetings in FY 2009-10.
- The Solana Center monitors large worm bins at Capri Elementary, Paul Ecke Elementary, Ocean Knoll Elementary, Encinitas County Day, Olivenhain Pioneer Elementary, San Dieguito Academy, Flora Vista, and a small worm bin at Mission Estancia Elementary. Solana Center has trained volunteer master composters to give composting/vermicomposting presentations at schools throughout Encinitas. School presentations are conducted both on and off site and scheduled as requested.
- The Solana Center for Environmental Innovation also participated in school based educational programs where stormwater awareness was taught. See Table 8-2 for details.

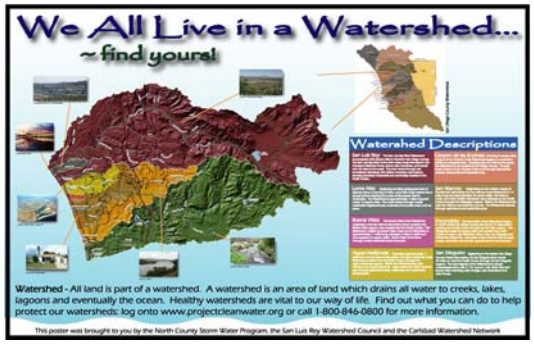
Table 8-2
Watershed Presentations FY 2009-10

School/Group Name	Date of Presentation	Number of Presentations	# of Students in Attendance
Kids Kore Camp- Solana Beach	7/8/09	1	29
Rancho Encinitas Academy	10/16/09	1	12
Solana Beach Boys and Girls Club	12/9/09	1	18
Kids for Peace- Del Mar	2/11/10	1	20

School/Group Name	Date of Presentation	Number of Presentations	# of Students in Attendance
Ocean Air Elementary- San Diego	4/12/10	3	68
Ocean Air Elementary- San Diego	4/13/10	2	44
Phoenix Learning Center- Encinitas	5/3/10	3	54
Phoenix Learning Center- Encinitas	5/5/10	3	59
Encinitas Homeschool Group	5/6/10	1	12
Encinitas Library Community Room	5/9/10	1	8
Del Mar Library	6/23/10	1	15
	Total	**18**	**339**

c. **Watershed Educational Activities-** Important components of the City's education program include materials and activities that were generated on a watershed basis to address the high priority water quality problems in the watershed. These materials and activities are then implemented or disseminated on a jurisdictional basis. Below is a description of the educational materials and activities that were created or performed on a watershed basis and implemented on a jurisdictional basis. A more detailed description of watershed activities will be provided in the FY 2009-10 Carlsbad WURMP Annual Report.

- **Watershed Map**- A 36"x 24" "We all Live in a Watershed" poster was developed giving information about the San Luis Rey, Carlsbad, and San Dieguito Watersheds. This educational poster includes a topographic map of the watershed, information on individual watersheds and sub-watersheds, photos of various land-uses, as well as general information about water quality. The City of Encinitas used the poster in presentations and public displays throughout the reporting year.



- **Watershed Collaboration**- The City of Encinitas collaborated with other outside organizations, including the Carlsbad Watershed Network, Solana Center, and Escondido Creek Watershed Alliance to enhance public educational efforts and understand watershed issues. The City of Encinitas participated in public outreach events throughout the watershed in an effort to provide watershed support and extend the watershed message beyond jurisdictional boundaries. In FY 2009-10, the City participated in the following watershed outreach events:
  - Coastal Cleanup Day – 9/19/09
  - Creek to Bay Beach Cleanup – 4/24/10

- **Watershed Educational Materials**- The City continues to distribute materials developed by the North County Stormwater Program in previous reporting periods, including the restaurant posters, automotive posters, "Storm Drains Lead to the Ocean" posters, general stormwater brochures, and the door hangers.

d. Regional Residential Education Plan

The City of Encinitas collaborated with other jurisdictions in the Education and Residential Sources (ERS) Workgroup to develop the Regional Residential Education Plan in FY 07-08. This plan contains recommended strategies for the development and implementation of the Regional Residential Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale. The complete Regional Residential Education Plan can be found in Appendix F-6.

The ERS Workgroup participated in Enviro Fair Day at the San Diego County Fair on June 19, 2010. Six Copermittees were represented at the event, with a total of six staff members throughout the day. The outreach booth was located at the entrance to the Flower and Garden Pavilion in O'Brien Hall. Copermittees were able to supply their own giveaways and literature during their individual shifts, but the main Regional giveaways were coloring books and crayons, reusable Chico bags, pencils, IPM Tip Card Packets, and pet waste bag dispensers. There were 351 Think Blue automotive surveys completed; results will be reported in the FY 09-10 Regional URMP. Total Fair attendance for the day was 67,356.

Program Identity. Through Citywide environmental efforts and initiatives, stormwater pollution prevention and water quality have been identified as priorities for residents and businesses in the Encinitas community. As a result, the City of Encinitas Clean Water Program staff felt that updating the program identity through a new logo would enhance awareness within the community and help identify the diverse City functions that help to protect local surface water quality in creeks, lagoons, and the ocean. A new Clean Water Program logo was developed in FY 2009-10 and is currently being used on new educational outreach materials, event giveaways, program correspondence, and staff apparel and will be used on an anticipated web site update. The new program logo has also been used on the front cover of this report.

Educational Outreach Materials Distributed. In FY 2009-10, a total of 3,051 outreach materials were distributed by the Clean Water Program. This includes BMP brochures for Automotive Facilities (English and Spanish), Developers (English and Spanish), Diazinon (English and Spanish), "Hiring A Handyman" (English and Spanish), Restaurants (English and Spanish), and Yard & Garden (English and Spanish). The Program also distributed pencils, magnets, key chains, reusable shop towels, "Bags on Board" dispensers, construction brochures, posters, door hangers, eating establishment guides ("What's

Cooking"), automotive guides ("Green Wrench"), flyers printed from the Project Clean Water Toolbox, Think Blue Regional Calendars, Minimum Required BMP mailers, and other informational guides. These guides included information on Integrated Pest Management (UCSD Cooperative Extension), water conservation from local water districts and the County Water Authority, invasive species ("Don't Plant A Pest" and "NIMBY-No Invasives In My Back Yard"), "How to Hire A Landscaper"-UCSD Cooperative Extension/Scott Parker, County of San Diego Household Hazardous Waste, miscellaneous stormwater educational for children, and lastly, "10 Simple Ways You Can Help Protect the Ocean" from the Encina Wastewater Authority.

9.0 PUBLIC PARTICIPATION

9.1 INTRODUCTION

Public participation is one of the components of the City's outreach program. The goal of the education component, discussed in Section 8, is geared primarily towards disseminating educational material to increase public knowledge of storm water issues. The goal of the public participation component is to provide opportunities for the public to become involved in the process of education and reducing pollutants in storm water and urban runoff.

Public participation activities provide opportunities for the public to interact and become involved with water pollution issues. When the public has the opportunity to become involved there are several positive outcomes. First, those involved become more knowledgeable about storm water issues. Second, they become educators and stewards for the Clean Water Program. Finally, they provide important feedback to the Clean Water Program regarding the concerns of the public and issues that may be overlooked. Ultimately, public participation help makes the education process more effective.

The constituency of Encinitas has a generally high level of awareness of water pollution issues and is actively involved in protecting the quality of our waterways. This is evident by the attendance and participation at community events and workshops and the number of complaints reported to the storm water hotline (discussed in more detail in Section 9.3.5 below and also in Section 8.3.4(a)). Following is a description of the City's public participation approach and the opportunities that were made available in Encinitas in the FY 2009-10 reporting period.

9.2 PUBLIC PARTICIPATION APPROACH

The City's approach for the outreach program is to develop an understanding among its residents and businesses of fundamental storm water and pollution prevention concepts. These include:

- The difference between the sanitary sewer and the storm drain system (sanitary waste gets treated, but discharges into the storm drain system flow directly to our waterways and beaches, untreated).
- The economic value of our beaches and the importance of protecting them.
- An understanding of illegal discharges, i.e. sidewalk and street wash water runoff, vehicle fluid (antifreeze and oil), landscape debris, sediment, etc.
- How to report a storm water violation (Clean Water Hotline or website).
- The fact that we all live in a watershed and that the watershed is integral to wildlife, public health, and to the water quality of the rivers, streams, and ocean.
- Reducing pollutants of concern.

- Responsibility of citizens to participate in the cleaning and maintaining of the community (i.e. beaches and parks) and not be part of the pollution problem (littering, illegal dumping of toxic chemicals, etc.).

Within the defined reporting period of this report, the tools that have been used by the City to implement the public participation activities include:

- Workshops/Training Sessions
- City of Encinitas Environmental Advisory Commission
- Public Outreach Events
- Public Opinion Survey
- Public Reporting Methods
- Pet Waste Dispensers
- Household Hazardous Waste Collection and Used Oil Recycling
- Permanent Best Management Practices (BMP) Self Verification & Inspection Programs

9.3 PROGRAM IMPLEMENTATION

This section describes the specific public participation tools used during the FY 2009-10 reporting period.

9.3.1 WORKSHOPS/TRAINING SESSIONS

Workshops and training sessions are effective tools for providing specific information to targeted audiences and obtaining direct feedback. These workshops/training sessions consisted of stormwater education and/or water conservation and provided an opportunity for the Clean Water Program to explain the complex issues of each target audience related to compliance with the stormwater regulations. Table 9-1 provides a summary of the FY 2009-10 workshops/training sessions conducted.

Table 9-1
City of Encinitas Workshops/Training Sessions FY 2009-10

Workshop/Training Session	Target Audience	Date	Attendance
Public Works- Streets Division	City Staff	7/7/09, 7/22/09, 7/30/09, 8/11/09, 8/20/09, 9/4/09, 10/8/09	82
City-wide Goal Setting Workshop for General Plan	Residents	3/8/10	71
City-wide Goal Setting Workshop for General Plan	Residents	3/9/10	51
City-wide Goal Setting Workshop for General Plan	Residents	3/11/10	98

Workshop/Training Session	Target Audience	Date	Attendance
City-wide Goal Setting Workshop for General Plan	Residents	3/22/10	104
City-wide Goal Setting Workshop for General Plan	Residents	3/23/10	80
Encinitas Stormwater Manual Field Training	City Staff	4/16/10	10
LID/BMP/ESM Field Training	City Staff	5/13/10	7
Public Works- Wastewater	City Staff	6/16/10	7
Spanish-speaking Landscapers	City Staff and Contractors	6/17/10	21
Fire Department	City Staff	6/17/10, 6/18/10, 6/21/10	36
San Dieguito Water District	City Staff	6/23/10	10
		Total	**577**

9.3.2 CITY OF ENCINITAS ENVIRONMENTAL ADVISORY COMMISSION

The Environmental Advisory Commission (EAC) provides policy advice and recommendations to the City Council on issues related to environmental stewardship and sustainability. The Commission assesses the City's current environmental efforts in relation to specified areas of interest and creates and recommends strategies to enhance City activities that promote conservation and sustainable practices. The Clean Water Program staff provide technical expertise to the Commission on matters related to water quality, pollution prevention, and stormwater regulations.

During the defined reporting period, the EAC presented its second annual series of community outreach activities in partnership with other Encinitas Environment Day activities. The series, entitled "Green Spring", included the following activities and presentations: Hydroponic Gardening; Environmental Films "Food, Inc.," "Dirt: The Movie," "Tapped," and "What's On Your Plate?"; Youth Watershed Presentation – "From Your Yard to the Beach"; Green Investing Workshop; Reusable Bag Reminder Promotions; as well as promotion of Bike to Work Day, E-Waste Collection Events, Beach Clean-Ups, and ongoing composting workshops. Additionally the Environmental Commission had been asked by the City Council to provide ongoing advice on the phase-out or ban of single-use plastic and paper bags. Despite the threat of lawsuit from a plastic bag industry association, through the Environmental Commission, the City continues to work with local businesses and residents through proactive bag give away promotions and activities. Each December the City coordinates "A Day Without a Bag," a community-wide promotion of reusable bags which includes a Mayor's press event, broad media coverage,

school presentations, and the giveaway of over 4,000 reusable bags which have been donated by all local grocers and several businesses.

9.3.3 PUBLIC OUTREACH EVENTS

The Clean Water Program participated in the following outreach events during FY 2009-10:

1. Coastal Cleanup Day @ Swami's – September 19, 2009; 182 volunteers
2. Cardiff Green Expo – September 26 & 27, 2009; 180 booth visitors
3. Oak Crest Field Study @ San Elijo Lagoon – November 19, 2009; 37 students
4. Day Without a Bag @ Encinitas City Hall – December 17, 2009
5. Encinitas Garden Festival – April 17, 2010; 1,000 attendees
6. La Costa Canyon High School Earth Day – April 23, 2010; 800 students
7. Creek to Bay Cleanup @ Moonlight Beach – April 24, 2010; 111 volunteers
8. San Elijo Lagoon Day – May 15, 2010; 60 booth visitors
9. Public Works Day – May 21, 2010; 76 attendees
10. Encinitas Environment Day – June 6, 2010; 100 booth visitors
11. Enviro Fair @ SD County Fair – June 19, 2010; 67,356 Fair attendees

Solana Center for Environmental Innovation. Outreach to the general public and school children is also provided through the Solana Center for Environmental Innovation via workshops and presentations involving stormwater, household hazardous waste, composting, and recycling. The Solana Center works closely with the City for many of these workshops and presentations. See the tables below for a description of Solana Center's attended events and workshops.

Table 9-2
Composting Workshops/Presentations FY 2009-10

Workshop schedule	Location	Attendance
8/15/09	Quail Botanical Gardens	41
Master Composter Training Course, Wednesdays, September 30- October 28	San Dieguito Academy	33
10/24/09	Quail Botanical Gardens	61
12/5/09	Yoga Swami Studio and Garden	30
1/23/10	San Diego Botanic Gardens (formerly Quail)	55
3/6/10	San Diego Botanic Gardens	29
4/28/10	Solana Center	20
5/15/10	San Diego Botanic Gardens	79
6/19/10	San Dieguito Academy	16

Total	**364**

Table 9-3
Used Oil Collection Events FY 2009-10

Encinitas Used Oil Events	Date	Total Attendance
Encinitas Foreign and Domestic	2/20/10	14
	Total	**14**

Table 9-4
Watershed Presentations FY 2009-10

School/Group Name	Date of Presentation	Number of Presentations	# of Students in Attendance
Kids Kore Camp- Solana Beach	7/8/09	1	29
Rancho Encinitas Academy	10/16/09	1	12
Solana Beach Boys and Girls Club	12/9/09	1	18
Kids for Peace- Del Mar	2/11/10	1	20
Ocean Air Elementary- San Diego	4/12/10	3	68
Ocean Air Elementary- San Diego	4/13/10	2	44
Phoenix Learning Center- Encinitas	5/3/10	3	54
Phoenix Learning Center- Encinitas	5/5/10	3	59
Encinitas Homeschool Group	5/6/10	1	12
Encinitas Library Community Room	5/9/10	1	8
Del Mar Library	6/23/10	1	15
	Total	**18**	**339**

Table 9-5
Other Outreach Events FY 2009-10

Event	Date	Booth Visitors/Attendees
Rods and Woodies Car Show	7/16/09	50
Encinitas Fall Festival	11/22/09	150
Ocean Night @ Cardiff Elementary	3/31/10	100
Encinitas Street Fair	4/25/10	400
	Total	**700**

9.3.4 PUBLIC OPINION SURVEY

The City of Encinitas joined the Think Blue San Diego Region workgroup in distributing public opinion surveys at regional events held throughout the County. In FY 2009-10, automotive surveys were given out at Enviro Fair at the San Diego County Fair. In addition, residents were asked to complete a pre-assessment survey in order to receive a Regional 2010 Stormwater Pollution Prevention Calendar. Post-assessment survey cards were included with the calendars to test whether stormwater knowledge had increased after viewing the calendar. The post-assessment survey was also available on the Think Blue San Diego Region website. Results from all regional surveys will be included in the FY 2009-10 Regional URMP.

9.3.5 PUBLIC REPORTING METHODS

The City has a local Clean Water Hotline that connects the caller directly to the staff in the Clean Water Program. The number is (760) 633-2787. An after-hours number [(760) 633-2922] is available for after-hours emergencies and connects the caller with the City's external answering service which takes in calls and contacts the appropriate City staff to determine appropriate response actions. There are also currently two regional storm water hotline numbers promoted within San Diego County: a toll-free Regional Storm Water Hotline, 1-888-846-0800, and the Think Blue Hotline, 1-888-THINK BLUE (1-888-844-6525). Both of these hotlines are staffed by the County of San Diego Monday through Friday, 8:00 a.m. - 5:00 p.m. In addition to personal service at these hotlines during regular business hours, the hotlines provide a voicemail message for 24-hour public access.

The Encinitas Clean Water Hotline has been in service for over 10 years. In FY 2009-10, the Clean Water Hotline received **275** calls. The hotline is advertised in newsletters and on the City's website, in brochures, on product giveaways, and at all Clean Water Program presentations. A summary of the types of calls, follow-ups, and enforcement actions related to the hotline are presented in Appendix H-1.

The Clean Water Program has a specific website URL (http://cwp.cityofencinitas.org) that provides information, as well as the general NPDES email address which can also be used to report stormwater violations. Each method of contact can also be used for general questions relating to stormwater.

9.3.6 PET WASTE DISPENSERS

Residents are encouraged to protect our creeks, lagoons, and ocean by cleaning up after their pets. To make this easier, 20 doggie bag dispensers are located at parks and trails throughout the City. Trash cans are also available in these areas. Both the trash cans and bag dispensers are maintained by the City's Parks and Recreation Department. In addition, individual Bags on Board pet waste bag dispensers were developed in FY 2007-08 and continued to be distributed at jurisdictional events during FY 2009-10 (Appendix F-5).

9.3.7 HOUSEHOLD HAZARDOUS WASTE COLLECTION AND USED OIL RECYCLING

City of Encinitas residents can bring their HHW and Electronic Waste to drop off facilities in Vista and Poway, free of charge. There is also a home pick up available for a small fee; however, the fee is waived for elderly and disabled residents. Used oil collection events were organized through the Solana Center at local automotive supply stores, and free used oil containers were available for pick up from the Center to encourage oil recycling. Please refer to Section 6.4.2 and Table 9-3 in Section 9.3.3 for a detailed description of Used Oil events and collection totals.

9.3.8 PERMANENT BEST MANAGEMENT PRACTICE (BMP) SELF-VERIFICATION AND INSPECTION PROGRAMS

FY 2008-09 was the first year of implementation of the Permanent BMP Self-Verification and Inspection Programs. These programs provide a valuable opportunity for residents and business owners to be actively involved in protecting stormwater quality. Residents and business owners with treatment control BMPs on their private property are responsible for the successful operation and routine maintenance of these facilities. The City's Self-Verification and Inspection Programs aim to make residents and owners aware of their operation and maintenance obligations through formal notification campaigns and one-on-one communication. Notification campaigns consisted of three rounds of notices mailed to the residents and business owners responsible for BMP maintenance. The notification packages consisted of a combination of the following materials: notification/program introduction letter, Treatment Control BMP brochure, grading plan identifying the location of BMPs, and forms and self addressed stamped envelopes necessary to complete self-verifications. As part of the self-verification and inspection processes, City staff also offered one-on-one assistance with identifying BMPs, conducting BMP inspections, and determining maintenance needs. City staff was available to answer questions regarding the self-verification and inspection programs both over the phone and on-site as requested by the responsible party. As the programs progress in future years, it is anticipated that public knowledge and awareness of permanent BMPs and required operation and maintenance activities will continually improve. For more information regarding the Permanent BMP Self-Verification and Inspection Programs refer to Section 2 of this report.

10.0 FISCAL ANALYSIS

10.1 INTRODUCTION

On January 29, 2009, the San Diego Region Stormwater Copermittees submitted the *Standardized Fiscal Analysis Method and Format* as required by municipal permit Sections G, J.1.a(3)(k), and J.1.c(1)(d). The defined reporting period of this report marks the first full application of the fiscal analysis methodologies developed in the document, and the information provided in this section has been prepared consistent with the standardized approach, using the best information available at the time of report preparation. The *Standardized Fiscal Analysis Method and Format* supports a greater scope of fiscal tracking, yielding a much more complete analysis of program related expenditures across a variety of City functions and departments and/or divisions that may not have been captured in previous reporting years. For consideration, using the standardized format to capture programmatic expenditures across multiple City departments that provide an array of interrelated stormwater management services has necessitated a considerable margin of approximation for various functional areas, particularly related to staff resources. In compliment to approximated figures, actual programmatic expenditures have been used as much as possible to present a refined fiscal analysis overview specific to the City of Encinitas.

10.2 GENERAL BUDGET INFORMATION

The Clean Water Program and associated functions and activities in the City of Encinitas are organizationally shared by two primary departments: Engineering Services and Public Works. Engineering Services is responsible for the overall administration of the Clean Water Program and develops and implements core program components including water quality monitoring; development oversight (SUSMP implementation) inspection and enforcement; and education, outreach, and training related to stormwater and water quality. Public Works performs the operations and maintenance of the municipal separate storm sewer system (MS4) including channel maintenance, sewer maintenance, street sweeping, municipal facility inventories, and municipal facility inspections. Other City departments additionally support core program functions and needs including the Planning, Finance, Fire, and Parks & Recreation departments.

The 2010-2011 Clean Water Program and supporting Department Budgets have been prepared in consideration of Water Quality Order No. 2007-0001 as well as other regulatory mandates placed upon the City of Encinitas. Despite significant budget constraints due to widespread economic downturns, the 2010-2011 budget supports the historic level of service provided by the Clean Water Program in addressing water quality concerns specific to Encinitas through response to citizen complaints, education, inspection, enforcement, monitoring, and development oversight. 2010-2011 budgeting

represents the City's ongoing commitment to this program and the community that it serves.

10.3 FISCAL ANALYSIS METHODS

As introduced above, the information presented in this section has been prepared based upon the *Standardized Fiscal Analysis Method and Format* document that was collaboratively developed by the San Diego County Stormwater Copermittees. This document provides the Copermittees, including the City of Encinitas, with guidance and standards to analyze and report on their respective urban runoff management program expenditures, and to identify the funding sources for their programs in a uniform format. While the regionally developed methodologies greatly support reporting consistencies such as expenditure categories and reporting metrics, the *Standardized Fiscal Analysis Method and Format* does not set up stringent or prescribed accounting practices.

In order to elucidate the information presented below, it is important to identify any assumptions used to calculate expenditures related to various program elements. The following points of consideration should be noted:

- Staff Resources have been calculated as a percentage of time and associated costs applied to a specific program area.
- Staff Resources have been captured for both Engineering Services and Public Works Operations personnel.
- In order to avoid cost "overlaps" in those areas implemented across multiple departments, supporting department staff costs have not been included in the accounting below.

10.4 FISCAL ANALYSIS RESULTS

10.4.1 EXPENDITURES

The City of Encinitas Clean Water Program FY 2009-2010 Jurisdictional expenditure summary is presented below in Table 10-1. In FY 2009-2010, the City's Coastal Storm Drain Monitoring; Dry Weather Monitoring; IDDE; Construction, Education, Residential, and Commercial program elements; and overall program administration were accomplished through the use of five full time Clean Water Program staff. Land Development and Construction components utilized Engineering Services staff resources from various divisions, and Municipal activities utilized Public Works personnel. Labor related costs have been captured in the summary below based upon percentages of applicable staff resources. In addition, non-labor costs including materials, supplies, and equipment have also been included.

Table 10-2 below presents the Watershed expenditure summary specific to Encinitas, and Table 10-3 presents the Regional expenditure summary capturing the City of Encinitas share of regionally distributed costs.

10.4.2 FUNDING SOURCES

In FY 2003-2004, the City Council attempted to pass a Clean Water Fee, which charged $5.00 per month per water meter to the residents and businesses in the City of Encinitas. The Howard Jarvis Taxpayers Associated challenged the fee based upon Proposition 218 requirements. The City was required to add this item to the ballot in March 2006 which was defeated. As a result, the City of Encinitas must completely subsidize the Clean Water Program through the General Fund.

Table 10-1 – Jurisdictional Expenditure Summary

JURISDICTIONAL EXPENDITURES		
ADMINISTRATION	$	129,620
DEVELOPMENT PLANNING	$	314,307
CONSTRUCTION	$	154,666
MUNICIPAL	$	1,326,404
INDUSTRIAL AND COMMERCIAL	$	97,075
RESIDENTIAL	$	24,269
IDDE	$	135,287
EDUCATION	$	28,167
PUBLIC PARTICIPATION	$	12,134
SPECIAL INVESTIGATIONS	$	2,750
NON-EMERGENCY FIREFIGHTING	$	12,134
Jurisdictional Total	**$**	**2,236,812**

Table 10-2 – Watershed Expenditure Summary

WATERSHED EXPENDITURES		
CARLSBAD WATERSHED	$	2,947
Watershed Total	$	**2,947**

Table 10-3 – Regional Expenditure Summary

REGIONAL EXPENDITURES		
CITY OF ENCINITAS SHARE OF REGIONAL COSTS	$	58,205
Regional Total	$	**58,205**

TOTAL EXPENDITURES	***$ 2,297,964***

11.0 EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

The City of Encinitas began applying baseline program effectiveness assessment methodologies soon after they were developed by the San Diego region stormwater Copermittees during the last permit cycle as described in the document titled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" dated October 16, 2003. The City has also actively participated in regional efforts to develop a standardized assessment approach and associated metrics from summer 2007 through winter 2008. The original goal of that group was to produce assessment work products that all Copermittees could use in their JURMPs to evaluate program effectiveness. Due to a variety of complications on a regional level, that standardization process could not be completed prior to the submittal of the City's JURMP, so the City prepared its own effectiveness assessment approach and measures modeled after conventionalized strategies and calibrated to evaluate "significant" program activities as required in Order No. 2007-0001.

Since the submittal of the JURMP in March 2008, little additional progress has been made on regionally standardized approaches to program effectiveness assessment. In FY 2009-2010, the Copermittees' Fiscal, Reporting, and Assessment Workgroup initiated renewed efforts to undertake the issue of standardized assessment metrics and procedures. The City of Encinitas is committed to engaging in the process of developing such regional standards and incorporating resulting work products into its own local program effectiveness assessment system. It is in consideration of the evolving and ongoing regional standardization process that the City has endeavored upon fine tuning its local effectiveness assessment approach as presented in the subsequent paragraphs and tables. Further, it is recognized that these methodologies and strategies must be adaptable as regionally developed procedures are solidified in the future.

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The core structure of the City's stormwater program is composed of three primary drivers:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The programmatic process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next the program elements developed during the planning step are implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

As part of the JURMP update process, the City has identified a variety of significant activities unique to each program element and metrics (numeric and/or narrative) to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP. The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The new Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the stormwater program as a whole. Level 1, Level 5, and Level 6 outcomes are discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 OUTCOME LEVEL ASSESSMENTS

Level 1

A requirements checklist, which includes a directory of permit compliance elements and where each is described within the JURMP Annual Report, can be found in Appendix G-1.

Levels 2 and 3

Tables 11-3 through 11-10 at the end of this section include discussions of Level 2 and Level 3 outcomes for activities identified as significant by the City of Encinitas within each program component. Note that only a Level 1 assessment applies to fiscal analysis, so a table for fiscal analysis is not included.

Level 4

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs, reliable load reduction estimation methods have not yet been or cannot be developed.

Level 5

On September 10, 2008, the San Diego Regional Water Quality Control Board adopted Addendum 2 to Order No. 2007-0001, effectively extending the annual due date of the Illicit Discharge Detection and Elimination reporting requirements to December 15. It is anticipated, consistent with previous Dry Weather Monitoring reports prepared by the City of Encinitas that baseline trend analysis will be provided for a number of constituents evaluated through the Dry Weather Monitoring Program. This information is further spatially correlated with sub-basins or drainage areas within the City of Encinitas and evaluated against land-use areas and potential source areas.

Level 6

It has been determined, through ongoing development and discourse over long-term effectiveness assessment methodologies that relationships between programmatic activities and changes in receiving water quality are difficult to establish on an annual basis or a jurisdictional scale. As such, the City will point to future regionally coordinated efforts including Report of Waste Discharge (ROWD) and Long Term Effectiveness Assessment (LTEA) development to more holistically evaluate changes in receiving water quality. It is anticipated that such efforts will be further refined and supported by ongoing data gathering efforts both locally and regionally.

11.2.2 OVERALL COMPONENT ASSESSMENTS

Development Planning

The City's review process for development projects is effectively requiring higher removal efficiency treatment control BMPs. It is important to recognize a significant program area development that will be analyzed more closely in future reporting years, in the Encinitas Stormwater Manual adopted in March of 2010. Further, two new significant program elements were in the second year of full implementation within the defined reporting period of this report (treatment control BMP self-verification and inspection); initial assessments indicate a generally successful second year. Continued refinement of this program area will support long term effectiveness assessment measures for development planning. *(See Table 11-3)*

Construction

The City's review and approval process for construction related plans and documents is effectively verifying proposed construction specific BMPs. BMP implementation and maintenance is being effectively managed through construction site inspection activities, and validated through associated assessment measures *(See Table 11-4).* It is anticipated that in response to increased inspection frequencies and refined data gathering practices that this trend will continue. Additionally, stormwater construction permitting dynamics are changing statewide in the forthcoming reporting period, and it is notable that jurisdictional programs will need to adjust to ensure ongoing and proper oversight of these activities.

Municipal

Enhanced stormwater conveyance, drainage facility, channel maintenance, and inspection and street sweeping activities were developed and implemented, equating to the removal of salient volumes of debris in FY 2009-10. Effective operations and maintenance activities are demonstrated in the Table 11-5 below, and it is anticipated that this continued level of service as well as enhancements in data gathering methods will support the efficacy of municipal program activities.

Industrial and Commercial

Similar to prior reporting years, Clean Water Program activities and actions related to industrial and commercial entities have exhibited positive trends within the defined reporting period. The City of Encinitas has identified inspection activities coupled with complaint response and enforcement as the significant activities by which to evaluate program effectiveness. During the defined reporting period, the City has been able to evaluate effectiveness on a number of levels (*See Table 11-6)* through the gathering of critical statistics, including a knowledge and BMP assessment scoring system presented in Tables 11-1 and 11-2. Data gathered and evaluated during the defined reporting period indicate that identified significant program activities targeting industrial and commercial sources have been effective.

Residential

Residential BMP implementation has been identified as the significant activity by which effectiveness has been assessed. Residential complaint response and enforcement constitute the core of residential BMP implementation assurance actions. Based upon an evaluation of data associated with these elements, including the number of incidents responded to and the ultimate resolution of these events, the City has demonstrated a notably effective program and level of service to the community of Encinitas.

Education

Education effectiveness is assessed for a variety of program elements as presented in the Table 11-9 below. In terms of education opportunities provided to the various community sectors and City staff and contractors, identified as the significant metric by which to evaluate education activities, the City has achieved a high level of success. These measurable successes will also be enhanced by supporting items such as the Clean Water Program logo, developed in 2009-2010, which will increase program notoriety and promote consistency of educational programs and activities.

Public Participation

The City of Encinitas provides a variety of venues and outlets in support of public participation. The City has identified a number of measures to evaluate the effective implementation of this program element. As with education, public participation translates across a number of program areas; however, the assessment measures identified in Table 11-10 are focused on success of the venues and outlets supported by the City. From the measures identified and quantified, community partnerships, event attendance, Clean Water Hotline calls, and volumes

of debris and hazardous materials collected through public participation, the City has established exceptional trends.

11.3 PROGRAM REVIEW AND MODIFICATION

While no significant changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document, Clean Water Staff continued to meet periodically throughout the reporting period of this report to evaluate effectiveness assessment measures as they relate to specific program elements. The purpose of this effort has been to keep the issue of effectiveness assessment in the forefront of program implementation strategies, and to conduct ongoing effectiveness assessment, and augment program areas as deemed necessary. While effectiveness assessments conducted on an annual basis are helpful, a critical first step in the process is to identify significant activities and to evaluate value added benefits both to the program and to the community of Encinitas throughout the implementation period.

Table 11-3
Development Planning Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Verify High Efficiency Treatment BMPs are Approved	Internal The City's Engineering Department staff is well versed in treatment BMPs and pollutant removal efficiencies.	Percent of approved projects implementing BMPs with high or medium removal efficiencies for key pollutants of concern	100%	N/A, addressed through other significant activities for this component
Verify Proposed BMPs are Implemented	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal The City contracts with a qualified consultant to perform treatment control BMP inspections.	Percent of projects installing / implementing proposed BMPs	100%	BMP implementation is likely to have reduced pollutant loads.
		Resolution status of enforcement actions	N/A	
Verify BMPs are Properly Maintained	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3Internal N/A, see Municipal section.	Percent of responsible parties submitting verification documentation	63%	Additional load reduction could be achieved through improved BMP maintenance.
		Number of responsible parties that did not submit self-verification documentation	15	
		Number of sites with BMPs requiring repair or maintenance	6	
		Resolution status of repair/maintenance	All Complete	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-4
Construction Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Verify Planned BMP Implementation - Review Proposed Plans and BMPs	External Projects submit plans for construction BMP implementation for their projects; the level of awareness of construction BMP requirements is fairly high. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs.	BMPs proposed for construction projects must meet minimum requirements; no significant problems have been noted.		Proper pre-project planning is likely to have reduced pollutant loading.
Verify Proposed BMPs are Implemented	External Grading projects implement BMPs as required by their permits, and contractors are familiar with the City's requirements. Internal Training for City staff is described in Section 8. City inspectors are familiar with relevant construction BMPs.	Percent of projects implementing required BMPs.	100%	Proper BMP implementation is likely to have reduced pollutant loading.
		Percent of inspection actions resulting in Corrective Action.	15%	
		Percent of inspection actions resulting in a Notice of Violation (NOV).	< 1%	
		Percent of inspections actions resulting in a Citation.	< 1%	
		Number of dry weather monitoring exceedances traced to construction sources.	0	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-5
Municipal Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Verify Proposed BMPs are Implemented at Facilities	City staff is regularly trained on BMP implementation; see sections 4 and 8.	Percent of inspected facilities/activities in compliance with BMP requirements	100%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of sites requiring follow-up inspections	See Section 4		
		Number of dry weather monitoring exceedances traced to municipal sites	0		
Sweep Streets and Parking Facilities		N/A, streets and parking facilities are swept as determined necessary and in compliance with Municipal Stormwater Permit standards.		Amount of sediment and debris removed per length of street swept (weight or volume per curb mile).	1,301 tons/ 9,199 curb miles (0.14 tons/curb miles)
Maintain and Clean the MS4 (catch basins, inlets and open channels).		N/A, MS4 structures are maintained as often as directed by management.		Amount of sediment and debris removed (weight or volume).	355.9 tons
Maintain Sanitary Sewer System		N/A, the sanitary sewer system is maintained as often as directed by management.		Total volume of SSO discharge to MS4 (gallons).	Data will be included in Section 7.0 for the 12/15/10 submittal.
Maintain Municipal Treatment Control BMPs		N/A, treatment control BMPs are maintained as often as directed by management.		Amount of sediment and debris removed from storm drain filter inserts.	2.99 tons
				BMP effectiveness studies	N/A
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-6
Industrial and Commercial Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Require BMP Implementation	External Knowledge assessment scores indicated a slightly low level of understanding of relevant storm water concepts. See Figure 11-1 on the following page for a score distribution. See Section 8 for more detail on educational materials and other outreach efforts. Internal City inspectors are well versed in Stormwater compliance and minimum BMP standards.	Percent of inspected sites in compliance with BMP requirements (inspections that did NOT require follow-up actions)	69%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of inspection related enforcement actions	96%		
		Number of dry weather monitoring exceedances traced to industrial or commercial sources	Data will be included in Section 7.0 for the 12/15/10 submittal.	Number of IC/IDs eliminated through enforcement actions taken as a result of routine inspection OR complaint investigations. (NOVs & Citations)	28
		Based on the results of individual facility assessment surveys, most facilities inspected have a good general understanding of BMPs and implement BMPs as required. See Figure 11-1 and 11-2.			
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-1
Knowledge Assessment Scores; FY 2009-10 Inspections

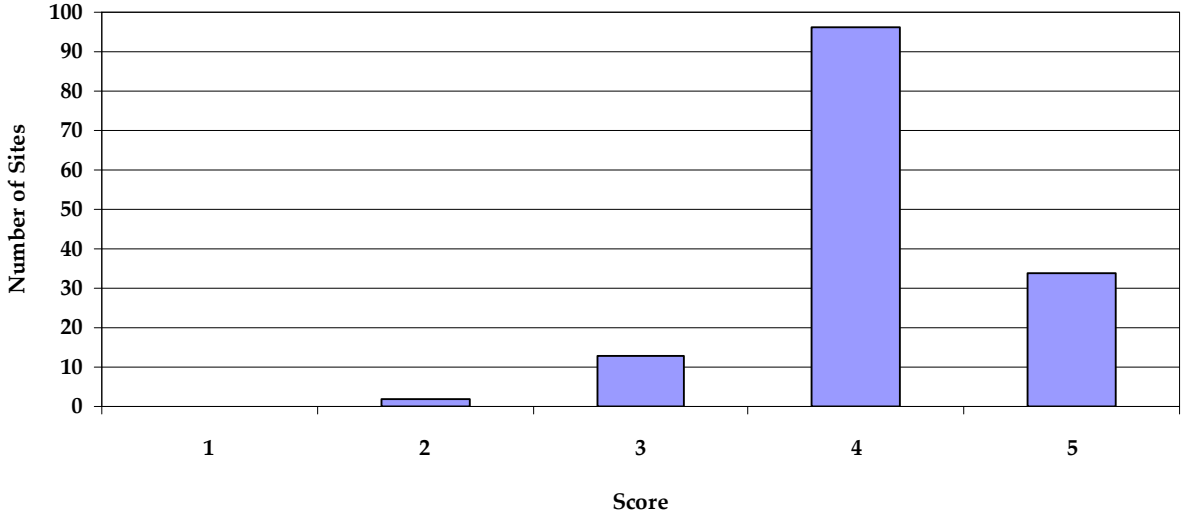


Figure 11-2
BMP Assessment Scores, FY 2009-10 Inspections

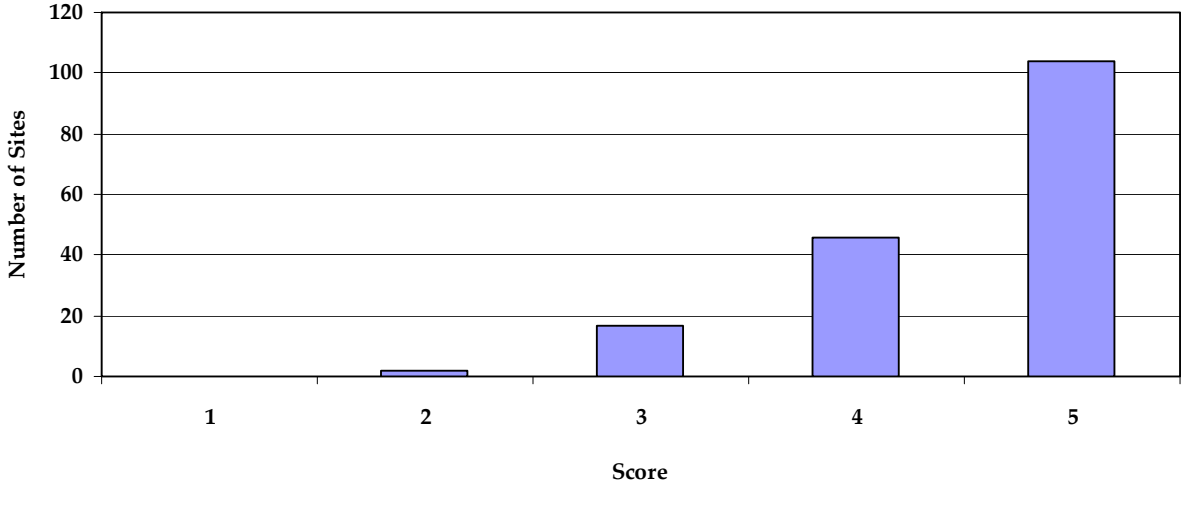


Table 11-7
Residential Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Require BMP Implementation	External Residents were educated in variety of ways in 2009/2010; see sections 6 and 8 for details. Internal City inspectors are well versed in Stormwater compliance and minimum BMP standards.	Number of residential incidents reported to storm water hotline	149	Resolution of residential incidents reported to the hotline likely resulted in a decrease in pollutant loading through improved BMP implementation.
		Resolution status of residential related enforcement actions	100%	
		Number of dry weather monitoring exceedances traced to residential sources	0	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-8
Illicit Discharge Detection and Elimination Component Assessment Measures

Significant Activity	Level 2	Level 3	Level 4
Conduct Dry Weather Monitoring Program	Clean Water Program staff executes the City's Dry Weather Monitoring Program.	N/A, personnel conduct monitoring as directed by management.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2010.
Respond to Incidents Reported to Clean Water Hotline	Dedicated Engineering and Public Works staffs are trained to respond to reported incidents.	N/A, personnel respond to incidents as directed by management.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2010.
Respond To and Clean up SSOs	Dedicated Public Works staffs are trained to respond to reported SSO incidents.	The City conducts additional preventative inspections and maintenance in areas with a higher history of problems.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2010.

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-9
Education Component Assessment Measures

Significant Activity	Level 2		Level 3	Level 4
Provide storm water education to the public	External The City actively educates the various audiences in its jurisdiction. See Sections 8 and 9 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for FY 2009-10.
	Estimated number of impressions made*	4,737		
	Estimated number of educational materials distributed to various community sectors	3,051		
Provide storm water education to City staff & contractors	Internal The City provides staff and contractors w/ regular stormwater training. See Sections 8 and 9 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for FY 2009--10.
	Number of Staff and Contractors trained	163		

Notes:
Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
*Impressions are based upon the number of interactions with public at education events, workshops, and presentations.

Table 11-10
Public Participation Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Involve the public in activities that relate to storm water protection	External The City and City partners put on a number of opportunities for the public to participate. See section 9 for details.	Estimated number of attendees at events, workshops, and presentations	4,737	Amount of trash, recycling, and debris collected at cleanup events	367.5 lbs
		Number of calls received to the Clean Water Hotline*	275	Amount of HHW collected	159,054 lbs

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
* The sum total of calls to the Clean Water Hotline related to all Community Sectors.

12.0 SPECIAL INVESTIGATIONS

As determined necessary and appropriate, the City of Encinitas is engaged in a variety of ongoing and long-term investigations to support reasoned and informed management actions to address local water quality concerns and threats.

12.1 STORM DRAINS AS SOURCES OF ENTEROCOCCUS TO SAN DIEGO BEACHES

In FY 2009-10, in collaboration with the Regional Monitoring Workgroup and Southern California Coastal Water Research Project (SCCRWP), the City of Encinitas participated in a special study identified as *Storm Drains as Sources of Enterococcus to San Diego Beaches.* This study was developed to assess storm drains as a potential source of *Enterococcus* bacteria to San Diego's marine coastal waters during dry weather. The goals of the study include: 1) to determine if biofilms and algae that form on the surfaces of storm drains support the growth of enterococci; 2) to determine if enterococci growing on storm drain surfaces are a source of bacteria to sand and beach water; and 3) to determine if enterococci growing on storm drain surfaces may be differentiated from those of fecal origin. Enterococcal growth will be assessed using small concrete blocks (coupons) tethered to the bottom surfaces of storm drain pipes. The hypothesis is that enterococci in urban runoff will attach to the coupons located inside the storm drain pipes, form biofilm, and multiply, leading to increased densities of enterococci over time. This raises the possibility that bacterial growth within storm drains may be at least partly responsible for elevated concentrations of enterococci observed in urban runoff impacting beach water quality.

Based on historical bacterial monitoring data, the presence of continuous dry weather flow, and accessibility, both Moonlight Beach in Encinitas and a City of San Diego beach in the community of La Jolla were chosen to participate in this regional study. The site at Moonlight Beach was of particular interest because it has an urban runoff treatment facility (UV Facility) located approximately 230 yards upstream of Moonlight Beach. The UV Facility diverts 85% of the dry weather flows in Cottonwood Creek into an ultra violet treatment system designed to inactivate bacteria and viruses in the creek water. Bacteria removal efficiencies through the UV Facility have been calculated at >99%. In February 2006, the City of Encinitas published the Moonlight Beach Urban Runoff Treatment Facility Final Report which indicated that additional sources of bacteria are contributing to the degradation of water quality downstream of the UV Facility. While nearly 100% of the bacteria were removed from the treated water at the UV Facility, removal efficiencies from the effluent to the Moonlight Beach outfall were not as dramatic, indicating significant regeneration of bacteria between the UV Facility and the beach. Despite the presence of the UV Facility, samples from Moonlight Beach

occasionally exceed the *Enterococci* AB411 single sample standard of 104 MPN/100 ml. Hypotheses offered in the City's Moonlight Beach Urban Runoff Treatment Facility Final Report indicated that increases in bacteria downstream of the UV Facility could be primarily due to animals in the creek and on the beach, sediments and debris in the creek and storm drains, and the wrack line on the beach.

The *Storm Drains as Sources of Enterococcus to San Diego Beaches* study consists of a detailed study plan, field sampling, data analysis, and preparation of a final report. Within the defined reporting period of this report, sampling for this study commenced on May 19, 2010, and will continue for twenty weeks ending on October 5, 2010, outside of the defined reporting period. All study samples are being collected by City of Encinitas Clean Water Program staff in collaboration with a researcher from SCCWRP. SCCWRP is responsible for managing and analyzing all of the data from this study. The San Diego Regional Copermittees expect to present final analysis and results from this study in FY 2010-2011.

At Moonlight Beach, sampling for the study consists of collecting water samples from the following five locations: an area of the creek that bypasses the UV Facility, the UV Facility treated water, upstream of the storm drain coupons, at the outfall which is downstream of the coupons, and in the receiving water along the shoreline. The water samples upstream from the coupons and the beach water are analyzed for the following parameters: conductivity, dissolved oxygen, pH, temperature, and turbidity. Additionally, the water samples upstream from the coupons are also analyzed for the following nutrient parameters: TOC, Nitrate as N, Nitrite as N, TKN as N, Ammonia as N, Orthophosphate as P, Total Phosphate as P, and Total Nitrogen (calculated). Two coupons are collected each week and analyzed for densities of enterococci. In addition to the water and coupon samples, natural samples of plants upstream of the coupons, algae, and sea wrack located downstream of the coupons and beach sand are also being collected at Moonlight Beach and are being analyzed to determine the densities of enterococci present on each sample.

12.2 SAN ELIJO LAGOON RESTORATION PROJECT

For a number of years, the City of Encinitas along with numerous agencies including the Army Corps of Engineers, San Elijo Lagoon Conservancy, Caltrans, SANDAG, SDRWQCB, California Coastal Commission, Department of Fish & Game, and NCTD have been analyzing possible enhancement opportunities for the San Elijo Lagoon. Artificial constrictions have hindered the natural ability of the estuary to open to the ocean. The Interstate 5 (I-5) North Coast Freeway widening project will further impact the lagoon. A study was completed by the Army Corps of Engineers to investigate potential mitigation opportunities for the I-5 North Coast project.

The goal of the study and ultimate project is to optimize the openings at the three major transportation passageways across the San Elijo Lagoon. Related studies have looked

specifically into the effects of varying channel widths at each opening: inlet and PCH Bridge, the SDNR system, and the I-5 freeway. Various alternatives have been identified based upon complex system simulations and evaluated on effects to reduce tidal muting, increase circulation, improve water quality in the lagoon, and ultimately on whether or not any improvements to the habitat distribution in the lagoon would be likely to occur.

Work on this project continued throughout the defined reporting period of this report, most significantly with efforts to conduct a variety of modeling and engineering studies including water quality and hydraulic modeling, sea level rise, sediment characterization, and shoaling studies to evaluate the various alternatives that are being considered for the restoration project.

Notably, the San Elijo Lagoon Restoration Project is a multi-agency effort, and far-reaching coordination has been critical and remains key to the long-term success of this project. In consideration of future Lagoon specific TMDL development and the emerging lagoon restoration scenarios, on May 24, 2010, staff from the City of Encinitas, San Diego Regional Water Quality Control Board (SDRWQCB), San Elijo Lagoon Conservancy (SELC), and Moffat & Nichol (Restoration Project Consultant) convened to discuss how these efforts may meet the mutual needs of the stakeholders involved. This meeting provided a good venue to connect the collective benefits of restoration efforts with water quality improvements in the San Elijo Lagoon and to better define priorities for all parties involved.

12.3 LONE JACK POND WATER QUALITY INVESTIGATION

In October of 2009, the City of Encinitas Clean Water Program initiated the Lone Jack Pond Water Quality Investigation. This study was undertaken in response to complaints from nearby residents that a local pond had "*turned green"* and was emitting *"foul odors"*and to determine if there was a specific pollutant source contributing to the pond conditions. The Lone Jack Pond is located off of Lone Jack Road, north of Lone Hill Lane, in a rural residential area within the City of Encinitas. The pond is a man made impoundment along Copper Creek in the Carlsbad Watershed (Hydrologic Unit 904).

To assess the water quality in the pond, a combination of visual observations, field tests, and laboratory analyses were performed on water samples taken from four locations in and around the pond area. Ultimately, based upon the results of the multi-level analysis, it was reasoned that flow patterns through the pond likely leave the water in the northern half of the pond with poor circulation, leading to comparatively stagnant conditions as compared to other areas of the pond. This was based mostly upon analytical results indicating higher levels of organic nitrogen and BOD in the northern portion of the pond, and further supported by visual observations documenting accumulated decomposing algal and/or plant material in the same area. A mix of pond circulation and flow dynamics, and natural conditions and functions all contributed to

the pond "turning over", yielding a significant algal bloom, and related unpleasant odors. Notably, Dry Weather field screening downstream of this area, both recent and historic, has not indicated any water quality concerns in the study area. The complete study report can be found in Appendix I-1 of this report.

13.0 NON-EMERGENCY FIRE FIGHTING

13.1 INTRODUCTION

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by fire fighting activities both at fire stations in the City and locations throughout the City. Two fire stations (No. 3 and No. 5) have treatment control BMPs in place to treat any runoff which may be discharged from washing activities. The remaining stations utilize source control BMPs to minimize and control discharges related to washing activities. All fire fighting training activities which include aqueous film forming foam are conducted at a fire station outside of the City of Encinitas. In addition to implementing structural BMPs at the fire stations, all City of Encinitas Fire Department employees are trained in storm water management on an annual basis by Clean Water Staff. Following is a detailed description of the program developed by the City to reduce pollutants from non-emergency fire fighting flows.

13.2 PROGRAM FOR NON-EMERGENCY FIRE FIGHTING FLOWS

The City of Encinitas has identified a number of potential discharge sources including maintenance of fire and emergency vehicles and equipment, training exercises, and facility maintenance. It is important to recognize and make provision for the post-emergency rehabilitation of response equipment including tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency, as this equipment must be restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for subsequent response actions. As such, the use of water that could contribute to storm water discharges may be used unless another practical and immediately available method is identified and will be performed in a manner that minimizes discharges to the MEP. In consideration of the non-emergency activities listed above, the City's fire personnel utilized the following BMPs to address discharge generated from such activities during FY 2009-10:

- Whenever possible, practice drills were performed in areas where runoff was contained. When practice drills were performed in an area where runoff could potentially leave the site, the site was surveyed by the officer-in-charge prior to training activities to ensure that debris would not enter the storm drain system as a result of the drill.
- As determined feasible, runoff from training drills or other non-emergency activities, was directed to landscaped areas.
- Areas that have debris that could potentially enter the storm drain system as a result of the drill activities were not used for training until the debris had been removed.
- Live fire training activities were pre-planned to allow integration of structural BMP barriers to control runoff as deemed necessary.
- Runoff from live fire training activities was contained and recovered with the City's Vac-con truck so that runoff did not discharge to the storm drain system or receiving waters.
- Good housekeeping and dry cleanup practices were utilized as part of standard facility maintenance procedures.

13.2.1 EDUCATIONAL METHODS

Details of the City's educational programs, including fire fighting personnel education, are provided in Section 8 of this document.

14.0 JURMP REVISIONS

The City's JURMP was rewritten in the spring of 2008 as required by Water Quality Order No. 2007-0001. Section 14 of the updated JURMP document includes a list of the changes made to the JURMP at that time. Any other changes made to the JURMP since the comprehensive JURMP update in the spring of 2008 would be detailed in the preceding sections of this JURMP Annual Report. Revisions may include, but would not be limited to, required inventory updates, necessary process and procedure changes, or programmatic modifications to improve efficiency and effectiveness.

15.0 CONCLUSIONS & RECOMMENDATIONS

During the 2007-2008 reporting period, the City of Encinitas updated its JURMP, which was finalized and submitted to the RWQCB on March 24, 2008. As captured in the preceding 2009-2010 JURMP Annual Report, the City of Encinitas has continued to refine newly developed program elements, standardize core program components, and stay current with emerging trends and technology. Further, the City has and will continue to actively participate and collaborate with other Copermittees in the development and collective implementation of regional programs. As compliance standards evolve based upon defined timeframes in Order No. 2007-0001, the City of Encinitas will continue to augment and update programs as necessary to comply with regulatory requirements, and evaluate the overall efficacy of program elements against value added outcomes to assure focused and refined implementation protocols.

Appendix A

Development Planning

A-1 **Treatment Control BMP Inventory**

A-2 **SUSMP Priority Project Map**

A-3 **Treatment Control BMP Inspection Priority Flowchart**

A-4 **Sample Grading Certification / BMP Installation Verification Letter**

A-5 **Treatment Control BMP Operation and Maintenance Self-Verification Letter**

A-6 **Treatment Control BMP Operation and Maintenance Brochure**

A-7 **Treatment Control BMP Operation and Maintenance Self-Verification Form**

A-8 **Treatment Control BMP Operation and Maintenance Self-Verification Results and Findings**

A-9 **Treatment Control BMP Operation and Maintenance Inspection Form**

A-10 **Treatment Control BMP Operation and Maintenance City Inspection Results and Findings**

A-11 **Stormwater Pollution Control Checklist and Certification**

Appendix A-1: Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
55	I	540 Cornish Dr	Vegetated Swale	vegetated swale	9/27/2005	3/17/2008	Encinitas Other		Low
55	I	540 Cornish Dr	Vegetated Swale	vegetated swale	9/27/2005	3/17/2008	Encinitas Other		Low
60	G	3275 Poppy Hills Ln	Landscaped Area	landscaped area for BMP	1/1/2003	1/15/2008	Private		Medium
60	G	3275 Poppy Hills Ln	Extended Detention Basin	detention basin	1/1/2003	1/15/2008	Private		Medium
60	G	3275 Poppy Hills Ln	Rock Swale	rock-lined swale	1/1/2003	1/15/2008	Private		Medium
60	G	3275 Poppy Hills Ln	Landscaped Area	landscaped area for BMP	1/1/2003	1/15/2008	Private		Medium
61	CN	801 Orpheus Ave	Flow-Through Planter	flow-through planter "bio-swale"	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Flow-Through Planter	flow-through planter "bio-swale"	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Other	roof cover for fueling area	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Pervious Pavement	gravel parking area	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Other	fuel slab reservoir	10/15/2007	6/7/2010	Encinitas Other		Low
87	G	354 Santa Fe Dr	Extended Detention Basin	detention basin	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
94	I	3740 Fortuna Ranch Rd	Rock Swale	gravel swale	4/12/2010	7/16/2010	Private	2010-0170453	TBD
94	I	3740 Fortuna Ranch Rd	Rock Swale	gravel swale	4/12/2010	7/16/2010	Private	2010-0170453	TBD
106	G	3358 Wildflower Valley Dr	Vegetated Swale	min. 100' long priority stormwater BMP grass swale	6/19/2006	11/8/2008	Private	2008-0582295	Medium
106	G	3358 Wildflower Valley Dr	Vegetated Swale	treatment swale	6/19/2006	11/8/2008	Private	2008-0582295	Medium
153	I	111 Chesterfield Dr	Mechanical Filter	Flo-Gard FF-RF24D	8/31/2006	2/13/2007	Private		Medium
153	I	111 Chesterfield Dr	Interceptor (Sewer)	traffic rated oil seperator	8/31/2006	2/13/2007	Private		Medium
169	G	510 S El Camino Real	Mechanical Filter	Kristar flogard	9/23/2008	7/15/2009	Private	2007-0310771	Medium
169	G	510 S El Camino Real	Vegetated Swale	grass-lined swale	9/23/2008	7/15/2009	Private	2007-0310771	Medium
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
183	G	3234 Olivenhain Farms Rd	Vegetated Swale	bio-swale for post BMP treatment	11/1/2006	11/1/2006	Private	2006-0764616	Low
183	G	3234 Olivenhain Farms Rd	Rock Swale	rock-lined swale	11/1/2006	11/1/2006	Private	2006-0764616	Low
183	G	3234 Olivenhain Farms Rd	Rock Swale	rock-lined swale	11/1/2006	11/1/2006	Private	2006-0764616	Low
183	G	3234 Olivenhain Farms Rd	Rock Swale	5' wide x 10' long x 1' thick rip rap	11/1/2006	5/13/2008	Private	2006-0764616	Low
187	G	1060 Urania Ave	Dry Well	9' deep drywell	3/22/2007	PRP/UC	Private	2006-0898796	TBD
187	G	1060 Urania Ave	Vegetated Swale	vegetated swale	3/22/2007	PRP/UC	Private	2006-0898796	TBD
276	G	Phoebe St & Hwy 101	Vortex Separator	StormFilter chamber by Contech	4/19/2007	6/19/2008	Private		High
276	G	Phoebe St & Hwy 101	Retention/Infiltration Vault	stormwater collection vault	4/19/2007	6/19/2008	Private		High
325	G	2620 Lone Jack Rd	Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	TBD
325	G	2620 Lone Jack Rd	Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	TBD
325	G	2620 Lone Jack Rd	Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	TBD
325	G	2620, 2622, 2624 Lone Jack Rd	Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	TBD
325	G	2620, 2622, 2624 Lone Jack Rd	Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	TBD
325	G	2622 Lone Jack Rd	Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	TBD
325	G	2624 Lone Jack Rd	Vegetated Swale	vegetated swale	11/28/2007	PRP/UC	Private	2008-0003721	TBD
372	G	1657 N Vulcan Ave	Vegetated Swale	grass swale	8/9/2007	PRP/UC	Private	2007-0615430	TBD
372	G	1657 N Vulcan Ave	Extended Detention Basin	detention basin	8/9/2007	PRP/UC	Private		TBD

Appendix A-1: Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
372	G	1657 N Vulcan Ave	Vegetated Swale	grass swale	8/9/2007	PRP/UC	Private		TBD
385	G	1555 Crest Dr	Vegetated Swale	BMP landscape swale	8/31/2007	7/13/2009	Private	2007-0611836	Low
385	G	1555 Crest Dr	Rock Swale	gravel/sand filter	8/31/2007	7/13/2009	Private	2007-0611836	Low
386	G	3535 Manchester Ave	Mechanical Filter	Katchall curb outlet filter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Mechanical Filter	Biofilter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Retention/Infiltration Vault	detention system	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Mechanical Filter	biofilter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 manchester Ave	Mechanical Filter	Bio-Clean continuous basket	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Mechanical Filter	Bio-Clean continuous basket	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Vegetated Swale	flow-based system for BMP	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Retention/Infiltration Vault	detention system	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Retention/Infiltration Vault	stormtech detention	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
388	G	1435 Lake Dr	Vegetated Swale	6'W X 20'L bioswale	12/17/2007	PRP/UC	Private		TBD
388	G	1435 Lake Dr	Vegetated Swale	6' X 28'L bioswale	12/17/2007	PRP/UC	Private		TBD
388	G	1435 Lake Dr	Vegetated Swale	203' long grass-lined swale	12/17/2007	PRP/UC	Private		TBD
414	G	4455 Manchester Ave	Vegetated Swale	grassy swale	5/10/2007	8/20/2008	Private	2007-0317169	Medium
414	G	4455 Manchester Ave	Mechanical Filter	flogard FB-24 storm drain filter by Kristar	5/10/2007	8/20/2008	Private	2007-0317169	Medium
414	G	4455 Manchester Ave	Vortex Separator	StormFliter per Contech stormwater solutions	5/10/2007	8/20/2008	Private	2007-0317169	Medium
414	G	4455 Manchester Ave	Mechanical Filter	flogard FB-24 storm drain filter by Kristar	5/10/2007	8/20/2008	Private	2007-0317169	Medium
437	G	222 El Camino Real	Vortex Separator	StormScreen unit	8/31/2007	8/31/2007	Private	2007-0571994	Medium
462	G	215 Second St	Landscaped Area	bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Landscaped Area	bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Turf Block Swale	grasscrete	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Landscaped Area	bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Dry Well	flow well stormwater leaching system	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Dry Well	flow well stormwater leaching system	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	90 N Coast Hwy 101	Mechanical Filter	kristar inlet filter	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	90 N Coast Hwy 101	Turf Block Swale	3' wide grass crete bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	90 N Coast Hwy 101	Interceptor (sewer)	Jensen sand and oil trap model JP50050	7/6/2007	7/6/2007	Private - HOA		Medium
462	G	90 N Coast Hwy 101	Mechanical Filter	kristar inlet filter	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
482	G	1864 Crest Dr	Extended Detention Basin	detention basin	3/28/2008	PRP/UC	Private	2007-0495449	Low
482	G	1864 Crest Dr	Vegetated Swale	4' wide grass lined treatment swale w/ rip-rap entrance	3/28/2008	PRP/UC	Private	2007-0495449	Low
482	G	1864 Crest Dr	Vegetated Swale	4' wide grass lined treatment swale w/ rip-rap entrance	3/28/2008	PRP/UC	Private	2007-0495449	Low
483	G	540 La Costa Ave	Mechanical Filter	filter insert	9/10/2007	7/27/2010	Private	2007-0637421	Medium
483	G	540 La Costa Ave	Vegetated Swale	bio-swale	9/10/2007	7/27/2010	Private	2007-0637421	Medium
483	G	540 La Costa Ave	Mechanical Filter	filter insert	9/10/2007	7/27/2010	Private	2007-0637421	Medium
483	G	540 La Costa Ave	Interceptor (Sewer)	wastewater sump	9/10/2007	7/27/2010	Private	2007-0637421	Medium
562	G	1302 Encinitas Blvd	Vegetated Swale	8' wide treatment swale with 6' wide bottom	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	Mechanical Filter	flogard lopro hydrocarbon absorbant filter	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	Vegetated Swale	4' wide landscaped swale	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	Infiltration Basin	infiltration basin	8/21/2007	8/4/2008	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	65 l.f. gravel detention / dispersion pit	11/20/2007	6/30/2010	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	6/30/2010	Private		Medium
570	G	489 Latigo Row	Rock Swale	rock swale	11/20/2007	6/30/2010	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	6/30/2010	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	6/30/2010	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	6/30/2010	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	6/30/2010	Private		Medium
692	G	1435 Rainbow Ridge	Vegetated Swale	6' BMP treatment swale	3/27/2008	PRP/UC	Private	2008-0029728	TBD
704	G	230 Quail Gardens Dr	Vegetated Swale	vegetated BMP swale and 2 energy dissipators	4/17/2008	10/19/2009	Private	2008-0162733	Low
704	G	230 Quail Gardens Dr	Pervious Pavement	pavers	4/17/2008	11/25/2009	San Diego County		Low
705	G	3354 Wildflower Valley Dr	Vegetated Swale	vegetated swale	1/14/2008	7/16/2009	Private		Low
705	G	3354 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	1/14/2008	7/16/2009	Private	2008-0106026	Low
705	G	3354 Wildflower Valley Dr	Vegetated Swale	vegetated swale	1/14/2008	7/16/2009	Private		Low
705	G	3354 Wildflower Valley Dr	Vegetated Swale	vegetated swale	1/14/2008	7/16/2009	Private		Low
713	G	3003 Wildflower Dr	Infiltration Basin	dispersion trench	4/25/2008	4/29/2010	Private	2008-0192767	Low

Appendix A-1: Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
713	G	3003 Wildflower Dr	Infiltration Basin	dispersion trench	4/25/2008	4/29/2010	Private	2008-0192767	Low
713	G	3003 Wildflower Dr	Landscaped Area	landscaped area	4/25/2008	4/29/2010	Private	2008-0192767	Low
713	G	3003 Wildflower Dr	Infiltration Basin	dispersion trench	4/25/2008	4/29/2010	Private	2008-0192767	Low
716	G	662 Encinitas Blvd	Vortex Separator	StormFilter catch basin by Contech	6/2/2008	PRP/UC	Private	2008-0243901	TBD
716	G	662 Encinitas Blvd	Vegetated Swale	3' wide grass lined treatment swale	6/2/2008	PRP/UC	Private	2008-0243901	TBD
716	G	662 Encinitas Blvd	Pervious Pavement	grasspave2 by Invisible Structures, Inc.	6/2/2008	PRP/UC	Private	2008-0243901	TBD
718	G	687 South Coast Hwy 101	Vortex Separator	6' X 12' precast StormFilter by Contech	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	PRP/UC	Private	2008-0440635	TBD
718	G	687 South Coast Hwy 101	Interceptor (Sewer)	320 gal. sand-oil interceptor	8/28/2008	PRP/UC	Private	2008-0440635	TBD
765	G	2234 Encinitas Blvd	Vortex Separator	StormFilter by Contech	4/1/2008	PRP/UC	Private		TBD
765	G	2234 Encinitas Blvd	Vegetated Swale	biofilter swale	4/1/2008	PRP/UC	Private		TBD
765	G	2234 Encinitas Blvd	Vortex Separator	1-cartridge StormFilter per Contech	4/1/2008	PRP/UC	Private		TBD
765	G	2234 Encinitas Blvd	Vegetated Swale	biofilter swale	4/1/2008	PRP/UC	Private		TBD
765	G	2234 Encinitas Blvd	Vegetated Swale	biofilter swale	4/1/2008	PRP/UC	Private		TBD
765	G	2234 Encinitas Blvd	Vegetated Swale	biofilter swale	4/1/2008	PRP/UC	Private		TBD
789	G	2005 San Elijo Ave	Interceptor (Sewer)	grease interceptor	1/9/2008	3/23/2009	Private	2008-0609543	Low
789	G	2005 San Elijo Ave	Pervious Pavement	porous concrete	1/9/2008	3/23/2009	Private	2008-0609543	Low
883	G	1058 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1058 Hymettus Ave	Infiltration Basin	15' X 8' X 5' infiltration basin	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1058 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1058 Hymettus Ave	Pervious Pavement	modular concrete-reinforced turf area	10/22/2008	PRP/UC	Private		TBD
883	G	1058 Hymettus Ave	Pervious Pavement	modular reinforced turf area	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Pervious Pavement	modular concrete-reinforced turf area	10/22/2008	PRP/UC	Private		TBD
883	G	1076 Hymettus Ave	Infiltration Basin	15' X 8' X 5' infiltration basin	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	PRP/UC	Private	2008-0563838	TBD
912	G	416 N Rancho Santa Fe Rd	Infiltration Basin	gravel	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Infiltration Basin	2.5' wide of 6" cobbles over 12" thick pea gravel	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Infiltration Basin	10' X 25' gravel	1/16/2009	9/24/2009	Private	2008-0609456	Medium
912	G	416 N Rancho Santa Fe Rd	Media Filter	2' diameter, 6' deep gravel pit with open bottom for BMP use	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Rock Swale	gravel swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Vegetated Swale	2' wide grass swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Rock Swale	gravel swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Rock Swale	gravel swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
943	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	1/14/2009	1/2/2010	Private	2009-0016310	Medium
943	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	1/14/2009	1/2/2010	Private	2009-0016310	Medium
943	G	211 Saxony Rd	Vegetated Swale	vegetated swale	1/14/2009	1/2/2010	Private	2009-0016310	Medium
943	G	211 Saxony Rd	Flow-Through Planter	6' X 12' Filterra unit	1/14/2009	1/2/2010	Private	2009-0016310	Medium
947	G	1423 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	1423 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	1423 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	1435 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	1435 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	1447 Bella Vista Ct	Landscaped Area	planter area	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	1447 Bella Vista Ct	Mechanical Filter	Kristar Lo-pro drain filter	5/26/2009	PRP/UC	Private	2009-0134165	TBD

Appendix A-1: Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
947	G	1447 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale w/ some rock-lined portions	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	1459 Bella Vista Ct	Mechanical Filter	Kristar Lo-pro drain filter	5/26/2009	PRP/UC	Private	2009-0134165	TBD
947	G	1459 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale w/ some rock-lined portions	5/26/2009	PRP/UC	Private	2009-0134165	TBD
983	G	1320 Encinitas Blvd	Vortex Separator	Contech Stormfilter	10/28/2008	2/4/2010	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	2/4/2010	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	2/4/2010	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	2/4/2010	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	2/4/2010	Private	2008-0522122	Medium
1092	EBP	820 Birmingham Dr	Mechanical Filter	12" trench with hydro carbon filter and steel grate	2/4/2008	6/26/2009	Private	2008-0075668	Medium
1092	EBP	820 Birmingham Dr	Mechanical Filter	12" trench with hydro carbon filter and steel grate	2/4/2008	6/26/2009	Private	2008-0075668	Medium
1092	EBP	820 Birmingham Dr	Mechanical Filter	12" trench with hydro carbon filter and steel grate	2/4/2008	6/26/2009	Private	2008-0075668	Medium
1365	G	311, 310, 314 and 318 Hana Ct	Rock Swale	gravel swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1365	G	311, 310, 314 and 318 Hana Ct	Rock Swale	gravel swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1365	G	311, 315, 319, 323, and 327 Hana Ct	Vegetated Swale	vegetated swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1365	G	315 and 311 Hana Ct	Rock Swale	rock swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1389	G	302 Requeza St	Extended Detention Basin	stormwater detention treatment basin	1/5/2004	8/2/2005	Private	2003-1503915	High
1457	G	200 Saxony Rd	Vegetated Swale	grass-lined swale	5/6/2004	4/6/2006	Private		Low
1469	G	1401 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	Low
1469	G	1401 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	Low
1469	G	1414 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	Low
1469	G	1414 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	Low
1469	G	1428 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	Low
1469	G	1428 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	Low
1469	G	1442 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	Low
1469	G	Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	PRP/UC	Private	2004-0874708	Low
1509	G	521 Ocean View Ave	Vegetated Swale	vegetated swale	7/7/2004	PRP/UC	Private		Low
1519	G	200 Saxony Rd	Landscaped Area	turf catch basin approach basin	3/1/2004	7/12/2005	Private		Medium
1519	G	200 Saxony Rd	Landscaped Area	turf catch basin approach apron	3/1/2004	7/12/2005	Private		Medium
1519	G	200 Saxony Rd	Mechanical Filter	flogard+plus model 'FGP-36CI' catch basin filter insert	3/1/2004	7/12/2005	Private		Medium
1519	G	200 Saxony Rd	Mechanical Filter	flogard+plus model 'FGP-36CI' catch basin filter insert	3/1/2004	7/12/2005	Private		Medium
1532	G	1316, 1318 Summit Ave	Vegetated Swale	grass swale and storm water "cleansing area" (detention basin)	4/28/2004	11/14/2007	Private		Low
1532	G	1320 Summit Ave	Vegetated Swale	landscape swale	4/28/2004	11/14/2007	Private		Low
1532	G	1320 Summit Ave	Vegetated Swale	landscape swale	4/28/2004	11/14/2007	Private		Low
1563	G	3701 Fortuna Ranch Rd	Vegetated Swale	grass swale	10/11/2004	6/11/2008	Private		Low
1563	G	3701 Fortuna Ranch Rd	Vegetated Swale	grass swale	10/11/2004	6/11/2008	Private		Low
5814	G	2108 Oxford Ave	Vegetated Swale	grass swale	12/4/2002	4/1/2004	Private		Low
5814	G	2108 Oxford Ave	Landscaped Area	landscaped area	12/4/2002	4/1/2004	Private		Low
5814	G	2112 Oxford Ave	Landscaped Area	landscaped area	12/4/2002	4/1/2004	Private		Low
5814	G	2112 Oxford Ave	Vegetated Swale	grass swale	12/4/2002	4/1/2004	Private		Low
6402	G	311 Princehouse Ln	Vegetated Swale	grass swale (275 ft by 4 ft)	7/18/2005	12/8/2006	Private	2004-0576710	Low
6442	G	3616 Manchaster Ave	Mechanical Filter	Fossil Filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchaster Ave	Mechanical Filter	fossil filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Sand/Oil Separator (stormwater)	2000-gal Jenson Sand-Oil Interceptor	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Sand/Oil Separator (stormwater)	2000-gal Jenson Sand-Oil Interceptor	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Extended Detention Basin	Football field is a detention basin with a filtration sytem under it Th	9/17/2004	10/17/2006	Private		High
6813	G	155 Saxony Rd	Vegetated Swale	grass swale	9/5/2003	7/23/2009	Private		Medium
6813	G	155 Saxony Rd	Vegetated Swale	grass swale/infiltration basin	9/5/2003	7/23/2009	Private		Medium
6813	G	155 Saxony Rd	Other	drain inlet with seepage pit	9/5/2003	7/23/2009	Private		Medium
7005	G	503 Ocean Bluff Wy	Vegetated Swale	vegetated swale around the home	9/4/2002	4/30/2007	Private		Medium
7005	G	507 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	509 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	510 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	513 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	517 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	518 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	521 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
7005	G	525 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	526 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	532 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	558 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscape area	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Mechanical Filter	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscape area	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscape area	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Mechanical Filter	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Mechanical Filter	fossil filter insert	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Mechanical Filter	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscape area	4/24/2003	5/18/2005	Private - HOA		Medium
7300	G	740 Garden View Ct	Landscaped Area	planter area	2/22/2002	12/22/2008	Private		Low
7300	G	740 Garden View Ct	Vegetated Swale	grass swale for stormwater treatment	2/22/2002	12/22/2008	Private		Low
7300	G	760 Garden View Ct	Landscaped Area	planter area	2/22/2002	12/22/2008	Private		Low
7300	G	760 Garden View Ct	Vegetated Swale	grass swale for stormwater treatment	2/22/2002	12/22/2008	Private		Low
7305	G	131 Princehouse Ln	Rock Swale	3-ft wide gravel swale	1/10/2003	4/7/2004	Private		Low
7305	G	131 Princehouse Ln	Infiltration Basin	3-ft diameter absorption pit, 4-ft deep w/ 3/4" rock	1/10/2003	4/7/2004	Private		Low
7374	I	95 N Vulcan Ave	Pervious Pavement	pervious pavement parking lot	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Pervious Pavement	pervious pavement walkway	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Rock Swale	rock lined swale	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Extended Detention Basin	detention basin	1/30/2003	10/16/2006	Encinitas Streets		Medium
7374	I	95 N Vulcan Ave	Pervious Pavement	grass pavers	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Pervious Pavement	pervious pavement walkway	1/30/2003	10/16/2006	Encinitas Parks		Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Vegetated Swale	grassy swale	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Vegetated Swale	grassy swale	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4120-M Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-M Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Vegetated Swale	grass lined swale	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7628	G	199 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	199 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	207 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	3/30/2006	Private	2006-0214323	Medium
7628	G	207 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	207 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	221 La Costa Ave	Vegetated Swale	landscaped area for filtration	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	235 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7702	G	301 Chopin Way	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	315 Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	322, 336 Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	329 Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	Rubenstein Ave and Chopin Wy	Retention/Infiltration Vault	stormwater detention vault	8/6/2003	1/23/2006	Private		Medium
7702	G	Rubenstein Ave and Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	Rubenstein Ave and Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7732	G	175 La Costa Ave	Extended Detention Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	175 La Costa Ave	Other	DG-lined swale	12/30/2003	5/15/2006	Private		Medium
7732	G	183 La Costa Ave	Infiltration Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	191 La Costa Ave	Infiltration Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	191 La Costa Ave	Infiltration Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7771	G	1550 S El Camino Real	Extended Detention Basin	desiltation basin	10/28/2003	2/4/2008	Private		Low
7771	G	1550 S El Camino Real	Pervious Pavement	pervious pavemnet "gravel pave" manufactured by Invisible Structu	10/28/2003	2/4/2008	Private		Low

Appendix A-1: Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
7780	G	133 Rosebay Dr	Infiltration Basin	rock-lined infiltration trench	8/4/2003	4/28/2005	Private		Low
7780	G	133 Rosebay Dr	Bioretention Basin	terraced stormwater drainage area	8/4/2003	4/28/2005	Private		Low
7791	G	1766 N Coast Hwy 101	Vegetated Swale	vegetated swale	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Infiltration Basin	vegetated detention basin	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Interceptor (Sewer)	grease interceptor	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Sand/Oil Separator (stormwater)	sand/oil interceptor	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Infiltration Basin	vegetated detention basin	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Vegetated Swale	vegetated swale	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Mechanical Filter	fossil filter insert	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Mechanical Filter	fossil filter insert	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7800	G	3542 Jasmine Crest	Vegetated Swale	vegetated swale (drains to bioretention)	3/13/2003	11/19/2009	Private		Low
7800	G	3542 Jasmine Crest	Vegetated Swale	vegetated swale (drains to bioretention)	3/13/2003	11/19/2009	Private		Low
7800	G	3542 Jasmine Crest	Bioretention Basin	bioretention area	3/13/2003	11/19/2009	Private		Low
7800	G	3542 Jasmine Crest	Bioretention Basin	bioretention area	3/13/2003	11/19/2009	Private		Low
7828	G	1200 Crestview Dr	Mechanical Filter	catch basin filter insert	11/13/2003	12/21/2006	Private		Medium
7828	G	1200 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1207 Crestview Dr	Mechanical Filter	catch basin filter insert	11/13/2003	12/21/2006	Private		Medium
7828	G	1207 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1208 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1216 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1219 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1223 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1223 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1945 Lake Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7847	G	2300 Eighth St	Infiltration Basin	filtration/desiltation pond	8/12/2003	7/23/2009	Private		Low
7852	G	3411 Via Monte Verde	Vegetated Swale	grass lined vegetation area	1/1/2003	10/24/2008	Private		Medium
7852	G	3411 Via Monte Verde	Vegetated Swale	grass lined vegation cleansing area	1/1/2003	10/24/2008	Private		Medium
7852	G	3411 Via Monte Verde	Vegetated Swale	landscaped area for BMP	1/1/2003	10/24/2008	Private		Medium
7852	G	3430 Via Monte Verde	Vegetated Swale	grass lined swale	1/1/2003	10/24/2005	Private		Medium
7852	G	3430 Via Monte verde	Infiltration Basin	rip rap lined infiltration basin (does not conform to plan)	1/1/2003	10/24/2005	Private		Medium
7852	G	3445 Via Monte Verde	Vegetated Swale	landscape area for BMP	1/1/2003	10/24/2005	Private		Medium
7852	G	3445 Via Monte Verde	Vegetated Swale	grass lined vegetation area	1/1/2003	10/24/2005	Private		Medium
7893	G	Christine Pl	Retention/Infiltration Vault	'Stormchamber' infiltration units (4)	1/27/2004	6/7/2010	Private	2003-1457627	Medium
7893	G	Christine Pl	Mechanical Filter	Flogard Plus filter insert	1/27/2004	6/7/2010	Private	2003-1457627	Medium
7893	G	Christine Pl	Mechanical Filter	Fflogard Plus filter insert	1/27/2004	6/7/2010	Private	2003-1457627	Medium
9023	G	427 Bristol Ave	Pervious Pavement	pathway filtration	10/20/2004	10/5/2006	Private		Low
9034	G	1464 Summit Ave	Infiltration Basin	detention filtration basin	12/21/2004	12/3/2007	Private		Low
9034	G	1470 Summit Ave	Other	DG swale	12/21/2004	12/3/2007	Private		Low
9057	G	192 Pacific View Ln	Vegetated Swale	7.8 ft wide terraced treatment swale	1/26/2005	1/22/2007	Private		Medium
9071	G	3317 Poppy Hills Ln	Vegetated Swale	vegetated swale	11/9/2004	7/3/2006	Private	2004-0955312	Low
9071	G	3317 Poppy Hills Ln	Rock Swale	rock swale	11/9/2004	7/3/2006	Private	2004-0955312	Low
9106	G	vacant lot N Vulcan Ave	Vegetated Swale	vegetated swale	12/21/2006	PRP/UC	Private		TBD
9106	G	vacant lot N Vulcan Ave	Infiltration Basin	vegetated infiltration basin w/ gravel pit	12/21/2006	PRP/UC	Private		TBD
9117	G	1902 Paxton Wy	Turf Block Swale	GravelPave swale	3/2/2005	PRP/UC	Private	2004-1183355	TBD
9117	G	1905 Paxton Wy	Turf Block Swale	GravelPave swale	3/2/2005	PRP/UC	Private	2004-1183355	TBD
9117	G	1908 Paxton Wy	Turf Block Swale	Gravel Pave Swale	3/2/2005	PRP/UC	Private	2004-1183355	TBD
9117	G	1908 Paxton Wy	Turf Block Swale	gravel pave swale	3/2/2005	PRP/UC	Private	2004-1183355	TBD
9117	G	1916 Paxton Wy	Turf Block Swale	Gravel Pave Swale	3/2/2005	PRP/UC	Private	2004-1183355	TBD
9117	G	1920 Paxton Wy	Turf Block Swale	GravelPave swale	3/2/2005	PRP/UC	Private	2004-1183355	TBD
9134	G	2153 Whisper Wind Ln	Vegetated Swale	grass swale	11/23/2004	4/6/2006	Private		Low
9134	G	2153 Whisper Wind Ln	Infiltration Basin	rip-rap infiltration	11/23/2004	4/6/2006	Private		Low
9150	G	3113 Camino Del Rancho	Rock Swale	Rock lined swale	3/24/2005	9/11/2007	Private		Low

Appendix A-1: Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
9150	G	3113 Camino Del Rancho	Rock Swale	rock lined swale	3/24/2005	9/11/2007	Private		Low
9150	G	3113 Camino Del Rancho	Bioretention Basin	flat area for stormwater treatment covered with grass	3/24/2005	9/11/2007	Private		Low
9180	G	1610 Neptune Ave	Landscaped Area	landscaped area and planters	7/20/2006	5/21/2009	Private		Low
9253	G	701 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	703 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	715 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	717 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	719 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	721 N Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9262	G	860 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	860 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	860 Bracero Rd	Mechanical Filter	trench drain with skimmer box	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	874 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	874 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	874, 896 & 900 Bracero Rd	Vegetated Swale	7' wide grass lined treatment channel	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	886 Bracero Rd	Mechanical Filter	trench drain with skimmer box	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	886 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	886 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	890 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	890 Bracero Rd	Mechanical Filter	trench drain with skimmer box	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	896 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	900 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	900 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	900 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	904 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	904 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	904 Bracero Rd	Mechanical Filter	trench drain with skimmer box	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	904 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	904 Bracero Rd	Mechanical Filter	trench drain with skimmer box	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9262	G	904 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	PRP/UC	Private	2005-0972175	TBD
9278	G	490 Latigo Row	Extended Detention Basin	detention area	12/27/2005	6/17/2010	Private		Low
9278	G	490, 494 Latigo Row	Turf Block Swale	turf block swale with gravel (no turf)	12/27/2005	6/17/2010	Private		Low
9278	G	494 Latigo Row	Extended Detention Basin	detention area	12/27/2005	6/17/2010	Private		Low
9283	G	1440 Hygeia Ave	Infiltration Basin	infiltration basin	1/17/2006	3/23/2007	Private	2005-0861753	Medium
9283	G	265 Sanford St	Infiltration Basin	Infiltration basin	1/17/2006	3/23/2007	Private	2005-0861753	Medium
9283	G	267 Sanford St	Infiltration Basin	infiltration basin	1/17/2006	3/23/2007	Private	2005-0861753	Medium
9283	G	267 Sanford St & 1440 Hygeia Ave	Rock Swale	rock swale	1/17/2006	3/23/2007	Private	2005-0861753	Medium
9289	G	2914 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2914 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2914 Lone Jack Rd	Vegetated Swale	turf reinforced mat drainage swale	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2914 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2914, 2934 Lone Jack Rd	Vegetated Swale	turf reinforced mat drainage swale	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2932 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2932 Lone Jack Rd	Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2932 Lone Jack Rd	Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2932 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2934 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2944 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2944 Lone Jack Rd	Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Low
9289	G	2944 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Low
9294	G	477 N El Camino Real	Advanced Mechanical Filter	ADS water quality unit	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Advanced Mechanical Filter	ADS water quality unit	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Vegetated Swale	grass-lined channel for BMP	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High

Appendix A-1: Treatment Control BMP Inventory

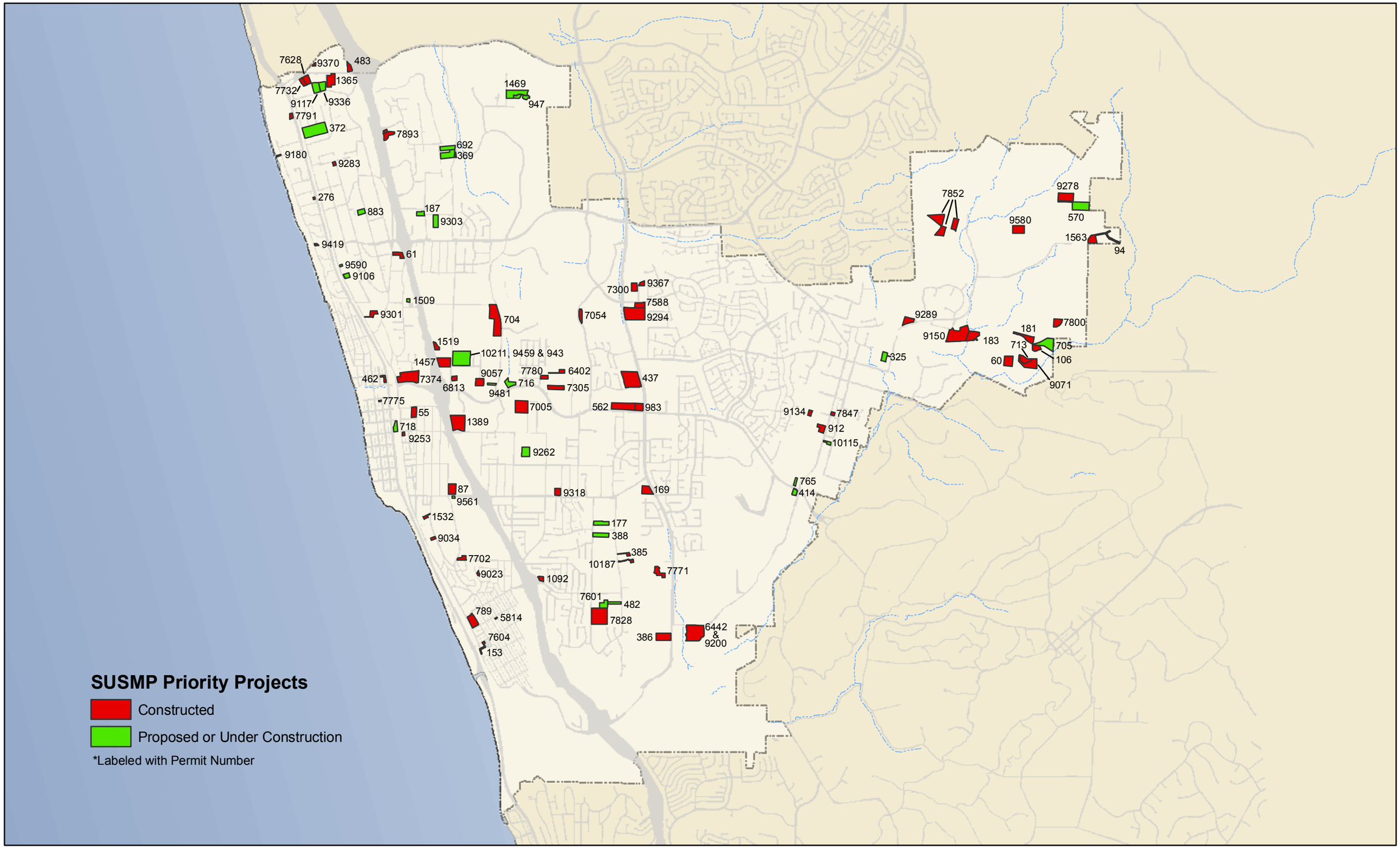
Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9301	G	187 Halcyon Rd	Vegetated Swale	grass lined ditch	8/3/2005	4/14/2009	Private	2005-0679467	Low
9301	G	187 Halcyon Rd	Landscaped Area	landscaped area for BMP	8/3/2005	4/14/2009	Private	2005-0679467	Low
9301	G	187 Halcyon Rd	Vegetated Swale	grass lined ditch	8/3/2005	4/14/2009	Private	2005-0679467	Low
9301	G	189 Halcyon Rd	Landscaped Area	landscaped area for BMP	8/3/2005	4/14/2009	Private	2005-0679467	Low
9301	G	189 Halcyon Rd	Turf Block Swale	Grasscrete	8/3/2005	4/14/2009	Private	2005-0679467	Low
9301	G	189 Halcyon Rd	Landscaped Area	landscaped area for BMP	8/3/2005	4/14/2009	Private	2005-0679467	Low
9303	G	869 Brittany Rd	Landscaped Area	landscaped area	6/7/2005	6/7/2010	Private	2005-0496885	Low
9303	G	869 Brittany Rd	Extended Detention Basin	40' +/- detention area	6/7/2005	6/7/2010	Private	2005-0496885	Low
9303	G	869, 875, 881, 887 Brittany Rd	Vegetated Swale	landscape filtration strip	6/7/2005	6/7/2010	Private	2005-0496885	Low
9303	G	875 Brittany Rd	Landscaped Area	landscaped area	6/7/2005	PRP/UC	Private	2005-0496885	Low
9303	G	875 Brittany Rd	Landscaped Area	landscaped area	6/7/2005	PRP/UC	Private	2005-0496885	Low
9318	G	1154 Evergreen Dr	Landscaped Area	landscape area BMP	8/16/2005	2/16/2007	Private		Medium
9318	G	1154 Evergreen Dr	Landscaped Area	2' wide grass pavement strip	8/16/2005	2/16/2007	Private		Medium
9318	G	1154, 1158 Evergreen Dr	Rock Swale	gravel swale (GravePave)	8/16/2005	2/16/2007	Private		Medium
9318	G	1158 Evergreen Dr	Landscaped Area	lanscaped area BMP	8/16/2005	2/16/2007	Private		Medium
9318	G	1158 Evergreen Dr	Vegetated Swale	2' wide grass pavement strip	8/16/2005	2/16/2007	Private		Medium
9318	G	1158 Evergreen Dr	Vegetated Swale	2' wide grass pavement swale	8/16/2005	2/16/2007	Private		Medium
9318	G	1160, 1164, 1168, 1172, 1169, 1165 Kava Ct	Vegetated Swale	vegetated swale	8/16/2005	2/16/2007	Private		Medium
9318	G	1169 & 1165 Kava Ct	Rock Swale	gravel swale	8/16/2005	2/16/2007	Private		Medium
9318	G	1176 & 1173 Kava Ct	Rock Swale	6.5 ft wide gravel swale w/ 3" river rock	8/16/2005	2/16/2007	Private		Medium
9336	G	1904 Sheridan Rd	Turf Block Swale	Gravel Pave Swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1904 Sheridan Rd	Vegetated Swale	grass swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1904, 1938 Sheridan Rd	Rock Swale	Gravel Pave swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1938 Sheridan Rd	Rock Swale	Gravel Pave swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1938 Stewart Wy	Vegetated Swale	grass swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1938 Stewart Wy	Vegetated Swale	grass swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1938 Stewart Wy	Vegetated Swale	grass swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1946 Sheridan Rd	Rock Swale	Gravel Pave swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1946 Sheridan Rd	Rock Swale	Gravel Pave swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1946 Sheridan Rd	Rock Swale	Gravel Pave swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1946 Sheridan Rd	Vegetated Swale	grass swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1946 Sheridan Rd	Vegetated Swale	grass swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1950 Stewart Wy	Vegetated Swale	grass swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1957 Stewart Wy	Vegetated Swale	grass swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	1957 Stewart Wy and 1946 Sheridan Rd	Vegetated Swale	grass swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	292 Andrew Ave	Turf Block Swale	Gravel Pave Swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9336	G	292 Andrew Ave	Vegetated Swale	grass swale	8/4/2005	PRP/UC	Private	2005-0503915	TBD
9367	G	781 Garden View Ct	Landscaped Area	landscape area for BMP	7/10/2006	1/14/2009	Private		Low
9367	G	781 Garden View Ct	Vegetated Swale	grass lined swale	7/10/2006	1/14/2009	Private		Low
9367	G	781 Garden View Ct	Landscaped Area	landscape area for BMP	7/10/2006	1/14/2009	Private		Low
9370	G	406 La Costa Ave	Other	4 ft diameter dual pump lift station	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	Vegetated Swale	4-ft wide grass swale	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	Other	4 ft X 4ft X 2.5 ft Jenson precast sump station	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	Pervious Pavement	Orco block pavers	1/30/2006	8/14/2007	Private	2006-0071959	High
9419	G	871 Neptune Ave	Landscaped Area	landscaped area	8/30/2005	2/6/2008	Private		Low
9419	G	871 Neptune Ave	Landscaped Area	landscaped area	8/30/2005	2/6/2008	Private		Low
9419	G	871 Neptune Ave	Landscaped Area	landscaped area	8/30/2005	2/6/2008	Private		Low
9419	G	871 Neptune Ave	Turf Block Swale	Grasscrete grass block	8/30/2005	2/6/2008	Private		Low
9459	G	211 Saxony Rd	Infiltration Basin	landscaped area (detention basin)	6/12/2006	9/10/2007	Private - HOA		Low
9459	G	211 Saxony Rd	Pervious Pavement	Grass Pave	6/12/2006	9/10/2007	Private - HOA		Low
9481	I	545 Quail Point Ln	Vortex Separator	StormFilter by Stormwater Management Inc.	5/17/2009	PRP/UC	Private	2007-0353916	TBD
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	PRP/UC	Private	2007-0598500	Low
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	PRP/UC	Private	2007-0598500	Low
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	PRP/UC	Private	2007-0598500	Low

Appendix A-1: Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	PRP/UC	Private	2007-0598500	Low
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	PRP/UC	Private	2007-0598500	Low
9561	G	303 Santa Fe Dr	Media Filter	stormfilter system	9/18/2007	PRP/UC	Private	2007-0598500	Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Dry Well	Dry Well Storm Water Retention	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
10187	G	1603 Crest Dr	Landscaped Area	turf area BMP	5/27/2009	4/13/2010	Private	2009-0280381	Low
10187	G	1603 Crest Dr	Rock Swale	2' wide BMP gravel/sand filter	5/27/2009	4/13/2010	Private	2009-0280381	Low
10211	G	211 Saxony Rd	Mechanical Filter	filter fossil filter drain insert	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Flow-Through Planter	Filterra Unit	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Flow-Through Planter	Filterra Unit	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Extended Detention Basin	underground detention system	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	PRP/UC	Private	TBD	TBD
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	PRP/UC	Private	TBD	TBD

Definitions:
PRP/UC: Project proposed or under construction, BMP installation is not complete.
TBD: BMP inspection priority To Be Determinined. After construction is complete, all BMPs on the project are inspected prior to start of the next rainy season. BMP inspection priority is established during this initial Operation and Mainenance Inspection.
HOA: Homeowner's Association

Note:
Responsible party information is maintained within the City's data management systems specific to this program area. In consideration of the sensitivity of private property ownership information, this data is not included in the inventory presented.



Appendix A-2

SUSMP Priority Projects with Treatment Control BMPs

DISCLAIMER: This map should not be used for Engineering, Survey, or Site-Specific Analysis.
Every reasonable effort has been made to assure the accuracy of the data provided; nevertheless, some information may not be accurate. The City of Encinitas assumes no liability or responsibility arising from the use of or reliance upon this information.

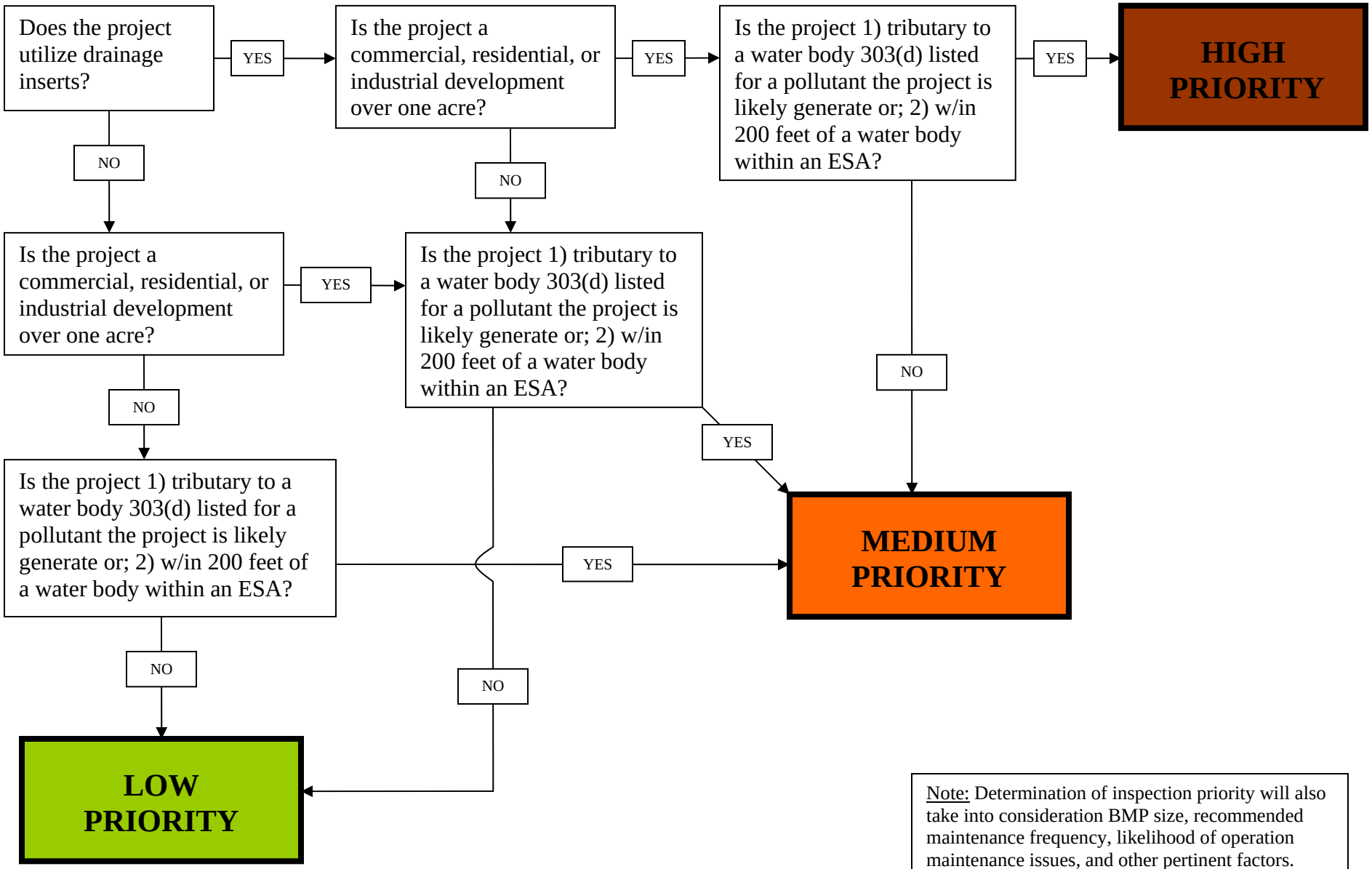
- Map Coordinates: Stateplane NAD83 Feet, CA Zone 6

N

0 6,200 Feet

1 inch = 3,700 feet

Treatment Control BMP Inspection Priority



Note: Determination of inspection priority will also take into consideration BMP size, recommended maintenance frequency, likelihood of operation maintenance issues, and other pertinent factors.

SAMPLE

Date: _____

City of Encinitas
Engineering Services Permits
505 South Vulcan Ave.
Encinitas, CA 92024

Re: **Engineer's Final Grading Certification for Project No. 99-001 TM and Grading Permit Number XXXX - G.**

The grading under permit number XXXX has been performed in substantial conformance with the approved grading plan or as shown on the attached 'As Graded' plan.

Final grading inspection has demonstrated that lot drainage conforms with the approved grading plan and that swales drain at a minimum of 1% to the street and/or an appropriate drainage system.

All the Low Impact Development, Source Control and Treatment Control Best Management Practices as shown on the drawing and required by the Best Management Practice Manual Part II were constructed and are operational, together with the required maintenance covenant(s).

Engineer of Record _____ (signed & sealed)

Dated _____

Verification by the Engineering Inspector of this fact is done by the Inspector's signature hereon and will take place only after the above is signed and stamped and will not relieve the Engineer of Record of the ultimate responsibility:

Engineering Inspector: _____

Dated:_____

The above information shall be on the Engineer of Record's letterhead and shall be signed and sealed by the Engineer of Record.

City of Encinitas

September 3, 2009

TO: *Owner Address*

RE: Treatment Control Best Management Practices (BMP) Verification Program

As you may recall, in 2008 the City of Encinitas Clean Water Program initiated the Treatment Control BMP Operation and Maintenance Verification Program by requesting all responsible parties to verify their property specific BMPs and provide current contact information. The intent of this letter is to inform you that the 2009 operation and maintenance verification of Treatment Control BMP(s) located on your property is due no later than **September 30, 2009**. City of Encinitas records indicate that treatment control BMP(s) were constructed as a part of the grading permit at *Location*.

Since 2003, specific development projects within the City of Encinitas have been required to construct BMP drainage features to treat and improve the quality of runoff from the developed site. The treatment control BMPs at your facility or on your property provide a critical function for downstream surface and coastal water quality. Proper operation and routine maintenance of treatment control BMPs is necessary to achieve maximum water quality benefits.

Annual inspection, maintenance and operation of permanent treatment control BMPs are required per City of Encinitas Municipal Code (EMC) Section 20.08, the San Diego Municipal Stormwater Permit, as well as property related legal agreements and/or covenants. *Please be advised that failure to complete annual inspection and maintenance activities and provide adequate verification information may constitute a violation of City ordinance (EMC Section 20.08) or breach of property related agreements or covenants.*

To fulfill inspection and maintenance obligations, please complete the following steps:

1) Visually inspect all Treatment Control BMPs for signs of malfunction or disrepair. (i.e. excessive sediment or debris, overgrown vegetation, restricted water flow.)

2) Maintain/repair any damage to the BMP(s). Necessary maintenance may include removing accumulated sediment, trash or other debris; stabilizing eroded areas; replanting dead vegetation; trimming / mowing overgrown vegetation; or cleaning out closed or blocked inlets and outlets, etc.

4) Take current photos of all BMPs on the property.

5) Complete the Operation and Maintenance Self-Verification Form and submit the form to the City's Clean Water Program (submittal instructions are provided on the back-side of this letter and on the enclosed Self-Verification Form).

PLEASE COMPLETE ALL INSPECTION AND MAINTENANCE ACTVITIES AND SUBMIT THE VERIFICATION FORM TO THE CLEAN WATER PROGRAM NO LATER THAN: September 30, 2009

It is the goal of the City to minimize the burden on property owners to fulfill these requirements. For more information regarding the Treatment Control BMP Operation and Maintenance Program, please refer to the enclosed brochure or call the Clean Water Hotline at 760-633-2787 for assistance. Your cooperation in this effort is greatly appreciated.

Sincerely,

Erik Steenblock
Clean Water Program Manager

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

Operation and Maintenance Self-Verification Form Submittal Options

1. **Complete the online version** of the form and submit your photos electronically. The online form can be found at the following website: **http://cleanwaterBMP.cityofencinitas.org**

2. **Email** electronic copies of completed form, maintenance records, and photos to: **npdesmail@cityofencinitas.org** *Note: Maximum file size for email attachments is **5MB***

3. **Mail** completed form, copies of maintenance records, and photos to:

   City of Encinitas
   Clean Water Program
   505 S Vulcan Ave
   Encinitas, CA 92024

4. Any combination of online, mail, or email submission of the necessary documents will also be accepted. For example, you may **mail** the form and maintenance records and **email** photos.

City of Encinitas
Clean Water Program

FINAL NOTICE

October 19, 2009

TO: *Owner Address*

RE: Treatment Control Best Management Practices (BMP) Self-Verification Program

The intent of this letter is to inform you that the 2009 operation and maintenance self-verification of treatment control BMP(s) located on your property is **PAST DUE** as of October 1, 2009. In a letter dated September 3, 2009, the City of Encinitas requested documentation showing that treatment control BMPs located at XX have been inspected and maintained as necessary (see attached letter).

The City of Encinitas is extending you an additional opportunity to complete self-inspection and necessary maintenance activities, and submit the required self-verification form and photos no later than November 6, 2009.

To fulfill inspection and maintenance obligations, please complete the following steps:

1) Visually inspect all Treatment Control BMPs for signs of malfunction or disrepair (i.e. excessive sediment or debris, overgrown vegetation, restricted water flow).

2) Maintain/repair any damage to the BMP(s). Necessary maintenance may include removing accumulated sediment, trash or other debris; stabilizing eroded areas; replanting dead vegetation; trimming / mowing overgrown vegetation; or cleaning out closed or blocked inlets and outlets, etc.

4) Take current photos of all BMPs on the property.

5) Complete the Operation and Maintenance Self-Verification Form and submit the form to the City's Clean Water Program (submittal instructions are provided on the back-side of this letter and on the enclosed Self-Verification Form).

If you do not complete your self-verification obligations by the above listed date, City staff will pursue formal inspection actions to assess BMPs on your property. Stormwater treatment control BMP inspections will consist of a site visit by City staff and documentation of site features consistent with the original grading permit or other approved property specific permits or plans. Formal inspection actions will take place between November 9, 2009 and December 31, 2009.

Annual inspection (self-inspection or City staff inspection), maintenance, and operation of permanent treatment control BMPs are required per City of Encinitas Municipal Code (EMC) Section 20.08, the San Diego Municipal Stormwater Permit, as well as property related legal agreements and/or covenants. *Be advised that failure to complete annual inspection and maintenance activities and provide adequate verification information constitutes a violation of City ordinance (EMC Section 20.08) or breach of property related agreements or covenants for which the City may opt to pursue further enforcement action.*

It is the goal of the City to minimize the burden on property owners to fulfill these requirements. If you have any questions regarding the Treatment Control BMP Operation and Maintenance Program, please call the Clean Water Hotline at 760/633-2787. Your cooperation in this effort is greatly appreciated.

Sincerely,

Erik Steenblock
Clean Water Program Manager

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

Operation and Maintenance Self-Verification Form Submittal Options

OPTION 1: Complete the online version* of the form and submit your photos electronically. The online form can be found at the following website: **http://cleanwaterBMP.cityofencinitas.org**
***This is the preferred option.**

OPTION 2: E-mail electronic copies of completed form, maintenance records, and photos to: **npdesmail@cityofencinitas.org** *Note: Maximum file size for email attachments is **5MB***

OPTION 3: Mail completed form, copies of maintenance records, and photos to:

City of Encinitas
Clean Water Program
505 S Vulcan Ave
Encinitas, CA 92024

OPTION 4: Any combination of online, mail, or email submission of the necessary documents will also be accepted. For example, you may **mail** the form and maintenance records and **email** photos.

Frequently Asked Questions

1. Why does the City of Encinitas require that Treatment Control BMPs be maintained?

As stated in the Municipal Stormwater Permit (issued by the San Diego Regional Water Quality Control (RWQCB)), the City must verify that treatment control BMPs installed on private property are adequately maintained. Proper operation and regular maintenance of permanent treatment control BMPs ensures that the facility reduces the amount of pollutants which end up in our creeks, lagoons, and beaches. These BMPs help to improve water quality and minimize human and environmental health risks.

2. What should I do if I am unsure how to complete my self-inspection form or cannot locate the treatment control BMPs on my property?

Contact Clean Water Program staff as soon as possible. We can provide assistance in understanding the self-verification form, identifying the location of BMP(s) on your property, and determining operation and maintenance needs of your BMP(s). Staff can be reached via phone: 760-633-2787, or email: npdesmail@cityofencinitas.org

3. What happens during the City's inspection of Treatment Control BMPs on my property?

If requested or as required due to repudiation, a City inspector will visit the property to validate the existence, proper maintenance, and function of treatment control BMPs. Inspection actions will be documented with an inspection report form and photos of specific BMPs. If access is limited or located on private property, the City inspector will call the responsible party to schedule an inspection.

FAQs continued…

4. What happens if I don't certify that my Treatment Control BMP(s) have been maintained?

The Treatment Control BMP Self Verification process has been developed to provide property owners with a simple mechanism to validate the proper maintenance and function of these facilities, and to help the City meet State mandated requirements. The San Diego Regional Water Quality Control Board requires the City to verify the proper function of treatment control BMPs through a Municipal Stormwater Permit. It is the goal of the City to minimize the burden on property owners to fulfill these requirements. The City does maintain the authority to ensure the existence and proper maintenance and function of treatment facilities, and failure to provide adequate information may constitute a violation of the City ordinance as well as property related agreements or covenants.

City of Encinitas
Clean Water Program
505 S. Vulcan Avenue
Encinitas, CA 92024

For questions relating to
Treatment Control BMPs,
please call: 760-633-2787
or e-mail: npdesmail@cityofencinitas.org

Printed on recycled paper

City of Encinitas
Clean Water Program

Operation and Maintenance Guide

for your

Treatment Control Best Management Practices (BMPs)



Thanks for helping us keep our creeks, lagoons, and ocean clean!

What is a Treatment Control BMP?

Treatment Control BMPs are drainage devices, structures, or areas designed to remove pollutants from storm water runoff, or minimize the quantity of runoff ultimately discharged from a development site. These facilities are required to be incorporated into permitted development or redevelopment projects and serve a functional purpose to improve the quality of water that flows to our local creeks, lagoons, and beaches. They are also frequently referred to as Stormwater Best Management Practices or BMPs.

The following BMPs are commonly incorporated into development projects throughout the City of Encinitas:

Vegetated Swales / Grassy Swales are open, shallow channels or depressions with vegetation or grass covering the side slopes and bottom that collect, infiltrate, and slowly convey runoff water. Rock lined swales are also commonly used.



Bioretention Areas consist of a planted or vegetated depression area designed to pond during a rain event. It is common to find multiple bioretention areas located throughout a development area.



Infiltration Trenches or **Basins** temporarily store runoff in shallow basins or linear depressions lined with sandy soil or gravel to enhance infiltration of water into the ground.



Storm Drain Filter Inserts are manufactured filters or fabric placed in a storm drain inlet to remove sediment, debris, oil, or other pollutants.



Other BMPs include Rock-Lined Swales, Terraced Swales, Detention Basins, Subsurface Infiltration Systems, Constructed Wetlands, Media Filters, Storm Water Storage Systems, and Vortex Separators.

Please note that each of the BMPs may vary in design size, shape, or materials from the descriptions above. City staff is available to help you determine the location of BMPs located on your property.

For more information on Treatment Control BMPs, refer to the City's Storm Water Best Management Practices Manual, Part II which can be accessed via the Clean Water Program webpage:

http://cwp.ci.encinitas.ca.us

How to locate Treatment Control BMPs on your property:

1. Refer to your approved grading or improvement plans. The plans will show the location of Treatment Control BMPs.
2. Walk your property to look for defined drainage areas such as channels, depressions, or basins.
3. Typical treatment control BMPs may look similar to traditional landscaped areas. Look for areas that have been graded in a concave, swale, or linear shape to capture and infiltrate storm water.
4. Structural treatment control devices such as an inlet filter may be located within a curb inlet or underground. *Please contact the City of Encinitas if you have a structural control located on your property with limited access.

Minimum Operation and Maintenance Requirements:

As stated on approved grading or improvement plans and in the City's Stormwater Management and Discharge Control Ordinance (Municipal Code Chapter 20.08), stormwater treatment control BMPs are required to be maintained in perpetuity by a designated responsible party. The responsible party is most commonly the property owner or a Home Owners' Association (HOA).

Minimum Operation and Maintenance tasks:

- ☑ On an annual basis, or as needed, visually inspect all Treatment Controls for signs of malfunction or disrepair.
- ☑ Maintain/repair any damage to the BMP. Necessary maintenance may include removing accumulated sediment, stabilizing eroded areas, replanting dead vegetation, trimming / mowing overgrown vegetation, cleaning out closed or blocked inlets and outlets, etc.
- ☑ Remove any accumulated trash and debris.
- ☑ Take photos of all BMPs on the property.
- ☑ Complete Operation and Maintenance Self-Verification Form and submit the form to the City's Clean Water Program.

*Return completed form no later than **September 30, 2009***

CITY OF ENCINITAS

STORM WATER TREATMENT CONTROL BEST MANAGEMENT PRACTICES (BMPS)

OPERATION AND MAINTENANCE SELF-VERIFICATION FORM

Step 1 RECORDS VERIFICATION

Property Address: **Permit No.:**

Responsible Party and/or Property Owner: _____
Responsible Party

_____
Company or HOA (if applicable) Address, City, State, ZIP Phone Number

Treatment Control BMPs on your property:
(Please Indicate the Quantity of Each BMP in the Applicable Box Below)

Quantity	BMP Type
	Grassy / Vegetated Swale
	Rock Lined Swale
	Infiltration Trench / Basin
	Proprietary Treatment Device

Quantity	BMP Type
	Bioretention Area
	Storm Drain Filter Insert(s)
	Detention Basin
	Other (*Describe Below*)

_____

*If you require assistance with BMP identification, please contact City Staff at (760) 633-2787

Step 2 SELF-VERIFICATION OF BMPS

Date(s) that the BMP(s) were self-evaluated: _____

Self Evaluation Results (check the box that applies):

☐ A. All BMPs are maintained and in good working order

☐ B. All or some BMP(s) needed maintenance and/or cleaning

☐ C. Other results (explain):_____

If you checked B or C, please describe maintenance that was performed in order to maintain proper function of BMP(s):

_____

_____

Maintenance Date: _____ *(As applicable, include any maintenance records with your submittal)*

Number of photos taken: _____ **Date the photo(s) were taken:** _____
(Include all photos with your submittal)

Step 3 CERTIFICATION

I, _____, hereby certify that the above information is correct to the best of my knowledge.

Signature _____

Date_____

See reverse for Submittal options.

*Return completed form no later than **September 30, 2009***

OPERATION AND MAINTENANCE SELF-VERIFICATION FORM

Step 4 SUBMITTAL OPTIONS

1. **Complete the online version** of the form and submit your photos electronically. The online form can be found at the following website: **http://cleanwaterBMP.cityofencinitas.org**

2. **Email** electronic copies of completed form, maintenance records, and photos to: **npdesmail@cityofencinitas.org** *Note: Maximum file size for email attachments is **5MB***

3. **Mail** completed form, copies of maintenance records, and photos to:

   City of Encinitas
   Clean Water Program
   505 S Vulcan Ave
   Encinitas, CA 92024

4. Any combination of online, mail, and email submission of the necessary documents will also be accepted. For example, you may **mail** the form and maintenance records and **email** photos.

Appendix A-8: FY 2009-10 Treatment Control BMP Self Verification Results and Findings

Permit		Location	Notices Sent	Verification Date	Summary of Results and Findings	City Action
60	G	3275 Poppy Hills Ln	2	10/27/2009	Verification Received	Information Validated
87	G	354 Santa Fe Dr	2	1/20/2010*	Unresponsive Owner	City Inspection Conducted
183	G	3234 Olivenhain Farms Rd	2	10/14/2009	Verification Received	Information Validated
437	G	204-252 N El Camino Real	2	11/2/2009	Verification Received	Incompleted Submittal (Invoice Missing)
562	G	1302 Encinitas Blvd	1	9/30/2009	Verification Received	Information Validated
1365	G	310 Hana Ct	2	11/10/2009*	Opted for City Inspection	City Inspected
1365	G	311 Hana Ct	2	11/10/2009*	Unresponsive Owner	City Inspected
1365	G	314 Hana Ct	2	11/10/2009*	Unresponsive Owner	City Inspected
1365	G	315 Hana Ct	2	11/10/2009*	Unresponsive Owner	City Inspected
1365	G	318 Hana Ct	1	9/3/2009	Verification Received	Information Validated
1365	G	319 Hana Ct	1	9/16/2009	Verification Received	Incomplete Submittal (Photos Missing)
1365	G	323 Hana Ct	1	9/6/2009	Verification Received	Information Validated
1365	G	327 Hana Ct	1	9/10/2009	Verification Received	Incomplete Submittal (Photos Missing)
5814	G	2108 Oxford Ave	2	9/30/2009	Verification Received	Information Validated
5814	G	2112 Oxford Ave	1	9/23/2009	Verification Received	Information Validated
6402	G	311 Princehouse Ln	2	10/1/2008	Verification Received	Incomplete Submittal (Photos Missing)
7005	G	503 Ocean Bluff Way	1	9/30/2009	Verification Received	Incomplete Submittal (Incorrect BMPs Noted)
7005	G	507 Ocean Bluff Way	2		Unresponsive Owner	Validate Contact Info
7005	G	509 Ocean Bluff Way	2	10/20/2009	Verification Received	Information Validated
7005	G	510 Camino De Orchidia	1	9/17/2009	Verification Received	Incomplete Submittal (Incorrect BMPs Noted)
7005	G	513 Ocean Bluff Way	2		Unresponsive Owner	Validate Contact Info
7005	G	517 Ocean Bluff Way	2	10/29/2009	Verification Received	Incomplete Submittal (Incorrect BMPs Noted)
7005	G	518 Camino De Orchidia	1	9/17/2009	Verification Received	Incomplete Submittal (Incorrect BMPs Noted)
7005	G	521 Ocean Bluff Way	2		Unresponsive Owner	Validate Contact Info
7005	G	525 Ocean Bluff Way	2	10/30/2009	Verification Received	Information Validated
7005	G	526 Camino De Orchidia	2	10/26/2009	Verification Received	Information Validated
7005	G	532 Camino De Orchidia	2		Unresponsive Owner	Validate Contact Info
7005	G	558 Camino De Orchidia	1	9/29/2009	Verification Received	Information Validated
7305	G	131 Princehouse Ln	1	9/28/2009	Verification Received	Information Validated
7780	G	121-153 Rosebay Dr	1	9/8/2009	Verification Received	Information Validated
7852	G	3411 Via Monte Verde	1	9/14/2009	Verification Received	Incomplete Submittal (Photos Missing)
7852	G	3430 Via Monte Verde	2		Unresponsive Owner	Suspected Foreclosure
7852	G	3445 Via Monte Verde	2	10/26/2009	Verification Received	Incomplete Submittal (Incorrect BMPs Noted)
9023	G	427 Bristol Ave	2		Unresponsive Owner	Validate Contact Info. FY 10-11 Inspection
9034	G	1462 Summit Ave	2	6/1/2009	Verification Received	Information Validated
9034	G	1464 Summit Ave	1	9/30/2009	Verification Received	Information Validated

Appendix A-8: FY 2009-10 Treatment Control BMP Self Verification Results and Findings

Permit		Location	Notices Sent	Verification Date	Summary of Results and Findings	City Action
9034	G	1470 Summit Ave	2	4/1/2010*	Opted for City Inspection	City Inspected
9134	G	2153 Whisper Wind Ln	1	9/30/2009	Verification Received	Information Validated
9150	G	3113 Camino Del Rancho	1	9/23/2009	Verification Received	Information Validated
9253	G	701 S Vulcan Ave	2	1/26/2010*	Unresponsive Owner	City Inspection Conducted
9253	G	703 S Vulcan Ave	2	1/26/2010*	Unresponsive Owner	City Inspection Conducted
9253	G	715 S Vulcan Ave	2	1/26/2010*	Unresponsive Owner	City Inspection Conducted
9253	G	717 S Vulcan Ave	2	1/26/2010*	Unresponsive Owner	City Inspection Conducted
9253	G	719 S Vulcan Ave	2	1/26/2010*	Unresponsive Owner	City Inspection Conducted
9253	G	721 S Vulcan Ave	2	1/10/2010	Verification Received	Information Validated
9283	G	1440 Hygeia Ave	2	12/10/2009	Verification Received	Information Validated
9283	G	265 Sanford St	2	11/16/2009*	Opted for City Inspection	City Inspected
9283	G	267 Sanford St	2	10/20/2009	Verification Received	Information Validated
9419	G	871 Neptune Ave	1	9/8/2009	Verification Received	Incomplete Submittal (Photos Missing)

* City Inspection Date

CITY OF ENCINITAS

INSPECTION REPORT

Storm Water Quality Inspection for Treatment Control BMPs

505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2787 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

GENERAL INFORMATION

Permit No/Type _____ Property Address _____ Gate Code _____

Inspection Type: ☐ Annual ☐ Complaint Ownership: ☐ HOA ☐ Homeowner ☐ Commercial

Project Type: ☐ Private ☐ City of Encinitas SUSMP Status: ☐ Priority ☐ Standard

Inspection Priority: ☐ High ☐ Medium ☐ Low ☐ Unk Property Access: ☐ Open ☐ Limited ☐ None

TREATMENT CONTROL BMP EVALUATION

BMP Type	Location	Observations	Comments / Corrective Actions
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	

Photo(s) Taken: ☐ Yes ☐ No

Additional Comments:

CORRECTIVE ACTIONS ☐ None ☐ Maintenance/Repair ☐ Other _____

_____

_____

_____ Completion Due Date _____

The corrective actions listed above are required pursuant to Encinitas Municipal Code Section 20.08.140. Failure to comply with minimum Best Management Practices (BMP) Standards may result in further enforcement action by the City of Encinitas.

_____

Inspector (Print) **Signature** **Date**

_____

Responsible Party (Print) **Signature** **Date** **Contact Number**

☐ Responsible Party not present. Copy of inspection report provided to Responsible Party on _____

FOLLOW UP INSPECTION

☐ All Corrective Actions completed ☐ Corrective Actions not complete—Enforcement Action required

_____

Inspector Sign-Off **Date**

COPY DISTRIBUTION White – Responsible Party Yellow – City Inspector Pink – File REVISED 9/1/09

CITY OF ENCINITAS
CLEAN WATER PROGRAM
505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2787 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

STORMWATER TREATMENT CONTROL BMP MAINTENANCE AND INSPECTION PROGRAM

Stormwater Treatment Control BMPs are required to be incorporated into permitted development or redevelopment projects and serve a functional purpose to improve the quality of water that flows to our local creeks, lagoons, and beaches. Common Treatment Control BMPs include Vegetated Swales, Bioinfiltration Areas, Infiltration Basins or Trenches, and Storm Drain Filter Inserts.

As stated on approved grading or improvement plans and in the City's Stormwater Management and Discharge Control Ordinance (Municipal Code Chapter 20.08), stormwater treatment control BMPs are required to be maintained in perpetuity by a designated responsible party. The responsible party is most commonly the property owner, business owner or a Home Owners' Association (HOA).

Minimum Operation and Maintenance tasks:

☑ **On an annual basis prior to the wet season, or more frequently as needed, visually inspect all Treatment Controls for signs of malfunction or disrepair (i.e. overgrown vegetation, restricted water flow, excessive sediment and debris).**

☑ **Maintain/repair any damage to the BMP. Necessary maintenance may include removing accumulated sediment, stabilizing eroded areas, replanting dead vegetation, trimming / mowing overgrown vegetation, cleaning out closed or blocked inlets and outlets, removing trash or other debris, etc.**

DEFINITIONS

Treatment Control Best Management Practice (BMP) means any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media absorption or any other physical, biological, or chemical process. Also frequently referred to as Stormwater Best Management Practices or BMPs.

Storm Water Conveyance System means private and public drainage facilities within the City of Encinitas by which Storm Water may be conveyed to waters of the United States, including but not limited to, streets, roads, catch basins, natural and artificial channels, natural and artificial drainage features, aqueducts, canyons, stream beds, gullies, curbs, gutters, ditches, and storm drains.

Wet Season means October 1 thru April 30 of each year.

EMC 20.08.140.F. • INSPECTION, MAINTENANCE, REPAIR AND UPGRADING OF BMPS

Treatment Control BMPs must be inspected by the Discharger or responsible party before the start of the wet season and following actual rain events. These BMPs must be maintained so that they continue to function as designed. Treatment BMPs which fail must be repaired as soon as it is safe to do so. If the failure of a structural or nonstructural BMP indicates that the BMPs in use are inappropriate or inadequate to the circumstances, the BMPs must be modified or upgraded to prevent any further failure in the same or similar circumstances. All sediment and debris in catch basins must be removed prior to the wet season and disposed of in a manner which prevents it from entering the Storm Water Conveyance System or the Receiving Waters.

EMC 20.08.080 • COMPLIANCE WITH BEST MANAGEMENT PRACTICES

No Discharger shall fail to implement, install, use, or maintain Best Management Practices established by the City Engineer pursuant to this Chapter.

EMC 20.08.160.A. • REGULATORY INSPECTIONS

The City Engineer or his designee may inspect the premises of any Discharger at reasonable times and in a reasonable manner to carry out the purposes of this Chapter. If a Discharger refuses to allow entry for an inspection, an inspection warrant shall be obtained prior to inspection.

EMC 20.08.040 • ILLEGAL DISCHARGES

A. Discharge of Storm Water. No person shall discharge Storm Water directly or indirectly into the Storm Water Conveyance System or Receiving Waters, unless discharged in compliance with this Chapter.

B. Discharge of Non-storm water Prohibited. No person shall discharge non-storm water directly or indirectly into the Storm Water Conveyance System or Receiving Waters.

Permit		Location	Inspection Date	Inspection Results/Findings	City Action
55	G	540 Cornish Dr	1/20/2009	All BMPs in good condition, no maintenance necessary	None necessary
87	G	354 Santa Fe Dr	1/20/2010	Maintenance required	Corrective Actions required. Completed 2/24/10
106	G	3358 Wildflower Valley Dr	11/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
153	I	111 Chesterfield	9/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
169	G	510 S. El Camino Real	9/4/2009	All BMPs in good condition, no maintenance necessary	None necessary
181	G	3342 Wildflower Valley Dr		No response from owner, inspection deemed low priority, pursuit of inspection halted for FY 09-10	Consider increased enforcement in FY 10-11
276	G	1218-1228 N Coast Hwy 101	9/23/2009	All BMPs in good condition, no maintenance necessary	None necessary
385	G	1555 Crest Dr	9/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
386	G	3535 Manchester Ave	9/23/2009	All BMPs in good condition, no maintenance necessary	None necessary
414	G	4455 Manchester Ave	9/23/2009	All BMPs in good condition, no maintenance necessary	None necessary
462	G	Moonlight Beach Lofts	10/1/2010	All BMPs in good condition, no maintenance necessary	None necessary
789	G	2011-2089 San Elijo Ave	9/23/2009	All BMPs in good condition, no maintenance necessary	None necessary
1092	EBP	820 Birmingham Dr	2/1/2010	All BMPs in good condition, no maintenance necessary	None necessary
1365	G	310 Hana Ct	11/10/2009	All BMPs in good condition, no maintenance necessary	None necessary
1365	G	311 Hana Ct	11/10/2009	All BMPs in good condition, no maintenance necessary	None necessary
1365	G	314 Hana Ct	11/10/2009	All BMPs in good condition, no maintenance necessary	None necessary
1365	G	315 Hana Ct	11/10/2009	All BMPs in good condition, no maintenance necessary	None necessary
1389	G	Beach St and Requeza St	9/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
1457	G	200 Saxony Rd	8/31/2009	All BMPs in good condition, no maintenance necessary	None necessary
1519	G	200 Saxony Rd	8/31/2009	Maintenance required	Corrective Actions required. Completed 9/16/09
1563	G	3701 Fortuna Ranch Rd		Non-responsive owner, unable to conduct inspection.	Consider increased enforcement in FY 10-11
6442	G	3616 Manchester Ave	9/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
6813	G	155 Saxony Rd	9/17/2009	Maintenance required	Corrective Actions required. Comepleted 9/17/09
7054	G	645 Via Cantebria	8/27/2009	All BMPs in good condition, no maintenance necessary	None necessary
7300	G	740 & 760 Garden View Ct	9/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
7374	G	Cottonwood Creek Park	6/2/2010	All BMPs in good condition, no maintenance necessary	None necessary
7588	G	1200 Garden View Rd	9/23/2009	BMP maintenance verification recevied 4/22/10	
7628	G	199 La Costa Ave	11/25/2009	Maintenance required	Findings forwarded to Development Review Dept
7628	G	207 La Costa Ave	11/16/2009	All BMPs in good condition, no maintenance necessary	None necessary

Permit		Location	Inspection Date	Inspection Results/Findings	City Action
7628	G	215 La Costa Ave	11/16/2009	All BMPs in good condition, no maintenance necessary	None necessary
7628	G	223 La Costa Ave	11/25/2009	All BMPs in good condition, no maintenance necessary	None necessary
7628	G	231 La Costa Ave	4/16/2009	All BMPs in good condition, no maintenance necessary	None necessary
7702	G	301 Chopin Way		Non-responsive owner, unable to conduct inspection.	Consider increased enforcement in FY 10-11
7702	G	315 Chopin Way		Non-responsive owner, unable to conduct inspection.	Consider increased enforcement in FY 10-11
7702	G	322 Chopin Way	11/25/2009	All BMPs in good condition, no maintenance necessary	None necessary
7702	G	329 Chopin Way	11/5/2009	All BMPs in good condition, no maintenance necessary	None necessary
7702	G	336 Chopin Way	11/5/2009	All BMPs in good condition, no maintenance necessary	None necessary
7702	G	Chopin Way		Shared BMPs	HOA representative to be contacted FY 10-11
7732	G	175 La Costa Ave	9/22/2009	House in forclosure	Place on inspection list for FY 2010-11
7732	G	183 La Costa Ave	9/22/2009	Needed re-inspection to assess detention basin	Corrective Actions required. Completed 9/22/09
7732	G	191 La Costa Ave	9/22/2009	All BMPs in good condition, no maintenance necessary	None necessary
7771	G	1550 S El Camino Real	9/22/2009	All BMPs in good condition, no maintenance necessary	None necessary
7791	G	1766 N Coast Hwy 101	9/29/2009	Maintenance required	Corrective Actions required. Completed 10/2/09
7828	G	1200 Crestview Dr		Non-responsive owner, unable to conduct inspection	Consider increased enforcement in FY 10-11
7828	G	1207 Crestview Dr	11/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
7828	G	1208 Crestview Dr	11/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
7828	G	1216 Crestview Dr	8/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
7828	G	1219 Crestview Dr	10/27/2009	All BMPs in good condition, no maintenance necessary	None necessary
7828	G	1223 Crestview Dr	8/31/2009	All BMPs in good condition, no maintenance necessary	None necessary
7828	G	1945 Lake Dr	8/17/2009	All BMPs in good condition, no maintenance necessary	None necessary
7828	G	Crestview Dr	8/17/2009	Shared BMPs	Ask PW to assume maintenance responsibility
7847	G	2300 8th St	9/29/2009	All BMPs in good condition, no maintenance necessary	None necessary
9034	G	1470 Summit Ave	4/1/2010	All BMPs in good condition, no maintenance necessary	None necessary
9034	G	1470 Summit Ave	4/1/2010	All BMPs in good condition, no maintenance necessary	None necessary
9057	G	192 Pacific View Ln	8/27/2009	All BMPs in good condition, no maintenance necessary	None necessary
9071	G	3317 Poppy Hills Ln	11/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
9180	G	1610 Neptune Ave	9/29/2009	All BMPs in good condition, no maintenance necessary	None necessary
9253	G	701 S. Vulcan Ave	1/26/2010	All BMPs in good condition, no maintenance necessary	None necessary
9253	G	703 S. Vulcan Ave	1/26/2010	All BMPs in good condition, no maintenance necessary	None necessary

Permit		Location	Inspection Date	Inspection Results/Findings	City Action
9253	G	715 S. Vulcan Ave	1/26/2010	All BMPs in good condition, no maintenance necessary	None necessary
9253	G	717 S. Vulcan Ave	1/26/2010	All BMPs in good condition, no maintenance necessary	None necessary
9253	G	719 S. Vulcan Ave	1/26/2010	All BMPs in good condition, no maintenance necessary	None necessary
9253	G	721 S. Vulcan Ave	1/26/2010	All BMPs in good condition, no maintenance necessary	None necessary
9283	G	265 Sandford St	11/16/2009	All BMPs in good condition, no maintenance necessary	None necessary
9289	G	2914 Lone Jack Rd	9/1/2009	All BMPs in good condition, no maintenance necessary	None necessary
9289	G	2932 Lone Jack Rd	8/25/2009	All BMPs in good condition, no maintenance necessary	None necessary
9289	G	2934 Lone Jack Rd	9/29/2009	1 BMP missing, pool permit pulled, OK. No maintenance necessary	None necessary
9289	G	2944 Lone Jack Rd	8/25/2009	1 BMP missing, pool permit pulled, OK. No maintenance necessary	None necessary
9294	G	477 N El Camino Real	9/30/2009	Maintenance required	Corrective action required. Completed 4/22/10
9301	G	187 Halcyon Rd		Non-responsive owner, unable to conduct inspection	Consider increased enforcement in FY 10-11
9301	G	189 Halcyon Rd		Non-responsive owner, unable to conduct inspection	Consider increased enforcement in FY 10-11
9318	G	1154 Evergreen Dr	9/17/2009	All BMPs in good condition, no maintenance necessary	None necessary
9318	G	1156 Kava Ct	9/17/2009	No BMPs on property	Remove from inventory
9318	G	1158 Evergreen Dr	2/17/2010	Refused inspection	Self-Verification requested, no response. Consider increased enforcement in FY 10-11
9318	G	1160 Kava Ct	9/17/2009	All BMPs in good condition, no maintenance necessary	None necessary
9318	G	1164 Kava Ct	9/17/2009	All BMPs in good condition, no maintenance necessary	None necessary
9318	G	1165 Kava Ct	9/17/2009	All BMPs in good condition, no maintenance necessary	None necessary
9318	G	1168 Kava Ct	9/17/2009	All BMPs in good condition, no maintenance necessary	None necessary
9318	G	1169 Kava Ct	9/17/2009	All BMPs in good condition, no maintenance necessary	None necessary
9318	G	1172 Kava Ct	9/17/2009	All BMPs in good condition, no maintenance necessary	None necessary
9318	G	1173 Kava Ct	8/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
9318	G	1176 Kava Ct	9/17/2009	All BMPs in good condition, no maintenance necessary	None necessary
9367	G	781 Garden View Ct	9/24/2009	All BMPs in good condition, no maintenance necessary	None necessary
9370	G	406 La Costa Ave	9/22/2009	All BMPs in good condition, no maintenance necessary	None necessary

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CITY OF ENCINITAS
STORMWATER QUALITY CHECKLIST AND CERTIFICATION

SW

All development projects proposed within the City of Encinitas are required to implement stormwater quality measures in accordance with the *Encinitas Stormwater Manual*. The intent of these requirements is to promote practices and project designs that improve the quality of runoff and protect our local oceans, creeks, and lagoons from the harmful effects of polluted runoff. The *Encinitas Stormwater Manual* meets State-mandated requirements established by Regional Water Quality Control Board Order No. R9-2007-0001 (San Diego Region Municipal Stormwater Permit). For a more detailed description of the City's stormwater requirements, refer to the *Encinitas Stormwater Manual* on the City website (www.CityofEncinitas.org). The manual provides detailed, step-by-step guidelines on how to plan for, design, construct, and maintain stormwater treatment features. Other City stormwater-related resources available on the City's website include:

1. Municipal Code Chapter 20.08: Stormwater Management
2. Municipal Code Chapter 23.24: Grading, Erosion, and Sediment Control

This checklist is designed to guide applicants in the determination of the stormwater quality designation of the project and the design of appropriate stormwater quality features. Projects may be designated as 1) **Priority**, 2) **Standard**, or 3) **Exempt** projects. At a minimum, all projects are required to provide designs and employ practices that minimize the potential for discharge of pollutants into the City's storm drainage system or local receiving waters, as outlined in the *Requirements for All Development Projects* below.

Requirements for ALL Development Projects

All development projects (including Exempt Projects) must include a minimum set of control measures to reduce the discharge of stormwater pollutants to the maximum extent practicable. All projects must include:

- ☑ Implementation of Best Management Practices (BMPs) to control potential pollutant sources.
- ☑ Inclusion of Low Impact Development (LID) features that minimize the water quality impacts of the project.
- ☑ Compliance with requirements for construction-phase controls on sediment and other pollutants.

In addition, all projects must design and install drainage features so that runoff from impervious areas (such as rooftops, parking lots, and driveways) drains through pervious or vegetated areas for treatment before draining to public or private streets or storm drainage systems. No Directly Connected Impervious Area (DCIA) will be allowed on any development project (Encinitas Municipal Code Section 23.24.120). For more information about prohibited DCIA practices and the stormwater runoff requirements for all projects, refer to the Encinitas Stormwater Manual.

Beyond the minimum *Requirements for All Development Projects* listed above, the stormwater quality measures required for a particular project differ based upon the nature of the proposed development. Step 1 (Tables I and II below) is designed to assist you in determining the appropriate stormwater quality designation for your project. An overview of the method for determining the designation is included in the flowchart on the next page.

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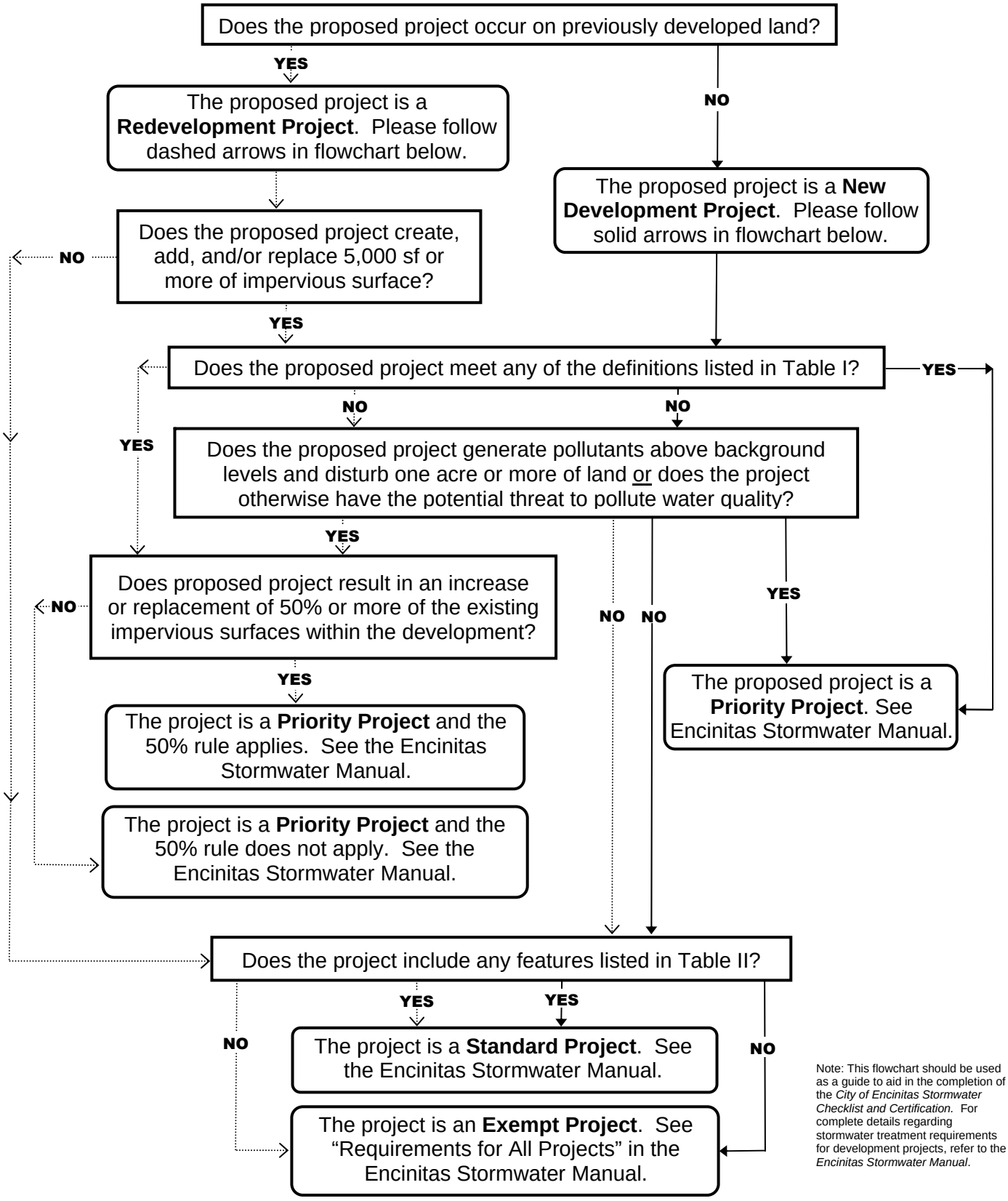
FLOWCHART: DETERMINATION OF THE APPROPRIATE STORMWATER QUALITY DESIGNATION FOR DEVELOPMENT PROJECTS



Note: This flowchart should be used as a guide to aid in the completion of the *City of Encinitas Stormwater Checklist and Certification.* For complete details regarding stormwater treatment requirements for development projects, refer to the *Encinitas Stormwater Manual*.

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STEP 1: DETERMINE STORMWATER QUALITY DESIGNATION

Step1 is designed to assist you in determining the appropriate stormwater quality designation for your project.

Step 1A: Determine Development Type and Priority Project Category Applicability

The first step in assessing the appropriate stormwater designation for your project is to determine whether it is a New Development Project or a Significant Redevelopment Project according to the definitions below.

New Development Projects are defined as projects proposing new impervious area on a previously undeveloped parcel.

Significant Redevelopment Projects are projects on previously developed land that create, add, and/or replace 5,000 square feet (s.f.) or more of impervious surface. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Redevelopment does not include interior remodels, roof or exterior surface replacement; trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bike lane on existing roads; and routine replacement of damaged pavement, such as pothole repair. However, other requirements, including incorporation of appropriate source controls, still apply. If your redevelopment project is exempt, the project is still obligated to meet the *Requirements for All Development Projects*, to the extent practicable. The City of Encinitas will make the final determination as to whether a proposed project is exempt from the requirements detailed in the Encinitas Stormwater Manual.

If your project meets one of the two definitions of development listed above, use Table I to determine if your project is a Priority Development Project.

Table I: Determine if Project is a Priority Development Project

Review each category A through J to determine whether the project meets the definition of one or more of the Priority Project categories. If any response in Table I is "Yes", the project is a **Priority Development Project**; *please continue to Step 3.* If all responses are "No", *please continue to Step 2B*.

Does the project meet the definition of one or more of the following categories?			
A	**Housing subdivisions of 10 or more dwelling units**. Examples: single-family homes, multi-family homes, condominiums, and apartments.	Yes ❑	No ❑
B	**Commercial—greater than one acre of development**. Any development other than heavy industry or residential. Examples: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; airfields; and other light industrial facilities.	Yes ❑	No ❑
C	**Heavy industry—greater than one acre of development**. Examples: manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, etc.).	Yes ❑	No ❑
D	**Restaurants**. Any facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirements and hydromodification requirements.	Yes ❑	No ❑

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Table I (cont.): Does the project meet the definition of one or more of the following categories?			
E	**Hillside development greater than 5,000 square feet.** Any development that creates 5,000 square feet of impervious surface and is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.	Yes ❑	No ❑
F	**Environmentally Sensitive Areas (ESAs).** All development located within or directly adjacent to or discharging directly to an ESA (where discharges from the development or redevelopment will enter receiving waters within the ESA), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition. "Directly adjacent" means situated within 200 feet of the ESA. "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.	Yes ❑	No ❑
G	**Parking lots** 5,000 square feet or more or with 15 or more parking spaces and potentially exposed to urban runoff.	Yes ❑	No ❑
H	**Streets, roads, driveways, highways, and freeways**. Any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles.	Yes ❑	No ❑
I	**Retail Gasoline Outlets (RGOs)** that are: (a) 5,000 square feet or more of development or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.	Yes ❑	No ❑
J	**Automotive repair shops**. A facility categorized in any one of Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532-7534, or 7536-7539.	Yes ❑	No ❑

If the answer to one or more of the categories in Table I is "Yes", the project is a considered **Priority Development Project** for stormwater quality. The project will be required to install Source Control measures, Low-Impact Design (LID) features, and Stormwater Treatment Facilities that meet specific criteria. Proceed to Step 2 and use the Encinitas Stormwater Manual for guidance on meeting these requirements. If all answers in Table I are "No", proceed to Step 1B.

Step 1B: Determine Project's Water Quality Sensitivity

Development projects have the potential to contribute pollutants that could threaten local and downstream water quality. Review the following project categories and determine whether your project meets either one of these definitions.

Pollutant Generating Project Which Disturbs One Acre or More of Land. Projects that generate pollutants at levels greater than background levels and disturb one acre or more of land are considered Priority Development Projects. In most cases linear pathway projects that are for infrequent vehicle use (such as emergency or maintenance access) or for pedestrian or bicycle use are not considered pollutant generating above background levels if they are built with pervious surfaces or if they allow runoff to sheet flow to surrounding pervious surfaces.

All Development Projects with Potential Threat to Pollute. Some projects not meeting the definitions listed in Table I may still be designated as Priority Projects if they are found to cause a threat to water quality through excess pollution potential. The City of Encinitas has the discretion to designate a project not listed within Table I as being a Priority Project based on the project's potential impacts to stormwater quality.

If your project meets either of the categories described above, the project is a **Priority Development Project** for stormwater quality and the project will be required to install Source Control measures, LID features, and Stormwater Treatment Facilities. The City Engineer will make the final determination as to whether your project meets one of the definitions. Proceed to Step 2 and use the Encinitas Stormwater Manual for guidance on meeting these requirements.

If your project does not meet one of the two categories listed above, proceed to Step 1C to determine whether your project includes any features that are consistent with the Standard Project

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classification.

Step 2C: Determine Standard Project Feature Applicability

Table II: Determine if Project is a Standard Project To use Table II, review A through J to determine whether the proposed project includes any feature that would qualify the project as a Standard Project. If the response to any feature in A through J below is "Yes", the project is designated as a **Standard Project**. If all responses are "No", the project is an **Exempt Project**. After completion of Table II, *please proceed to Step 2.*			
Does the project include any features qualifying it as a Standard Project?			
A	**New Impervious Surface Areas totaling 500 square feet or more** combined, and including any cumulative development over the five-year period preceding the time of application. Impervious areas include improvements such as rooftops, roads, parking lots, driveways, patios, pool decks, paths, etc.	Yes ❑	No ❑
B	**Reconstruction of any Existing Impervious Surface Areas** such as rooftops, roads, parking lots, driveways, paths, and sidewalks in excess of 500 square feet, including any cumulative development over the five-year period preceding the time of application.	Yes ❑	No ❑
C	**Permanent Structures** within 100 feet of any natural water body.	Yes ❑	No ❑
D	**Trash Storage Areas**.	Yes ❑	No ❑
E	**Loading and/ or Unloading Areas** for liquids and/or solid materials.	Yes ❑	No ❑
F	**Vehicle or Equipment Fueling, Washing, and/or Maintenance Areas**.	Yes ❑	No ❑
G	**General NPDES Permit Required** for storm water discharges associated with industrial activities (except for construction permits)	Yes ❑	No ❑
H	**Commercial and/ or Industrial Waste** handling or storage, excluding typical office or household waste.	Yes ❑	No ❑
I	**Grading** or ground disturbance proposed during construction.	Yes ❑	No ❑
J	**Storm Drains** including new storm drains as well as alteration to existing storm drains that reduce natural storm water treatment.	Yes ❑	No ❑

If the answer to one or more of the features in Table II is "Yes", the project is a **Standard Project** for stormwater quality. The project will be required to install Source Control measures, Low-Impact Design Features, and some Stormwater Treatment Facilities. Proceed to Step 2 and use Chapter 4 of the Encinitas Stormwater Manual as a general guide when designing stormwater treatment facilities that will meet Standard Development Project requirements.

The City of Encinitas will make the final determination as to whether a proposed project is exempt from the requirements detailed in the Encinitas Stormwater Manual. If the answers to all categories in Tables I and II are "No", and the project has been determined by the City of Encinitas not to be a pollutant generating project or have the potential to pollute, the project is an **Exempt Project** for stormwater quality but is still required to meet the *Requirements for All Development Projects*. Please proceed to Step 2.

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STEP 2: DETERMINE PROJECT SUBMITTAL REQUIREMENTS

Requirements for Exempt, Standard, and Priority Projects are discussed in turn below. Engineering Services Department staff are available to answer any specific questions regarding the stormwater quality requirements.

Please check the box adjacent to the project type determined in Step 1.

- ❑ **Exempt Project:** See Step 2A below.
- ❑ **Standard Project**: See Step 2B below.
- ❑ **Priority Project**: See Step 2C below.

Step 2A: Determining Stormwater Quality Measures for an Exempt Project.

Exempt projects are not required to install new Stormwater Treatment Facilities but shall utilize existing on-site landscape and pervious areas to avoid Directly Connected Impervious Areas (DCIA) as outlined in the *Requirements for All Development Projects* section above and in the *Encinitas Stormwater Manual.* In addition, Exempt Projects, like all other projects, are required to comply with requirements for construction-phase controls on sediment and other pollutants. *Please proceed to Step 3.*

Step 2B: Determining Stormwater Quality Measures for a Standard Project.

Standard Projects are obligated to conform to the *Requirements for All Development Projects* outlined in the previous section as well to as integrate some BMP or LID features into the project proposal. BMP and LID features should be designed using Chapter 4 of the *Encinitas Stormwater Manual* as a general guide and then depicted on the plans for the permit. In addition, based on the types of BMPs or LIDs proposed, the City may require that a maintenance agreement be developed. *Please proceed to Step 3.*

Step 2C: Determine Stormwater Quality Measures for a Priority Project.

Priority Projects will be required to install Source Control measures, Low-Impact Design (LID) features, and Stormwater Treatment Facilities that meet specific criteria. Please refer to the ***Encinitas Stormwater Manual*** which includes detailed guidance for the planning and design of acceptable storm water quality features and for developing your project submittal package.

The 50% Rule for Significant Redevelopment Projects Only: The requirements for Priority Redevelopment Projects differ depending upon the amount of redevelopment proposed. If the proposed project results in an increase and/or replacement of 50% or more of the previously existing impervious surfaces onsite, then the entire development must be included in the stormwater treatment design. If less than 50% of the previously existing impervious surfaces will be affected by the proposed project, then only the affected previously existing areas and the newly proposed project must be included in the stormwater treatment design.

After completing the steps outlined in the *Encinitas Stormwater Manual*, Priority Projects shall provide required documentation to the City detailing the project's compliance with Priority Project standards. All documentation shall be reviewed and approved by the City of Encinitas prior to issuance of a grading or improvement permit or prior to the issuance of any discretionary permit, at the direction of the City Engineer. At a minimum, the items below are required for stormwater facility documentation of Priority Projects. The City Engineer may pose additional requirements for certain projects. Upon review of the submittal requirements in Step 2C, *please proceed to Step 3.*

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PRIORITY PROJECT SUBMITTAL MINIMUM REQUIREMENTS

Priority Projects shall provide to the City all of the following documentation detailing the project's compliance.

I) STORMWATER QUALITY SECTION OF DRAINAGE STUDY: A Stormwater Quality discussion shall be included as a separate section within the project drainage study and shall include a **narrative** as well as an **exhibit**. Minimum requirements for the narrative and exhibit are discussed in items (a) and (b) below.

a) STORMWATER QUALITY NARRATIVE: The stormwater quality narrative in the drainage study shall discuss, at a minimum, the items listed below.

1) Tabulation of the square footage of proposed pervious areas, impervious areas, and areas draining to an IMP. Also, a tabulation of the square footage of self-treating areas, self retaining areas, and areas draining to self-retaining areas, as applicable. (Step 3)

2) Calculations of the required sizing for self-retaining and Integrated Management Practice (IMP) areas and calculations documenting the sufficiency of the facilities provided. (Step 3)

3) A table of pollutant sources identified, and the source control measure(s) used to reduce pollutants to the maximum extent practicable. See worksheet in Appendix A of the Encinitas Stormwater Manual. (Step 4)

b) STORMWATER QUALITY EXHIBIT: The Stormwater Quality Section of the drainage study shall contain one exhibit including all of the items listed below. The Stormwater Quality Exhibit must be in conformance with the Site Plan. The Stormwater Quality Exhibit shall include the Site Plan features screened into the background for ease of confirming agreement between the Exhibit and the Site Plan.

1) Division of entire site into distinct drainage management areas (DMAs), with each drainage management area assigned a unique identifier (e.g., 1, 2, 3 or A, B, C). (Step 1)

2) Square footage and types of surfacing (e.g., roof, landscape, pavement) included in each DMA and the total DMA square footage. (Step 1)

3) Hydrologic soil group and depth to groundwater (as applicable) for each DMA. (Step 1)

4) Each DMA labeled as self-treating, self-retaining, draining to a self-retaining area, or draining to an IMP. (Step 2)

5) Potential pollutant source areas, including refuse areas, outdoor work and storage areas, etc. listed in Appendix A and corresponding required source controls. (Step 4)

II) SITE PLAN: At a minimum, the Site Plan shall include the items listed below. A copy of the Site Plan shall be included in the Stormwater Quality Section of the drainage study.

1) Existing and proposed drainage network and connections to drainage off-site. (Step 3)

2) Depiction of site design characteristics that minimize disturbance as well as building features and pavement selections that minimize the proposed imperviousness of the site. (Step 3)

3) Proposed design of each IMP feature and any Permanent Source Control features. (Step 3)

4) Title sheet standard notes for each of pollutant sources identified specifying the source control measure(s) to be used to reduce pollutants to the maximum extent practicable. See worksheet in Appendix. (Step 4)

5) Existing natural hydrologic features such as depressions, watercourses, floodplains, relatively undisturbed areas as well as significant natural resources. (Step 1)

6) The City of Encinitas Standard Storm Water Quality Notes shall be added to the site plan.

7) Certification by a civil engineer, architect, or landscape architect on the title sheet. (Step 6)

III) MAINTENANCE AGREEMENT: In order to provide for the perpetual maintenance of the stormwater treatment facilities, the City will prepare for the property owner a Maintenance Agreement that shall record against the property. The items listed below shall be provided to the City for inclusion in the Maintenance Agreement.

1) Discussion of general maintenance needs for infiltration, treatment, and flow-control facilities. (Step 5)

2) The means by which facility maintenance will be financed and maintained into perpetuity. (Step 5)

3) Statement accepting responsibility for interim operation and maintenance of facilities. (Step 5)

4) Plat and legal description of the property.

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STEP 3: STORMWATER PROJECT CERTIFICATION

The property owner of any project (Priority, Standard, or Exempt) shall complete the following Owner's Certification. In addition, any agent completing this form on behalf of a client shall complete the Agent's Certification below.

Owner's Certification:

I hereby acknowledge that my project is subject to the stormwater quality regulations of the City of Encinitas and certify that my project will provide satisfactory stormwater quality measures both during the construction process and afterwards.

If my project is designated as a Priority or a Standard Project, I further acknowledge my understanding that the permanent stormwater treatment features must remain in place, be inspected at least once annually, and be maintained in good working order. Removal or modification of these features without prior City authorization is prohibited.

I certify that I have reviewed the information contained in this form and verified that it is both complete and correct.

_____ _____

Owner 1 Signature Date Owner 2 Signature Date

_____ _____

Printed Name of Owner 1 Printed Name of Owner 2

Agent's Certification:

I hereby certify that this project will be designed in conformance with the stormwater quality regulations of the City of Encinitas.

I certify that I have reviewed the information contained in this form and verified that it is both complete and correct.

_____

Agent Signature Date

_____

Printed Name of Agent

_____

Working Capacity of Agent (architect, engineer)

_____

Company Name Place Professional Seal Above

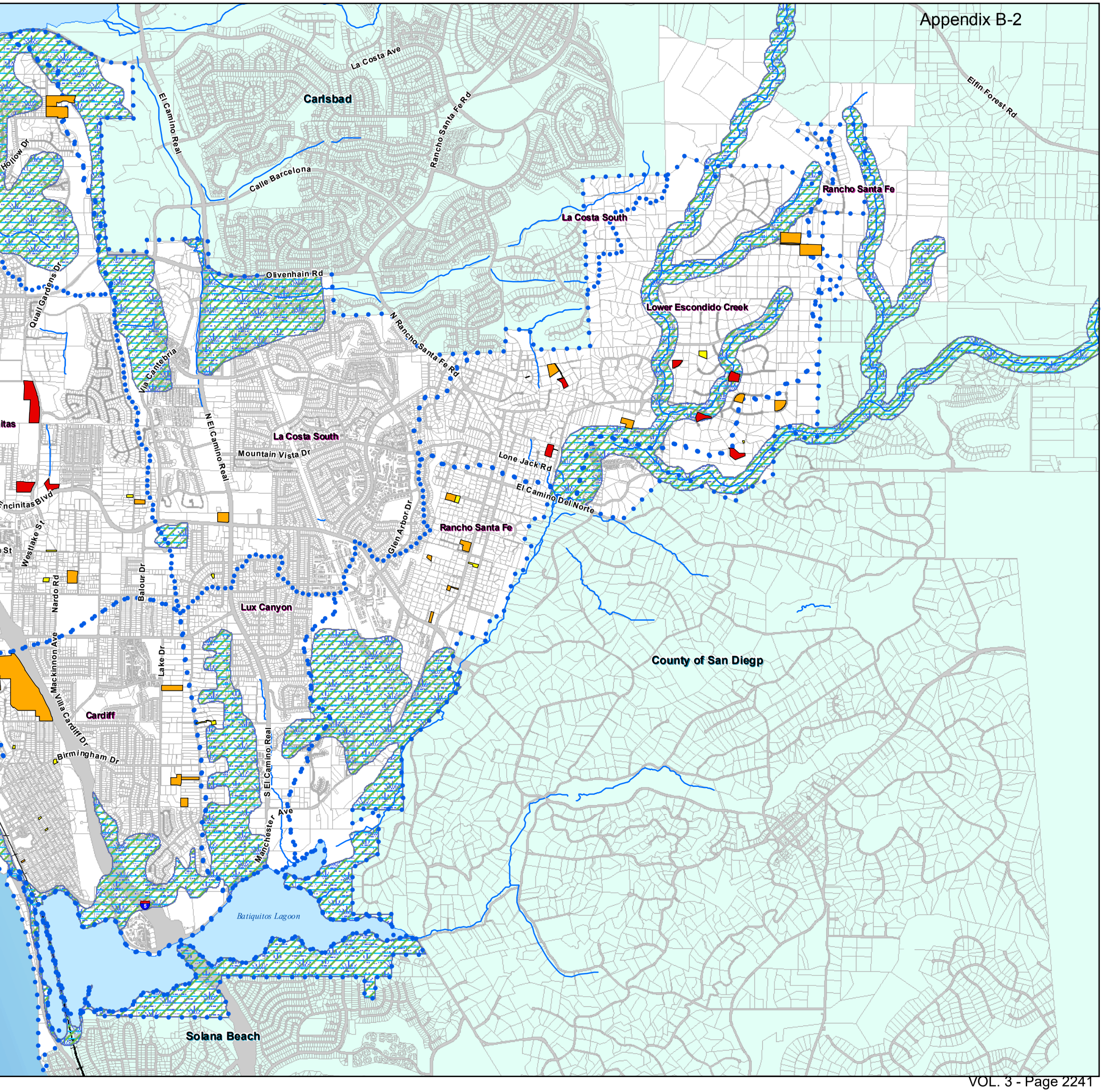
Appendix B

Construction

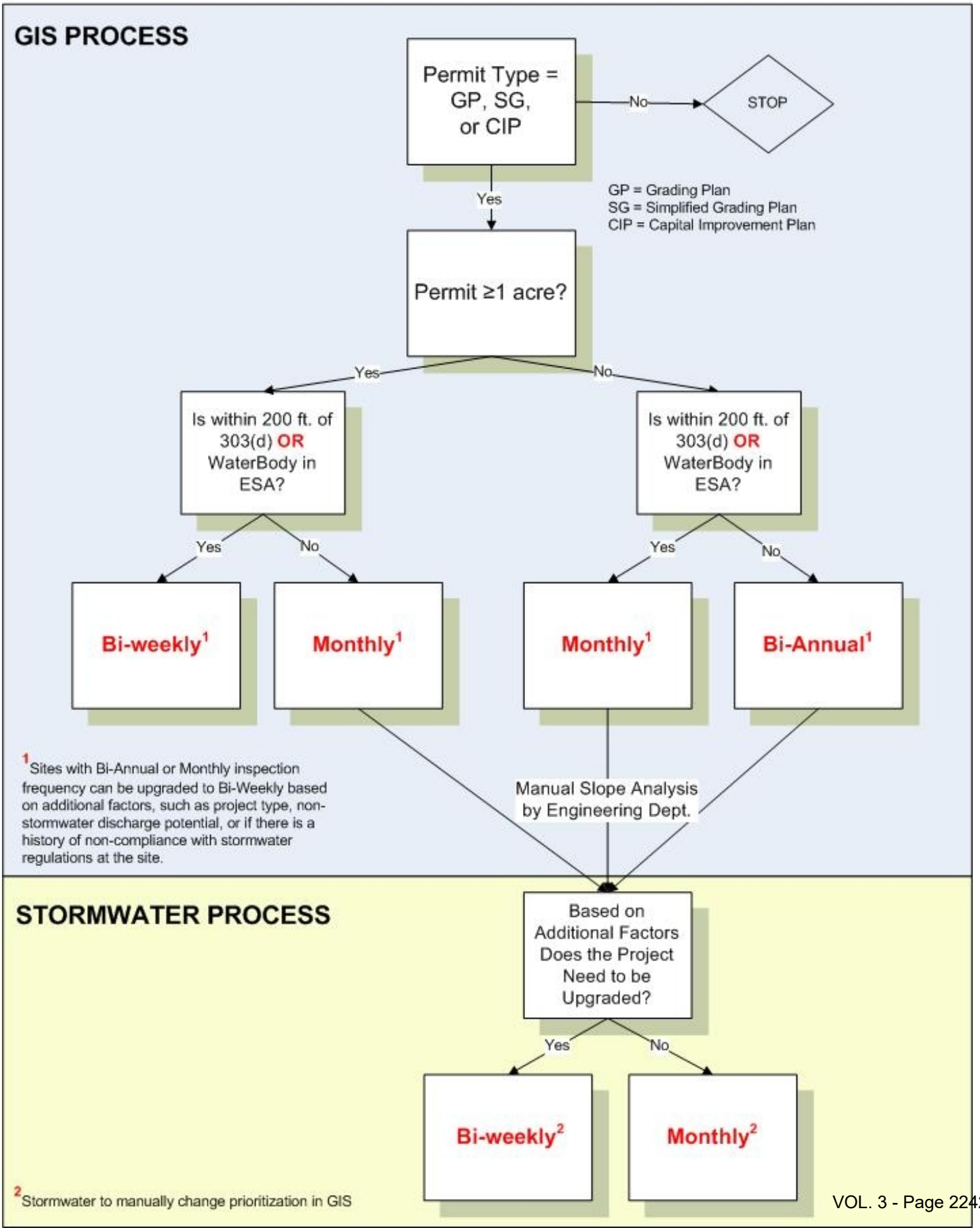
B-1	**Construction Inventory**
B-2	**Prioritized Construction Sites Map FY 2009-10**
B-3	**Flow Chart for Inspection Frequencies**
B-4	**Construction Inspection Form**
B-5	**Erosion Control Letter**
B-6	**Construction Enforcement Actions**

Permit #		Site Address	Site Street Name	Inspection priority	Total Number of Weeks Active During the Wet Season	Total Number of Inspections Conducted During the Wet Season	Total Number of Inspections Conducted During the Dry Season	Total Number of Inspections from July 1, 2009-June 30, 2010
54	GI		BIRMINGHAM & MACKINNON	Biannual	3	2	0	2
61	SI	801	ORPHEUS FIRE STA #3	Biweekly	0	1	0	1
103	SG	1079	VULCAN	Biannual	22	2	0	2
184	SG	2271	MONTGOMERY AVE	Biannual	14	1	0	1
185	SG	1423	RAINBOW RIDGE	Biannual	0	1	0	1
187	GI	1060	URANIA AVE	Monthly	6	3	0	3
215	GI	424	BRIGHTON AVE	Biannual	30	3	0	3
245	GI	3351	LILAC SUMMIT	Monthly	25	7	0	7
266	G	735	DEL RIO	Biannual	2	0	0	0
278	GI	3403	BUMANN RD.	Biweekly	2	1	0	1
306	GI	2351	SAN ELIJO	Monthly	15	4	0	4
325	GI		LONE JACK RD	Biweekly	2	1	0	1
366	GI	742-744	DEWITT	Biannual	2	2	0	2
369	GI	1415	RAINBOW RIDGE	Biweekly	0	1	0	1
372	GI	1657	N. VULCAN AVE.	Monthly	2	2	0	2
388	GI	1435	LAKE DR.	Monthly	2	2	0	2
419	SG	1972	CREST	Monthly	2	0	0	0
423	GI	399	HILLCREST DRIVE	Biannual	2	1	0	1
465	GI	1045	VIA DI FELICITA	Monthly	6	1	0	1
482	GI	1864	CREST DRIVE	Monthly	30	7	0	7
483	GI	540	LA COSTA	Biweekly	1	1	0	1
497	GI	681	SECOND STREET	Biannual	12	0	0	0
570	GI	489	LATIGO ROW	Monthly	0	1	0	1
578	GI	1531	SAN ELIJO AVE	Biannual	0	0	0	0
583	SG	2898	LONE JACK ROAD	Biweekly	0	1	0	1
590	GI	2126	WOODWIND Dr.	Monthly	2	1	0	1
653	SG	860	NARDO ROAD	Biannual	22	1	0	1
674	GI	3220	BELLA COLLINA	Biweekly	7	4	0	4
675	GI	1719	SAN ELIJO	Biannual	30	2	0	2
679	SG	1627	CAUDOR	Biannual	1	1	0	1
692	GI	1435	RAINBOW RIDGE	Biweekly	0	1	0	1
698	GI	1075	CORNISH DRIVE	Biannual	1	1	0	1
704	GI	230	QUAIL GARDENS	Biweekly	3	2	0	2
713	GI	3003	WILDFLOWER DR	Biweekly	30	15	0	15
716	GI	662	ENCINITAS BLVD. @ QUAIL GARDENS	Biweekly	0	1	0	1
718	GI	687	S. COAST HIGHWAY 101	Biweekly	30	15	0	15
765	GI	2234	ENCINITAS BLVD	Monthly	0	1	0	1
767	GI	911	CORNISH DRIVE	Biannual	10	1	0	1
857	SG	1252	RUBENSTEIN	Biannual	6	0	0	0
859	GI	721	Dewitt Ave	Biannual	30	3	0	3
877	GI	816	WOOD DR.	Biannual	1	2	0	2
883	GI	1058-1076	HYMETTUS	Monthly	30	7	0	7
886	GI	1084 & 1086	NEPTUNE AVE	Monthly	2	1	0	1
905	GI	1439	NEPTUNE AVE	Biannual	30	3	0	3
912	GI	416	Rancho Santa Fe Rd	Monthly	1	3	0	3
926	SG	234	RANCHO SANTA FE RD.	Monthly	11	3	0	3
943	GI	211	SAXONY RD	Monthly	9	2	0	2
944	GI	1501	NEPTUNE AVE	Biannual	8	2	0	2
952	GI	1866	SHERIDAN	Biannual	10	0	0	0
983	GI	1320	ENCINITAS BLVD	Monthly	8	2	0	2
1000	GI	272	SEEMAN DR	Biannual	9	2	0	2
1001	GI	342	HILLCREST DRIVE	Biannual	30	2	0	2

Permit #		Site Address	Site Street Name	Inspection priority	Total Number of Weeks Active During the Wet Season	Total Number of Inspections Conducted During the Wet Season	Total Number of Inspections Conducted During the Dry Season	Total Number of Inspections from July 1, 2009-June 30, 2010
1010	GI	1865	N. Vulcan Ave	Biannual	25	1	0	1
1015	SG	3255	FORTUNA RANCH ROAD	Biannual	2	0	0	0
1469	GI	1555	BELLA VISTA	Monthly	30	7	0	7
1533	GI	1098	HYMETTUS	Biannual	0	0	0	0
7601	GI	1255	BIRMINGHAM	Monthly	2	1	0	1
7800	GI	3542	JASMINE CREST	Monthly	7	2	0	2
7893	GI	600	Christine Place (PIRAEUS & PLATO)	Monthly	1	2	0	2
9103	GI	115	VERDI AVE	Biannual	30	1	0	1
9106	GI	Vulcan Townhomes	NORTH VULCAN AVE	Monthly	0	1	0	1
9117	GI	236/268	ANDREW	Monthly	1	1	0	1
9177	GI	740	CORNISH	Biannual	0	0	0	0
9262	GI	800	BLK BRACERO RD	Monthly	1	1	0	1
9278	GI		OFF LONE HILL LN	Monthly	9	2	0	2
9303	GI	875	BRITTANY	Monthly	1	1	0	1
9336	GI	290	ANDREW	Monthly	2	1	0	1
9481	GI	500	QUAIL GARDENS	Biweekly	30	18	0	18
9482	GI	1635	GASCONY	Biannual	2	1	0	1
9561	GI	303	SANTA FE DR	Biannual	30	2	0	2
9576	GI	843	SAN DIEGUITO DRIVE	Biannual	1	1	0	1
10004	SG	1413	EOLUS	Biannual	15	1	0	1
10015	GI	1309-1311	CORNISH DRIVE	Biannual	20	2	0	2
10041	GI	825	Arden	Biannual	30	2	0	2
10042	GI	1450	BLUE HERON DR	Monthly	12	3	0	3
10045	GI	1660	Brahms	Biannual	30	3	0	3
10046	SG	3363	Wildflower Valley Dr	Biannual	30	2	0	2
10056	SG	2898	LONE JACK RD	Biannual	0	1	0	1
10068	GI	125	Mozart	Biannual	30	3	0	3
10071	GI	975	EOLUS	Biannual	26	2	0	2
10087	GI	237	Seeman Dr	Monthly	23	7	0	7
10090	GI	3183	Narcissus Summit	Biweekly	30	15	0	15
10115	GI	350	COLE RANCH RD	Biannual	20	2	0	2
10116	GI	2209	SERENO VIEW LANE	Biannual	22	2	0	2
10150	II	684	Requeza Street	Biannual	2	2	0	2
10172	GI	221	FLORITA STREET	Biannual	27	3	0	3
10187	GI	1603	Crest Dr	Biannual	27	1	0	1
10205	GI	3055	BROOKSIDE LANE	Monthly	20	3	0	3
10210	GI	133	W. Jason	Biannual	15	0	0	0
10211	GI	211	SAXONY RD	Monthly	12	3	1	4
10225	SG	2207	SERENO VIEW LN	Monthly	1	2	0	2
10238	SG	2211	MONTGOMERY AVE	Biannual	19	0	0	0
10252	SG	1516	Calle Pensamientos	Biannual	23	2	0	2
10305	GI	354	SANTA FE DR	Monthly	11	3	0	3
10315	GI	794	NEPTUNE AVE	Biannual	24	2	0	2
10323	GI	950	SAXONY RD	Monthly	15	3	0	3
10372	SG	304	LA COSTA AVE	Biannual	2	1	0	1
10390	GI	1015	VALLEYSIDE	Biannual	0	0	2	2
10413	GI	747	DORIS DR	Biannual	7	2	0	2
10437	GI	1491	NEPTUNE AVE	Biannual	30	3	0	3
10492	GI		SOMMERSET/SANTA FE	Monthly	10	1	1	2
10498	CN		PARKING LOT B	Biannual	0	0	1	1
			FY 09-10 TOTAL INSPECTIONS		**NA**	**242**	**5**	**247**


Carlsbad
La Costa Ave
El Camino Real
Rancho Santa Fe Rd
Calle Barcelona
Elfin Forest Rd
Rancho Santa Fe
La Costa South
Olivenhain Rd
Lower Escondido Creek
N Rancho Santa Fe Rd
Quail Gardens Dr
Via Cantebria
N El Camino Real
La Costa South
Mountain Vista Dr
Lone Jack Rd
El Camino Del Norte
Encinitas Blvd
Westlake St
Glen Arbor Dr
Rancho Santa Fe
Nardo Rd
Balfour Dr
Lux Canyon
County of San Diegp
Mackinnon Ave
Lake Dr
Cardiff
Villa Cardiff Dr
Birmingham Dr
S El Camino Real
Manchester Ave
Batiquitos Lagoon
Solana Beach

GIS Script Process for Determining Construction Project Inspection Frequencies



CITY OF ENCINITAS

INSPECTION REPORT

Appendix B-4

Storm Water Quality Inspection for Construction Activities

505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2770 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

Property Address: _____ Inspection Date: _____

Contact Person: _____ Permit No: _____

Phone Number: _____ Project Size: _____

Site Status: ❒ Active ❒ Inactive ❒ First Inspection ❒ Final Sign-Off Date ___/___/___

Inspection Frequency: ❒ Bi-Weekly ❒ Monthly ❒ Bi-Annual ❒ Post-Rain Event

State General Construction Permit? ❒ Yes ❒ No WDID # _____

Is Project SWPPP on Site? ❒ Yes ❒ No SWPPP Maintenance Required? ❒ Yes ❒ No

MINIMUM BEST MANAGEMENT PRACTICE (BMP) REQUIREMENTS		BMP INSTALLATION REQUIRED	BMP REQUIRES MAINTENANCE	OTHER CORRECTIVE ACTIONS REQUIRED
A. Erosion Control BMPs				
1	**Slope / Soil Stabilization**			
2	**Silt Fencing**			
3	**Check Dams / Rip Rap**			
4	**Fiber Rolls**			
5	**Permanent Landscaping**			
6	**Preserving Existing Vegetation**			
7	**Diversion Channel for Run-On**			
8	**Other:**			
B. Sediment Control BMPs				
1	**Storm Drain Inlet Protection**			
2	**Detention Basin / Desilting Basin**			
3	**Perimeter Protection**			
4	**Stabilized Construction Entrance / Exit**			
5	**Other:**			
C. Materials Management BMPs				
1	**Stockpile Management**			
2	**Material Washout Area**			
3	**Equipment Storage**			
4	**Trash, Litter, Debris Management**			
5	**Designated Washout Area(s)**			
6	**Sanitary Waste Area Management**			
7	**Fuel / Chemical Storage**			
8	**Other:**			

Corrective Actions: ❒ Correct Work (*See Comments*) ❒ No Corrective Actions Required

❒ Referred to the Clean Water Program ❒ Stop Work/NOV

Comments:_____

_____

_____

_____

Corrective Actions identified above must be addressed, to the satisfaction of the City Inspector, within _____ days from the date above OR prior to the next predicted rain event. Failure to comply by this date may result in further enforcement action by the City of Encinitas.

Inspector (Signature) _____ Date ___/___/___

Received By (Signature) _____ Date ___/___/___

COPY DISTRIBUTION White – Responsible Party Yellow – City Inspector Pink – File REVISED 11/06/09

City of Encinitas

September 17, 2009

RE: **SEDIMENT AND EROSION CONTROL**

City of Encinitas Permit Holder:

Please be advised that starting October 1, 2009 and continuing through April 30, 2010, the City will enter into the official wet season as defined by the State Water Resources Control Board. As such, all construction projects (active or inactive) are required to implement sediment and erosion control Best Management Practices (BMPs) to prevent the discharge of sediment and non-stormwater into the stormwater conveyance system and local water bodies.

Attached please find a letter issued by the San Diego Regional Water Quality Control Board (RWQCB) which identifies the need for rainy season preparation through the installation of appropriate sediment and erosion control measures and general site cleanup at all construction sites. Further note the intent of this regulatory agency to enhance monitoring and evaluation of construction activities throughout the San Diego Region, including the City of Encinitas.

Ultimately, for permit holders within the City of Encinitas, the wet season brings with it a responsibility for erosion and sediment control as outlined in sections 23.24.370, 23.24.380 and 23.24.390 of the City of Encinitas' Municipal Code. For your reference, a copy of these municipal code sections has been enclosed with this letter. The full text of the Municipal Code can also be accessed on the City's website at http://www.ci.encinitas.ca.us/Government/PublicD/MunicipalCode/

Please feel free to address any questions regarding this work to your City of Encinitas Engineering Inspector.

Sincerely,

Greg Shields, P.E.
Sr. Civil Engineer
Field Operations

Cc: City of Encinitas Engineering Inspectors

Encl:

1. North County Storm Water Program Construction Brochure
2. RWQCB letter to all San Diego County Copermittees on August 24, 2009
3. City of Encinitas Municipal Codes Sections 23.24.370, 23.24.380 and 23.24.390

505 South Vulcan Avenue, Encinitas, CA 92024, TEL: 760/633-2600 FAX: 760/633-2627 TDD: 760/633-2700

Date	Site Address	Violation	Correct Work	Stop Work/ NOV	Citation- Warning	Citation- Fine	Citation Number	Cost Recovery	Routine Inspection	Complaint Inspection
10/19/09	825 Arden Dr	BMP Installation and Maintenance Required	1						1	
12/3/09	424 Brighton Ave	BMP Installation and Maintenance Required	1						1	
3/4/10	424 Brighton Ave	BMP Maintenance Required	1						1	
3/30/10	3055 Brookside Lane	BMP Installation Required	1						1	
4/21/10	3055 Brookside Lane	BMP Installation Required	1						1	
10/6/09	1516 Calle Pensamientos	BMP Installation Required	1						1	
10/15/09	687 S Coast Hwy 101	BMP Installation Required	1						1	
11/19/09	687 S Coast Hwy 101	BMP Maintenance Required	1						1	
12/9/09	687 S Coast Hwy 101	BMP Maintenance Required	1						1	
1/7/10	687 S Coast Hwy 101	BMP Maintenance Required	1						1	
3/31/10	687 S Coast Hwy 101	BMP Maintenance Required	1						1	
11/6/09	1603 Crest Dr	BMP Installation Required	1						1	
10/6/09	721 Dewitt Ave	BMP Maintenance Required	1						1	
10/6/09	1320 Encinitas Blvd	BMP Installation Required	1						1	
12/7/09	975 Eolus Ave	BMP Installation and Maintenance Required	1						1	
10/13/09	1635 Gascony Rd	BMP Maintenance Required	1						1	
10/14/09	1058-1076 Hymettus	BMP Installation Required	1						1	
11/24/09	1058-1076 Hymettus	BMP Maintenance Required	1						1	
1/21/10	1058-1076 Hymettus	BMP Installation and Maintenance Required	1			1	CW012110		1	
10/26/09	3351 Lilac Summit	BMP Installation Required	1						1	
4/20/10	3351 Lilac Summit	BMP Installation Required	1						1	
4/12/10	125 Mozart	BMP Installation Required	1						1	
10/12/09	3183 Narcissus Summit	BMP Installation Required	1						1	
1/7/10	3183 Narcissus Summit	BMP Maintenance Required	1						1	
3/17/10	3183 Narcissus Summit	BMP Maintenance Required	1						1	
4/27/10	3183 Narcissus Summit	BMP Installation Required	1						1	
10/14/09	1084 & 1086 Neptune Ave	BMP Installation Required	1						1	
5/26/10	Parking Lot B	BMP Installation Required	1						1	
10/13/09	234 Rancho Santa Fe Rd	BMP Installation and Maintenance Required	1						1	
12/15/09	234 Rancho Santa Fe Rd	Permanent Landscaping BMP Required	1						1	
10/26/09	2351 San Elijo Ave	BMP Installation Required	1						1	
11/6/09	303 Santa Fe Dr	BMP Installation Required	1						1	
3/31/10	354 Santa Fe Dr	BMP Installation Required	1						1	
4/20/10	354 Santa Fe Dr	BMP Installation Required	1						1	
10/26/09	237 Seeman Dr	BMP Installation Required	1						1	
10/6/09	2207 Sereno View Lane	BMP Installation Required	1						1	
10/13/09	1045 Via di Felicita	BMP Installation and Maintenance Required	1						1	
10/14/09	3003 Wildflower Dr	BMP Installation and Maintenance Required	1						1	
10/29/09	3003 Wildflower Dr	BMP Installation and Maintenance Required	1						1	
3/31/10	3003 Wildflower Dr	BMP Installation Required	1						1	
		Totals	**40**	**0**	**0**	**1**	**NA**	**0**	**40**	**0**

Appendix B-6 Construction Enforcement Actions

Appendix C

Municipal

C-1 **Municipal Inventory**

C-2 **Municipal Activities Report**

C-3 **Municipal BMP Map**

C-4 **Special Events Permit P2 Questionnaire**

C-5 **Approved Special Events in FY 09-10**

C-6 **Routine Inspections Summary**

	Facility Name	Address	Land Use/Activities	Tributary to a 303(d) Impaired Water Body	Inspection Priority	Sub-basin
1	"A" TANK SITE	601 SANTA FE DR	Tank storage site/municipal yard	NOT TRIBUTARY	High Priority	Encinitas
2	BEACON'S BEACH	948 NEPTUNE AVE	Beach access/parking lot	NOT TRIBUTARY	High Priority	Leucadia
3	CALLE MAGDALENA PUBLIC WORKS FACILITY	160 CALLE MAGDALENA	Administrative offices/municipal yard/vehicle maintenance/materials storage	NOT TRIBUTARY	High Priority	Encinitas
4	CARDIFF SPORTS PARK	1661 LAKE DR	Recreational facilities/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Cardiff
5	CARDIFF SPORTS PARK EXPANSION	1623 LAKE DR	Recreational facilities/landscaped areas	NOT TRIBUTARY	High Priority	Cardiff
6	COTTONWOOD CREEK PARK	95 N. VULCAN AVE	Park/landscaped areas/parking lot	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
7	ENCINITAS RANCH GOLF COURSE	1275 QUAIL GARDENS DR	Golf course	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
8	ENCINITAS VIEWPOINT PARK	56 E D STREET	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
9	GLEN PARK	2149 ORINDA DR	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Cardiff
10	GRANDVIEW BEACH	1700 NEPTUNE AVE.	Beach access/parking lot	NOT TRIBUTARY	High Priority	Leucadia
11	H STREET VIEWPOINT	498 H STREET	Vista point	NOT TRIBUTARY	High Priority	Encinitas
12	HAWK VIEW PARK	1309 BLUE HERON DRIVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
13	J STREET VIEWPOINT	398 J STREET	Vista point/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
14	LAS VERDES PARK	1390 PASEO DE LAS VERDES	Park/landscaped areas	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
15	LEO MULLEN SPORTS PARK	951 VIA CANTEBRIA	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	La Costa South
16	LEUCADIA OAKS PARK	1511 N. VULCAN AVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
17	LEUCADIA ROADSIDE PARK	860 N COAST HIGHWAY 101	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
18	LITTLE OAKS EQUESTRIAN PARK	2879 LONE JACK RD	Park/horse corral/landscaped areas	NOT TRIBUTARY	High Priority	Lower Escondido Creek
19	MILDRED MACPHERSON PARK	1045 S VULCAN AVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
20	MOONLIGHT BEACH	400 B STREET	Beach access/park/landscaped area/parking lot	TRIBUTARY TO PACIFIC OCEAN SHORELINE	High Priority	Encinitas
21	MS4	CITY WIDE	MS4	TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
22	OAKCREST PARK	1219 ENCINITAS BLVD	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Encinitas
23	ORPHEUS PARK	482 ORPHEUS AVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
24	PAUL ECKE SPORTS PARK	278 SAXONY RD.	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Encinitas
25	REQUEZA STREET FACILITY	397 REQUEZA ST	Municipal yard/sediment/materials storage	NOT TRIBUTARY	High Priority	Encinitas
26	ROADS, STREETS AND HIGHWAYS	CITY WIDE		TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
27	WASTEWATER COLLECTIONS DIVISION MUNICIPAL YARD	2695 MANCHESTER AVE	Administrative offices/Municipal yard	NOT TRIBUTARY	High Priority	Cardiff
28	SCOTT VALLEY PARK	1602 WILLOWHAVEN	Park/landscaped areas	TRIBUTARY TO ENCINITAS CREEK	High Priority	La Costa South
29	SPECIAL EVENTS	CITY WIDE	Recreational facilities, parks, landscaped areas, roads, streets and highways	MAY BE TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
30	SUN VISTA PARK	2011 AVENIDA LA POSTA	Park/landscaped areas	NOT TRIBUTARY	High Priority	La Costa South
31	SWAMI'S BEACH	1298 S COAST HIGHWAY 101	Beach access/parking lot	NOT TRIBUTARY	High Priority	Encinitas
32	WIRO PARK	2232 EL CAM DEL NORTE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Lower Escondido Creek/Ranch Santa Fe
33	CARDIFF PUMP STATION	2690 MANCHESTER AVE	Pump station	NOT TRIBUTARY	Low Priority	Cardiff
34	CIVIC CENTER	505 S VULCAN AVE.	Administrative offices/parking lot	NOT TRIBUTARY	Low Priority	Encinitas
35	ENCINITAS COMMUNITY & SENIOR CENTER	1140 OAKCREST PARK DR	Administrative offices/parking lot	NOT TRIBUTARY	Low Priority	La Costa South
36	D STREET BEACH	450 D STREET	Beach access and vista point	TRIBUTARY TO PACIFIC OCEAN SHORELINE	Low Priority	Encinitas
37	FIRE STATION #1	415 2ND ST	Fire station	NOT TRIBUTARY	Low Priority	Encinitas
38	FIRE STATION #2	1867 MACKINNON	Fire station	NOT TRIBUTARY	Low Priority	Cardiff
39	FIRE STATION #3	801 ORPHEUS AVE	Fire station	NOT TRIBUTARY	Low Priority	Leucadia
40	FIRE STATION #4	2011 VILLAGE PARK	Fire station	NOT TRIBUTARY	Low Priority	La Costa South
41	FIRE STATION #5	540 BALOUR DR	Fire station	NOT TRIBUTARY	Low Priority	Encinitas
42	HALL PROPERTY	425 SANTA FE DR.	Undeveloped park site	NOT TRIBUTARY	Low Priority	Cardiff
43	HIGHWAY 101 PUMP STATION	S. COAST HIGHWAY 101	Pump station	NOT TRIBUTARY	Low Priority	Cardff
44	I STREET VIEWPOINT	498 I STREET	Vista point	NOT TRIBUTARY	Low Priority	Encinitas
45	INDIAN HEAD CANYON	SAXONY ROAD/QUAIL HOLLOW DR	Undeveloped park site	NOT TRIBUTARY	Low Priority	Leucadia
46	MOONLIGHT BEACH PUMP STATION	305 THIRD ST.	Pump station	TRIBUTARY TO COTTONWOOD CREEK	Low Priority	Encinitas
47	OLIVENHAIN PUMP STATION	MANCHESTER/I-5	Pump Station	NOT TRIBUTARY	Low Priority	Cardiff
48	PHOEBE PUMP STATION	1200 block of N. Coast Highway 101	Pump Station	NOT TRIBUTARY	Low Priority	Leucadia
49	SAN DIEGUITO WATER DISTRICT*		Water reservoir/water storage	NOT TRIBUTARY	Low Priority	La Costa South/Encinitas
50	SAN DIEGUITO WATER DISTRICT*		Water reservoir/water storage	NOT TRIBUTARY	Low Priority	Encinitas
51	SAN DIEGUITO WATER DISTRICT*		Water recycling reservoir	NOT TRIBUTARY	Low Priority	Encinitas
52	SAN DIEGUITO WATER DISTRICT*		Pressure regulating station/no activities on site	NOT TRIBUTARY	Low Priority	Encinitas
53	SAN DIEGUITO WATER DISTRICT*		Pressure regulating station/no activities on site	NOT TRIBUTARY	Low Priority	Cardiff
54	SWAMIS BLUFFS PARCELS	1400 S. COAST HIGHWAY 101	Undeveloped site	NOT TRIBUTARY	Low Priority	Encinitas
55	STANDARD PACIFIC PARK	OLYMPUS / PIRAEUS	Undeveloped site	NOT TRIBUTARY	Low Priority	Leucadia
56	STONESTEPS BEACH	350 SOUTH EL PORTAL	Beach access and vista point	NOT TRIBUTARY	Low Priority	Leucadia
57	UV TREATMENT FACILITY	305 THIRD ST.	UV Treatment Facility	TRIBUTARY TO COTTONWOOD CREEK	Low Priority	Encinitas

***Note: The San Dieguito Water District's facility addresses have been omitted for security purposes.**

Item No.	**Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68**	**Reporting Dates**	**Comments**	**FY 2009-10 Annual Result**
1.	Report on updates to the municipal inventory and prioritization (J.3.a.(3)(c)i).	July 1, 2009-June 30, 2010		See Appendix C-1
2.	Confirmation that the designated BMPs were implemented, or required to be implemented for: municipal areas and activities (J.3.a.(3)(c)ii).	July 1, 2009-June 30, 2010		See Sections 4.2.3, 4.3.3, 4.4.3, 4.5.3 and 4.6.3
3.	Confirmation that the designated BMPs were implemented, or required to be implemented for: special events (J.3.a.(3)(c)ii).	July 1, 2009-June 30, 2010		See Section 4.7.3
4.	A description of inspections and maintenance conducted for municipal treatment controls-Municipal Filter Inserts (J.3.a.(3)(c)iii).	July 1, 2009-June 30, 2010		See Section 4.4.4.1
5.	A description of inspections and maintenance conducted for municipal treatment controls-UV Treatment Facility (J.3.a.(3)(c)iii).	July 1, 2009-June 30, 2010		See Section 4.4.4.1
6.	Identification of the total number of catch basins and inlets (J.3.a.(3)(c)iv).	July 1, 2009-June 30, 2010		1,591
7.	Identification of the number of catch basins and inlets **inspected** (J.3.a.(3)(c)iv).	July 1, 2009-June 30, 2010		1,659
8.	Identification of the number of catch basins and inlets found with accumulated waste exceeding 33% of design capacity ((J.3.a.(3)(c)iv).	July 1, 2009-June 30, 2010	All inlets and catch basins within the City are inspected on an annual basis, which is sufficient in ensuring the catch basins do not reach one-third of capacity and that self-cleaning facilities remain free of trash and debris.	0
9.	Identification of the number of catch basins and inlets **cleaned** (J.3.a.(3)(c)iv).	July 1, 2009-June 30, 2010		1659
10.	Identification of total distance (miles) of the MS4 (J.3.a.(3)(c)v).	July 1, 2009-June 30, 2010		61 miles of pipe
11.	Identification of distance of the MS4 **inspected** (J.3.a.(3)(c)v)**.**	July 1, 2009-June 30, 2010		57.6 miles of pipe
12.	Idenitification of distance of the MS4 found with accumulated waste exceeding cleaning criteria (J.3.a.(3)(c)v).	July 1, 2009-June 30, 2010		0
13.	Identification of distance of the MS4 **cleaned** (J.3.a.(3)(c)v)**.**	July 1, 2009-June 30, 2010		4.8 miles of pipe
14.	Identification of total distance (miles) of open channels (J.3.a.(3)(c)vi).	July 1, 2009-June 30, 2010		2.25 miles

Item No.	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2009-10 Annual Result
15.	Identification of distance of open channels **inspected** (J.3.a.(3)(c)vi).	July 1, 2009-June 30, 2010		4.5 miles
16.	Identification of distance of open channels found with anthropogenic litter (J.3.a.(3)(c)vi).	July 1, 2009-June 30, 2010		0.4
17.	Identification of distance of open channels **cleaned** (J.3.a.(3)(c)vi).	July 1, 2009-June 30, 2010		.41 miles
18.	Amount of waste and litter (tons) removed from catch basins (J.3.a.(3)(c)vii).	July 1, 2009-June 30, 2010		45.6 tons
19.	Amount of waste and litter (tons) removed from inlets (J.3.a.(3)(c)vii).	July 1, 2009-June 30, 2010		2.99 tons
20.	Amount of waste and litter (tons) removed from the MS4 (J.3.a.(3)(c)vii).	July 1, 2009-June 30, 2010		357 tons
21.	Amount of waste and litter (tons) removed from the open channels (J.3.a.(3)(c)vii).	July 1, 2009-June 30, 2010		307.7 tons
22.	Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification of the finding (J.3.a.(3)(c)viii).	July 1, 2009-June 30, 2010		None
23.	Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented or required to be implemented for municipal areas and activities (J.3.a.(3)(c)ix).	July 1, 2009-June 30, 2010		See Section 4.3.3.1
24.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating the **highest** volumes of trash and/or debris (J.3.a.(3)(c)x).	July 1, 2009-June 30, 2010		41 curb miles
25.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)x).	July 1, 2009-June 30, 2010	See Section 4.2.4	Weekly

Item No.	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2009-10 Annual Result
26.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating **moderate** volumes of trash and/or debris (J.3.a.(3)(c)xi).	July 1, 2009-June 30, 2010		60.8 curb miles
27.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)xi).	July 1, 2009-June 30, 2010	See Section 4.2.4	Twice a month
28.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating **low** volumes of trash and/or debris (J.3.a.(3)(c)xii).	July 1, 2009-June 30, 2010		241 curb miles
29.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)xii).	July 1, 2009-June 30, 2010	See Section 4.2.4	Monthly
30.	Identification of the total distance of curb-miles swept (J.3.a.(3)(c)xiii).	July 1, 2009-June 30, 2010		9,199 miles
31.	Identification of the number of municipal parking lots (J.3.a.(3)(c)xiv).	July 1, 2009-June 30, 2010		11
32.	Identification of the number of municipal parking lots swept (J.3.a.(3)(c)xiv).	July 1, 2009-June 30, 2010		11
33.	Identification of the frequency of sweeping (J.3.a.(3)(c)xiv).	July 1, 2009-June 30, 2010	All beach parking lots are swept once per week April through September and once per month October through March.	See Section 4.2.4
34.	Amount of material (tons) collected from street and parking lot sweeping (J.3.a.(3)(c)xv).	July 1, 2009-June 30, 2010		1,301 tons
35.	A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4 (J.3.a.(3)(c)xvi).	July 1, 2009-June 30, 2010		See Section 4.5.4.1
36.	Identification of the number of fixed municipal sites requiring inspections (J.3.a.(3)(c)xvii).	July 1, 2009-June 30, 2010	Refer to Appendix C-1 list of all High Priority Municipal Facilities	28
37.	Identification of the number of sites inspected (J.3.a.(3)(c)xvii).	July 1, 2009-June 30, 2010		28
38.	Identification of the frequency of inspections (J.3.a.(3)(c)xvii).	July 1, 2009-June 30, 2010		Annual

Item No.	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2009-10 Annual Result
39.	A description of the general results of the inspections (J.3.a.(3)(c)xviii).	July 1, 2009-June 30, 2010		See Appendix C-6
40.	Confirmation that the inspections conducted addressed all the required inspection steps and follow-ups to determine full compliance (J.3.a.(3)(c)xix).	July 1, 2009-June 30, 2010	All inspections conducted meet BMP requirements	See Appendix C-6
41.	The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken (J.3.a.(3)(c)xx).	July 1, 2009-June 30, 2010	In FY 2009-10, there were 3 corrective actions and follow-up inspections as a result of the routine annual inspections at all high priority municipal facilities. Details of the corrective actions for all routine municipal inspections can be found in Appendix C-6. The Clean Water Program hotline also received a total of 14 municipal complaints during the reportine period. Six of those complaints were requests for info and were referred to other departments/organization. A total of 8 complaints were investigated which resulted in 5 violations, 0 NOVs, 0 citations, 4 education actions and 4 follow-up inspections.	0
42.	A description of notable activities conducted to manage urban runoff from municipal areas and activities (J.3.a.(3)(c)xxi).	July 1, 2009-June 30, 2010		See Sections 4.2.4, 4.3.4, 4.4.4, 4.5.4, 4.6.4 and 4.7.4

Batiquitos Lagoon

La Costa Basin
Quail Hollow
Pireaus #1
Piraeus #2
Fox Point
ECR 1
Fire Station #3
ECR 2
ECR 3
ECR 4
Cottonwood Creek Park
Lot 12
UV Treatment Facility
2nd Street Energy Dissipator
Encinitas Library
Santa Fe Basin
Energy Dissipator
Pinebranch
Ocean Cove
San Elijo Lagoon



FY 2009-2010 Encinitas Municipal BMP Locations

- Storm Drain Inlet Filters
- Detention Basin
- Structural BMP
- Multiple BMPs
- Storm Drains
- Streams
- Roads

This map was produced by the City of Encinitas GIS and is designed for internal use only. The map is based on the best data available at the time of production and is not guaranteed to survey accuracy. City of Encinitas, SanGIS, SANDAG and other data are represented.

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Coordinate System:
California State Plane Feet, Zone 6
Datum: NAD83

Date of Map Production: September, 2010

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N

0 2,500 5,000 Feet

POLLUTION PREVENTION
(Does not apply to Special Ceremonies)

Storm drains are not connected to the City's sewer system. All pollutants allowed to enter the storm drain system flow directly to our beaches, ocean, lagoons, and other waterways without being treated. The City of Encinitas is required by the San Diego Regional Water Quality Control Board to report on pollution prevention measures taken at special events held throughout the City.

In the area provided on the next page or on a separate sheet of paper, please complete the following questions and describe methods of pollution prevention that will be implemented at your proposed event.

1. Describe how trash, recycling, and debris will be managed (i.e. extra bins, temporary fencing, etc.)

2. If your event will include food production, describe how excess oil and grease will be disposed of. These materials cannot be dumped into the streets or storm drain system.

3. Please identify any other potential pollutant generating sources or activities that may take place (i.e. portable toilets).

For questions, please call the City's Clean Water Program at (760) 633-2787.

	Event	Date	Time	Location	Estimated Attendance	Clean-up Deposit required?
1	Summer Sunday Concerts	July 5, 19, August 2, 16	3-5pm	MLB		Extra Trash and Restroom Service
2	Encinitas Rotary Club Soccer	August 8 & 9		CSP, ECK, LMSP		Extra Trash and Restroom Service
3	Encinitas Classic Car Nights	7/16/09, 8/20/09, 9/17/09	5:30-7:30pm	682 S Coast Hwy 101	1000	
4	Volcom's Blowfish Surf Series	7/18/09	8am-6:30pm	D Street/MLB	75	
5	Solana Beach Triathlon & Duathlon	7/26/09	5:30-11am	S Coast Hwy 101 @ Las Olas	1300	
6	Dog Days of Summer	8/8/09	10am-3pm	Cardiff- Aberdeen/Newcastle/Chesterfield	3000-4000	
7	Taste of Mainstreet	8/27/09	6-9pm	Hwy 101- Encinitas Blvd to K Street	2000	
8	LeucadiART Walk	8/30/09	7am-6pm	West side of Hwy 101- Marcheta to Glaucus	3000	
9	Challenge Walk MS 2009	9/11/09-9/13/09	8am-2pm	Beacons, MLB, Swami's, Cardiff State Beach	350	
10	Coastal Cleanup Day	9/19/09	9am-12pm	Swami's	100	
11	Wavecrest Rods and Woodies	9/19/09	5:30am-3pm	MLB Parking lot	600	
12	MLB Open Water Splash	9/20/09	8am-11am	MLB	200	
13	15th Annual Encinitas Oktoberfest	9/20/09	10am-6pm	Mountain Vista Dr.btwn ECR and Wandering Rd.	25,000	$300.00
14	Fundraiser	9/26/09	6-9pm	Cardiff Towne Plaza	200-300	
15	Fire Prevention Safety Expo	10/3/09	8am-3pm	MLB Parking lot	250	
16	Encinitas Feeling Fit Festival	10/4/09	10am-2pm	Leo Mullen Sports Park	600-800	
17	Bike MS Bay to Bay Tour	10/10/09	8am-4pm	MLB Parking lot	1000	
18	Swami's Surf Contest	Oct 10 & 11	Dawn to Dusk	D Street/MLB	300	
19	ISF Surf Series	Oct 17 & 18, Feb 27 & 28	7am-4pm	D Street/MLB	350	
20	DEMA Safe Trick or Treat	10/31/09	4-9pm	Lumberyard center courtyard	2,000	
21	City of Encinitas Family Enrichment Community Garage Sale	11/7/09	8am-12pm	Community Center Parking Lot	300	
22	ISF Surf Series	11/21 and 11/22/09	7am-4pm	D Street/MLB	350	
23	Fall Festival	11/22/09	9am-4pm	Hwy 101- D Street to J Street	35,000-45,000	
24	City of Encinitas Holiday Parade	12/5/09	5pm	Downtown Encinitas	15,000	
25	Sand Labyrinth	1/1/10	10am-12pm	Btwn MLB and Stonesteps	Unknown	
26	City of Encinitas P&R Community Garage Sale	3/13/10	8am-12pm	Community Center Parking Lot	300	
27	P&R Easter Egg Hunt	4/3/10	5am-4pm	Paul Ecke Sports Park, 278 Saxony Rd	5,000	
28	Easter Service	4/4/10	6am-1pm	MLB	450	
29	March for Babies	4/10/10	8am-12pm	MLB	350	
30	Fire Engineer Promotional Exercise	4/13/10	7am-4pm	MLB Parking lot	20	
31	Tour de Cure	4/17/10	6am-4pm	Mira Costa College	1,200	
32	Encinitas Garden Festival	4/17/10	8am-5pm	Orpheus Park and neighborhood to east	1,500	
33	Creek to Bay Cleanup	4/21/10	8am-1pm	MLB and Beacons	175	
34	Encinitas Street Fair	4/24 and 4/25 2010	9am-5pm	Hwy 101- D Street to J Street	40,000/day	$300.00
35	Chelsea King Baseball Tournament	4/25/10	8am-5pm	Ecke Park Baseball Fields 2 & 3	150	
36	Encinitas Surf Festival	4/25/10	7am-4pm	MLB/D Street	150	
37	Encinitas 2035 Visioning Festival	5/1/10	7:30-2:30	Community Center Parking Lot	500	
38	Great Strides/Cystic Fibrosis Walk	5/2/10	8am-1pm	MLB	300	
39	Cottonwood Creek Environmental Film Series	5/6/10, 6/3/10	7-9pm	Pacific Station 687 S Coast Hwy 101	100	
40	San Dieguito Alumni Event	5/8/10	8am-3pm	D Street/MLB	50	
41	Encinitas Sprint Triathlon	5/9/10 & 5/16/10	6:30am-12pm	MLB	1500	
42	MLB Paddle and Swim	5/15 & 5/16/10	8-11am	MLB	400	
43	Encinitas 5K	5/15/10	8am-10am	MLB	5000	
44	7th Annual Ohana Picnic	5/16/10	10am-6pm	Oakcrest Park	125	
45	A Sporting Life: Family Health Festival	5/23/10	10am-5pm	Oakcrest Middle School- 675 Balour	5000	
46	A Sporting Life	5/23/10	10am-5pm	Oakcrest Middle School- 675 Balour	3000	
47	NSL H.S. Cup	5/25 and 5/26	3:45-7pm	D Street	45	
48	K5 Surf Klassic	5/29/10	6am-8pm	MLB	100	
49	Law Enforcement Torch Run	6/2/10	6-9am	Route throughout City	20	
50	Encinitas Environment Day	6/6/10	10am-4pm	Cottonwood Creek Park	1500	
51	Pet Health Expo	6/6/10	9am-1pm	City Hall Courtyard	200	
52	Encinitas Classic Car Nights	6/17/10	5:30-7:30pm	F Street from Hwy 101 to 2nd Street	400	
53	City of Encinitas Employee Recognition Lunch	6/18/10	9am-2pm	Encinitas Viewpoint Park	150	
54	6th Annual Switchfoot Bro-Am	6/26/10	7am-5pm	MLB	5000	

Appendix C-6 Routine Municipal Inspections Summary **FY 2009 - 2010**

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed? Follow Up #1	Corrective Actions Still Needed? Additional Follow Ups	NOV Date
1	**120163**	4/21/10	Wastewater Collections Facility		No Corrective Actions Required			
2	**120164**	4/21/10	Requeza Maintenance Yard		Remove or cover signal parts & large white tanks; Clean up Haz waste containment barrels.	No. Completed: 5/20/2010		
3	**120165**	4/21/10	"A" Tank Site		Treated wood needs to be covered.			
4	**120184**	4/21/10	City of Encinitas Public Works Yard		Clean/Maintain outdoor storage areas.	No. Completed: 5/20/2010		
5	**120187**	5/18/10	Encinitas Viewpoint Park		No Corrective Actions Required			
6	**120188**	5/18/10	Paul Ecke Sports Park		No Corrective Actions Required			
7	**120189**	5/18/10	Las Verdes Park		No Corrective Actions Required			
8	**120191**	5/18/10	Oakcrest Park		Clean Excel storage area	No. Completed: 5/18/2010		
9	**120192**	5/18/10	Leo Mullen Sports Park		No Corrective Actions Required			
10	**120194**	5/18/10	Scott Valley Park		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
11	**120196**	6/9/10	Beacons Beach		No Corrective Actions Required			
12	**120197**	6/8/10	Glen Park	Central drainage channel maintained regularly. Irrigation runoff monitored regularly.	No Corrective Actions Required			
13	**120199**	6/10/10	Grandview Beach	All irrigation is drip emitter type w/ 0% runoff.	No Corrective Actions Required			
14	**120201**	6/9/10	H Street Viewpoint	Irrigation modified to reduce runoff since last inspection	No Corrective Actions Required			
15	**120203**	6/9/10	J Street Viewpoint	Irrigation modified to reduce runoff in the last 12 months.	No Corrective Actions Required			
16	**120205**	6/10/10	Leucadia Roadside Park		No Corrective Actions Required			
17	**120207**	6/10/10	Mildred MacPherson Park		No Corrective Actions Required			
18	**120273**	6/10/10	Moonlight Beach	Regular maintenance on stormwater channel daily/as needed for litter.	No Corrective Actions Required			
19	**120274**	6/10/10	Orpheus Park		No Corrective Actions Required			
20	**120275**	6/8/10	Swami's Beach Park	Irrigation modified to reduce runoff to hardscape since last inspection.	No Corrective Actions Required			
21	**120276**	6/4/10	Sun Vista Park	Excessive groundwater leaving/creating orange residue. See soils report attached to inspection form.	No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
22	**120277**	6/3/10	Hawk View Park		No Corrective Actions Required			
23	**120278**	6/4/10	Wiro Park		No Corrective Actions Required			
24	**120279**	6/4/10	Little Oaks Equestrian Park		No Corrective Actions Required			
25	**120280**	6/3/10	Leucadia Oaks Park		No Corrective Actions Required			
26	**120281**	6/2/10	Cottonwood Creek Park		No Corrective Actions Required			
27	**120284**	6/2/10	Cardiff Sports Park Expansion		No Corrective Actions Required			
28	**120285**	6/2/10	Cardiff Sports Park		No Corrective Actions Required			

Total Municipal Inspections: 28 **Total Follow ups: 3** **Total NOVs: 0**

Appendix D

Industrial and Commercial

D-1 **Stationary Commercial Inventory**

D-2 **Industrial Inventory**

D-3 **Industrial and Commercial Inspection Form**

D-4 **Inspection Summary Form**

D-5 **Routine Inspections Summary**

D-6 **Mobile Commercial Inventory**

D-7 **Commercial Business Notification Letter**

D-8 **Mobile Business Notification Letter**

No.	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
1	Cardiff Animal Hospital	2159 San Elijo Ave		Animal	742	Veterinary care	no	Low
2	Companion Pet Care Professionals	1466 Encinitas Blvd		Animal	753	Pet grooming service	no	Low
3	D A W G S	379 Trailview Rd		Animal	753	Pet grooming service	no	Low
4	DEBORAH PTASHNE GROOMING	2013 San Elijo Ave		Animal	753	Pet grooming service	no	Low
5	Dove Hollow Farm	1084 Double Ll Ranch Rd		Animal	752	Horse training, boarding	no	Low
6	Drake Center for Animal Health	195 N El Camino Real		Animal	742	Veterinary care	no	Low
7	GRATEFUL DOG	802 N Coast Highway 101		Animal	753	Pet grooming service	no	Low
8	Holiday Pet Hotel	551 Union St		Animal	752	Pet boarding	no	Low
9	Horses and Moore Pet Care	1060 California St		Animal	752	Horse boarding	no	Low
10	Moonlight Pet Sitting	152 N Coast Highway 101	21	Animal	752	Pet boarding	no	Low
11	North Coast Equestrian Park	1877 Olivenhain Rd		Animal	752	Horse boarding and training	yes	High
12	Puppy Love Pet Grooming	191 N El Camino Real	211	Animal	753	Pet grooming service	no	Low
13	Rancho Los Amigos Equestrian Center	3049 Camino Del Rancho		Animal	752	Horse boarding and training	no	Low
14	Santa Fe Animal Clinic	301 Santa Fe Dr	A	Animal	742	Veterinary care	no	Low
15	SIT AND STAY AWHILE PET CARE	251 Calle De Madera		Animal	742	Veterinary care	no	Low
16	Sunnybrook Farm Holistic Pet Care	812 Bracero Rd		Animal	752	Pet boarding	no	Low
17	SWEET PANDA PET CARE	1786 N Coast Highway 101	11	Animal	752	Pet boarding	no	Low
18	Sylvia's In-Home Pet Sitting	2210 Encinitas Blvd	W	Animal	752	Pet boarding	no	Low
19	The Animal Keeper	155 Saxony		Animal	752	Pet boarding	no	High
20	The Contented K-9	1711 Old Mill Ct		Animal	753	Pet grooming service	no	Low
21	The Pet Pals	3250 Country Rose Cir		Animal	753	Pet grooming service	no	Low
22	Underwater Environments	442 Rancho Santa Fe Rd		Animal	5999	Pet sales	no	Low
23	V C A North Coast Animal Hospital	414 Encinitas Blvd		Animal	742	Veterinary care	no	Low
24	Bradley Allen Auto Body	204 N Coast Highway 101		Auto Body Repair/Painting	7532	Auto body repair	no	High
25	California Body & Paint	320 N El Camino Real	F	Auto Body Repair/Painting	7532	Auto body repair	no	Low
26	Custom Cycle Creations, Inc.	304 N El Camino Real	B	Auto Body Repair/Painting	7549	Installation of interior auto parts	no	Low
27	Ding King	591 Westlake St	D	Auto Body Repair/Painting	7532	Auto body repair	no	Low
28	Fender Mender	326 N El Camino Real		Auto Body Repair/Painting	7532	Auto body repair	no	High
29	First Mission Auto Body Repair	339 N El Camino Real	B	Auto Body Repair/Painting	7532	Auto body repair	no	Low
30	Rancho Auto Body	591 Westlake St	A	Auto Body Repair/Painting	7532	Auto body repair	no	Low
31	S & Brothers Inc. Auto Upholstery	322 N El Camino Real	F	Auto Body Repair/Painting	7532	Auto upholstery repair	no	Low
32	SoCal Custom	328 N El Camino Real		Auto Body Repair/Painting	7532	Auto body repair	no	low
33	World Auto Body	140 N Coast Highway 101		Auto Body Repair/Painting	7532	Auto body repair	no	High
34	A+ Test Only Center	449 Second St		Auto Other	7549	Auto diagnostic testing center	no	Low
35	Encinitas Smog Test Only Ctr	682 S Coast Highway 101		Auto Other	7549	Auto diagnostic testing center	no	Low
36	FIC Smog	322 N El Camino Real	C	Auto Other	7549	Auto diagnostic testing center	no	Low
37	Johnathan Davis	543 Encinitas Blvd	121	Auto Other	557	Motorcycle parts retail	no	Low
38	Moonlight Auto Sales	140 N Coast Highway 101	C	Auto Other	5521	Motor vehicle dealer	no	Low
39	Road One	1205 S Coast Highway 101		Auto Other	7549	Auto towing and storage of towed cars	no	Low
40	SandToyZ 4 Less, Inc.	184 N Coast Highway 101		Auto Other	5521	Motor vehicle dealer	no	Low
41	Toolshed Equipment Rental/Rebel Rents	1900 N Coast Highway 101	A	Auto Other	7359	Equipment rental	no	High
42	Ace Cars & Vans	1244 N Coast Highway 101		Auto Repair/Maintenance	7514	Auto rental, car washing	no	Low
43	All Car CTR	140 N Coast Highway 101	Rear	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
44	Auto Zone	120 Leucadia Blvd		Auto Repair/Maintenance	5103	Auto parts supply used oil and used battery collection	no	Low
45	Keith's Automotive	215 W G St		Auto Repair/Maintenance	5103	Auto repair and maintenance	no	Low
46	Brad's Foreign & Domestic	565 Westlake St	200C	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
47	CALIFORNIA ROVER	386 Encinitas Blvd		Auto Repair/Maintenance	7538	Auto sales and maintenance	no	Low
48	Cardiff Classic	1049 S Coast Highway 101		Auto Repair/Maintenance	7549	Auto sales and cleaning	no	Low
49	Charlie's Foreign Car	751 Second St		Auto Repair/Maintenance	7538	Auto sales and maintenance	no	High
50	Coast Brake & Wheel	444 S Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
51	Coastal Foreign Auto	320 N El Camino Real	A	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
52	Dan's Precision Alignment	565 Westlake St	200F	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
53	Dave's Automotive Services	591 Westlake St	E	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
54	Definitive Mobile Audio (DMA)	126 A St		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
55	DISCOUNT AUTO	710 S Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
56	Discount Tire	107 N El Camino Real	A	Auto Repair/Maintenance	5103	Auto repair and maintenance	no	Low
57	El Camino Tire & Brake	330 N El Camino Real		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
58	Encinitas Automotive Repair	322 N El Camino Real	A	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low

Note: All facilities are in the Carlsbad Watershed.

No.	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
59	Encinitas Car Wash	293 N El Camino Real		Auto Repair/Maintenance	7542	Car wash	no	Low
60	Encinitas Ford	1424 Encinitas Blvd		Auto Repair/Maintenance	7538	Auto sales, repair and cleaning	no	Low
61	ENCINITAS FOREIGN AUTO	901 Second St		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
62	Encinitas Japanese Car Specialists	328 N El Camino Real	A	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
63	FURGERSONS GARAGE	807 Second St		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
64	HAPPY AUTO SALES	148 N Coast Highway 101		Auto Repair/Maintenance	5511	Auto sales and cleaning	no	Low
65	Harloff BMW	1302 Encinitas Blvd		Auto Repair/Maintenance	5511	Auto sales, repair and cleaning	no	High
66	Harris Radiator	274 N Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
67	HUGO'S EUROPEAN CAR SERVICE	110 N Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
68	Instant Oil Change	127 S El Camino Real	A	Auto Repair/Maintenance	7549	Lubrication service	no	Low
69	JIFFY LUBE	221 N El Camino Real		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
70	K & B Auto Service & Repair	320 N El Camino Real	D	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
71	Kragen Auto Parts	180 N El Camino Real		Auto Repair/Maintenance	5103	Auto parts	no	Low
72	Midas Mufflers	328 N El Camino Real	C	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
73	Miller Tire	759 Munevar Rd		Auto Repair/Maintenance	5103	Auto parts, minor maintenance	no	Low
74	Moonlight Motors	215 Melrose Ave		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	High
75	Napa Auto Parts	523 Encinitas Blvd	100	Auto Repair/Maintenance	5103	Auto parts, used battery and used oil collection	no	Low
76	North County Jet Ski	111 C St		Auto Repair/Maintenance	5511	Personal watercraft sales and repair	no	Low
77	Olson's Hand Car Wash	127 S El Camino Real	B	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
78	Paul's Auto Electric	325 Melrose Ave		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
79	Pep Boys Manny Moe & Jack	256 N El Camino Real		Auto Repair/Maintenance	5103	Auto parts sales and used battery and used oil collection	no	Low
80	Precision Tune	318 N El Camino Real	A	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
81	Ray's Automotive	1051 South Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
82	Scott's Automotive	1508 N Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	High
83	Softspra Carwash	790 S Coast Highway 101		Auto Repair/Maintenance	7542	Car wash	no	Low
84	Speedy Tune & Brake	225 N El Camino Real		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
85	Suspension Plus	322 N El Camino Real	D	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
86	Swami's Automotive Repair	320 N El Camino Real	C	Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
87	Transmasters Transmissions	184 N Coast Highway 101		Auto Repair/Maintenance	7538	Auto repair and maintenance	no	Low
88	Quail Botanical Gardens	230 Quail Gardens Dr		Botanical Garden	5361	Retail garden	no	Low
89	Home Depot	1001 N El Camino Real		Building Material	5211	Retail lumber, brick, paint, and other building supplies	no	High
90	7-11	1446 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
91	101 Diner, The	552 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
92	1st Street Bar	656 S Coast Highway 101		Eating/Drinking Establishment	5813	Sells prepared drink for consumption on site	no	Low
93	7- Eleven 18087/Moonlight Partners Inc.	105 W D St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
94	7-Eleven	2240 Encinitas Blvd	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
95	7-Eleven Food Store	592 Santa Fe Dr		Eating/Drinking Establishment	5541	Gas station, food store	no	High
96	A & M Investment/ Dba East Coast Pizza	2015 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
97	Amici Bakery	564 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
98	Angelo's Burgers	608 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
99	Auggies House of Crab	1468 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
100	Baja Fresh	194 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
101	Bar Leucadian	1542 N Coast Highway 101		Eating/Drinking Establishment	5813	Sells prepared drink for consumption on site	no	Low
102	Baskin Robbins	441 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
103	Beach City Cafe	102 Aberdeen Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
104	Beach Grass Cafe	1476 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
105	Beach House Restaurant	2530 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
106	Beach Tea House	1076 N Coast Highway 101	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
107	Beachside Bar and Grill	806 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
108	Bety's Mexican Restaurant	1464 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
109	Bird House Grill	250 N Coast Highway 101	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
110	Blue Fin Sushi	257 N El Camino Real	D	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
111	Borelli's Restaurant	285 N El Camino Real	106	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
112	Boscinitas, Inc. (Boston's)	294 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
113	Bretts B B Q	1505 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
114	Bubby's	937 S Coast Highway 101	106	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
115	Calypso Cafe	576 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
116	Captain Keno's	158 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low

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No.	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
117	Cardiff Seaside Market	2087 San Elijo Ave		Eating/Drinking Establishment	5411	Grocery store	no	Low
118	Carl's Jr. #181	1137 Regal Rd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
119	Champagne Bakery	162 S Rancho Santa Fe Rd	E10	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
120	Chart House, The	2588 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
121	Chick's Natural	191 N El Camino Real	107	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
122	Chili's Bar & Grill	1004 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
123	Chinatown Restaurant	118 Leucadia Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
124	Chin's Restaurant	625 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
125	Chipotle	268 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
126	Chuao Chocolatier	937 S Coast Highway 101	C109	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
127	Cicciotti's Trattoria Italiana	1933 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
128	Coco's #881	407 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
129	D Street Bar & Grill	485 S Coast Highway 101		Eating/Drinking Establishment	5813	Sells prepared drink for consumption on site	no	High
130	Dairy Queen	1465 Encinitas Blvd	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
131	DALEY DOUBLE	546 S Coast Highway 101		Eating/Drinking Establishment	5813	Sells prepared drink for consumption on site	no	Low
132	Daphne's Greek Cafe	130 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
133	Del Taco	130 Calle Magdalena		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
134	Denny's Restaurant	135 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
135	Dippin Dots	260 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
136	Dollshie Coffee	345 S Coast Highway 101	O-2	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
137	Domino's Pizza	1458 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
138	Duke's Bar	107 Diana St		Eating/Drinking Establishment	5813	Sells prepared drink for consumption on site	no	Low
139	E St Cafe	128 W E St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
140	Einstein Brothers Bagels	1006 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
141	El Callejon	345 S Coast Highway 101	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
142	El Nopalito	560 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
143	El Pollo Loco	1002 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
144	El Torito Market	948 N Coast Highway 101	C	Eating/Drinking Establishment	5411	Grocery store	no	High
145	El Torito Restaurant	1068 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
146	Encinitas Cafe	531 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
147	Encinitas Donut Shop	580 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
148	Encinitas Ranch Cafe & Golf School	1275 Quail Gardens Drive		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
149	Encinitas Swirls, Inc.	204 N El Camino Real	G	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
150	Encinitas Yogurt & Ice Cream	1070 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
151	Filiberto's Mexican Food	476 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
152	Firefly Grill & Wine Bar	251 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
153	FIRENZE TRATTORIA	162 S Rancho Santa Fe Rd	G10	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
154	Flippin Pizza, New York Style	215 S El Camino Real	H	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
155	French Pastry Cafe	127 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
156	Fulanos	145 Leucadia Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
157	Garden State Bagels	191 N El Camino Real	106	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
158	Giovanni's Sandwich Shop	764 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
159	Golden Baked Hams	114 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
160	Greek American Family Restaurant	392 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
161	Gusto Trattoria	429 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
162	Harvest Ranch Market	162 S Rancho Santa Fe Rd	E50	Eating/Drinking Establishment	5411	Grocery store	no	Low
163	HENRYS FARMERS MARKET	1327 Encinitas Blvd		Eating/Drinking Establishment	5411	Grocery store	no	Low
164	Honey Baked Ham	459 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
165	Honey's Bistro & Bakery	632 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
166	Island Brother's Teriyaki	274 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
167	Islands	1588 Leucadia Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
168	Its A Grind Coffee House	1920 Paxton Way	H	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
169	J. S. Foods/Dba Burger King	242 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
170	Jack In The Box	1439 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
171	Jam Roc 101	101 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
172	Jamba Juice	272 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
173	Java Express	325 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
174	Jorge's Mexicatessan	267 N El Camino Real	E	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low

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No.	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
175	Jorge's Mexicatessen	417 Santa Fe Dr	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
176	Juanita's Taco Shop	290 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
177	Juice N Java	168 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
178	Juice Stop	1042 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
179	Just Peachy	1354 N Coast Highway 101		Eating/Drinking Establishment	5411	Grocery store	no	High
180	K C'S Tandoor	1070 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
181	Kaito Restaurant	130 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
182	Karina's Taco Shop	916 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
183	Kealani's	137 W D St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
184	Kentucky Fried Chicken	266 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
185	Kim's Vietnamese & Chinese Restaurant	745 S Coast Highway 101	103	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
186	Ki's Juice Bar	2591 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
187	Kona Coffee Hut	230 Quail Gardens Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
188	Kotija Jr. Taco Shop	852 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
189	Kraken	2531 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
190	L & L Hawaiian Barbeque Encinitas	215 S El Camino Real	G	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
191	LA BONNE BOUFFE	471 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
192	La Especial Norte	664 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
193	La Salsa Fresh Mexican Grill	219 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
194	Las Olas	2655 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
195	Le Petite Calypso	1002 N Coast Highway 101	2	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
196	Leucadia Donut Shop	1604 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
197	Leucadia Pizzeria	315 S Coast Highway 101	V	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
198	Leucadia Sushi Bar	996 N Coast Highway 101	D	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
199	Lil Jungle Java	1500 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
200	LITTLE CAESARS PIZZA	118 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
201	Little Moore, A	1030 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
202	Lumberyard Tavern & Grill	967 S Coast Highway 101	101	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
203	LUXUS 101 - BISTRO GRILL	1044 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
204	Mama Lulu's Pizza and Pasta	191 N El Camino Real	110	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
205	MANDARIN CITY	815 Birmingham Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
206	Mandarin Oriental	1337 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
207	Manhattan Pizza	143 W D St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
208	Mc Donald's	1271 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
209	McDonald's	1064 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
210	Mexico Viejo	1465 Encinitas Blvd	E	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
211	Mister Sushi	111 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
212	Miyabi's Japanese Restaurant	211 S El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
213	Moonlight Grille	190 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
214	Moonlight Snack Shack	400 B St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
215	Mozy	698 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
216	Mr. Peabody's Steakhouse	136 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
217	Nfarooqi Enterprises, L L C	1967 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
218	Noodles & Company	260 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
219	Nrgize Lifestyle Cafe	201 S El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
220	Ogata Japanese Cuisine	615 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
221	Oggis Pizza & Brew	305 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
222	One Sweet World, L L C (Besta Wan)	148 Aberdeen Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
223	PACIFIC Q BILLARDS, INC.	1454 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
224	Panda Express	1084 N El Camino Real	E	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
225	Pannikin Coffee & Tea	510 N Coast Highway 101	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
226	Papa John's Pizza #1596	337 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
227	Papa Toni's Pizza	554 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
228	Passage to India	257 N El Camino Real	K	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
229	Pasta Bravo	1042 N El Camino Real	J05	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
230	Pei Wei Asian Diner	1560 Leucadia Blvd	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
231	Pick Up Stix	127 N El Camino Real	H	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low

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No.	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
232	Pipes	121 Liverpool Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
233	Pizza Hut	127 N El Camino Real	G	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
234	Pizzicato Gourmet Pizza (Hopuluvgarlic)	252 N El Camino Real	5	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
235	Potato Shack Cafe	120 W I St		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
236	Premier Food Services at MiraCosta College	3333 Manchester Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
237	Quick Fix	552 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
238	QUICKIE FOOD STORE	233 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
239	Quizno's Classic Subs	337 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
240	Quizno's Subs	1042 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
241	R M C, L L C	2031 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
242	Ralphs	125 N El Camino Real		Eating/Drinking Establishment	5411	Grocery store	no	High
243	Raul's Taco Shop	490 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
244	REDBOX (Albertsons)	134 N El Camino Real		Eating/Drinking Establishment	5411	Grocery store	no	Low
245	Rico's Taco Shop	165 S El Camino Real	L	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
246	Rite Aid	439 Santa Fe Dr		Eating/Drinking Establishment	5411	Grocery store	no	Low
247	Robbie's Ristorante & Pizzaria	534 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
248	Robbie's Road House Grill	530 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
249	Roberto's Mexican Food	1900 N Coast Highway 101	D	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
250	Roberto's Taco Shop	274 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
251	Round Table Pizza	1321 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
252	Roxy Restaurant	517 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
253	Rubio's	252 N El Camino Real	4	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
254	Russo's Pasta Shop	270 N El Camino Real	I	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
255	Sage Grill	1506 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
256	Sake House	1246 N Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
257	Sakura-Bana Sushi Bar	1031 S Coast Highway 101	101	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
258	Sandwich Station	218 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
259	Santa Fe Cafe	120 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
260	Santa Fe Cafe	445 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
261	Savory Restaurant	267 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
262	Scripps Memorial Hospital	354 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
263	Siamese Basil Restaurant	527 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
264	Siilk Asian Tapas	288 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
265	Smart & Final	150 Encinitas Blvd		Eating/Drinking Establishment	5411	Grocery store	no	High
266	St Germain's Cafe	1010 S Coast Highway 101	112	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
267	St Tropez Bakery & Bistro	947 S Coast Highway 101	D103	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
268	Starbuck's Coffee	947 S Coast Highway 101	D101	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
269	Starbuck's Coffee	258 N El Camino Real	B2	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
270	Starbuck's Coffee	1040 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
271	Starbuck's Coffee	1560 Leucadia Blvd	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
272	Stater Brothers	1048 N El Camino Real		Eating/Drinking Establishment	5411	Grocery store	no	Low
273	Sub Palace	810 N Coast Highway 101	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
274	Subman	113 N El Camino Real	E	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
275	SubMania	1514 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
276	Subway	765 S Coast Highway 101	104	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
277	Subway	2105 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
278	Subway #27567	1560 Leucadia Blvd	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
279	Subway Sandwiches & Salads	272 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
280	Sunny Sub., L L C	252 N El Camino Real	1	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
281	Super Donut #2	252 N El Camino Real	2	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
282	Super Donuts #1	465 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
283	Surf Dog Records	1126 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
284	Sushi House	214 N El Camino Real	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
285	Swami's Cafe	1163 South Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
286	T M P Restaurant Group, L L C	162 S Rancho Santa Fe Rd	C10	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
287	Taco Bell #25497	1502 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
288	TARGET T - 1029	1010 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low

Note: All facilities are in the Carlsbad Watershed.

No.	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
289	Tastes Group, L L C	641 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
290	Thai Pan Express	138 N El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
291	The 3rd Corner Wine Shop & Bistro	897 S Coast Highway 101	F104	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
292	The Bullpen	149 S El Camino Real		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
293	The Greenery Raw Food Cafe	133 Daphne Avenue		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
294	The Original Pancake House	160 S Rancho Santa Fe Rd	D10	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
295	The Quick Fix	144 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
296	Todays Pizza	481 Santa Fe Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
297	TOK Subs, Inc. aka Subway	138 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
298	Tomiko	87 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
299	Trader Joe's	115 N El Camino Real		Eating/Drinking Establishment	5411	Grocery store	no	Low
300	Trattoria	2171 San Elijo Ave		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
301	Trattoria I Trulli	830 S Coast Highway 101	A	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
302	Treats By Teresa	1277 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
303	Tuscan Sun Italian Deli	1070 N El Camino Real	B	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
304	VG Donuts & Bakery	106 Aberdeen Dr		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
305	Via Italia	565 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
306	Vigilucci's	505 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
307	Von's Grocery	453 Santa Fe Dr		Eating/Drinking Establishment	5411	Grocery store	no	Low
308	Von's Grocery	262 N El Camino Real		Eating/Drinking Establishment	5411	Grocery store	no	High
309	Wahoo's Fish Tacos	1006 N El Camino Real	C	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
310	Wendy's Hamburgers	102 Encinitas Blvd		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
311	When In Rome	1108 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	Low
312	Wine Steals	1953 San Elijo Avenue	100	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
313	Yogi's Sports Bar & Restaurant	2633 S Coast Highway 101		Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	yes	High
314	Zi Bibbo	1560 Leucadia Blvd	E	Eating/Drinking Establishment	5812	Sells prepared food for consumption on site	no	High
315	7-Eleven Food Store	2211 San Elijo Ave		Gas Station	5812	Sells prepared food for consumption on site	no	High
316	7-Eleven Store, #13627D-2111	102 Leucadia Blvd		Gas Station	5541	Gas station, food store	no	High
317	7-Eleven Store, #24335D-2111	1988 Village Park Way		Gas Station	5541	Gas station, food store	no	Low
318	AM/PM Gas Station	1580 Leucadia Blvd		Gas Station	5541	Gas station	no	Low
319	Cardiff 76	3085 Manchester Ave		Gas Station	5541	Gas station	yes	High
320	Chevron Encinitas	350 Encinitas Blvd		Gas Station	5541	Gas station	no	High
321	Chevron Food Mart	805 Birmingham Dr		Gas Station	5541	Gas station, food store	no	Low
322	Chevron Station #1943	540 La Costa Ave		Gas Station	5541	Gas station	no	High
323	DREAM PETROLEUM, INC. (ARCO 9598)	633 Birmingham Dr		Gas Station	5541	Gas station	no	Low
324	Encinitas Gas	310 Encinitas Blvd		Gas Station	5541	Gas station	no	Low
325	Leucadia Shell	865 Orpheus Ave		Gas Station	5541	Gas station, service station	no	Low
326	Rosano's Unocal 76	236 N El Camino Real		Gas Station	5541	Gas station	no	Low
327	SEASIDE AUTOHAUS (Cardiff Valero)	820 Birmingham Dr		Gas Station	5541	Gas station	no	High
328	Shell Oil	160 Encinitas Blvd		Gas Station	5541	Gas station, car wash	yes	High
329	Shell Oil Company	1060 N El Camino Real		Gas Station	5541	Gas station	no	Low
330	Shell Station	1355 Encinitas Blvd		Gas Station	5541	Gas station	no	High
331	Valero Of Encinitas	325 Encinitas Blvd		Gas Station	5541	Gas station	no	High
332	Encinitas Ranch - Golf Building	1253 Paseo De Las Flores		Golf Course	7997	Golf Course	yes	High
333	Lui Delgado Landscaping and Tierra Verde	1545 Lake Dr		Landscaping	782	Lawn and garden services, turf installation, garden planting	no	High
334	Mark Lanager Masonry & Landscaping	1310 Summit Ave		Masonry	1741	Masonry work, stone setting, garden planting.	no	High
335	RCP Block Company	577 N Vulcan Ave		Masonry	5211	Sales of brick, rock and other masonry supplies.	no	High
336	A & M Farms	1534 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
337	Able's Flowers	710 Clark Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
338	Ades & Gish Nurseries - Growers	1150 Melba Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
339	Ades & Gish Nurseries - Growers	1492 Hymettus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
340	Anderson, H Greenhouse	375 La Costa Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
341	Andy's Orchids	734 Ocean View Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
342	Armstrong Garden Center	701 N El Camino Real		Nursery	5193	Production of ornamental plants, nursery products	no	Low
343	Barrels & Branches	1452 Santa Fe Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
344	Basil Tops	1425 Rubenstein Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
345	Bird Rock Tropicals	221 Princehouse Ln		Nursery	5193	Production of ornamental plants, nursery products	no	Low

Note: All facilities are in the Carlsbad Watershed.

No.	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
346	Browns Plants Inc- Growers	1515 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
347	Byer, Richard- Growers	1731 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
348	C M A Growers- Growers	1254 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
349	CAL GRO (Expo Plant Service)	710 Clark Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
350	Cal Pacific Orchid Farm	1122 Orpheus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
351	Cardiff Palm Tree 2	333 Liszt Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
352	Cardiff/California Greenhouses	1753 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
353	Chino Greenhouses	1168 & 1253 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
354	Cordova Gardens	902 Encinitas Blvd	A	Nursery	5193	Production of ornamental plants, nursery products	no	Low
355	Cordova, Joe- Growers	720 Balour Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
356	Cosgrove Cymbidium Co- Growers	1200 Saxony Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
357	D. Ades Investment Corporation	875 Balour Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
358	Daniel Mojonnier	912 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
359	Davis, Eric- Growers	752 Bracero Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
360	Divine Orchids	1015 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
361	DONS FLOWERS	924 Bracero Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
362	Dramm & Echter	1150 Quail Gardens Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
363	Ecke, Paul Ranch	1051 Summer Holly Ln & 441 Saxony Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
364	EMERALD M. GROWERS, INC.	834 Leucadia Blvd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
365	Encinitas Green Houses - Nursery	351 Union St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
366	Erhardt's Tropicals (Morales Romero)	805 Bracero Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
367	ERIN VOLPI	887 Brittany Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
368	ERWIN MOJONNIER ENT.	2009 Sheridan Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
369	Erwin Mojonnier Enterprises- Growers	679 Camino El Dorado		Nursery	5193	Production of ornamental plants, nursery products	no	Low
370	Fiesta Flowers, L L C	335 Santa Fe Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
371	Flowers of La Costa	1911 Saxony Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
372	Franco's Flowers Inc- Growers	842 Leucadia Blvd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
373	Gill, Padam- Growers	754 Bonita Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
374	Gish Foliage	1255 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
375	Glover, A T- Growers	571 Union St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
376	Granite Homes Requeza LLC- Growers	843 Requeza St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
377	GREENS & THINGS, INC.	950 Brittany Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
378	Groot, Dana- Growers	603 Union St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
379	Hydro Scape Products, Inc	750 S Coast Highway 101		Nursery	5193	Production of ornamental plants, nursery products	no	High
380	Islas Jose L- Growers	231 La Costa Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
381	Ito Kiyoko- Growers	936 Eolus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
382	J & S Green Houses	748 Requeza St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
383	Jose Louis Islas	514 La Costa Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
384	L & E Greenhouses/G&J Plants	712 Clark Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
385	La Costa Farms	1911 Saxony Road		Nursery	5193	Production of ornamental plants, nursery products	no	Low
386	La Costa Flower Shop/Nursery (Gish Foliage)	1245 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
387	LEUCADIA GROWERS	940 Orpheus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
388	Leucadia Orchids	1660 Burgundy Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
389	Lois' Flowers	1195 Cardiff Dr & 1616 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
390	Lopez Flowers	440 Saxony Rd		Nursery	5193	Production of ornamental plants, nursery products	no	High
391	Maldonado Growers	1412 Mackinnon Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
392	Manatee Inc- Growers	1500 Somerset Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
393	May Greenhouse Inc	241 Andrew Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
394	May Greenhouses, Inc- Growers	2021 Sheridan Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
395	Miquel Estevez Flowers	708 Del Rio Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
396	Native Sons Nursery	631 Orpheus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
397	O&J Growers	1313 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
398	Orchid Barron	804 Cathy Ln		Nursery	5193	Production of ornamental plants, nursery products	no	Low
399	Orchid Place	829 Bracero Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
400	Owens, Mark N- Growers	1073 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
401	Pacific Verde Nursery	556 Union St		Nursery	5193	Production of ornamental plants, nursery products	no	High
402	Pacifica Flowers	510 La Costa Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low

Note: All facilities are in the Carlsbad Watershed.

No.	Facility Name	Address	Unit	Type	SIC	Activity Description	Tributary	Priority
403	Payne, Parry- Growers	1231 Birmingham Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
404	Quezada, Teresa A- Growers	1190 Island View Ln		Nursery	5193	Production of ornamental plants, nursery products	no	Low
405	R & L Sky Blue Inc. - Nursery	598 Park Ln		Nursery	5193	Production of ornamental plants, nursery products	no	Low
406	Rancho Uribe	1616 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
407	Seaside Farms- Growers	754 Plato Pl		Nursery	5193	Production of ornamental plants, nursery products	no	Low
408	Secret Garden	1236 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
409	Seedling Express	440 Saxony Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
410	Seedling Express	1698 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
411	Self-realization Fellowship - Growers	1177 Cornish Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
412	Skopec, Frank- Growers	1381 Summit Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
413	Speciman House	782 Leucadia Blvd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
414	Speert, Ellen- Growers	1905 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
415	Staver, Dan- Growers	1586 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
416	Tayama Greenhouse	710 Requeza St		Nursery	5193	Production of ornamental plants, nursery products	no	Low
417	The Palm Source- Growers	1329 Lake Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
418	The Plantri - Nursery	921 Urania Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
419	Tinney, Brooke- Growers	1674 Crest Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
420	Tom, Gim- Growers	3107 Manchester Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
421	Tverdoch, R- Growers	898 Hymettus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
422	Twigs By Teri	155 Quail Gardens Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
423	W.F. Muhlethaler - Nursery	350 Seeman Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
424	Walt Hoehn	1752 Eolus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
425	Weidner's Gardens	860 Eolus Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
426	Weidners' Gardens	695 Normandy Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
427	Weidner's Gardens- Growers	850 Normandy Rd		Nursery	5193	Production of ornamental plants, nursery products	no	Low
428	Wilkens Palm Tree Nursery	1450 Mackinnon Ave		Nursery	5193	Production of ornamental plants, nursery products	no	Low
429	Williamson's Produce	3111 Manchester Ave		Nursery	5193	Production of ornamental plants, nursery products	yes	High
430	Wilma Romero - Nursery	870 Devonshire Dr		Nursery	5193	Production of ornamental plants, nursery products	no	Low
431	Zalinda Farms - Growers	501 Ocean Bluff Way		Nursery	5193	Production of ornamental plants, nursery products	no	Low
432	Frazee Paint	270 N El Camino Real	B	Painting	5231	Retail paint and other liquid building products	no	Low
433	The Sherwin-Williams Company #8557	208 N El Camino Real		Painting	5231	Retail paint and other liquid building products	no	Low
434	Vista Paint Corporation	133 N El Camino Real		Painting	5231	Retail paint and other liquid building products	no	Low
435	Del Rancho Pools	1315 Encinitas Blvd		Pool	1799	Pool supply	no	Low

Note: All facilities are in the Carlsbad Watershed.

No	Name	Address	Type	SIC	Description	Tributary	Priority
1	San Dieguito Union High School District Transportation Cooperative	1142 Bonita Dr	Vehicle Storage	4151	Vehicle storage and transportation services for students	no	High
2	San Elijo Water Pollution Control Facility	2695 Manchester Ave	Wastewater Treatment	9511	Treatment of wastewater for use a recycled water	no	High
3	Encinitas Landfill*	2099 Encinitas Blvd	Closed Landfill	4953	Closed solid waste collection facility	no	NA

*The Encinitas Landfill is regulated and inspected by the County of San Diego.
**All sites are in the Carlsbad Watershed.

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION REPORT

Appendix D-3

CLEAN WATER HOTLINE: 760-633-2787

http://cwp.ci.encinitas.ca.us

Revised 3/09

Type of Inspection:	☐ Annual (Date):	☐ Complaint Investigation (Date):	
Business Name:		Size: Sq.Ft.	SIC Code:
Street Address:		Mailing Address:	
Contact Person(s):		Property Manager (PM):	
Business Phone/Fax:		PM Phone/Fax:	
Business Email:		PM Email :	
Does facility have a current Encinitas business certificate? ☐Yes ☐No #: Exp:			

A. Training **Number of Employees:**

1. Are employees trained? ☐Yes ☐No a. Training log at facility? ☐Yes ☐No Last time trained:

B. Liquid Storage (Oil, Grease, Antifreeze) ☐NA

2. ☐Trap- Last Maintained(LM): ☐Interceptor- LM: By: Every ____ months

3. ☐Bin- LM: ☐Clarifier- LM: By: Every ____ months

a. Is there secondary containment? ☐Yes ☐No b. Overhead Coverage? ☐Yes ☐No

4. Are other outdoor items adequately stored/covered? ☐Yes ☐No ☐NA

5. Does facility have a spill kit? ☐Yes ☐No a. Posted spill response plan? ☐Yes ☐No

C. Cleaning Activities

6. Does facility conduct any of the following activities?:

Washing Floor Mats: ☐Y ☐N Vehicle Washing/Fueling: ☐Y ☐N Hosing Off / Power Washing Site: ☐Y ☐N

a. Is wash water contained and disposed of properly? ☐Y ☐N

D. Waste Management	Yes	No	N/A	Comments
7. Are the storm drains and site free of litter and debris?				
8. Downspouts directed away from areas of potential pollutants?				

9. Does trash/recycling storage area meet the following requirements?:

Receptacle Lids Closed: ☐Y ☐N Clean/Well Maintained: ☐Y ☐N Are bins overflowing?: ☐Y ☐N

10. Does the facility properly maintain the following landscape/maintenance issues: ☐NA

Erosion Control: ☐Y ☐N Over-irrigation Runoff: ☐Y ☐N Reclaimed Water Use: ☐Y ☐N Stockpiles: ☐Y ☐N

E. Other Storm Water Management

11. Is the site free of any evidence of illicit connections and illegal discharges? ☐Yes ☐No

F. Corrective Actions Needed? ☐Yes ☐No If yes, see Inspection Summary

G. Follow Up Inspection? ☐Yes ☐No Date: _____ If yes, see Inspection Summary

H. Education or Best Management Practice (BMP) Information Distributed:

☐Restaurant Brochure Eng/Span ☐What's Cooking Guide Eng/Span ☐Auto Brochure Eng/Span ☐Green Wrench Guide Eng/Span ☐Only Rain ☐10 Simple Ways ☐Yard and Garden Care Eng/Span ☐Doorhanger ☐Business card ☐Green Business ☐Spill Response Guide ☐Other:

Inspector Name: **Signature:** **Date:**

Notes:

FOR OFFICE USE ONLY

ASSESSMENT (circle appropriate level - "5" is highest level)	
Level of knowledge regarding stormwater issues: 1 2 3 4 5	WO#:
Level of cleanliness, BMP implementation, orderliness of site: 1 2 3 4 5	Follow Up WO#

CITY OF ENCINITAS

Commercial & Industrial

STORMWATER QUALITY INSPECTION SUMMARY

(760) 633-2787 ◆ FAX (760) 633-2818 ◆ npdesmail@cityofencinitas.org

ISSUED TO: _____

CONTACT PERSON: _____

SITE ADDRESS: _____

PHONE #: _____

❒ **NO CORRECTIVE ACTIONS REQUIRED**

REQUIRED CORRECTIVE ACTIONS

ALL REQUIRED CORRECTIVE ACTIONS IDENTIFIED BELOW MUST BE COMPLETED AND REPORTED TO THE CITY BY THE FOLLOWING DATE: ____/___/____

❒ **Obtain Spill Kit**

❒ **Post Spill Response Plan**

❒ **Provide and Document Employee Training**

❒ **Provide Secondary Containment for Storage of Fluid/Liquid**

❒ **Provide Coverage for Outdoor Storage of Fluid/Liquid Waste**

❒ **Provide Coverage for Exposed Equipment and/or Parts**

❒ **Clean Litter and Debris From Site, Trash Areas, and/or Storm Drain**

❒ **Clean/Maintain Outdoor Storage Areas**

Other Corrective Actions/Comments:

_____

_____

_____

_____

The corrective actions listed above are required pursuant to Encinitas Municipal Code Section 20.08.110. Failure to comply with minimum Best Management Practice (BMP) Standards may result in further enforcement action by the City of Encinitas.

Inspector (Signature) **Date**

Responsible Party (Signature) **Date**

FOLLOW UP INSPECTION

❒ **All Corrective Actions Completed**

❒ **Corrective Actions Not Complete – Enforcement Action Required**

Inspector Sign-Off **Date**

Appendix D-5 Routine Commercial Inspections Summary **FY 2009 - 2010**

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
1	**88390**	7/13/09	Super cuts		No Corrective Actions Required			
2	**88391**	7/13/09	Men's Warehouse		No Corrective Actions Required			
3	**88392**	7/13/09	Great Earth Vitamins		No Corrective Actions Required			
4	**88393**	7/13/09	Sprint		No Corrective Actions Required			
5	**88452**	11/5/09	Las Olas		1. Provide overhead cover and 2nd containment for 3rd grease bin.	No. Completed: 11/12/2009		
6	**88454**	1/28/10	Cardiff Valero (Seaside Autohaus		No Corrective Actions Required			
7	**99108**	11/12/09	Yogis		No Corrective Actions Required			
8	**99109**	11/12/09	Ki's juice bar & restaurant		No Corrective Actions Required			
9	**103112**	11/16/09	Kraken		No Corrective Actions Required			
10	**103113**	11/16/09	Chart House		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
11	**103115**	11/16/09	Beach House		No Corrective Actions Required			
12	**103116**	11/16/09	Beach city cafe		No Corrective Actions Required			
13	**103125**	11/18/09	Subway Cardiff	From: Request ID: 86898, 11/18/2009 11:14:19 AM DIS-TRASH Discharge of trash Problem Details: Trash dumpster over flowing	No Corrective Actions Required			
14	**103158**	11/19/09	VG donuts		No Corrective Actions Required			
15	**103159**	11/19/09	Best-a-wan		No Corrective Actions Required			
16	**107314**	11/24/09	Zenbu/Rimel's		No Corrective Actions Required			
17	**107315**	11/25/09	East Coast Pizza		No Corrective Actions Required			
18	**107338**	11/24/09	7/11 Cardiff		Pick up abandoned box of light bulbs.			
19	**107339**	11/25/09	Shanty		No Corrective Actions Required			
20	**107591**	12/30/09	Certified Transmission		No Corrective Actions Required			
21	**107600**	1/4/10	Chuao		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
22	**107665**	1/5/10	Coast Landscaping Inc		tray for Port-a-potty	No. Completed: 2/10/2010		
23	**107711**	12/1/09	Highland farms		spill kit, training, overhead coverage and 2nd containment for generator			
24	**107739**	1/5/10	CM landscape maintenance and services		2nd containment for Port-a-potty, trash overflowing and old leaking motor	No. Completed: 1/12/2010		
25	**107741**	1/7/10	Firenze Trattoria		No Corrective Actions Required			
26	**107742**	1/6/10	Garcias		No Corrective Actions Required			
27	**107844**	1/6/10	Del Rancho Pools		Provide coverage for exposed equipment and clean debris from site	No. Completed: 2/11/2010		
28	**107846**	1/6/10	Cotixan Mexican Food		spill kit, training, 2nd containment, clean trash area	No. Completed: 1/15/2010		
29	**107848**	1/15/10	Frazee Paints		No Corrective Actions Required			
30	**113222**	3/8/10	Emerald Growers		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
31	**113225**	2/18/10	Hydro-scape Products		No Corrective Actions Required			
32	**113268**	2/24/10	Sushi Do		No Corrective Actions Required			
33	**117367**	2/12/10	Angelo Burgers		Provide and document employee training, Clean litter and debris from trash area and close lids.	No. Completed: 2/26/2010		
34	**117371**	5/13/10	Naked Cafe		No Corrective Actions Required			
35	**117372**	5/13/10	Java Hut Coffee Co.		Obtain spill kit	No. Completed: 5/13/2010		
36	**117374**	5/6/10	Giant New York Pizza and Pasta		No Corrective Actions Required			
37	**117376**	4/22/10	Froots		No Corrective Actions Required			
38	**117378**	4/7/10	Swami's Cafe		No Corrective Actions Required			
39	**117382**	2/16/10	Bradley Allen Auto Body		No Corrective Actions Required			
40	**117384**	1/11/10	Islands		Post spill response plan, Provide and document employee training, Provide 2nd containment for grease bin.	No. Completed: 2/12/2010		

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
41	**117391**	2/17/10	Berry Happy		No Corrective Actions Required			
42	**117392**	2/17/10	Filiberto's		No Corrective Actions Required			
43	**117393**	2/23/10	Lotus Cafe		No Corrective Actions Required			
44	**117394**	3/29/10	Global Grind Coffee		No Corrective Actions Required			
45	**119729**	2/24/10	Road One		No Corrective Actions Required			
46	**119730**	5/25/10	McDonalds		Grease trap and bin records, floor mat cleaners info.			
47	**119732**	5/25/10	Gusto Trattoria		No Corrective Actions Required			
48	**119733**	2/23/10	Lumberyard Tavern & Grill		Obtain spill kit, provide & document employee training, Provide 2nd containment & overhead cover for grease, tie trash bags closed, fix broken sprinkler	No. Completed: 5/27/2010		
49	**120330**	6/3/10	Vicky's Floral Design		No Corrective Actions Required			
50	**120333**	2/12/10	101 Pacific Coast Auto		Obtain spill kit.			
51	**120351**	6/15/10	Kamp Kanine		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
52	**120404**	6/15/10	Vons Grocery #2351		No Corrective Actions Required			
53	**120405**	6/30/10	Seedling Express Inc		No Corrective Actions Required			
54	**120406**	5/24/10	O'Brien Station		Provide 2nd containment and overhead cover for liquid storage; remove hazmat as required.	No. Completed: 6/23/2010		
55	**120422**	6/22/10	Shell, Tesoro Refining & Marketing		No Corrective Actions Required			
56	**120426**	5/17/10	El Pollo Loco #3431		Obtain spill kit; clean litter and debris from trash area.	No. Completed: 6/23/2010		
57	**120509**	6/23/10	Self Realization Fellowship		No Corrective Actions Required			
58	**120511**	6/4/10	Browns Plants		No Corrective Actions Required			
59	**120512**	5/6/10	Chick's Chicken		Provide employee training; provide 2nd containment and overhead cover for liquid storage	No. Completed: 6/23/2010		
60	**120530**	6/28/10	Dramm & Echter		Clean litter and debris from storm drain in SE corner			
61	**120531**	6/1/10	Shell Station		Obtain spill kit, provide employee training, provide 2nd containment and overhead cover for oil bins.	No. Completed: 6/22/2010		

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
62	**120534**	2/23/10	Trattoria i Trulli		No Corrective Actions Required			
63	**120538**	2/16/10	Leucadia Pizzeria		No Corrective Actions Required			
64	**120539**	3/31/10	Golden Baked Hams and Sandwiches		No Corrective Actions Required			
65	**120547**	3/31/10	Pizzicato		No Corrective Actions Required			
66	**120548**	3/31/10	Burger King		No Corrective Actions Required			
67	**120549**	5/18/10	Subway		No Corrective Actions Required			
68	**120550**	5/18/10	Little Caesars		No Corrective Actions Required			
69	**120551**	5/18/10	Tomiko		Provide great interceptor and bin records			
70	**120552**	5/18/10	Wendy's #3015		No Corrective Actions Required			
71	**120554**	2/23/10	Beachside Bar and Grill		No Corrective Actions Required			
72	**120555**	2/23/10	3rd Corner Wine Shop and Bistro		No Corrective Actions Required			
73	**120556**	5/6/10	Vons #2144		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
74	**120574**	5/4/10	Flippin PIzza		No Corrective Actions Required			
75	**120575**	5/4/10	Firefly Grill and Wine Bar		No Corrective Actions Required			
76	**120577**	3/31/10	Daphne's Greek Cafe		No Corrective Actions Required			
77	**120578**	3/29/10	Kotija		No Corrective Actions Required			
78	**120579**	3/29/10	Scott's Automotive		No Corrective Actions Required			
79	**120580**	5/17/10	Fender Mender		No Corrective Actions Required			
80	**120585**	5/17/10	Home Depot		Clean litter and debris from north side storm drain			
81	**120589**	5/17/10	Wahoo's Fish Taco		No Corrective Actions Required			
82	**120591**	2/17/10	D Street Bar and Grill		No Corrective Actions Required			
83	**120594**	2/16/10	El Callejon		No Corrective Actions Required			
84	**120677**	5/17/10	Encinitas Yogurt and Ice Cream		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
85	**120678**	5/17/10	Panda Express		No Corrective Actions Required			
86	**120679**	5/20/10	Shell Oil (CNG Inc)		No Corrective Actions Required			
87	**120680**	5/21/10	Java Express		No Corrective Actions Required	No. Completed: 7/14/2010		
88	**120681**	5/21/10	The Quick Fix		No Corrective Actions Required			
89	**120692**	5/20/10	Denny's		Obtain spill kit	No. Completed: 5/24/2010		
90	**120699**	6/21/10	North Coast Equestrian Park		No Corrective Actions Required			
91	**120700**	6/9/10	Trattoria Positano		No Corrective Actions Required			
92	**120701**	6/10/10	Carl's Jr #181		No Corrective Actions Required			
93	**120702**	6/14/10	The Animal Keeper		No Corrective Actions Required			
94	**120706**	6/8/10	Moonlight Motors		No Corrective Actions Required			
95	**120708**	6/8/10	7-Eleven		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
96	**120728**	2/16/10	Bird House Grill		No Corrective Actions Required			
97	**120729**	2/16/10	Juanita's Tacos		No Corrective Actions Required			
98	**120730**	6/7/10	Cardiff 76 (Rosano's)		No Corrective Actions Required			
99	**120731**	5/25/10	KC's Tandoor		No Corrective Actions Required			
100	**120732**	5/17/10	El Torito		Obtain spill kit	No. Completed: 5/24/2010		
101	**120734**	6/2/10	Tierra Verde Resources		No Corrective Actions Required			
102	**120735**	5/25/10	Honey Baked Ham		No Corrective Actions Required			
103	**120736**	6/21/10	Encinitas Ranch Golf Course		No Corrective Actions Required			
104	**120737**	6/22/10	Moonlight Snack Shack		No Corrective Actions Required			
105	**120738**	6/23/10	Borrelli's Pizza Inc		No Corrective Actions Required			
106	**120739**	6/22/10	Passage to India		No Corrective Actions Required			
107	**120740**	6/30/10	Pacific Verde Nursery		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
108	**120741**	6/29/10	RCP Block and Brick		No Corrective Actions Required			
109	**120742**	6/28/10	Charlie's Foreign and Domestic		No Corrective Actions Required			
110	**120743**	6/8/10	Pei Wei Asian Diner		Obtain spill kit, provide and document employee training, clean litter from area behind store			
111	**120744**	6/28/10	Lopez Flowers		No Corrective Actions Required			
112	**120821**	6/1/10	Bety's		Clean litter from trash area	No. Completed: 7/14/2010		
113	**120823**	5/18/10	Mr Peabody's		Obtain spill kit, post spill response plan, provide employee training, prove 2nd containment for oil.	No. Completed: 7/19/2010		
114	**121271**	6/9/10	Pipes Cafe		Obtain spill kit; provide and document employee training; provide 2nd containment and overhead cover for outdoor storage; keep trash containers closed.	No. Completed: 7/14/2010		
115	**121273**	5/26/10	Henry's		Provide cover for grease bin	No. Completed: 7/14/2010		
116	**121275**	5/20/10	Valero		Provide 2nd containment and overhead cover for 55 gallon drum.	No. Completed: 7/14/2010		

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
117	**121277**	6/14/10	Jack in the Box		Provide and document employee training			
118	**121278**	2/24/10	St Germain's		Provide and document employee training; provide cover for kitchen oil; clean litter and debris from site, trash areas, and storm drains. Consider larger 2nd containment and more sturdy overhead cover.	No. Completed: 4/1/2010		
119	**121280**	5/4/10	Ralph's		Clean littler from trash area. Close lids or construct cover.	No. Completed: 5/11/2010		
120	**121282**	2/17/10	Vigilucci's		Clean litter and debris from site, trash area, and/or storm drain; sweep up kitty litter.	No. Completed: 2/18/2010		
121	**121284**	3/29/10	El Torito market		Provide 2nd containment and overhead cover for outdoor liquid storage.	No. Completed: 5/12/2010		
122	**121286**	3/31/10	Santa Fe Cafe		Provide 2nd containment for outdoor liquid storage	No. Completed: 5/12/2010		
123	**121288**	3/31/10	Rubio's		Provide and document employee training; Clean outdoor grease storage area	No. Completed: 5/27/2010		
124	**121290**	6/2/10	Brett's BBQ		Provide and document employee training; clean litter and debris from trash area; clean grease storage area in parking lot. Please check irrigation for water in parking lot.	No. Completed: 6/2/2010		
125	**121295**	5/4/10	Blue Fin Sushi Bar		Obtain spill kit	No. Completed: 6/4/2010		

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed? Follow Up #1	Corrective Actions Still Needed? Additional Follow Ups	NOV Date
126	**121297**	5/25/10	Chin's Szechwan		Clean oil on pavement in trash area- capture all wash water.	No. Completed: 6/23/2010		
127	**121299**	6/10/10	7 Eleven		Clean litter and debris from trash/storage area.	No. Completed: 6/30/2010		
128	**121301**	6/2/10	Beach Grass Cafe		Obtain spill kit; Clean litter from trash area.	No. Completed: 6/30/2010		
129	**121303**	6/17/10	Encinitas Golf Course Cafe		No Corrective Actions Required			
130	**121304**	6/16/10	Scripps memorial Hospital		Obtain spill kit; post spill response plan; provide and document employee training	No. Completed: 7/16/2010		
131	**121708**	5/13/10	Boston's Pizza		Clean litter and debris from grease tray; call in last grease interceptor service date; clean paint in trash area.	Yes- Paint has not been cleaned up.	No. Completed: 8/18/2010	
132	**121714**	6/1/10	Taco Bell		Obtain spill kit; provide and document employee training.	Yes- Obtain spill kit.	No. Completed: 8/18/2010	
133	**121719**	3/15/10	Williamson Produce		Drain ditch next to Manchester needs to be maintained; Fix leak or remove old diesel tank/liquid fuel.	No. Completed: 6/7/2010		
134	**121724**	5/21/10	Chevron Encinitas		Provide 2nd containment and overhead cover for two 55 gal bins in trash area; provide cover for batteries in trash area; Clean litter and debris from trash area and close lids. Follow up will be completed in FY 10-11.			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
135	**121725**	6/28/10	Barrels and Branches		Provide and document employee training; Provide 2nd containment and overhead cover for outdoor liquid storage; Provide cover for exposed soil on east area. Follow up will be completed in FY 10-11.			
136	**121726**	6/29/10	BMW of Encinitas		Provide and document employee training for car wash and painting area; Provide 2nd containment for car wash cleaning containers; Provide cover or remove exposed computer parts and old racks; Clean white paint stain from storm drain. Follow up will be completed in FY 10-11.			
137	**121727**	6/28/10	The Palm Co		Provide 2nd containment and overhead cover for liquid storage/waste; Clean litter and debris from trash area. Follow up will be completed in FY 10-11.			
138	**121729**	6/22/10	Barracuda Fresh Grill		Obtain spill kit; Post spill response plan; Provide and document employee training; Provide 2nd containment and overhead cover for liquid storage. Follow up will be completed in FY 10-11.			

Total Commercial Inspections: 138 **Total Follow ups: 38** **Total NOVs: 0**

Appendix D-5: Routine Industrial Inspections Summary FY 2009-10

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed? Follow Up #1	Corrective Actions Still Needed? Additional Follow Ups	NOV Date
1	**120510**	6/23/10	San Dieguito Transportation Cooperative	Maintain perimeter BMPs. use wash out pits when applicable	No Corrective Actions Required			
2	**120802**	6/21/10	San Elijo Joint Powers Authority		Provide 2nd containment for gas cans	NO. Completed: 7/14/2010		

Total Industrial Inspections: 2 **Total Follow ups: 1** **Total NOVs: 0**

	Business Name	Address	Type	SIC	Activity Description
1	Cardiff Carnivores	1285 Blue Sky Dr	Mobile- Animal	752	Pet Grooming/Training
2	Coastal Canine Conditioning	711 Teaberry St	Mobile- Animal	752	Pet Grooming/Training
3	Dog Behavior 101	2142 Montgomery Ave F	Mobile- Animal	752	Pet Grooming/Training
4	Encinitas Critter Care	1527 Avenida De Los Lirios	Mobile- Animal	752	Pet Grooming/Training
5	Evans Mobile Veterinary Care	2354 Oxford Ave A	Mobile- Animal	752	Pet Grooming/Training
6	Jill's North County Pet Sitting	2538 Ocean Cove Dr	Mobile- Animal	752	Pet Grooming/Training
7	North Co. Coastal Canine Care	1549 San Elijo Ave	Mobile- Animal	752	Pet Grooming/Training
8	The Pet Pals	3250 Country Rose Cir	Mobile- Animal	752	Pet Grooming/Training
9	Underdog Pet Sitting	2439 Caminito Ocean Cove	Mobile- Animal	752	Pet Grooming/Training
10	Your Fairy Dogmother	946 Woodgrove Dr	Mobile- Animal	752	Pet Grooming/Training
11	70 Moto Parts, L L C	1873 Haymarket Rd	Mobile- Auto	7538	Auto Repair & Maintenance
12	Affordable Detail Guys	560 Hermes Ave	Mobile- Auto	7542	Mobile Washing & Detailing
13	Bryans Tropic Shield	1840 Blue Bonnet Pl	Mobile- Auto	7542	Mobile Washing & Detailing
14	Cardiff Limousine	844 Bonita Dr	Mobile- Auto	4111	Local & Suburban Transit
15	Coast Highway Taxi	815 Wood Dr	Mobile- Auto	4111	Local & Suburban Transit
16	Color Solutions Auto Two	126 Triton Cir	Mobile- Auto	7542	Mobile Washing & Detailing
17	Conner Detail	1721 Red Barn Rd	Mobile- Auto	7542	Mobile Washing & Detailing
18	D L M Motors	617 Cathy Ln	Mobile- Auto	7538	Auto Repair & Maintenance
19	Detail On Us	1660 S El Camino Real 103	Mobile- Auto	7542	Mobile Washing & Detailing
20	Elite Auto Trim	4265 Manchester Ave	Mobile- Auto	7542	Mobile Washing & Detailing
21	Herbie Auto Mobile Detailing	141 Grandview St 13	Mobile- Auto	7542	Mobile Washing & Detailing
22	L. WICKS	804 Saxony Rd	Mobile- Auto	7538	Auto Repair & Maintenance
23	Lucas' Cab	117 Rosebay Dr 21	Mobile- Auto	4111	Local & Suburban Transit
24	Mercedes West Auto Wholesale	2026 Oxford Ave	Mobile- Auto	5511	Auto Sales & Maintenance
25	Miller Tire & Wheels, Inc.	248 La Veta Ave	Mobile- Auto	7538	Auto Repair & Maintenance
26	Reed Motors	1326 Rainbow Ridge Ln	Mobile- Auto	7538	Auto Repair & Maintenance
27	So Cal Demolition	1918 Azure Way	Mobile- Auto	7538	Auto Repair & Maintenance
28	Trinity Express	1457 Pegaso St	Mobile- Auto	4111	Local & Suburban Transit
29	Wallace Courier	523 Samuel Ct	Mobile- Auto	4215	Transport Services
30	Whalen Performance	1726 Avenida Melodia	Mobile- Auto	7538	Auto Repair & Maintenance
31	A C Energy Systems, Inc.	224 Birmingham Dr 1A	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
32	A. P. Cottam Co.	123 Jasper St 12	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
33	All Integrity Plumbing	1062 Golden Rd	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
34	App Tek Commercial Inc.	171 Saxony Rd 202	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
35	Archibald Sheet Metal	125 A St	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
36	Artisan Textures And Drywall	909 Woodlake Dr	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
37	B L T Construction, Inc.	1923 Lahoud Dr	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
38	Beeson Squared Construction	1572 Caudor St	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
39	Better Homes Construction	231 Countryhaven Rd	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
40	Caliber Drywall	1253 N Vulcan Ave 3	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses

Appendix D-6: FY 2009-10 Commercial Inventory- Mobile Businesses

41	Coastal Construction Group	742 Neptune Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
42	Colt Construction & Development	709 Cathy Ln	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
43	Concrete Heritage, Inc.	825 Del Rio Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
44	Craftsman Stone And Tile	1014 San Abella Dr	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
45	Creative Garage Door Systems	1665 Orange Blossom Way	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
46	CUSTOM BUILDERS	1347 Summit Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
47	D. Bell Construction, Inc.	1539 Caudor St	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
48	D. H. Construction	477 Delage Ct	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
49	Delany Construction Company	112 La Veta Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
50	Dry Wall Doctor	476 La Mesa Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
51	E. L. Hewitt Construction	825 S Vulcan Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
52	Eric Jason Cashion, Dba: Siding Solutions	168 Coop Ct	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
53	Finishing Touch Moulding, Inc.	921 Hymettus Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
54	Green Building Squared, Inc	1572 Caudor St	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
55	Hauser Houses	1452 Santa Fe Dr	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
56	Howe Construction	125 Calle Pensamientos	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
57	J. BRYANT CONCEPTS	565 Requeza St	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
58	John Bland Construction	812 Palaro Dr	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
59	KLR Bobcat and Hauling Servies	1924 Country Grove Ln	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
60	Langtree Woodworking	301 Horizon Dr	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
61	M R B Construction	1265 N Vulcan Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
62	Pacific Coast Glazing, Inc.	908 Nolbey St	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
63	Pacific Custom Builders	146 W Glaucus St	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
64	Pacific Horizon Construction Co.	773 Hymettus Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
65	Pascal Steel Corporation	555 Second St 4	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses

Appendix D-6: FY 2009-10 Commercial Inventory- Mobile Businesses

66	Paul Beeson H H P	1572 Caudor St	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
67	R. A. Booker Builders, Inc.	3451 Toscano Ct	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
68	Richard Melton Constructioin Inc.	1570 Lake Dr	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
69	Richard Thaisz Construction	1403 Caminito Septimo	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
70	Robert R. Lovci	1236 Rubenstein Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
71	Robert Tessieri Construction	1743 Legaye Dr	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
72	Sahba Javedani	624 Faith Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
73	So - Cal Shade Sails	1009 Hurstdale Ave	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
74	Steffen Enterprises, Inc.	1008 Saxony Rd	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
75	Sun Cal Solar Incorporated	745 Winding Way	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
76	Titan Woodworks	1131 Bonita Dr B	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
77	Van Veen Team	1145 Aloha Dr	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
78	W O A Builders, Inc.	110 Requeza St	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
79	William B. Hannon General Construction	1748 Lake Dr	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
80	Willowen Builders	3410 Adams Run	Mobile- Contractor	1521	General contractors primarily engaged in construction of single-family houses
81	Chucks Garden	1578 S El Camino Real	Mobile- Eating/Drinking	5812	Establishments primarily engaged in the retail sale of prepared food and drinks
82	Dave De Jour	2080 Montgomery Ave	Mobile- Eating/Drinking	5812	Establishments primarily engaged in the retail sale of prepared food and drinks
83	GREEN GENERATION GREASE COLLECTION	2035 Sea Village Cir	Mobile- Eating/Drinking	7389	Establishments primarily engaged in furnishing business services
84	Shouri Sushi Enterprise Corp.	1404 Via Terrassa	Mobile- Eating/Drinking	5812	Establishments primarily engaged in the retail sale of prepared food and drinks
85	Victoria Wit	616 Cypress Hills Dr	Mobile- Eating/Drinking	5812	Establishments primarily engaged in the retail sale of prepared food and drinks
86	101 Window Cleaning	910 Hermes Ave	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
87	A & M Window Cleaning	1125 N Vulcan Ave 26	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
88	All Cities Hauling	937 Woodlake Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
89	Anonymous Window Cleaning	1727 Legaye Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
90	At Ease Services	842 Bonita Dr A	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
91	Aztech Cleaning Services	1627 Valleda Ln	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
92	Belman Handyman	738 Snapdragon St	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
93	Blade Dufour Handyman Service	905 Woodlake Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
94	Bouche Construction	1115 Balour Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
95	Bright Visions Window Washing	616 Lynwood Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
96	C C A R E	1399 Ranch Rd	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
97	Classy Glass	244 Camino De Las Flores	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work

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98	Clean Air Diagnostics & Solutions	1546 Avenida La Posta	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
99	Clean Sweep	1252 Mackinnon Ave	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
100	Coast Transportation	1990 Country Grove Ln	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
101	D V Environmental Group	1829 Forestdale Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
102	Designs By The Sea	1511 Calle Tulipanes	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
103	Ed's Handyman Service	1372 Hymettus Ave	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
104	F & V Painting, Inc./Dba Certapro Painters	1340 Ravean Ct	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
105	First Place Finish Carpentry	556 Third St	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
106	FRAZIER WINDOWS	1017 Hygeia Ave	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
107	G B Enterprises	1106 Second St	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
108	Gary Wesley Handyman	1813 N Vulcan Ave	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
109	Gaul Remodeling	126 Jasper St 404-B	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
110	Heavenly Views Window Cleaning	1123 Gardena Rd	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
111	Home Security Solutions	544 Crest Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
112	Jesus Fuentes	2039 Shadow Grove Way	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
113	John's Window Cleaning	1201 N Vulcan Ave 25	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
114	Ken's Handyman Service	152 N Coast Highway 101 19	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
115	Liquid Pool And Spa Service	16 E I St	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
116	Lux Homes	378 Fulvia St	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
117	M H S - Works	1008 Cottage Way	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
118	Madrigal Handyman Service	513 S Willowspring Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
119	Maurice's Handyman Services	1190 Encinitas Blvd A	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
120	Mc Gowans Home Maintenance	949 Woodgrove Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
121	Michael E. Greiff	1448 Caminito Septimo	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
122	Mike Hidalgo, Inc.	119 Europa St	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
123	N. Otis Potter	505 Arden Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
124	North County Handy Man	1270 Avenida Miguel	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
125	North County Hauling Service	1117 Woodlake Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
126	Pacific Roof Cleaning	1571 Avenida De Las Lilas	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
127	Patrice Alexander	2437 Oxford Ave	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
128	Patrick W. Quinlan Handyman	454 Requeza St 320	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
129	Peruvian Builders	349 Village Run East	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
130	Phil's Handyman Service	1726 Old Mill Rd	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
131	R. K. Enterprises	658 Santa Fe Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
132	Reva Hydro Jetting	1056 Lark Song Ln	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
133	Reyes Handyman	1143 Gardena Rd	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
134	Romeo Godinez Handyman	1159 Gardena Rd	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
135	Rusty Tree Service	1144 Woodlake Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
136	S. M. H. Handyman Service	1009 Hermes Ave A	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
137	Salo Custom Woodwork	1549 N Vulcan Ave 54	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
138	Sammy's Handyman Plumbing	110 S Kihridge Ln	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
139	San Diego Stone Care	731 Snapdragon St	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
140	Scot Enterprises	454 Requeza St 130C	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
141	Seacoast Plumbing	1334 Caminito Septimo	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
142	Short People Services	116 Quail Gardens Dr 137	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
143	Sparkle Window Cleaning	2427 Newcastle Ave	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
144	Spectrum Builders	699 N Vulcan Ave 84	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
145	Sunny Window Cleaning	404 Encinitas Blvd 345	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
146	Supergrampa	1831 Pleasantdale Dr	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
147	Turn Key Construction Handyman Services	444 N El Camino Real 87	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
148	Velasquez Maintenance, L L C	1902 Paxton Way	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work

Appendix D-6: FY 2009-10 Commercial Inventory- Mobile Businesses

149	William Brady Handyman	923 Melba Rd	Mobile- Handyman	1799	Special trade contractors primarily engaged in construction work
150	30 Minute Carpet	558 Beach St	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
151	All About Cleaning Services	1168 Arcadia Rd	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
152	All In Carpet Cleaing	720 Devonshire Dr	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
153	Best Cleaning/Dba Anago	1543 Villa Cardiff Dr	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
154	Beyond Industrial Cleaning	945 Woodgrove Dr	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
155	Bob's Carpet Care, Inc.	336 Sanford St	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
156	California Maids Home Services	885 Del Rio Ave	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
157	Cardiff Maintenance	2233 Lagoon View Dr	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
158	Cifuentes Residential & Commercial Cleaning	1646 Landquist Dr	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
159	Claudia's Housekeeping Services	1338 Mackinnon Ave	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
160	Cleaning Lady Elmorr	2134 Carol View Dr 311	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
161	Clear Choice Window Cleaning	138 Diana St	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
162	David Rivers Cleaning Services	1743 Old Mill Rd	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
163	Doctor Playground, Inc.	123 Jasper St 46	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
164	Drenie's Housecleaning	1421 San Elijo Ave B	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
165	Elva's Housecleaning	1936 Park Dale Ln	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
166	Encinitas Janitorial Service	699 N Vulcan Ave 109	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
167	Favorite Maid	404 Encinitas Blvd 258	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
168	Guillermina's House Keeping	1253 Orkney Ln	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
169	Jason Cardoza General Maintenance	884 Del Riego Ave	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
170	Just Us Cleaning And House Sitting	1066 Guildford Ct	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
171	Kamin's Cleaning Services	170 Phoebe St 11	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
172	Letty Boops Housekeeping	407 Requeza St E10	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
173	Lorenas Cleaning	1125 N Vulcan Ave 11	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
174	Maria Lopez Professional Cleaning	282 Aspenwood Ln	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services

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175	Nayeli Kim Dba Anago Of San Diego	1015 Guadalajara Dr	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
176	Pacific Coast Maintenance	981 N Vulcan Ave 8	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
177	Professiional Cleaning & Errands	1099 Regal Rd	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
178	Ranch & Coast Mortgage Group, Inc.	149 W D St	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
179	Rita's Cleaning Services	796 Clark Ave	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
180	Romero's Carpet Cleaning	1190 Encinitas Blvd 146	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
181	Rosanas Home Cleaning Services	1100 Garden View Rd 129	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
182	Seaside Janitorial Service	1019 1/2 Hermes Ave	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
183	Terry's Cleaning Service	2157 Pleasant Grove Rd	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
184	The Rescue Maids	1305 Mackinnon Ave	Mobile- Janitorial/Cleaning	7349	Establishments primarily engaged in furnishing building cleaning and maintenance services
185	10-C'S Landscape Enhancements	1301 Trabert Ranch Rd	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
186	A Sinclair Ground Maintenance	454 Requeza St 316 A	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
187	Aguirre Services	347 Cerro St	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
188	Alfonso Rey Landscape Maintenance	351 Sprucewood Dr	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
189	All Cities Construction Services	729 Requeza St	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
190	All Cities Hauling	280 Cottage Grove Ln	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
191	Alonzo	755 Regal Rd	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
192	Anguiano Landscaping	471 Cole Ranch Rd	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
193	Arnulfo Medina Landscaping	1408 Hermes Ave A	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
194	Arroyo Landscape Design	910 Nardo Rd	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
195	Benny's Gardening	1010 Balour Dr	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
196	Carrillo Tree Maintenance	794 Clark Ave	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
197	Coco's Landscape And Maintenance	1744 Knollfield Way	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
198	Crown Pool And Landscape	2126 Via Tiempo	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
199	Dave Steinbis Landscape Maintenance	699 N Vulcan Ave 127	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services

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200	Del Mar Landscaping	2016 Bulrush Ln	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
201	Enrique Landscaping	1020 Aloha Dr	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
202	Falling Waters Landscape, Inc	774 Lotus Blossom St	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
203	Felix Sanchez Gardening Service	880 Del Rio Ave	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
204	Flores Landscaping	647 San Dieguito Dr 3	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
205	G. K. Landscape	244 Second St E	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
206	Galapacifica Landscape	924 Encinitas Blvd 73	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
207	Greg Stone Landscape Architects	69 Mcneill Ave	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
208	Gresham Landscaping & Consulting	1734 Noma Ln	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
209	Hauling And Landscaping.Com	1133 Gardena Rd	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
210	J A Landscape	2068 Bulrush Ln	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
211	Jean Nordstrom	2156 Mountain Vista Dr	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
212	JESUS AGUSTIN AMEZCUA LANDSCAPE	213 Hickoryhill Dr	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
213	JMD Landscape, Inc.	187 N Vulcan Ave	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
214	John Hanna & Associates	1753 Swallowtail Rd.	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
215	L. L. M. Landscape, Inc.	675 Requeza St	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
216	LANDESCAPE DESIGNS/LANDESCAPE	944 Hermes Ave	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
217	Landscaping	1105 Regal Rd	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
218	Lattin	246 Neptune Ave	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
219	Luis Maldonado	1041 San Andrade Dr A	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
220	Mijangos Landscaping	1608 Charro St	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
221	MIKE HIRSCH	753 Requeza Street	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
222	Mitchell Aquarium Service	591 Hygeia Ave A	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
223	Morrison Workshop	875 Del Rio Ave	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
224	Pacific View Landscapes	2444 Manchester Ave	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services

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225	Pappas Landscape Technician	1063 Gardena Rd	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
226	Prola Landscape Design	1333 San Elijo Ave	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
227	REEGAN RAY DESIGN	734 San Dieguito Dr	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
228	Sinclair Grounds Maintenance	454 Requeza St	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
229	STEPHANIE C. SMULL	837 Stratford Dr	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
230	U P E Resources/Tree Elements	1624 Olmeda St	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
231	Zachary Jones Landscaping	704 Regal Rd #3	Mobile- Landscaping	782	Establishments primarily engaged in performing a variety of lawn and garden services
232	Action Painting	1443 Via Terrassa	Mobile- Painting	1721	Special trade contractors primarily engaged in painting and paper hanging.
233	Beemer Coatings	152 Coop Ct	Mobile- Painting	1721	Special trade contractors primarily engaged in painting and paper hanging.
234	Kessing Painting,Inc.	261 Caliban Ct	Mobile- Painting	1721	Special trade contractors primarily engaged in painting and paper hanging.
235	Mr. Paint	404 Encinitas Blvd 228	Mobile- Painting	1721	Special trade contractors primarily engaged in painting and paper hanging.
236	Russell Handy Painting	2056 Bulrush Ln	Mobile- Painting	1721	Special trade contractors primarily engaged in painting and paper hanging.
237	A Plus Pool And Spa Service	1190 Encinitas Blvd 247	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
238	Absolute Perfection Fountain	730 Third St	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
239	Aqua Tech Pool Care, L L C	233 Delphinium St	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
240	Aquatic Perfection	1590 Ave De Los Lirios	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
241	Bishop Pool Service And Repair	744 Foxglove St	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
242	Blue Water Of La Jolla	2008 Wandering Rd	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
243	C D Pools	1265 Rubenstein Ave	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
244	Cielo Pools	708 Oakbranch Dr	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
245	James Kandiguranis Pools	1853 N Vulcan Ave 4	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
246	Leisure Friends,	368 N El Camino Real	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
247	Mayer Pool Service & Repair	1553 Plumtree Dr	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
248	Pacific Coast Pool Service	1439 Linda Sue Ln	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
249	Palisades Pool And Spa Service	230 Gloxina St	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
250	Pro Clean Pools & Spas	1052 Arcadia Rd	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
251	Ranch And Sea Pool Care	1686 Falcon Hill Ct	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
252	Rancho Santa Fe Pool Service	2039 Willowood Ln	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
253	S. S. Pool Service	1125 Woodlake Dr	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
254	The Pool Pros	2061 Village Park Way 123	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance
255	Wilson Pools Plus	185 Village Run East	Mobile- Pool	7389	Swimming pool and fountain cleaning and maintenance

Appendix D-6: FY 2009-10 Commercial Inventory- Mobile Businesses

CITY OF ENCINITAS

Clean Water Program

Minimum Required

STORMWATER BEST MANAGEMENT PRACTICES

for Commercial Facilities



YOUR BUSINESS CAN MAKE A DIFFERENCE!



What is a stormwater Best Management Practice (BMP)?

The term "Best Management Practice" (BMP) refers to a combination of effective and economical practices, techniques, and/or activities that can help prevent or reduce stormwater runoff pollution. It's simple: only rain goes in the storm drain.

How do stormwater BMPs apply to your business?

The City of Encinitas has established minimum stormwater BMP requirements for all commercial businesses in the City. These minimum BMP standards are summarized below for your information and awareness. Please note that some facilities may require additional BMPs as determined by the City, based upon activities or materials specific to that location. *(Encinitas Municipal Code chapter 20.08)*

FOR MORE INFORMATION:

See http://bmp.projectcleanwater.org for more information on Best Management Practices relating to specific commercial business activities.

To report stormwater pollution in the City of Encinitas, please call the Clean Water Hotline: (760) 633-2787

For any questions regarding the City's Clean Water Program or the information presented above, email: npdesmail@cityofencinitas.org

Printed on recycled paper.

BMP CATEGORIES:

Employee Education and Training

Education and training is an essential and cost effective pollution prevention method. It is important to provide and document employee training. A training log should be kept at the facility to ensure that all employees are properly trained in stormwater pollution prevention practices. At a minimum, all employees should be trained on the following:

- Knowledge of Best Management Practices (BMPs) for every activity performed on the job. (Please visit *http://bmp.projectcleanwater.org* for activity specific practices)
- Proper spill prevention and response procedures (containment, control, cleanup - do NOT hose it down)
- The location and proper use of clearly labeled spill kit and spill response guide.
- The location of all stormwater drains and inlets, and the knowledge that they all lead to the ocean.

Indoor/Outdoor Liquid Storage

Commonly stored liquids including grease, oil, and other fluids that may be kept in a container inside or outside may pose a potential threat to water quality if they can overflow, get knocked over, or leak. Properly storing these fluids is a key component to effective pollution prevention at any business. The following practices comply with minimum BMP standards for liquid storage — and will help to keep them out of the stormwater system.

- Keep containers that store fluid or liquid inside an additional container to provide secondary containment
- Provide overhead coverage for outdoor storage of fluid or liquid waste
- Schedule regular waste pick-ups to prevent spills and overflows from storage containers
- Perform regular maintenance and cleaning of storage areas

Good Housekeeping

Routine maintenance and clean-up is essential to minimizing stormwater pollution from your business. When cleaning up outdoors, it is important to keep debris and contaminants from running into the storm drain system. The following good practices should be applied to all cleanup and maintenance activities to prevent storm drain pollution:

- Dry cleaning methods (i.e. using a broom to sweep instead of a hose) will reduce water usage and lessen the potential to pollute. Also, using a mop and bucket will eliminate runoff; the wash water can then be disposed of in the sink or toilet (NOT the storm drain)
- Wash water from activities such as hosing off sidewalks and patios, vehicle washing, and cleaning floor mats should be directed toward or done over pervious areas (i.e. lawn, dirt, flower bed, shrubs, and planted areas).
- If using water as a clean-up method and it cannot be re-directed to a vegetated area, proper storm drain protection (i.e. sand bags) must be utilized to capture all washwater.

Trash/Recycling Storage and Management

Properly maintained trash, recycling, and debris containment areas are an easy way to protect the environment. Simple steps like keeping trash dumpster lids closed and immediate cleanup of spilled materials (solid or liquid) will go a long way. The following practices must also be applied to better manage trash, debris and other waste materials:

- Ensure the site, trash/recycling areas, and storm drains are free of litter and debris.
- Trash containers and dumpsters must be in good condition and free of holes.
- All receptacles must have closed lids or be placed in a covered area.





Common urban runoff contaminants include: oil and grease from cars; pesticides, herbicides and fertilizers from lawns and landscaped areas; soapy water from carpet cleaning and vehicle washing; sediment from construction projects; loose trash such as cigarette butts and soda bottles; and many other sources associated with everyday activities. There are many simple things that everyone can do to help prevent stormwater pollution.

-Project Clean Water

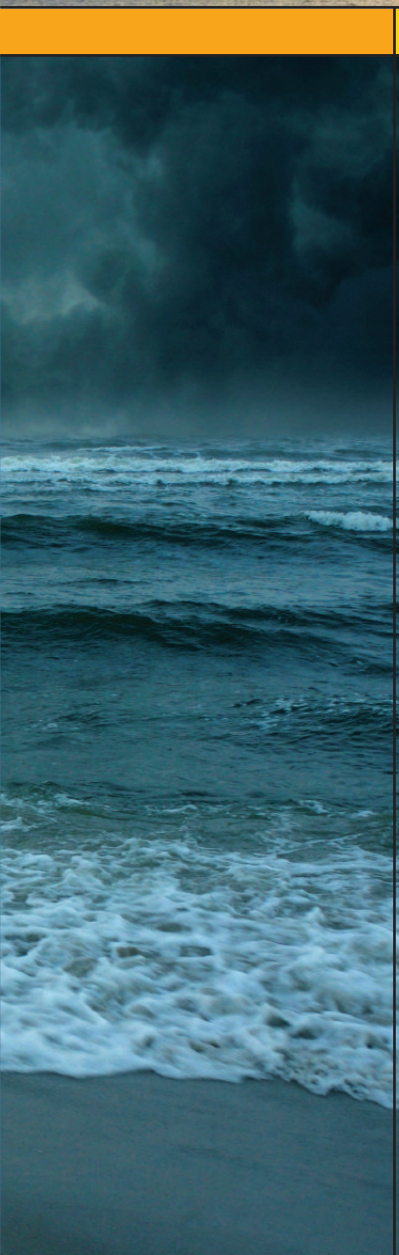


CITY OF ENCINITAS

Clean Water Program



Minimum Required STORMWATER BEST MANAGEMENT PRACTICES *for Mobile Business Activities*



YOUR BUSINESS CAN MAKE A DIFFERENCE!



What is a stormwater Best Management Practice (BMP)?

The term "Best Management Practice" (BMP) refers to a combination of effective and economical practices, techniques, and/or activities that can help prevent or reduce stormwater runoff pollution. It's simple: only rain goes in the storm drain.

How do stormwater BMPs apply to your business?

The City of Encinitas has established minimum stormwater BMP requirements for all commercial businesses in the City. These minimum BMP standards are summarized below for your information and awareness. Please note that some businesses may require additional BMPs as determined by the City, based upon activities or materials specific to that location. *(Encinitas Municipal Code chapter 20.08)*

FOR MORE INFORMATION:

See http://bmp.projectcleanwater.org for more information on Best Management Practices relating to specific commercial business activities.

To report stormwater pollution in the City of Encinitas, please call the Clean Water Hotline: (760) 633-2787

For any questions regarding the City's Clean Water Program or the information presented above, email: npdesmail@cityofencinitas.org

Printed on recycled paper.

BMP CATEGORIES:

Employee Education and Training

Education and training is an essential and cost effective pollution prevention method. It is important to provide and document employee training. At a minimum, all employees should be trained on the following:

- Knowledge of Best Management Practices (BMPs) specific to mobile business activities. Please visit *http://bmp.projectcleanwater.org* for activity specific BMPs related to your business.
- Knowledge of the storm drainage system, and how to locate drains and inlets that must be protected.
- How to use appropriate and easily accessible supplies to properly control and eliminate any discharge to the storm drain system.
- Proper spill control and cleanup procedures.

Proper Waste Handling (solid, liquid, and hazardous wastes)

Before starting any job, consider the types of waste that may be generated including wash water, chemical compounds, residual construction or repair materials, paints, oil and grease, and loose trash and debris. It is important to properly control, contain, and transport these materials to prevent spills and discharge from entering the storm drain system. The following steps will help to manage waste generated from your mobile business activity:

- Do not dispose of ANY waste material in the storm drain system.
- Liquid non-hazardous wastes may be disposed of in the sanitary sewer (i.e. sinks, toilets) if appropriate, or placed in sealed containers and disposed of properly.
- Solid wastes should be removed from the worksite in waste containers with a lid and disposed of at appropriate waste sites.
- Inspect and label all hazardous material waste containers prior to removal. For details in the management, transport, and disposal of specific waste, contact the County of San Diego Hazardous Materials Division at (619) 338-2231.

Equipment Cleanup

Equipment cleanup activities should always be conducted away from storm drain inlets, and performed in a manner to prevent the release of any material into the street, curb, gutter, alley or any other conveyance facility. To ensure compliance with minimum BMP standards for equipment cleanup activities, follow these simple practices:

- Equipment cleanup should be conducted in a container such as a bucket, tub or basin to control liquids and prevent runoff.
- Alternatively, conduct equipment and material cleanup activities in an area contained by a berm or plastic liner to collect and contain all fluids.
- Dispose of waste water into a sanitary sewer drain (i.e. sink, toilet) as appropriate or into a vegetated area (i.e. lawn, flower bed, dirt area).





Common urban runoff contaminants include: oil and grease from cars; pesticides, herbicides and fertilizers from lawns and landscaped areas; soapy water from carpet cleaning and vehicle washing; sediment from construction projects; loose trash such as cigarette butts and soda bottles; and many other sources associated with everyday activities. There are many simple things that everyone can do to help prevent stormwater pollution.

-Project Clean Water



Appendix E

Residential

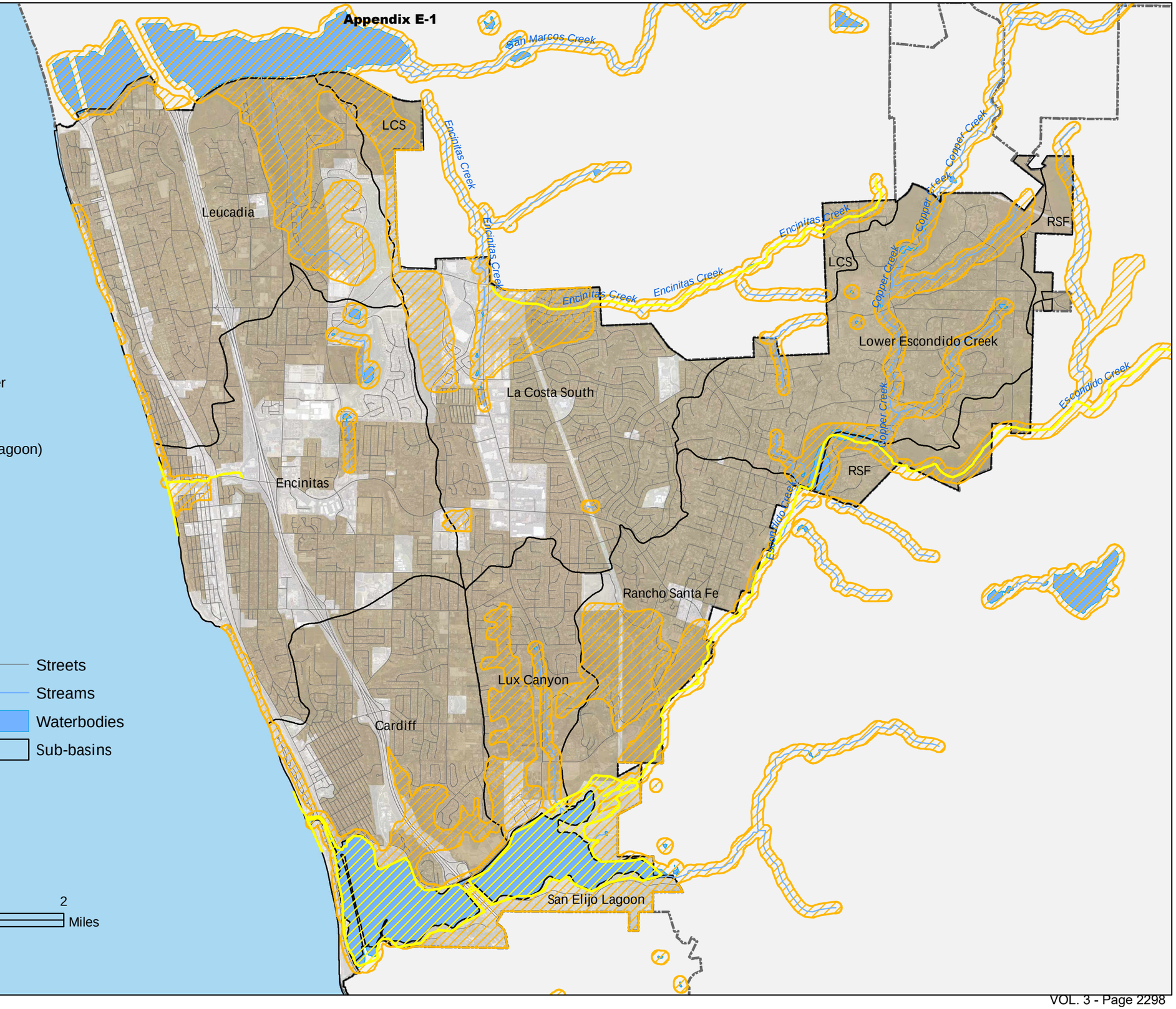
E-1 Map of High Threat to Water Quality Residential Areas

City of Encinitas

High Threat to Water Quality Residential Areas

High Threat to Water Quality Residential Areas in the City of Encinitas include:

- All residential areas within 500ft of any 303(d) listed water body or lagoon
- All residential areas within, directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an ESA
- The residential area to the west of Interstate 5 within the Cardiff sub-basin (drains to San Elijo Lagoon)
- The residential area south of Sylvia St, west of Second Street, and north of K Street (drains to Cottonwood Creek and Moonlight Beach)



Appendix F

Education

F-1 **Regional Mobile Business Outreach and Education Plan**

F-2 **NCSWP Construction Brochure**

F-3 **City of Encinitas Brochures (English/Spanish)**

F-4 **Encinitas Environmental Services Guide**

F-5 **Giveaway items for FY 09-10**

F-6 **Regional Residential Education Plan**

Regional URMP Attachment 5.0

Regional Mobile Business Outreach and Education Strategy

FINAL - March 20, 2008

Submitted by the San Diego Stormwater Copermittees in partial fulfillment of the requirements of San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (the San Diego Municipal Stormwater Permit)

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1.0 INTRODUCTION

This document describes a **Regional Mobile Business Outreach and Education Program** to be collaboratively conducted by the Copermittees of NPDES Order No. R9-2007-0001 (Permit). It was developed by the Mobile Business Subcommittee of the Copermittees' Outreach Workgroup. Permit section D.3.b.(4)(a) requires that each Copermittee develop and implement a program to reduce the discharge of pollutants from mobile businesses to the MEP. Section D.3.b.(4)(b) further states "if they choose to, the Copermittees may cooperate in developing and implementing their programs for mobile businesses, including sharing of mobile business inventories, BMP requirements, enforcement action information, and education." Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the Copermittees have chosen to collaborate on a regional mobile business outreach and education strategy. It addresses the following elements:

- Inventory Development and Maintenance;
- Establishment of Minimum BMP Requirements; and
- Outreach and Education (Including Business Notifications).

Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this Strategy.

2.0 SOURCE CHARACTERIZATION

Mobile businesses provide services at offsite locations rather than from fixed bases of operation. Services may be provided at, but are not limited to, residential, industrial, municipal, and commercial areas. Permit Section D.3.b.(1), identifies 12 categories of mobile business types that will be addressed as part of this regional Strategy. Table 1 identifies these businesses types and the potential pollutants associated with each. Additional characterization and description of these sources will be conducted during the development and implementation of the regional program elements described in Section 2.0

Table 1 – Identification of Mobile Business Types and Associated Pollutants-of-Concern

Source Type	Bacteria	Metals	Pesticides	Sediment	Trash	Nutrients	Organics	Oil/Grease
1. Auto Repair, Maintenance, Fueling, Cleaning		X		X	X		X	X
2. Equipment repair, maintenance, fueling, or cleaning		X		X	X		X	X
3. Mobile automobile or other vehicle washing		X		X	X		X	X
4. Pest control services		X	X				X	
5. Mobile carpet, drape or furniture cleaning							X	
6. Cement mixing or cutting				X		X	X	
7. Masonry				X		X	X	
8. Painting and coating		X			X		X	
9. Landscaping	X	X	X	X		X	X	
10. Pool and fountain cleaning		X		X		X	X	
11. Portable sanitary services	X				X	X	X	
12. Power washing services	X	X	X	X	X	X	X	X

3.0 REGIONAL PROGRAM ELEMENTS

The Regional Mobile Business Outreach and Education Program will consist of several elements to be developed and implemented by June 2010.

3.1 Inventory Development and Maintenance

Permit section D.3.b.(1) requires that each Copermittee keep as part of its commercial sources inventory a listing of mobile businesses known to operate within its jurisdiction, and section D.3.b.(4)(b) encourages Copermittees to share these inventories. In addition to sharing inventory information, the Copermittees have determined that the collaborative development of a shared regional inventory would promote consistency in the regulation of mobile businesses, and would promote cost-efficiency by eliminating redundancy between individual inventories and avoiding duplicative notifications. The Copermittees

intend to utilize a consultant to compile this inventory. It is expected to be completed by June 2009. Prior to the completion of a shared inventory, the Copermittees will continue to meet the requirements of section D.3.b.(4)(b) by individually maintaining and updating as necessary their existing jurisdictional mobile business inventories. These will be used as a starting point for the development of a consolidated inventory. The consultant will also be tasked with researching other information sources such as unlicensed mobile businesses operating within the County, as well as with managing updates to the inventory in subsequent years.

3.2 Establishment of Minimum BMP Requirements

Permit section D.3.b.(4)(a)i requires that Copermittees develop and implement minimum standards and BMPs to be required for each of the various types of mobile businesses. The Copermittees also intend to collaborate in the development of a minimum set of BMP standards for each type of mobile business addressed through the regional effort. Existing resources such as jurisdictional minimum BMPs, the Project Clean Water Clean Water Tool Box (http://www.projectcleanwater.org/bmp/) and the Think Blue website (http://www.sandiego.gov/thinkblue) will be reviewed by the Copermittees in developing these common standards. A consultant may also be utilized for BMP development support. This task is expected to be completed by June 2009.

3.3 Outreach and Education Strategy

Permit section D.3.b.(4)(a)iv requires that Copermittees develop and implement an outreach and education strategy for mobile businesses. A variety of educational methods and approaches will likely be utilized in complying with this requirement. These will be determined by the Copermittees during the development of this task. The centerpiece of the Copermittees' education strategy will be business notifications. This element is described further below.

3.4 Business Notifications

Permit section D.3.b.(4)(a)iii requires that, within the first three years of implementation of the updated JURMP, each Copermittee must notify the owner/operator of each

inventoried mobile business their minimum standards and BMP requirements and local ordinances. The Copermittees will collaboratively develop and implement a regional notification strategy to inform mobile businesses of their obligation to comply with the local ordinances of the jurisdictions where they operate. In addition to assisting in the development of this strategy, the consultant will be tasked with notifying businesses and tracking when and how they were notified. Potential notification options include mailing, emailing, workshops, and website posting. This task will be completed no later than March 24, 2011, but is targeted for completion by March 2010.

3.5 Implementation Schedule

Implementation of the Regional Mobile Business Outreach and Education Program will begin during FY 08/09, with all major tasks targeted for completion by the end of FY 2009/10. The consultant may also be retained for future management of the inventory and other tasks as needed. Major milestones are summarized below.

FY 2008/09

- Consultant selection by Subcommittee
- Completion and maintenance of regional inventory by consultant
- Development of regional minimum BMPs

FY 2009/10

- Notification of businesses by consultant (by January 2010)
- Final report including status of notifications submitted to Copermittees

4.0 INDIVIDUAL COPERMITTEE RESPONSIBILITIES

Although many of the specific requirements of Permit section D.3.b.(4)(a) will be collaboratively addressed through the completion and implementation of the Regional Mobile Business Outreach and Education Program, the responsibility for ensuring individual Permit compliance ultimately remains with each Copermittee. These responsibilities are briefly discussed below.

4.1 Inspections and Enforcement

Permit section D.3.b.(4)(a)ii requires that Copermittees develop and implement an enforcement strategy which specifically addresses the unique characteristics of mobile businesses operating within their jurisdictions. Section D.3.b.(4)(a)v further requires that Copermittees conduct inspections of mobile businesses as needed (e.g., on a complaint basis). The Regional Mobile Business Outreach and Education program will not address inspections or enforcement of mobile businesses; these responsibilities are retained individually by each Copermittee.

4.2 Education and Outreach

Copermittees are expected to participate as requested in the development of the Education and Outreach Strategy described in Section 3.3 above. Individual Copermittees may also have specific needs or requirements not addressed through this effort. Each jurisdiction retains the responsibility for developing additional education programs or strategies in accordance with their own needs, and as necessary to ensure their own Permit compliance.

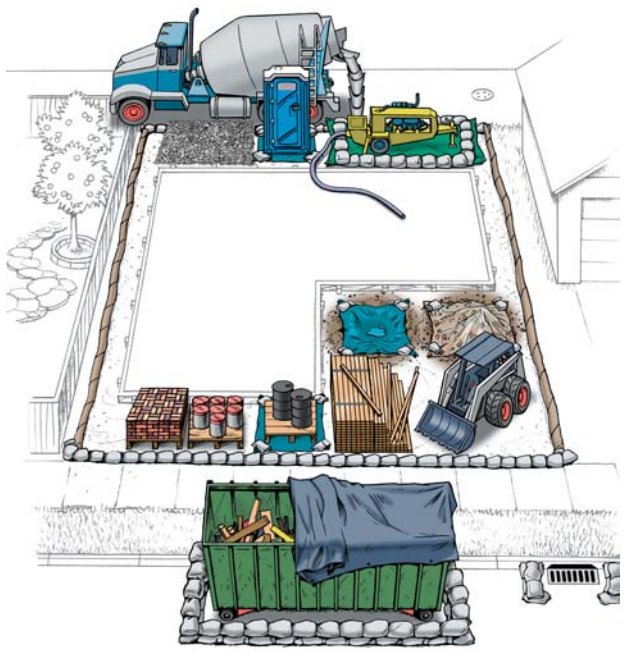
4.3 Inventory Updates

As described in Section 3.1 above, individual Copermittee mobile business inventories will initially be used as a starting point for the development of a consolidated regional inventory. Copermittees are expected to make their inventories available as requested, and to provide updated information as determined necessary for future updates.

4.4 BMP Requirements

Copermittees are expected to make their jurisdictional BMPs and requirements available as requested during the development of regional standards and program content. The Regional Mobile Business Outreach and Education Program will emphasize standardized, common content. In the event that an individual Copermittee determines that their specific requirements are not adequately addressed by the Regional Program, they will be responsible for completing additional notifications or other needed measures.

A Pollution Prevention Guide for the Construction Industry



North County Storm Water Program

Carlsbad • Del Mar • Encinitas • Oceanside • San Marcos • Solana Beach • Vista

Only Rain in the Storm Drain

Water Quality Regulations for Construction Sites

Dear Contractor,

The North County Storm Water Program (NCSWP) is a collective of jurisdictions in northern San Diego County working together to protect our watersheds. We believe that reducing pollution is critical to maintaining our communities' way of life.

It is our hope that this brochure will help you identify activities that are recognized to cause water pollution and implement appropriate Best Management Practices (BMPs) to minimize their impact. By providing you with these tools, we hope to make your job easier while keeping our waterways clean.

Each jurisdiction will be inspecting their construction sites to ensure the protection of water quality. We look forward to seeing the BMPs presented in this brochure implemented at your sites.

Together we have the ability to preserve and improve the quality of life in our communities.

Sincerely,

The North County Storm Water Program

Contact Phone Numbers:

City of Carlsbad
760-602-2719

City of San Marcos
760-744-1050

City of Encinitas
760-633-2787

City of Del Mar
858-755-9313

City of Oceanside
760-435-5800

City of Solana Beach
858-720-2470

City of Vista
760-726-1340

Water Quality Regulations for Construction Sites

In 1972, the environmental Protection Agency developed regulations to control water pollution. As a result, the National Pollutant Discharge Elimination System (NPDES) Permit was created. NPDES permits are issued to municipalities as well as construction sites. In addition to complying with local regulations, which are governed by our municipal NPDES permit, you may be required to obtain a permit through the State of California under the State General Construction Permit (99-08-DWQ). All construction sites over one acre are required to obtain coverage under this permit.

Construction sites can contribute pollutants, such as sediment, metals, and chemicals, to our local creeks, rivers, lakes, lagoons, and ocean. These pollutants make their way down our streets and into storm drains, eventually discharging to the nearest body of water.

All construction sites are required to implement Best Management Practices (BMP) to prevent storm water pollution. This brochure is intended to assist your construction site in understanding BMP requirements.

Each municipality has one or more persons dedicated to ensuring that all construction sites are in compliance with state and local storm water control regulations. Contact your local municipality for further information.

Inspection and Enforcement Program

Each jurisdiction has established an enforcement program to ensure that all businesses operate in compliance with all appropriate storm water laws and other City requirements. Contractors, site supervisors and property owners can be held responsible for violations, which may lead to a civil penalty of up to $10,000 per day and/or reimbursing the local jurisdiction for all expenses associated with clean up.



Right-of-Way Permitting

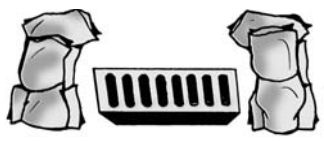
We understand that there are times when space on construction sites is limited. If at any point, you (as a contractor or subcontractor) need to use the public right-of-way in order to work or store materials, you must apply for a special permit. This permit allows you to use the City's right-of-way areas, and describes what is required to prevent illegal contaminants from entering local storm drains. For more information or to obtain a permit application contact your local jurisdiction.



Best Management Practices

Construction materials such as paint, dirt and trash often find their way into our storm drains, polluting the environment and jeopardizing our creeks, rivers, lakes, lagoons, and ocean.

The NCSWP is working with contractors to implement what are known as Best Management Practices (BMPs) on all construction sites. That is, methods used to keep pollution out of our storm drains and off public property, such as sidewalks, streets, parkways and alleys. Carrying out and maintaining these BMPs on the construction site is critical to protecting our ocean and lagoons.





The following is a list of BMPs and pollution prevention measures that shall be implemented at all construction sites:

1. **Conduct daily site cleanings.**
2. **Develop spill response and containment procedures.**
3. **Educate employees and subcontractors about BMPs.**
4. **Develop an erosion control plan for wind and rain.**
5. **Regularly maintain all BMPs at project site.**

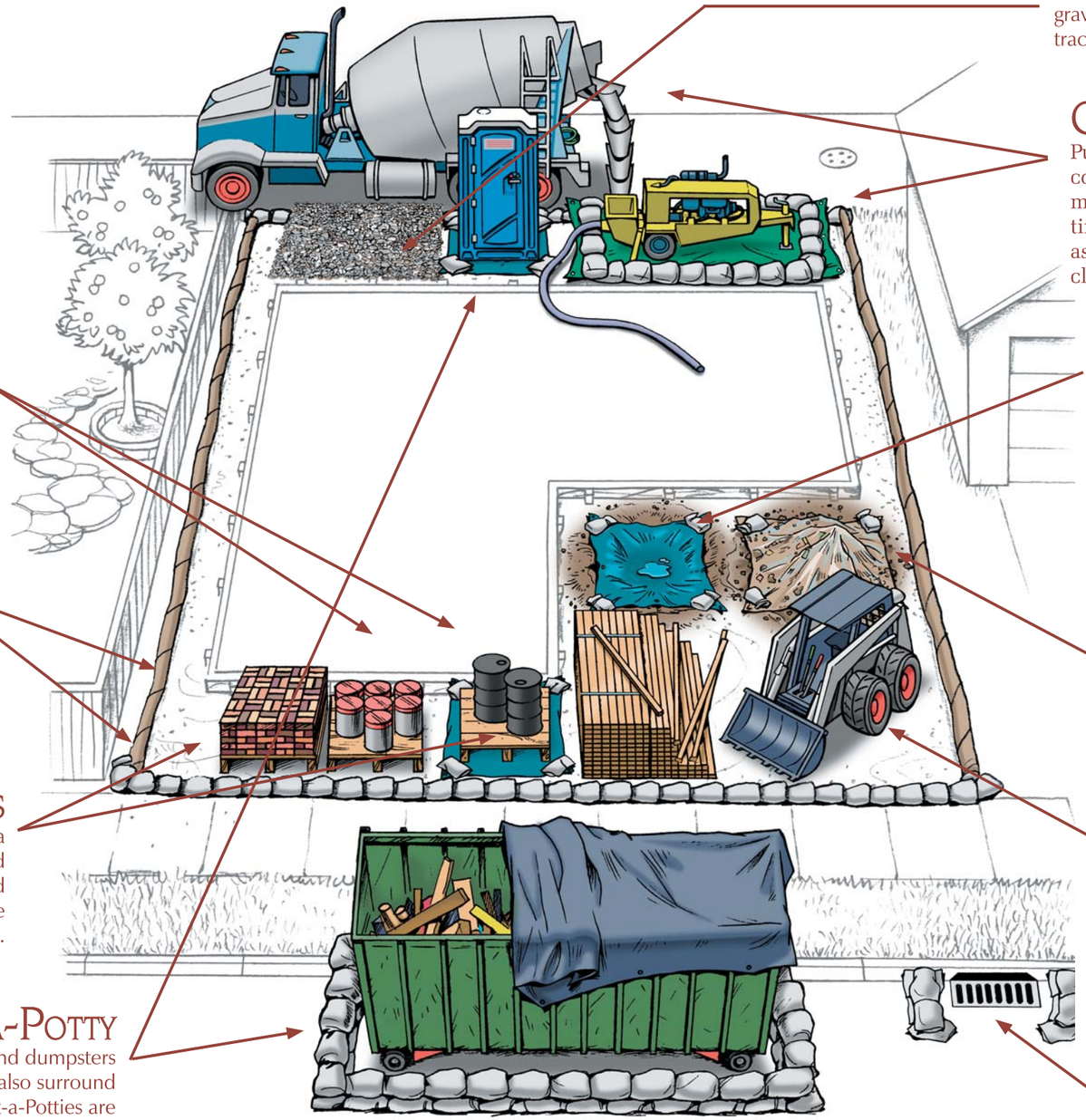
Best Management Practices

Site Overview

Protecting our water resources improves our quality of life and preserves the local environment for our children and future generations.

Untreated storm water and/or unintentional spills at work sites can flow into storm drains and pollute creeks, rivers, lakes, lagoons or the ocean. These discharges are prohibited by law.

The following drawing illustrates Best Management Practices (BMPs) that are recommended for construction sites in North County cities to protect storm drains and minimize pollution. Please check for local requirements.



Materials Storage

All building materials and fuel stored on the site must be contained and covered. It is illegal for contractors to wash out paint brushes in the street or dump any residues in the storm drain. Paint brushes and spray guns must be contained and disposed of properly.

Perimeter controls

Gravel bags, silt fences, and straw wattles are acceptable perimeter controls, and must be used to surround the entire site to control run-on and run-off. Avoid running over perimeter controls with vehicles or heavy equipment, as they can damage the materials. Keep extra absorbent materials and/or a wet/dry vacuum on site to quickly pick up unintended spills. Sites must also be checked and maintained daily.

Building materials/staging areas

Construction materials must be stored on site at all times unless a right-of-way permit has been obtained. Building materials should always be covered when not in use to prevent run-off caused by wind or rain. To apply for a right-of-way permit, contact the appropriate department of your local jurisdiction.

Dumpsters/Port-a-Potty

Always cover dumpsters with a rollback tarp. Areas around dumpsters should be swept daily. Perimeter controls should also surround dumpsters and all Port-a-Potties. If dumpsters or Port-a-Potties are kept on the street, right-of-way permits are needed.

Tracking Controls

All entrances and exits on the site must have coarse gravel or steel shaker plates to limit offsite sediment tracking.

Concrete Trucks/Pumpers

Pumpers must be surrounded by perimeter controls, such as gravel bags. Plastic sheets also must be placed beneath concrete pumpers at all times., and residual materials must be cleaned up as well. Washout areas must be used whenever cleaning trucks.

Washout area

The disposal of "wet" construction materials should be handled in the washout area. This includes paint, stucco and concrete. Use a berm and/or plastic sheet to collect and contain liquids and prevent run-off in nearby areas. The washout area must be checked and maintained daily to ensure compliance. Washout liquids must be disposed of properly.

Dirt and grading

Mounds of dirt or gravel should be stored on site. These materials should also be covered each day with a tarp, coconut mat, or other form of protection. Visqueen and/or tarps must be available and on site to cover 125% of exposed areas during the rainy season (October – April).

Earthmoving equipment

All earthmoving equipment should be stored on site. Maintenance should also be conducted on the site, and tracks and trails left by equipment leading to and from the site should be cleaned up immediately.

Storm drains

Storm drains must be protected at all times with perimeter controls, such as gravel bags or straw wattles. Sediment accumulation should be removed frequently.

These guidelines are generalized. Please check specific requirements with your local jurisdiction.


Mantenimiento
Automotriz
Automotive

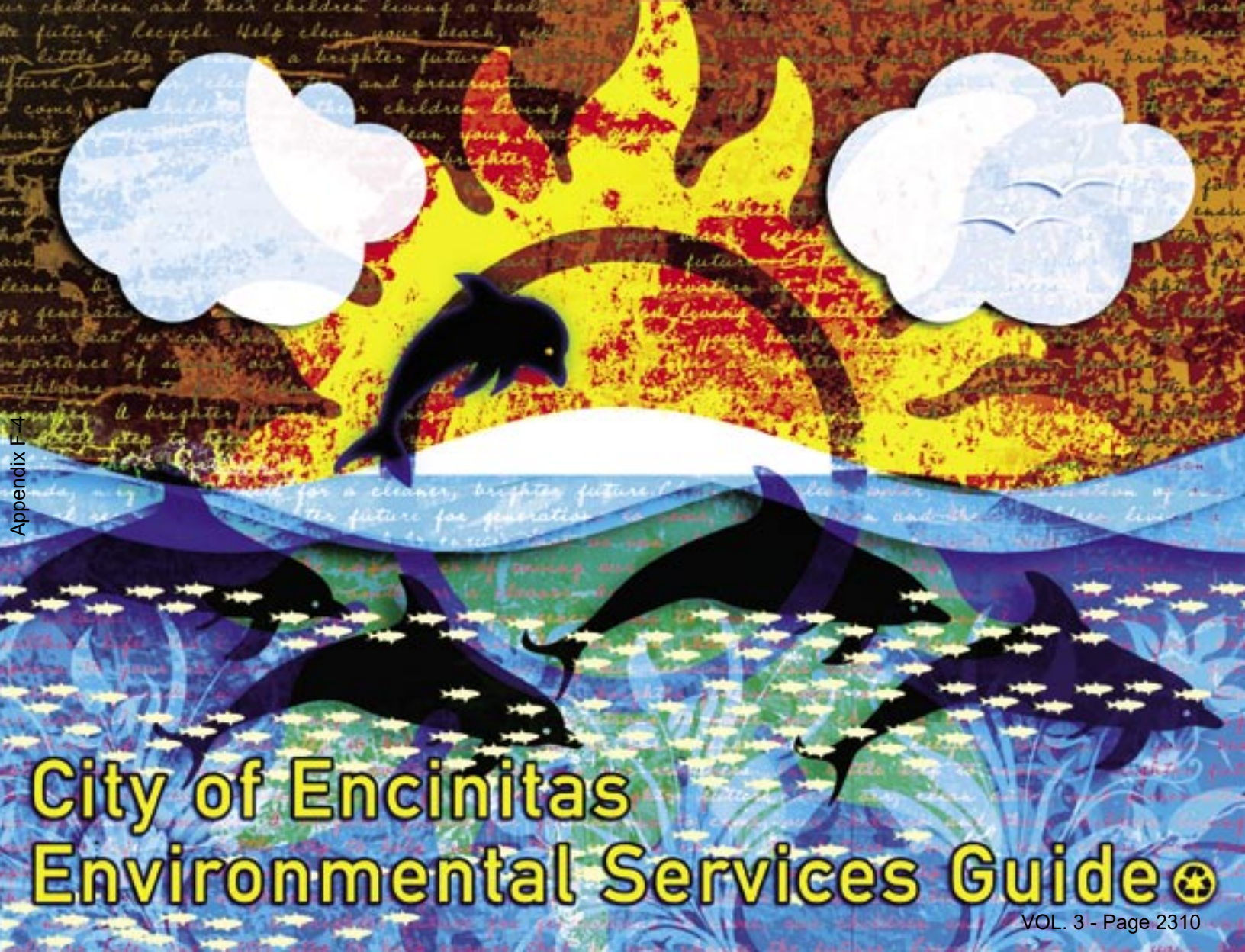

Empresas Constructoras
Developers


Hiring a
Handy Man


Diazinón
Diazinon


Restaurants Can
Help Keep our
Waterways Clean


Cuidado del
Patio y del jardín
Yard & Garden
Care


City of Encinitas
Environmental Services Guide

Ocean protection

The ocean begins at your front door.

Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to carry rainwater away from developed areas to prevent flooding. Untreated storm water and the pollutants it carries flow directly into our creeks, rivers, lagoons, and the ocean.

Storm water pollution can have a serious impact on water quality in Encinitas. Pollutants from the storm drain system can harm marine life as well as coastal and wetland habitats. They can also degrade our recreational beach areas and contribute to beach postings.



Storm water pollution comes from a variety of sources, including:

- Sediment from construction, home improvement, and landscaping projects
- Excess pesticides and fertilizer from lawns, gardens, greenhouses, and nurseries
- Trash/litter
- Oil and metals from cars
- Detergents, cleaners, and solvents from car washing and power washing activities
- Bacteria from pet waste

Did you know?

One gallon of oil can pollute about one million gallons of water.

- California Integrated Waste Management Board

We all live in a watershed

A watershed is an area of land which drains all the water into creeks, rivers, lagoons, and eventually the ocean. The City of Encinitas drains into Cottonwood Creek, Moonlight Beach, San Elijo Lagoon, and Batiquitos Lagoon.

HEALTHY WATERSHEDS = HEALTHY COMMUNITIES

In Encinitas we are surrounded by water and your actions either help or hurt the environment. Healthy watersheds are vital to our quality of life. Here are some tips to help keep our community clean:

- Properly dispose of all trash and debris
- Use fertilizers and pesticides sparingly. For more information visit: www.ipm.ucdavis.edu
- Adjust sprinklers and prevent over-watering. For more information visit: www.bewaterwise.com
- When possible, take your car to a commercial car wash
- Keep your car properly maintained to prevent fluid leaks
- Volunteer at cleanup events in Encinitas
- Pick up after your pets

To report an illegal discharge or for more information, visit us online at:
www.ci.encinitas.ca.us/resident/environment/cleanWP
or call our Clean Water Hotline at (760) 633-2787.





Color Changing Mood Pencil



Pet Waste Bag Dispenser



Recycled Shop Towel



Recycled Key Chain

Regional URMP Attachment 2.0

Regional Residential Education Plan

FINAL – March 20, 2008

Submitted by the San Diego Stormwater Copermittees in partial fulfillment of the requirements of San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (the San Diego Municipal Stormwater Permit)

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1.0 INTRODUCTION

The Regional Residential Education Program is a joint effort by the Copermittees of the Municipal Stormwater Permit (Order No. R9-2007-0001, NPDES No. CAS0108758). The Regional Residential Education Plan (Plan) contains recommended strategies for the successful development and implementation of the Regional Residential Education Program. Per section F.1 of the Permit, as amended by Addendum No. 1 on December 12, 2007, this program must be collaboratively developed and implemented by March 24, 2008.

In the past, Copermittees have been limited in their ability to pursue strategies which may have a much greater potential to influence knowledge and behavioral change in residential populations. There are several benefits to implementing an enhanced regional program to target residential sources of stormwater pollution. First, it will encourage the development of consistent messages throughout the region. Second, a regional approach will enable Copermittees to better leverage resources and utilize economies of scale. Finally, stormwater and urban runoff pollution frequently cross jurisdictional boundaries, making collaborative approaches a necessity. While the regional program will be coordinated extensively among the Copermittees, it is not meant to supplant the jurisdictional and watershed programs.

The overall goals of the program are to increase awareness and knowledge, improve attitudes toward stormwater pollution and provide a foundation for changing behaviors that contribute to stormwater pollution. Based on extensive input from the Copermittee Regional Stormwater Management Committee (RMC) and the Education & Residential Sources Workgroup, as well as an independent analysis of existing educational efforts, the following objectives were developed to support these goals:

1. Maintain a consistent image, message, and brand
2. Use positive messages to increase knowledge and awareness, and ultimately change behavior
3. Develop community partnerships to leverage resources

4. Develop assessment strategies for program effectiveness

The Regional Education & Residential Sources Workgroup advises the RMC on regional shared outreach activities as necessary to support the requirements of the Permit. The Education & Residential Sources Workgroup plans, develops, and implements the various aspects of the stormwater education program. Education & Residential Sources Workgroup participants have traditionally combined efforts to reach business, industrial, and residential communities across the San Diego region. However, in accordance with the most recent NPDES Permit, this Plan represents a distinct effort to target residential sources of stormwater pollution.

Messages developed by the Education & Residential Sources Workgroup are designed to increase knowledge and awareness of regional stormwater issues and encourage positive changes in behavior. Assessment methods and measures have also been developed to evaluate the effectiveness of these messages and the strategies used to deliver them. Program evaluation methods and strategies will evolve as various program elements are implemented. Regional assessment methods will measure knowledge, awareness, and attitudes of residents. Program elements that are determined to be ineffective or least effective will be replaced by more effective elements or improved upon as needed. The regional program will also facilitate the measurement of changes in pollutant generating behaviors by the jurisdictional and watershed programs.

As a basis for developing this Regional Residential Education Plan, the Copermittees contracted with TRG & Associates to develop *Recommended Options for the San Diego Regional Stormwater Educational Program*. This document contains a number of recommended strategies for the successful development and implementation of a regional residential education program. It includes an extensive literature review, an analysis of existing educational programs in San Diego, and a comprehensive list of public awareness surveys. The literature review outlines other programs in the State that have

successfully implemented regional residential stormwater education programs. The document also summarizes the strengths and weaknesses of existing residential education efforts, provides suggestions for how they can be improved, provides a brief analysis of baseline public awareness surveys that have been implemented locally within the last five years, and offers recommendations for improving assessment methods and survey instruments.

2.0 SOURCE CHARACTERIZATION

The San Diego region occupies 4,261 square miles with a population of approximately 3 million people. Estimates for the year 2007 indicate that the San Diego regional population is 29% Hispanic and 71% non-Hispanic. Non-Hispanic persons include African Americans, American Indians, Native Hawaiians, Asians, and persons of a multitude of races, ethnicities, and cultures. SANDAG currently estimates that the median household income in the San Diego region is $68,388. According to the US Census Bureau in 2004 only 10.9% of San Diego's population was living below the poverty level, compared to 13.2% Statewide. Other estimates indicate that as much as 25% of California's population is living below the poverty level. Much of the region's quality of life revolves around the water resources.

Residential areas have been shown to be a prevalent source of urban runoff in the San Diego region, although less than ten percent of the region is developed as residential land. Most of the urban activity is clustered in the western third of the county, near coastal areas. However; residential land–based activities throughout the entire region contribute to polluted stormwater runoff.

The Regional Residential Education Program will focus efforts on high priority residential pollution sources that are common throughout the San Diego region. Water quality monitoring data and source characterization studies have provided the Copermittees with useful information in determining regional residential sources of stormwater pollution and constituents of concern. Regional threats to water quality were initially outlined in the Report of Waste Discharged and finalized in the Permit. Section

F.1.a of the Permit describes the process for determining which pollutants will be addressed by the program.

2.1. Regional Constituents of Concern

The following constituents of concern were determined to be the primary pollutants from residential sources for the San Diego region:

- Bacteria
- Nutrients
- Sediment
- Pesticides
- Trash

Some jurisdictions may have additional high priority pollutants. Each jurisdiction will be individually responsible for addressing additional pollutants and their sources. The pollutants listed above will remain the focus of the Regional Residential Education Program.

2.2. Pollutant-generating Activities and Constituents of Concern

Table 1 outlines residential pollutant generating activities and associated constituents of concern generated by residential areas in the San Diego region.

Table 1) Pollutant Generating Activities

Pollutant Generating Activities	Priority Constituents				
	Bacteria	Nutrients	Pesticides	Sediments	Trash
• Leaving pet waste in yard, street or sidewalk • Improper disposal of pet waste	X	X			
• Over-irrigation • Improper irrigation and system maintenance	X	X	X	X	
• Fertilizer use • Pesticide use • Landscaping activities	X	X	X	X	
• Cleaning outdoor impervious surfaces (i.e., driveways and patios)	X	X		X	X
• Improper waste disposal	X	X	X	X	X

2.3. Target Audiences

As described above, this program is intended to address the entire residential community of the San Diego region. This residential audience will be further described in terms of two specific target audiences in order to design more effective education and outreach strategies. The target audiences for the Regional Residential Education Program have been identified based on information gathered by the consultant (TRG and Associates), who utilized data from market research conducted by the County and City of San Diego and surveys gathered from other case studies. Although there may be other smaller groups of target audiences, regional outreach must realistically target the highest priority demographics in order to effectively utilize program funds. The following describes the target audiences for the campaign:

1. Primary Target Audience- English speaking residents and homeowners
2. Underserved Target Audience- Spanish speaking communities and Low Socio-Economic Status (SES)

One of the challenges of program implementation will be to develop messages that appeal to these communities. While creating content and developing materials for the primary target audience may be relatively straightforward, methods and approaches will need to be modified in order to engage the Underserved Target Audience. For example; some messages will be more conducive to translation into the Spanish language than others. Once translated, Spanish language media will be used to disseminate these messages.

According to the US Census Bureau, 33% of San Diego County residents speak a language other than English at home (2000). The same data indicates that 26.7 % of the regional population is Hispanic or Latino. Although this number varied within jurisdictions from 49.5% in Chula Vista to 11.7% in Carlsbad, it is clear that every jurisdiction in the region has significant populations of Hispanic or Latino residents. Therefore, although there are many languages spoken in San Diego, Spanish speaking communities are likely the most common throughout the region.

Research indicates that the motivating factors in Spanish speaking communities are 1) health and commitment to family, 2) children, and 3) finances. Similar priorities are found within the low SES communities. Hence, some messages will resonate more strongly with the communities among the Underserved Target Audience. Other messages may need to be modified in order to create a more appealing campaign. Low SES in California is defined as household annual income less than $25,000. Low SES residents tend to obtain information and resources from different sources than the residents within the Primary Target Audience. Again, message delivery becomes a key issue. In order to address all of these issues, specific outreach strategies will need to be developed in order to effectively reach the Underserved Target Audience.

3.0 TARGETED CHANGES TO KNOWLEDGE, AWARENESS AND BEHAVIOR

The overall goals of the Regional Residential Education Program are to raise the levels of knowledge and awareness with regards to stormwater pollution among residents, while encouraging changes to behaviors that are harmful to San Diego's waterways. The program will generally educate residents on 1) The difference between stormwater conveyance systems and sanitary sewer systems 2) the connection of storm drains to local waterways and 3) common residential sources of urban run-off. These are the general knowledge and awareness concepts upon which more specific messages will be built.

Recent research indicates that many residents do not understand that storm drains and sanitary sewer systems are completely separate. While sewage is treated, everything that goes down a storm drain goes directly to a creek, bay, or the ocean. The City of San Diego conducted a public opinion survey in 2007 in which 91% of respondents said they had heard the term "storm drain" before. However, only 46% knew that the water entering storm drains is not treated. This is a fundamental stormwater pollution prevention issue and general awareness concept. Awareness of the stormwater conveyance system is the first step towards understanding pollution prevention. Increasing knowledge and awareness that the system leads directly to local waterways will help residents to understand that urban sources of pollution have a direct effect on water quality. The awareness and knowledge of these issues are precursors to adjustments in attitudes (i.e.: increased concern for preventing this type of pollution).

Ultimately, it is anticipated that the program's targeting increased awareness and knowledge of these concepts will lead to positive changes in attitude. Furthermore, improved attitudes toward the importance of stormwater issues can provide motivation for changing pollutant generating behaviors.

In keeping with the program goals, the Copermittees have agreed on a number of positive behavior outcomes for each stormwater issue presented to the target audience. Pollutant generating activities are listed in Table 2, along with the knowledge required to understand the significance of the stormwater impacts. Also listed are numerous examples of desired behavior outcomes. Since it may not be feasible to craft messages that address each of the desired behavior outcomes listed in Table 2, some behaviors may be considered primary and targeted before others. Secondary behaviors will be targeted only if the initial efforts are determined to be unsuccessful. It is important to recognize that the Copermittees agreed on these issues and the associated behaviors, and some may wish to further utilize the concepts listed in Table 2 in their jurisdictional and/or watershed programs.

Table 2) Pollutant Generating Activities and Examples of Positive Behavior

Pollutant Generating Activities	Knowledge/Awareness	Examples of Desired Behavior Outcomes
• Leaving pet waste in yard, street or sidewalk • Improper disposal of pet waste	Pet waste left in the yard and streets may introduce solids, bacteria, and nutrients to the storm drain and/or receiving water bodies.	• **Pick up pet waste during walks** • Pick up pet waste around home • **Properly dispose of pet waste in trash can or bin**
• Over-irrigation • Improper irrigation and system maintenance	Over-irrigation causes water and pollutants in its path to run into the storm drain and/or receiving water bodies.	• **Reduce over-irrigation** • Use irrigation controller technology to reduce the amount of over-watering • **Inspect and maintain irrigation system regularly** • Adjust irrigation schedule according to seasonal changes
• Fertilizer use • Pesticide use • Landscaping activities	Fertilizers and pesticides become pollutants that can be harmful to natural ecosystems when entering receiving water bodies. Soil, sediment, and yard waste can clog storm drains and/or receiving water bodies.	• Use plants that reduce the need for fertilizers (i.e.: native plants) • Apply chemical fertilizers and pesticides only as needed and at the appropriate time • **Use organic or slow-release fertilizers** • **Use Integrated Pest Management** • Store chemicals inside in a shed or storage cabinet where they are protected from rainfall • **Collect grass clippings and yard waste** • **Dispose of grass clippings and yard waste in the proper containers** • Protect exposed soil from rain with a tarp, vegetation, and/or mulch
• Cleaning outdoor impervious surfaces (i.e.: driveways and patios)	When it rains, trash, dirt, and chemicals that have built up on these surface can run into the street, the storm drain, and eventually local waterways.	• **Clean driveways, walkways, and patios by sweeping instead of hosing** • Direct wash water to soak in to lawn or garden
• Improper waste disposal	Litter and debris dropped on the ground will be washed into storm drains and local water bodies.	• **Put litter and cigarette butts in trash cans or bins** • Keep lids closed on trash cans or bins

Although many positive behaviors have been identified that may be encouraged by the messages developed in this program, the following have been selected as the primary desired behaviors to result from the changes to knowledge, awareness, and attitudes:

- Pick up pet waste and properly dispose of in trash can or bin
- Reduce over-irrigation by regularly inspecting and maintaining irrigation systems
- Reduce fertilizer use by applying chemical fertilizer only as needed and using organic or slow-release fertilizers
- Reduce chemical pesticide use through Integrated Pest Management
- Collect grass clippings and yard waste and place them in the appropriate disposal container in order to prevent them from entering the storm drain systems
- Sweep up outside areas such as driveways, walkways, and patios instead of hosing them down
- Put litter and cigarette butts in trash cans or bins

Specific messages will be designed to increase knowledge and awareness, and therefore encourage the behaviors listed above. Regional messages will be initially developed to address only the primary targeted behaviors. Once a baseline is established and program implementation is underway, Copermittees will have the opportunity to evaluate the knowledge, awareness, and willingness of the residential target audiences to adopt these behaviors. Other positive behaviors from Table 2 may also be substituted, if necessary.
It can reasonably be expected that the regional program will be able to measure success in terms of increasing knowledge and awareness, and improving attitudes, of residents.

Knowledge describes the accuracy of one's beliefs and awareness indicates recognition of the severity of the issues whereas attitude can be described as an individual's evaluation of it (favorable or unfavorable).

As a result of the regional efforts, Copermittees expect to see an increase in the general awareness of storm drain systems and their connection to local waterways, as well the sources of urban run-off. Specifically, residents should understand the difference between the stormwater conveyance system and sanitary sewer systems. They should become aware that water entering storm drains flows untreated to local waterways. Residents should also be able to accurately identify sources of stormwater pollution (i.e.: pet waste). Attitudes toward stormwater pollution should also improve. Ideally, there will be an increase in the numbers of households or individuals engaging in the desired behavior outcomes as a result of their increased knowledge and awareness. These targets will be measured using the assessment methods described in Section 6.0.

The primary assessment tool will be the public opinion surveys. A baseline regional residential telephone survey will be conducted in 2008 and, ideally, at one other point during the current permit cycle. The numeric objectives for survey results are set so that they exceed the statistical margin of error of 2.5 percent (assuming a sample size of 1000) so that if they are achieved, they will be statistically significant. In addition, the objectives are intentionally set high, with the understanding that they are intended as a point of reference rather than a pass/fail measure. With that in mind, Copermittees have set a target of a 10% change in knowledge that storm drains are separate from sanitary sewer systems, a 10% increase in the awareness that all storm drains are connected to local waterways, and a 15% increase in the number of participants who can identify residential sources of stormwater pollution.

4.0 EDUCATIONAL METHODS AND APPROACHES

A variety of methods and approaches will be utilized to implement the program objectives. As described above, the Regional Residential Education Program objectives are 1) to maintain a consistent image and brand 2) use positive messages to change behavior 3) develop community partnerships and 4) develop strategies to assess program effectiveness. The following regional program elements are designed to meet these objectives:

- Standardized Regional Brand (Think Blue)
- Regional Think Blue Website
- Mass Media (Broadcast and Outdoor)
- Regional Outreach Materials (Development and Distribution)
- Regional Outreach Event
- Partnerships
- Regional Stormwater Hotline
- Public Relations

Some of the elements are designed for program management whereas others are outreach methods. Program management elements include standardizing the Think Blue brand, message and material development, and partnership development. The program will have a multi-faceted outreach approach utilizing a regional website, mass media (broadcast and outdoor), public relations, printed materials and promotional items, and regional outreach such as a community event. Implementation of all the recommendations is dependent on funding for each year. Therefore, some activities may be feasible only if sufficient or additional funds are available in a given year.

4.1 Standardized Regional Brand (Think Blue)

The Think Blue campaign has created a locally recognizable brand that has demonstrated effectiveness in stormwater outreach. Expanding the brand to the regional program has obvious benefits for all of the Copermittees. With a consistent look and brand, the Copermittees can continue to conduct their own outreach; however they can use the Think Blue brand in conjunction with their materials for consistency. There will be a Think Blue Graphic Standards Guide that provides the correct fonts, colors and standards to be used for all outreach materials. This will help reinforce the Think Blue brand and provide standards for its use in messages and materials. Messages and materials may need to be continuously revised in order to keep current and effectively reach target audiences.

4.2 Regional Think Blue Website

A regional Think Blue website will help build upon and reinforce the branding strategy. The Internet is a powerful means of communication. Web sites can reach large audiences with relatively minimal effort. The regional website will be developed and maintained by a contractor. It could contain easy to download, user friendly information sheets, links to Copermittees websites, and short surveys or quizzes. The regional web site, along with the new logo and slogan, will increase program visibility.

4.3 Mass Media

Although the website is an important component of the outreach efforts, many residents still get the great bulk of their environmental messages from more traditional venues such as the television and radio (broadcast media). Public Service Announcements (PSA) and advertisements are the most common forms of broadcast media. Some PSAs have already been developed under the Think Blue campaign and through the combined efforts of the Copermittees. The Copermittees can utilize funds to expand or complement the existing Think Blue campaign. The public relations component will involve news coverage such as news stories, interviews, and event coverage. Public relations provide

valuable outreach opportunities that will be sought whenever possible. Outdoor media such as bus placards and billboards can also be utilized for outreach. The location of outdoor media advertisements will need to be carefully placed in order to reach the regional target audience.

4.4 Regional Outreach Materials and Community Events

Print materials and promotional items are critical items for successful outreach. Materials include items like fact sheets, brochures, flyers, booklets, coupon booklets, posters, and doorknob hangers. These materials are easily created and the target audience can refer to them repeatedly. Promotional materials are good for promoting the regional brand, increasing knowledge and awareness, and encouraging simple actions to prevent stormwater pollution. They will be designed to also serve as visual prompts that remind people to choose behaviors that protect and improve water quality.

A regional outreach event can be an energizing and successful venue for distributing outreach messages. Careful attention should be given to participating in a community event so that the effort reaches residents from the entire region. Extensive planning, material or display development, coordination, and marketing will be necessary in order to prepare for one successful regional outreach event. This is an endeavor that will involve identifying events that reach the entire region as well as coordinating, funding, and staffing the selected event. The Copermittees expect to participate in up to two regional events over the duration of this permit cycle. Some examples of regional events that may be considered are the San Diego County Fair, the Miramar Air Show, or a local sports venue.

4.5 Partnerships

Partnerships are both a management and outreach element of the program. A partnership is a voluntary collaboration of agencies, organizations, or other groups or individuals that have joined to work toward a common goal. The Copermittees can maximize resources through the use of partnerships. The potential for partnerships is immense for the

Copermittees. Potential partnerships include local water districts (combine conservation and pollution prevention messages), hardware stores and nurseries, pet stores, and Homeowner's Associations and Property Management Companies. Initial development of partnerships with businesses and business organizations, nonprofits, other government agencies, will be necessary before the full benefits can be realized. Copermittees may then encourage partners to distribute materials or spread messages through signage, advertising and websites. Partnerships will require time to develop and may not be fully recognized until later in the permit cycle.

4.6 Regional Stormwater Hotline

Although a regional stormwater hotline is already in place, successful outreach may lead to an increase in hotline calls. The regional hotline can also help the public gain access to information quickly and easily. The hotline will be promoted through the website, media advertising and other promotional venues. The number of calls to the hotline can be tabulated to help gauge whether some advertising is effective (if the call to action is a hotline call). Since the hotline will also be an important measure of program success, careful consideration will be given to managing the hotline as the program implementation moves forward.

4.7 Behavior Specific Outreach Methods

Table 3 lists the primary target behaviors for the program during this permit cycle. The table indicates which of the outreach methods described above may be utilized to deliver messages designed for each behavior. These were selected as the primary targets because they have current appeal. Primary target behaviors may be updated as program evaluation progresses. If necessary, resources may be reallocated to address the other (secondary) target behaviors previously listed in Table 2.

Table 3) Applicability of Outreach Methods to Primary Target Behaviors

Primary Target Behaviors	Potential Methods of Outreach						
	Website	Mass Media Broadcast	Mass Media Outdoor	Public Relations	Material Distribution	Partnerships	Regional Community Events
Pick up pet waste and dispose of in trash bin	X	X	X	X	X	X	
Reduce over-irrigation by regularly inspecting and maintaining irrigation systems	X			X	X	X	X
Apply chemicals to lawn and garden only as needed	X	X		X	X	X	X
Use organic or slow-release fertilizers	X	X		X	X	X	X
Collect grass clippings and dispose of them in the proper container	X				X		
Employ Integrated Pest Management	X	X	X		X	X	X
Sweep outside areas instead of hosing them down	X		X		X		
Put litter and cigarette butts in trash cans or bins	X			X	X	X	X

Specific messages will be developed to increase knowledge and awareness that will lead to each desired behavior outcome

4.8 Program Implementation

While the overall goals of the program are to educate the general public in order promote knowledge and awareness and decrease pollutant generating behaviors, a successful program will also require coordination among the Copermittees. Program planning and message development are key components of the program that will precede full implementation. Message delivery will be ongoing. Subsequently, as results from assessments are reviewed, messages and delivery methods will need to be revised. Therefore, there are essentially three steps in the program implementation process 1)

development, 2) implementation, and 3) assessment. For the purposes of this report, the development phase includes planning projects as well as developing materials and messages. Implementation includes initiating a program element (such as media outreach) as well as maintaining the ongoing nature of the element once it is in place. Assessment includes all levels of determining the effectiveness of program elements, as well as making revisions that reflect the knowledge gained through assessment.

Table 4 charts the schedule of program implementation over the 5-year permit cycle. Strategies to achieve these objectives will be implemented over the 5-year permit cycle. Because some upfront planning and development is necessary, the first year will focus on standardizing a regional brand, developing messages, and determining the most appropriate methods for disseminating messages on a regional scale (i.e.: a regional website). Copermittees may also begin fostering partnerships in the initial years of the program. Subsequent years will build on this foundation. Copermittees may decide to refine messages and could begin leveraging resources through partnerships.

Table 4) Projected General Implementation Schedule

Program Elements	Year 1: 2007-08	Year 2: 2008-09	Year 3: 2009-10	Year 4: 2010-11	Year 5: 2011-12
Branding	D	D, I, A	I, A	I, A	I,
Regional Website	D	D, I, A	I, A	I, A	I,
Regional Hotline	D	D, I	I, A	I, A	I,
Mass Media	D	D, I	I, A	D, A	I,
Regional Outreach (Marketing and Community Events)	D	D, I	I, A	D, A	I,
Materials Development & Distribution	D	D, I, A	D, I, A	D, A	D, I
Public Relations	D	D, I	I, A	D, A	I,
Market Research & Assessment Tools	D, I, A	D, I, A	D, I, A	D, I, A	D, I,
Partnerships	D, I	D, I,	I, A	I, A	I

Development (D), Implementation (I), Assessment (A)

4.9 Social Marketing Approaches

In all of the aforementioned efforts, a variety of social marketing approaches will be utilized whenever possible. There are so many techniques described as social marketing that it is not possible to utilize them all, especially with limited staff and budgets. Social marketing uses many of the principles of social psychology and marketing techniques to bring about behavior change. Rather than being product oriented, social marketing focuses on people and their behaviors. All social marketing approaches use audience research to learn how to motivate an audience to change one or more recurring actions.

Social marketing consists of several basic components that result in delivering messages that will increase knowledge and awareness, thereby prompting people to change certain behaviors. The challenge is to present the new behavior in a positive way and emphasize the benefits to adopting a new behavior. Forming strategic partnerships with community resources can help to achieve the end goal of behavior change. Social marketing campaigns deliver messages that are strategically created and positioned to give people a compelling reason to adopt a new behavior. In order to overcome the barriers to action it is necessary to understand what the barriers are and why they exist. Researching and understanding the audience is a critical step in developing a social marketing campaign. Messages are conveyed through advertising, websites, materials and other communications. Messages should be simple, memorable and easy to follow. There should be one simple message for each of the targeted areas of knowledge and awareness. Each message needs to be used consistently in communications.

Community Based Social Marketing (CBSM) is a type of social marketing. It has gained popular appeal among the environmental community as an effective alternative to traditional information-based marketing approaches. CBSM packages basic principles of behavior change and social science research in a way that provides a usable framework for practitioners working to promote positive behavior change.

A key element of the CBSM approach is to pilot test the program with a small representative segment of the community, and compare the results to a control group. For example, a small jurisdiction may implement a project that essentially serves as a pilot for the regional program. If the pilot is not successful, the strategy should be refined and then pilot tested again. If the pilot is successful at changing behavior, the strategy can be implemented more broadly throughout the community or on a regional level. Once the successful pilot program has been widely implemented CBSM requires that the program be carefully evaluated at several points to measure continued success.

The Copermittees have agreed that CBSM offers a solid foundation for developing an effective program. However, it may not always be feasible to utilize the CBSM approach on a regional scale, hence the need for a combined approach that uses traditional social marketing techniques as well as CBSM. Some methods will lend themselves more readily to developing CBSM based approaches. When implementing each of the methods, a CBSM approach will be pursued whenever feasible.

5.0 RELATIONSHIP OF REGIONAL, WATERSHED, AND JURISDICTIONAL OUTREACH

The Regional Residential Education Program is designed to meet the Permit requirements for residential education based on regional needs and issues. The first step in meeting these requirements is to establish a regional brand and consistent image. The City of San Diego's regionally recognized Think Blue logo will be utilized as the Regional Residential Education Program's brand. During the implementation phase of the permit cycle the Copermittees will work collaboratively with the City of San Diego to update and standardize the Think Blue brand. A Graphics Standards Manual will be developed by the City of San Diego and adopted by the Copermittees in order to facilitate ease of material development and ensure a consistent regional image. Existing jurisdictional programs may also choose to use the Think Blue brand, maintain individuality, or

combine both programs for maximum impact. In a similar manner, watershed activities may be coordinated under the Think Blue brand, so long as the standards are adhered to.

Copermittees will hire a contractor to build and maintain a regional Think Blue website. The website may include links to jurisdictional program, watershed program websites, and other regional websites such as Project Clean Water. The regional Think Blue website will provide user friendly information for the public in a single location, thereby promoting consistency and coordination among the regional, jurisdictional, and watershed programs.

In addition, the Education & Residential Sources Workgroup provides a platform for integration of regional, jurisdictional, and watershed messages. The Education & Residential Sources Workgroup also coordinates activities between non-profit organizations, private institutions, and governmental agencies providing environmental and water quality education. Regular meetings will continue to provide a forum for educators, trainers, and public information officers to collaborate, share methods and materials, and seek policy level support and direction.

Watershed and jurisdictional programs should look to the Regional Residential Education Program when designing residential educational activities. The Regional Residential Education Program can thereby serve as a basis for developing these other programs. Some specific watershed or jurisdictional issues may not be covered by the Regional Residential Education Program, and must still be met by the individual or Watershed Copermittees as required by the Permit. These issues will be addressed in the watershed or jurisdictional programs. In this manner, the watershed and jurisdictional programs can supplement the Regional Residential Education Program in order to ensure that all requirements are met. As a result, each jurisdictional program may be unique in some respects and elements of the watershed programs may go beyond those in the regional program.

While the regional program may play a role in encouraging behavior changes, it is more feasible for jurisdictional programs to be able to measure actual behavioral changes resulting from increased knowledge and awareness because of their ability to implement pilots on a small scale. The broad based regional program will be implementing methods and utilizing assessment tools that most accurately gauge attitudes, knowledge, and awareness. Positive changes in attitudes and awareness are generally accepted as precursors to behavior change. Therefore, due to the difficulty of assessing behavior change on a regional level, demonstrating behavior change will therefore reside with the jurisdictional and watershed programs. In order to facilitate the assessment of jurisdictional and watershed programs, the Plan outlines assessment tools for measuring changes in knowledge and awareness through the regional program. These measures can also be tailored to meet the needs of the jurisdictional and watershed programs that implement CBSM pilots or focused outreach efforts, which provide excellent opportunities to assess behavior change. Section 6.0 describes assessment tools in further detail.

6.0 ASSESSMENT OF REGIONAL EDUCATION ACTIVITIES

In order to evaluate whether the various components of the program are resulting in the targeted knowledge and awareness outcomes, a number of assessment methods may be utilized. A random digit dial telephone survey will be the primary tool for measuring changes resulting from implementation of the regional program. Different types of assessment methods will be employed in order to gauge the outcomes of each activity and thereby determine effectiveness. Copermittees will review and assess existing survey data while developing the new regional baseline survey. Public opinion surveys will be alternated with other assessment methods to adequately assess the overall effectiveness of the Regional Residential Education Program. Copermittees have agreed to work cooperatively on funding and conducting market research and surveys. Measurement tools outlined in the Plan may be modified somewhat to correspond with different program elements. The Plan basically provides a model for program effectiveness

assessment. Specific assessment methods will depend on the type of outreach or education activity conducted and other constraints.

Copermittees will work with the City of San Diego to conduct a county-wide random digit dial telephone survey in order to obtain baseline information on knowledge, awareness, attitudes, and behaviors pertaining to stormwater. Results of the survey will guide further adaptation of the program objectives. Ideally, another public opinion survey will be conducted later in the permit cycle to assess any changes resulting from program implementation. Once the baseline is established, future permit cycles may involve one or more public opinion surveys. Additional evaluation methods may be utilized once specific media, promotions, and outreach activities are implemented. Results will enable Copermittees to determine the most effective outreach methods and make modifications to the programs as needed.

Outcome levels used in this program are based on the Hierarchy of Targeted Outcomes Pyramid referred to in the NPDES Permit, which includes outcome levels 1-6. Outcome levels 1-3 will be most applicable to educational and outreach activities. Table 5 illustrates potential assessment methods that may be utilized for each of the activities being considered. Level 1 outcomes indicate compliance with permit based activities. This is the most basic means of assessing program effectiveness. Measuring Level 2 outcomes will indicate changes in attitudes, knowledge and awareness. Surveys and quizzes provide the most common means for measuring Level 2 outcomes. Level 3 outcomes provide an opportunity to measure behavioral changes and implementation of Best Management Practices (BMPs). This can be accomplished through observations and program specific counts. For example, tracking sales of less toxic pesticides in a store where IPM information is available may indicate changes in the behavior of consumers. Level 4 outcomes indicate actual load reduction, and are more practical for activities such as clean up events or Household Hazardous Waste collection activities, which are sometimes associated with outreach activities.

Table 5) Potential Program Element Assessment Measures

Activity/ Level		Type of Assessment Measure
Branding		
1		Updating materials to reflect new regional brand.
2		Count number of survey respondents who are aware of brand/program.
3		N/A
4		N/A
Website		
1		Count number of hits to website, interactive use/quizzes taken, etc.
2		Administer survey/quiz to assess attitude/knowledge of web users.
3		Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data. Downloads of informational brochures.
4		N/A
Mass Media/Public Service Announcement (PSA)/Public Relations		
1		Count number of household/individuals reached.
2		Administer survey/quiz to assess attitude/knowledge of PSA recipients.
3		Comments and feedback received regarding PSA via the hotline or website.
4		N/A
Outreach Materials (i.e.: fact sheets and brochures)		
1		Count number of fact sheet/brochures handed out.
2		Administer survey/quiz to assess attitude/knowledge of fact sheet/brochure recipients
3		Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data.
4		N/A
Regional Outreach Event		
1		Count number of visitors to booths, brochures handed out, surveys/quizzes completed, etc.
2		Count number of mail-in cards, number of volunteers to organization, number of persons who attended community event. Administer survey/quiz to assess attitude/knowledge of visitors
3		Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data.
4		N/A

Partnerships

1	Count number of incentives distributed, participants in the program.
2	Survey or quiz to assess attitude/knowledge of volunteers pre- and post- participation
3	Administer survey to assess behavior change in program participants or count observable behavior of program participants and compare to pilot data, historical data, and/or control group. Count number of mail-in cards, number of volunteers to organization, or number of persons who signed a petition directed from incentive program.
4	Count amount of load reduction in targeted residential area or count amount of load removed from targeted area

Hotline

1	Count number of calls to hotline.
2	Administer survey/quiz to assess attitude/knowledge of hotline users.
3	Administer survey to assess behavior change of participants in program and compare to pilot, historical, or control data, count observable behavior of participants in program and compare to pilot data and/or control group.
4	N/A

7.0 CONCLUSIONS AND RECOMMENDATIONS

The San Diego region has widely diverse socio-economic, ethnic, biological, and physical characteristics. These characteristics create the region's appeal and present many challenges to the entities charged with developing and implementing an effective Regional Urban Runoff Management Program (RURMP).

The Regional Residential Education Program is a component of the San Diego RURMP. This program is designed to increase knowledge and awareness of stormwater issues and potentially change pollutant generating behaviors. Research indicates that these are attainable goals under a well-funded, long term, multi-faceted and strategic public outreach campaign.

In order to implement program goals, the Copermittees have agreed on general objectives: 1) maintain a consistent image, message and brand 2) use positive messages to increase knowledge and awareness, thereby increasing the likelihood of behavior change 3) develop community partnerships and 4) develop strategies to assess program effectiveness. In order to efficiently accomplish these objectives, Copermittees have agreed to adopt Think Blue as the regional flagship brand. In addition, strong and

focused outreach messages will be selected to increase knowledge and awareness and ultimately target the primary pollutant generating behaviors from residential activities.

The basic program elements include an array of methods and approaches that will be utilized for program management, message delivery, and effectiveness assessment. Over time, the Regional Residential Education Program will be adapted to utilize the most effective outreach and education strategies practicable while maintaining a clear focus for the entire region. Annual reports will summarize progress and provide an opportunity to reflect on the year's successes and shortcomings. At the end of the 5-year permit cycle, Copermittees will be able to assess of the program's progress and develop more effective regional outreach strategies.

Appendix G

JURMP Annual Report Requirements Checklist

G-1 Requirements Checklist

Appendix G
JURMP Annual Report Requirements Checklist

2.0 Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location In Report**
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2.4, 2.3, 2.4.4.1, 2.4.4.2
ii. Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.4.4.2, 2.4.4.3, 2.4.4.4
iii. A listing of the development projects to which SUSMP requirements were applied.	2.4.4.3, Table 2-2
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.4.4.3, 2.4.4.4
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.4.4.3
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.4.4.3 (N/A)
vii. An updated treatment control BMP inventory.	2.4.4.4, Appendix A-1
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.4.4.7
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.4.4.6
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.4.5
xi. A listing of any projects which received a SUSMP waiver.	2.4.4.3 (N/A)
xii. A description of implementation of any SUSMP waiver mitigation program.	2.4.4.3 (N/A)
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.4.3.1, 2.4.4.1
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.4.4.3 (N/A)
xv. A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	2.4.4.3

2.0 Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location In Report**
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	2.4.4.3 (N/A)
xvii. The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	2.4.4.8
xviii. A description of notable activities conducted to manage urban runoff from development projects.	2.4.3.1, 2.4.4.1, 2.4.4.4, 2.4.4.6, 2.4.4.7

3.0 Construction

Permit Annual Reporting Requirement—Section J.3.a.(3).(b)	**Location in Report**
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.5.1
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2.2, Appendix B-3
iii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iv. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.4.1
v. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.5.4 (N/A)
vi. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.5.3, 3.5.4 (N/A)
vii. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	Appendix B-1 and B-2
viii. A description of the general results of the inspections.	3.5.5.2
ix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5.5.1
x. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.5.5.2, Appendix B-6 and H-1
xi. A description of notable activities conducted to manage urban runoff from construction sites.	3.2.2, 3.3, 3.4.1.1

4.0 Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
i. Any updates to the municipal inventory and prioritization.	Appendix C-1
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2.3, 4.3.3, 4.4.3, 4.5.3, 4.6.3, 4.7.3
iii. A description of inspections and maintenance conducted for municipal treatment controls.	4.4.4.1, Appendix C-2
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4.4.1, Appendix C-2
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	Appendix C-2
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	Appendix C-2
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4.4.1, Appendix C-2
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	N/A
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	4.3.3.1
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2

4.0 Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2
xiii. Identification of the total distance of curb-miles swept.	4.2.4, Appendix C-2
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.2.4, Appendix C-2
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.2.4, Appendix C-2
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	4.5.4.1
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.3.2, 4.3.4.3, Appendix C-2
xviii. A description of the general results of the inspections.	4.3.4.3, Appendix C -6
xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	4.3.4.3, Appendix C -6
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	Appendix C-6 and H-1
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	4.2.4, 4.4.2, 4.4.4.1, 4.5.4.1, 4.7.3.1, 4.7.4

5.0 Industrial and Commercial

Permit Annual Reporting Requirement—Section J.3.a.(3).(d)	**Location in Report**
i. Any updates to the industrial and commercial inventory.	5.2.2,
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.4.5, 5.3.4.4, Appendix D-5 and H-1
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.4.4, 5.3.4.1
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.4.2
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.4.1
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4.3, 5.2.4.5
vii. Identification of the number of third party inspections conducted.	5.2.4.3 (N/A)
viii. Identification of efforts conducted to verify third party inspection effectiveness.	5.2.4.3 (N/A)
ix. A description of efforts implemented to address mobile businesses.	5.3.4
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4.5, 5.3.4.4
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4.5
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	5.2.4, 5.3.4

6.0 Residential

Permit Annual Reporting Requirement—Section J.3.a.(3).(e)	**Location in Report**
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.3, 6.4.3, Appendix H-1
iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4.2
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4.2
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.2.3
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4.3, Appendix H-1
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4.4, Appendix F-6
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	6.4

7.0 IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
To be included in FY 2009-10 Illicit Discharge Detection and Elimination Component on December 15, 2010.	N/A

8.0 Education

Permit Annual Reporting Requirement—Section J.3.a.(3).(g)	Location in Report
i. A description of education efforts conducted for each target community.	8.3
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	8.3.1
iii. A description of education efforts conducted for municipal departments and personnel.	8.2
iv. A description of education efforts conducted for the new development and construction communities.	8.3.2
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.3.4

9.0 Public Participation

Permit Annual Reporting Requirement—Section J.3.a.(3).(h)	Location in Report
i. A description of public participation efforts conducted.	9.3

10.0 Fiscal Analysis

Permit Annual Reporting Requirement—Section J.3.a.(3).(j)	Location in Report
i. A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order.	10.1, 10.2, 10.3, 10.4

11.0 Effectiveness Assessment

Permit Annual Reporting Requirement—Section J.3.a.(3).(i)	Location in Report
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11.2, 11.3

12.0 Special Investigations

Permit Annual Reporting Requirement—Section J.3.a.(3).(k)	Location in Report
i. A description of any special investigations conducted.	12.1, 12.2, 12.3

13.0 Non-Emergency Firefighting

Permit Annual Reporting Requirement—Section J.3.a.(3).(l)	Location in Report
i. A description of efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	13.2

14.0 JURMP Revisions

Permit Annual Reporting Requirement—Section J.3.a.(3).(m)	Location in Report
i. A description of any proposed revisions to the JURMP.	14.0

Appendix H

Complaint Response

H-1 Construction Summary

Municipal Summary

Commercial Summary

Industrial Summary

Residential Summary

Referrals or Requests for Info Summary

Appendix H-1 Construction Complaint Response Summary FY 2009 - 2010

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	82586	9/21/09	cement	Discharge of concrete waste. - Contractor poured cement on west side of restaurant.	WO#88444 : By INSPECTOR1, ENG: 10/26/2009 3:23:35 PM Site inspection took photos of construction debris without required BMPs contacted owner and requested that BMPs be implemented. WO#88445 : By INSPECTOR1, ENG: 10/26/2009 3:30:49 PM Site inspection BMPs in place case closed	Yes	No		Yes			SEL	9/22/09
2	82817	10/27/09	na old BMPs	Discharge of construction debris - Complainant stated that the BMPs were not updated and need to be implemented.	WO#103127 : 11/18/2009 4:16:24 PM site inspection BMPs in place case closed WO#98923 : 10/29/2009 5:49:00 PM Site inspection took photos of old BMPs. Called property owner and requested that he fortify the BMPs so that no silt leaves the site. He said he would take a look and do what ever is needed. He asked for 10-14 days to comply unless there is a 40% or grater chance of rain then he will implement immediately.	Yes	No		Yes			ENC	11/30/09
3	82844	11/4/09	na- lack of BMPs	Discharge of construction debris - Neighbor is concerned with lack of BMPs on site next door.	WO#103129 : 11/18/2009 5:22:34 PM site inspection new waddle in place case closed	No	No					ENC	11/30/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
4	86914	11/20/09	parking lot wash	Discharge of other washwater - ne part of parking lot was wet from power washing and not collecting the wash water NW part of parking lot was wet from power washing and not collecting the wash water	WO#103164 : 11/20/2009 10:31:58 AM Site inspection contacted contractor regarding discharge into storm drain from washing parking lot. Contactor thought it was OK because the wash water was passing through a filter. He was informed that those filters are for storm water only and that he needs to capture all the wash water in the future---case closed	Yes	Yes		Yes			LCS	12/30/09
5	91049	12/14/09	uncovered stockpiles	Other discharge - Construction at facility, lack of BMPs-uncovered stockpiles.	WO#107438 : 12/22/2009 10:32:52 AM site inspection contacted contractor and gave stockpile detail	Yes	Yes		Yes			ENC	1/4/10
6	91088	12/18/09	wash water	Discharge of construction debris - Construction workers washing white liquid material into the street.	WO#107434 : 12/21/2009 5:45:10 PM Site inspection took photos issued NOV and gave info WO#107435 : 12/21/2009 5:50:14 PM Site inspection contacted worker and extended compliance time to 12/21/09 WO#107436 : 12/21/2009 5:53:51 PM site inspection area cleaned up ----case closed	Yes	Yes	12/18/09	Yes			LUC	12/21/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
7	91110	12-22-09	sediment	Discharge of sediment - Plastic cover for stock piles has blown off and needs to be replaced	WO#107444 : 12/23/2009 12:37:36 PM Site inspection took photos contacted const inspector to notify contractor to replace BMP (plastic) WO#107445 : 12/23/2009 12:40:24 PM Site inspection took photos of replaced BMP (plastic)----case closed	Yes	Yes					LUC	12/22/09
8	91263	1/21/10	sediment	Discharge of sediment - Sediment from 1076 Hymettus construction collecting in culvert near 204-260 Hygeia Ct.	WO#107842 : 1/21/2010 2:43:58 PM Will be addressed by Clean Water Program staff.	Yes	No	1/21/10		1/21/10		LUC	1/21/10
9	91265	1/21/10	sediment	Discharge of sediment - Sediment runoff from construction site during rain event.	WO#107843 : 1/21/2010 3:47:51 PM 4 rows of gravel bags and silt fence over run by runoff. Mud trapped by additional bags and straw wattles placed by contractor.	Yes	No		Yes			ENC	1/21/10
10	93575	3/4/10	Uncovered stockpiles	Discharge of construction debris - Uncovered sediment stockpile near Vulcan and Hillcrest.	WO#111804 : 3/8/2010 8:18:31 AM Per construction inspector: Stockpiles of bedding sand are covered with white plastic sheeting. Crew was on job site on Friday.	Yes	No		Yes			LUC	3/8/10
11	93735	4/5/10	Oil	Discharge of oil. - Resident concerned with the trucks parked outside his house leaking oil. Referred to construction inspector for safe route to school.	WO#113293 : 4/7/2010 10:05:48 AM Per construction inspector: Location- Hygeia west of Hymettus. 2000 gallon water truck, blown right rear axle seal. Discharge of approximately 1 quart	Yes	No		Yes			LUC	4/7/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					90 wt oil. Clean up by contractor with spill kit. Gutter flows to vegetated swale. Complainant satisfied with cleanup.								
12	93948	5/17/10	sediment	Discharge of sediment - Sediment runoff into street from 1327.	WO#119654 : 5/24/2010 1:26:46 PM Inspector met with resident from 1349, who had already cleaned up most of discharge coming from the development at 1415. Alerted construction inspector of discharge from his site at 1415.	Yes	No		Yes			LUC	5/24/10
13	96181	6/30/10	cement	Discharge of concrete waste. - Washing concrete off equipment without capturing wash water.	WO#121032 : 8/2/2010 4:51:05 PM site inspection took photos gave ed info WO#121033 : 8/2/2010 5:06:34 PM site inspection area cleaned up case closed	Yes	Yes	6/30/10	Yes			ENC	6/30/10
Construction Totals: 13					**Follow ups: 6**	**12**	**5**	**3**	**10**	**1**			

Appendix H-1 Municipal Complaint Response Summary FY 2009 - 2010

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	82222	7/27/09	kitty litter	Other discharge - Unknown substance may have spilled on La Costa I-5 bridge on south side.	WO#88399 : 7/27/2009 3:24:28 PM 7-27-09 site inspection took photos of vehicle crash debris and Kitty Litter that needs to be cleaned up. 7/27/2009 3:45:08 PM called Carlsbad they will clean up and call me back	Yes	No					LUC	7/28/09
2	82225	7/23/09	sand and red paint chips	Other discharge - PW Contractors sand blasting red curb in front on Second St at D and E Streets. PW Contractors sand blasting red curb on Second St at D and E Streets- left sand and paint chips in street.	WO#97214 : 7/28/2009 2:01:59 PM Sand and pieces of red paint chips left in street. Took photos and contacted PW Streets. Contractor will return later today to sweep. WO#97575 : 8/28/2009 5:18:25 PM 7/27/09 site inspection took photos and contacted PW to get contractor to clean up gutter and train employees 9/11/2009 2:44:59 PM 7/29/09 PW reported that they had cleaned up the street case closed	Yes	No		Yes			ENC	7/27/09

Appendix H-1 Municipal Complaint Response Summary

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
3	82598	9/22/09	covered storm drain causing flooding	Discharge of yard waste - Forwarded from SDWD: Customer at this address came into PW Yard and said that the cover you put on the storm drain at this location is clogging up with leaves and overflowing. Last rain caused flooding. *No record of previous work at this address.	WO#88439 : 10/26/2009 8:34:56 AM site inspection took photos of storm drain guard. Called waste water to remove WO#88440 : 10/26/2009 8:58:54 AM Site inspection guard removed case closed	No	No					CBS	10/8/09
4	82883	11/5/09	water and dirt	Discharge of water - received report of "a whole lot" water running down Vulcan & Sunset	WO#99095 : 11/12/2009 9:01:15 AM Site inspection contacted José at SDWD and asked that he get the street swept. he agreed and streets division ordered a special sweep to be charge to SDWD WO#99096 : 11/12/2009 9:04:16 AM site inspection street sweeper cleaned up mess ---case closed	Yes	No		Yes			ENC	11/6/09
5	91230	1/19/10	SILT	Discharge of sediment - Sediment runoff from driveway during rain event.	WO#107829 : 1/21/2010 10:43:15 AM Site inspection took photos. Contacted PW to clean up sediment in street and maintain BMPs of drainage ditch. WO#121752 : 8/31/2010 5:15:17 PM site inspection area cleaned PW to fix ditch case closed	Yes	No					LUX	9/7/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
6	91343	1/28/10	pet waste	Other discharge - Forwarded from County: discharge of dog excrement into the soil at Orpheus Park. This is a mixed use off-leash dog park situated above an Elementary School. A system of swales divert the runoff from animal excrement downhill, ending in the playground area of the School. Standing water is usually in these swales and other parts of the swales are choked with sludge and weeds.	WO#88455 : 1/28/2010 5:44:03 PM Site inspection with program manager. Took photos of storm drain and the flow pattern for Orpheus and Glen parks. Did not observe a water quality issue.	No	No					LUC	2/1/10
7	93627	3/15/10	smell of grease	Discharge of food waste. - Smell of grease coming from the Community Center. Possible clogged grease trap?	WO#112295 : 3/16/2010 5:37:23 PM Site inspection met with Facility technician. he informed me of all of the actions he has taken to stop the grease odor: 1/5/10-3/15/10 grease interceptor was pumped 3/15/10 pumping was observed by Facility Technician 7or8/09 more frequent pumping from 4 times a year to 6 times a year 6/09 extended vent pipes on roof and eliminated horizontal vent pipes Treats system weekly with enzymes Flushes floor drains nightly 3/17/2010 3:02:44 PM 6/16/10 Contacted building & engineering staff and sent emails to waste water and	No	No		Yes			CBS	4/8/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					another city for help to eliminate odors. 4/5/2010 3:18:41 PM Waste water and other cities reported that the interceptor looked normal and there were no corrective actions that could be taken. Left message with PM that some of the photos showed the contractor cleaning off the manholes and it appeared that it washed into the storm drain and to call the contractor or clean water to contact the contractor to discontinue washing off manhole covers into the storm drain.								
8	93701	3/12/10	silt	Discharge of sediment - Silt discharge after rain event	WO#113179 : 3/30/2010 4:17:03 PM Site inspection left info at main business office took photos 3/26/10 received call from owner stating that the discharge did not come from his business as it is cemented in on the setbacks. He said in the past his workers have cleaned u[the inlet/outlet but he only has one employee and he will get to it himself when he has a chance but it is not his violation he feels it is the city's. Sent email to PW to clean out inlet/outlet as it is a city/municipal issue.	Yes	No		Yes			CBS	4/8/10
Municipal Totals: 8					**Follow ups: 4**	**5**	**0**	**0**	**4**	**0**			

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	82104	7/9/09	none	Discharge of vehicle wash water - Mobile car washer operating without containment near corner of Neptune and N. El Portal.	WO#96870 : 7/9/2009 12:49:11 PM 7/9/09 site inspection contacted detailer regarding containment. He said it was not him. Observed no discharge Case closed	No	Yes		Yes			LUC	7/13/09
2	82140	7/15/09	yard waste	Discharge of yard waste - Complainant is concerned with neighbor's lawn maintenance crews using leaf blowers to blow yard waste into the street.	WO#97574 : 8/28/2009 5:06:56 PM 7/27.09 site inspection left card and ed info	No	Yes		Yes			CBS	8/31/09
3	82142	7/16/09	wash water	Discharge of building or sidewalk washwater - Construction inspector witnessed restaurant sweeping sidewalk wash water into street.	WO#88401 : By INSPECTOR1, ENG: 7/27/2009 4:31:54 PM 7-16-09 site inspection took photos of debris and wash water contacted owner and requested that he contact his worker and give the information that was supplied to him.	Yes	No		Yes			ENC	7/28/09
4	82156	7/15/09	wash debris	Discharge of building or sidewalk washwater - City staff saw sudsy water running into the street from restaurant on Saturday, July 11.	WO#88397 : By INSPECTOR1, ENG: 7/22/2009 4:22:21 PM 7/22/09 site inspection took photos of debris from NE gate to the storm drain contacted business owner. He said there was a sewer flow from a blocked drain in the women's RR on July 11, 2009. Observed grease storage violations. Owner had worker sweep up debris and will get grease into compliance within 2	Yes	No		Yes			LCS	7/27/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					weeks or 8/5/09. WO#88398 : By INSPECTOR1, ENG: 7/27/2009 3:03:53 PM 7-27-09 site inspection took photos of all corrective actions completed Case Closed								
5	82181	7/20/09	dirt	Discharge of sediment - Business park overwatering, causing sediment runoff into the concrete drainage swale along north side of Ecke Sports Park.	WO#88396 : By INSPECTOR1, ENG: 7/22/2009 1:23:13 PM 7/22/09 site inspection took photos of storm drain contacted PM to fix broken pipe to be done today. By INSPECTOR1, ENG: 8/6/2009 2:33:12 PM 8/6/09 site inspection took photos sediment still draining into storm drain called PM WO#88403 : By INSPECTOR1, ENG: 7/28/2009 10:08:45 AM 7/28/09 site inspection took photos of sediment draining off the property. Called PM will have landscaper call me to set up meeting. WO#88419 : By INSPECTOR1, ENG: 8/17/2009 2:09:17 PM 8/13/09 site inspection took photos of improvements spoke to lead landscaper case closed	Yes	No		Yes			ENC	8/13/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
6	82234	7/28/09	trash juice	Discharge of other washwater - Illegal discharge from trash compactor	WO#88406 : By INSPECTOR1, ENG: 7/28/2009 5:54:30 PM 7/28/09 site inspection took photos drainage from trash compactor draining into the storm drain. Contacted business manager to dry clean up wash debris replace leaking compactor, train employees and provide overhead coverage for outdoor storage of oil and machines. . WO#88408 : By INSPECTOR1, ENG: 7/29/2009 12:05:05 PM 7/29/09 site inspection took photos of area cleaned up case closed.	Yes	No	7/29/09	Yes	7/29/09		LCS	7/30/09
7	82237	7/28/09	roof wash water	Discharge of building or sidewalk washwater - Washing roof without containing wash water. Brown/red water running down street.	WO#88404 : By INSPECTOR1, ENG: 7/28/2009 2:23:42 PM 7/28/09 site inspection took photos of roof wash draining off the property. Contacted worker and business owner to dry clean up wash debris. Issued nov to comply by 2pm 7/29/09 WO#88407 : By INSPECTOR1, ENG: 7/29/2009 11:50:42 AM 7/29/09 site inspection took photos of area cleaned up case closed	Yes	Yes	7/28/09	Yes			LUX	7/29/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
8	82269	8/1/09	wash water	Discharge of building or sidewalk washwater - Vacation rental property pressure washes w/out containment every week. Call came in Saturday at 11:50am, and water was flowing into the street then.	WO#88412 : By INSPECTOR1, ENG: 8/6/2009 4:13:25 PM site inspection 8/6/09 need to call PM 8/28/2009 5:24:15 PM 8/11 contacted PM to discontinue discharge. PM will speak to contractor email ed info case closed	No	No		Yes			LUC	9/11/09
9	82302	8/6/09	wash water	Discharge of building or sidewalk washwater - Staff witnessed school washing off lunch area with soap and water w/out containment.	WO#88413 : By INSPECTOR1, ENG: 8/6/2009 4:23:49 PM 8/6/09 CONTACTED WORKER GAVEINFO	Yes	No		Yes			LUC	8/11/09
10	82321	8/8/09	water	Discharge of water - Flower shop dumping water from booth next to Swami's cafe	WO#97582 : 9/1/2009 11:21:15 AM 8/13/09 site inspection contacted business owner she will speak to staff gave ed info	No	No		Yes			ENC	9/11/09
11	82328	8/10/09	trash	Discharge of trash - Forwarded from Webmater. Trash bags left outside gates of dumpster and contents blowing against fence. Creek empties into Batiquitos Lagoon.	WO#88417 : By INSPECTOR1, ENG: 8/11/2009 4:30:51 PM 8/11/09 site inspection took photos of trash blowing into storm drain contacted businesses in the area to clean it up. WO#97421 : 8/17/2009 1:06:02 PM 8/12/09 site inspection area cleaned up signed off NOV case closed	Yes	No	8/11/09	Yes			LCS	9/10/09
12	82350	8/12/09	trash debris and liquid	Discharge of trash - Restaurant has overflowing trash bin.	WO#97346 : 8/13/2009 8:48:01 AM 8/12/09 site inspection	Yes	No	8/14/09	Yes			ENC	8/17/09

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					took photos and contacted lead worker and requested clean up and training WO#97424 : 8/17/2009 1:38:28 PM 8/14/09 site inspection took photos and contacted lead worker and requested clean up and training. Issued NOV WO#97586 : 9/1/2009 12:16:40 PM 8/17/09 site inspection area cleaned up signed off NOV case closed								
13	82369	8/17/09	roof wash water	Discharge of building or sidewalk washwater - illegal discharge to street. no containment.	WO#97583 : 9/1/2009 11:38:02 AM 8/17/09 site inspection took photos issue NOV to clean up debris in street next to property to storm drain WO#97584 : 9/1/2009 11:44:02 AM 8/19/09 site inspection area cleaned up case closed	Yes	Yes	8/17/09	Yes			CBS	8/19/09
14	82384	8/19/09	grease storage, storm drain maintenance	Discharge of building or sidewalk washwater - Resident witnessed restaurant employee hosing off kitchen mats in alley behind building w/out containment.	WO#107272 : 12/2/2009 10:42:35 AM site inspection old grease storage unit was removed case closed WO#88423 : By INSPECTOR1, ENG: 8/25/2009 3:27:02 PM 8/25/09 site inspection took photos of trash and debris flowing from storm drain contacted business owner and property manager.	Yes	No		Yes			LCS	12/4/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					9/9/2009 12:38:49 PM 9/09/09 called PM regarding drainage and removal of grease storage unit--must be covered of removed. also contacted PW Streets regarding the drainage issue encroaching onto public street mountain vista 9/10/2009 10:57:59 AM 9/10/09 called landlord he requested that the city contact the grease storage company to request removal grease storage unit and to cite the restaurant that is washing their mats into the storm drain. He will be replacing asphalt within 90 days. He stated that he is not GOD but will work with the City to stay in compliance.								
15	82390	8/19/09	roof wash water	Discharge of building or sidewalk washwater - Power washing roof w/out containment.	WO#97611 : 9/1/2009 5:58:09 PM 8/19/09 site inspection took photos of red debris in street appeared to originate from 2277 Lagoon view Drive. Contacted resident gave contractors info. Called contractor and requested clean up ASAP. Contractor indicated that his equipment was damaged and that is why there was discharge. Business owner will call when gutter is clean WO#97612 :	Yes	Yes		Yes			CBS	8/20/09

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					9/1/2009 6:10:50 PM 8/20/09 site inspection area is being cleaned up took photos of all wash water being captured obtained business card case closed								
16	82420	8/26/09	h2O	Discharge of water - Clogged storm drain at NE corner of parking lot between Chili's and El Pollo Loco. Privately maintained by property manager. Needs to be cleaned out.	WO#97562 : 8/26/2009 5:24:15 PM 8/26/09 site inspection took photos and contacted lead worker at El Pollo Loco and requested clean up of trash area and training. He stated that the water did not come from his business. Called PM and will meet with her on 8/27/09. Discussed case with Clean water staff and sent email to PW-streets regarding maintenance of Detention basin. Streets sent it to waste water. WO#97732 : 9/10/2009 12:57:15 PM 8/27/09 site inspection took photos met with PM and her landscaper. Discussed problem and possible solutions. PM had landscaper turn off sprinkler system and has contacted plumbers to jet line. PW and Vector control were contacted. WO#97733 : 9/10/2009 1:04:15 PM 9/1/09 site inspection with Vector control took photos detention basin and the debris clogging it. and contacted PW to clean out debris. Vector	Yes	No		Yes			LCS	9/11/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					control to make this area a treated site. WO#97734 : 9/10/2009 1:21:16 PM 9/8/09 received email from PW that the drain was cleaned out. 9/9/09 site inspection took photos of drain box appeared to be clear. PW informed me that they did not get after photos. Clean water manager wants photos and case clearly documented so that the issue can be resolved in a more expeditious manner. Private pipe maintenance by owner, basin maintenance by PW outside of pipe. WO#97739 : 9/10/2009 4:35:28 PM 9/3/09 site inspection took photos of cleaned out storm drain case closed								
17	82433	8/27/09	roof wash	Discharge of building or sidewalk washwater - Roof power washers in HOA not containing all wash water.	WO#88424 : By INSPECTOR1, ENG: 9/1/2009 10:25:56 AM 8/27/09 site inspection took photos of red roof wash debris flowing in storm drain left card with house keeper. Contacted worker and he confirmed that his business had cleaned 2311 Lagoon view Drive issued citation #1 WO#97751 : 9/11/2009 2:55:03 PM 9/8/09 site inspection area cleaned up case closed	Yes	Yes	8/28/09	Yes	8/28/09		CBS	9/8/09

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18	82437	8/27/09	roof wash	Discharge of building or sidewalk washwater - Roof power washers not using containment yesterday, but it appears they are containing today.	WO#88425 : By INSPECTOR1, ENG: 9/1/2009 10:55:09 AM 8/27/09 site inspection took photos of BMPs working and preventing flows in storm drain.	No	Yes					CBS	9/14/09
19	82439	8/27/09	roof wash water	Discharge of building or sidewalk washwater - Power washing roof without containment.	WO#97579 : 8/31/2009 5:45:56 PM 8/27/09 site inspection took photos and contacted lead worker and requested clean up and training. Worker said they had cleaned 2311 lagoon view on 8/26/09 and that when he cleans the front of the house it is too much discharge for the system to handle. He will use additional secondary containment of the next job and clean up all of the gutters for these recent jobs.	Yes	Yes	8/28/09	Yes	8/28/09		CBS	9/2/09
20	82449	8/28/09	vehicle wash water	Discharge of vehicle wash water - Church car wash, no containment of wash water.	WO#97578 : 8/31/2009 5:33:40 PM 8/28/09 site inspection contacted lead worker of Faith Community Church informed him of the clean water codes he said he would comply. case closed	Yes	No		Yes			LUC	9/1/09
21	82466	9/1/09	water and sediment	Discharge of yard waste - Over-irrigation causing grass and moss to run onto the sidewalk	WO#107312 : 12/7/2009 5:06:18 PM site inspection took photos of over irrigated area case closed WO#97727 : 9/10/2009 10:11:24 AM 9/1/09 site inspection	Yes	No		Yes			LCS	12/2/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					took photos and contacted business owner to get landlord's info regarding constant drainage. 9/8/09 called water district and Landlord. 9/10/09 received call from landlord stating that the NE sprinkler value was stuck on for 24/7. Owner then contacted Cotixan to inform their gardener to fix value. PO also stated that he cleaned sidewalk and captured all was water. He wanted an inspection to verify clean up. Informed PW of progress.								
22	82495	9/4/09	wash water	Discharge of vehicle wash water - Mobile detailers washing cars without containment at BMW.	WO#97723 : 9/9/2009 4:36:02 PM 9/8/09 contacted business owner and requested information on their contractor 9/9/09 site inspection contacted contractor and requested compliance with clean water laws and gave required BMP info and obtained business card.	No	Yes		Yes			LCS	9/11/09
23	82497	9/4/09	building wash water	Discharge of building or sidewalk washwater - Power washers at complex using some sandbags, but wash water is still going around the sand bags into the storm drain.	WO#97722 : 9/9/2009 4:23:15 PM 9/8/09 contacted PM and requested information on their contractor info and called and left message requesting compliance with clean water laws and address to send required BMP info	Yes	Yes		Yes			ENC	9/11/09
24	82509	9/9/09	trash	Discharge of trash - Complaint of a mess behind the restaurant. Lack of proper trash storage.	WO#97780 : 9/14/2009 2:30:30 PM 9/10/09 site inspection took photos of trash	No	No		Yes			LCS	11/10/09

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					and grease storage area case closed								
25	82547	9/9/09	reclaimed water	Discharge of water - Reclaimed water leak behind Barnes and Noble.	WO#117164 : 5/5/2010 4:32:08 PM Leak fixed took photos WO#97787 : 9/14/2009 4:47:03 PM 9/10/09 site inspection took photos of leaking reclaimed irrigation box contacted PM to inform landscaper to fix box and discontinue washing off the cleaning vehicle	Yes	No		Yes			LCS	10/27/09
26	82548	9/11/09	wash water	Discharge of building or sidewalk washwater - Landscaper hosing off sidewalk debris without containment.	WO#97786 : 9/14/2009 4:20:31 PM 9/10/09 site inspection landscaper and informed him that washing off the driveway and patio is not allowed they complied case closed	Yes	Yes		Yes			LUC	11/10/09
27	82593	9/22/09	TRASH WATER	Discharge of food waste. - Construction inspector saw someone dumping grease into a dumpster behind VG's Donuts and Beach City Cafe	WO#88441 : By INSPECTOR1, ENG: 10/26/2009 2:15:11 PM Site inspection took photos of leaky open trash dumpster appeared that several businesses were using the temp dumpster. Added all businesses in the area to the inspection inventory	Yes	No					CBS	11/10/09
28	82611	9/22/09	oil	Discharge of oil. - Complaint of car leaking oil near the intersection of Bonita and Santa Fe Dr.	WO#88438 : By INSPECTOR1, ENG: 10/22/2009 5:08:56 PM site inspection no discharge observed case closed	No	No					CBS	11/10/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
29	82668	9/26/09	wash water	Discharge of building or sidewalk washwater - Employees dumping wash water bucket into concrete drainage swale. Occurred in the 11pm hour on 9/26/09.	WO#88436 : By INSPECTOR1, ENG: 10/21/2009 4:44:13 PM 10-21-09 called GM and requested that he speak to his employees and retain them to discontinue any discharge By INSPECTOR1, ENG: 10/22/2009 3:41:50 PM 10-21-09 called GM and requested staff training and informed the Manager of the date and time of discharge. He said it may another business but he will retrain his staff. Case Closed	No	No		Yes			LCS	11/10/09
30	82670	9/30/09	trash	Discharge of other washwater - Unknown drainage behind Queen Eileen's	WO#98732 : 10/13/2009 3:10:34 PM 10-7-09 site inspection took photos of old white paper next to AC drainage pipe Contacted employee who stated that someone had dumped a bucket of with paper into it. As requested he cleaned up the debris. Case Closed	Yes	No		Yes			ENC	11/10/09
31	82671	9/21/09	lack of BMPs	Other discharge - Someone working on a car on the SW corner of Saxony and La Costa Ave. No BMPs.	WO#88429 : By INSPECTOR1, ENG: 10/6/2009 6:18:30 PM 9/21/09 site inspection took photos of work without required BMPs spoke to worker he said he would clean it up and discontinue working in the location (he only worked there because that is where his car broke down WO#88430 :	Yes	Yes	9/24/09	Yes			LUC	9/25/09

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					By INSPECTOR1, ENG: 10/6/2009 6:31:30 PM 9/24/09 site inspection took photos of work without required BMPs spoke to worker he said he would clean it up and discontinue working in the location (he only worked there because that is where his car broke down) 11/10/2009 3:24:09 PM Issued NOV. WO#88431 : By INSPECTOR1, ENG: 10/6/2009 6:37:30 PM 9/25/09 site inspection took photos area clean it up case closed								
32	82703	10/8/09	wash water	Discharge of building or sidewalk washwater - Restaurant hosing off sidewalk and patio. Also, possibly dumping bucket full of wash water into storm drain at the corner of G and 101..	WO#88434 : By INSPECTOR1, ENG: 10/21/2009 3:31:18 PM 10-8-09 site inspection no discharge observed case closed	No	No		Yes			ENC	11/10/09
33	82733	10/14/09	silt	Discharge of sediment - Waste water reported silt discharge and dilapidated BMPs	WO#107311 : 12/7/2009 5:00:18 PM site inspection took photos area case closed WO#98748 : 10/14/2009 5:22:00 PM site inspection took photos of discharge and dilapidated BMPs left info at front door 395 Sunset Drive	Yes	No		Yes			LUC	1/4/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
34	82750	10/15/09	wash water from cleaning	Discharge of other washwater - 10-15-09 Clean water manager passed on a complain from city staff stating that a 55 gallon bucket was dumped directly into the storm drain	WO#98792 : : 82750, 10/20/2009 1:54:52 PM DIS-OTHER WASH Discharge of other washwater Problem Details: 10-15-09 Clean water manager passed on a complaint from city staff stating that a 55 gallon bucket was dumped directly into the storm drain 10-15-09 site inspection contacted bar owner regarding discharge complaint. He said he does not discharge and that he wants to keep the ocean clean. He was asked to review storm water regulation with his staff especially new employees. He indicated that he has not had any staff turn over and that if there is any discharge from his business to go ahead and arrest him. He agreed to clean up discharge from a south drain that was not connected to his drains and to contact the building maintenance person. 10/20/2009 3:23:45 PM 10-15-09 called Bar owner and informed him about the Patio smoking regulations. He said he understands and will gladly comply.	No	No		Yes			ENC	11/10/09
35	82751	10/20/09	patio wash water	Discharge of other washwater - 10/20/09 received complaint stating that wash water was being discharged	WO#98800 : 10/20/2009 3:39:33 PM 10-20-09 site inspection took photos and called bar owner regarding discharge complaint left message. Contacted worker and gave him restaurant flyer and explained that wash water is not allowed. exchanged voice mails with Business owner	Yes	No	10/21/09	Yes	10/21/09		ENC	11/10/09

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36	82818	10/28/09	Drain Wash water	Discharge of sediment - Complainant stated that dirt was coming out on to Balour Drive	WO#98921 : 10/29/2009 4:39:25 PM Site inspection took photos of discharge placed sand bags and cones to block discharge from entering the storm drain notified contractor that the drains were flowing onto the street gutter. WO#98922 : 10/29/2009 4:48:39 PM Site inspection took photos of clean up area. Met with Business president regarding email Muni code and permit	Yes	Yes		Yes			LCS	10/28/09
37	82831	11/2/09	sewage	Discharge of sewage - Bathroom at HOA swimming pool at Mtn Vista and Willowspring backs up, causing sewage overflow in bathroom. Unsure if discharge reaches street- caller didn't leave contact info.	WO#98970 : 11/3/2009 4:56:51 PM Site inspection sewage contained on site workers cleaning it up. They stated that they were repairing a sprinkler yesterday and someone took a photo.	No	Yes		Yes			LCS	11/10/09
38	82834	11/2/09	black tar	Other discharge - Roofer spilled liquid tar in gutter. Clean up was done, but resident wants to know if anything more should be done. Please call resident to set up a site visit.	WO#103126 : 11/18/2009 4:02:14 PM site inspection area cleaned up case closed WO#98969 : 11/3/2009 4:23:35 PM Site inspection observed chunks of tar that could be removed from the road. The resident will contact the roofer to do additional clean up 11/3/2009 4:27:13 PM In addition, contacted PW streets for guidance	Yes	Yes		Yes			RSF	11/5/09

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					on how they wanted it cleaned up								
39	86898	11/16/09	trash	Discharge of trash - Trash dumpster over flowing	WO#103117 : 11/17/2009 3:23:39 PM site inspection took photos of overflowing trash dumpster and contact local businesses and PM WO#103123 : 11/18/2009 11:04:17 AM site inspection area cleaned case closed	Yes	Yes		Yes			CBS	11/30/09
40	86912	11/20/09	concrete debris	Discharge of concrete cutting slurry or washwater. - observed a trail of white leading to the storm drain	WO#103161 : 11/20/2009 10:05:29 AM site inspection contact counter clerk who stated that the contractor used a shop vac to capture the debris	Yes	Yes		Yes			CBS	11/30/09
41	86915	11/20/09	Vehicle maintenance debris	Other discharge - appears customers are doing work on their vehicles in the parking lot without any BMPs	WO#103169 : 11/20/2009 1:42:04 PM Site inspection observed white powder over what appeared to be liquid automotive spill. Contacted counter staff regarding customers working in their parking lot. And that that activity is prohibited. They agreed and referenced their sign that states no work in parking lot. Case closed	Yes	No		Yes			LUC	11/30/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
42	86922	11/23/09	wash water	Discharge of building or sidewalk washwater - Restaurant power washing floor mats without containing wash water.	WO#103203 : 11/24/2009 3:13:47 PM Site inspection took photos of workers washing off kitchen floor mats without containment. Workers were requested to discontinue discharge and to produce business contact information. Contacted the restaurant owner and informed him of the illegal discharge. 11/24/2009 3:14:58 PM Contacted mobile business owner and explained why his company was in violation 11/24/2009 3:17:30 PM 11/24/09 issued NOV and citation to mobile business owner via 1st class mail and cc business and restaurant managers and called Property manager.	Yes	Yes	11/24/09	Yes	11/24/09		LCS	11/30/09
43	86932	10/27/09	sewage	Discharge of sewage - No connection to sewer no sewer for workers	WO#103201 : 11/24/2009 2:56:22 PM Site inspection with county inspector. Farm user showed us the sewer hook up and where the potentially polluting items were stored. Did not observe anything going into the creek. Worker did not know the contact information for any contractors that work on the site. He gave me the owner's phone #. A complete commercial inspection will need to be completed complaint	No	No		Yes			RSF	11/30/09

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					case is closed.								
44	91040	12/10/09	appeared to be water	Discharge of concrete cutting slurry or washwater. - Truck is emptying some fluid into parking lot at Kinkos.	WO#107351 : 12/14/2009 11:05:38 AM site inspection business GOA called complainant and checked business directory no luck case closed	No	Yes					ENC	1/4/10
45	91076	12/17/09	uncovered dirt	Discharge of sediment - Approx 3 acre dirt lot, exposed soil. On Puebla, east of Saxony. Located near greenhouses.	WO#107391 : 12/18/2009 1:20:55 PM Site investigation showed no violations. Case closed.	No	No					ENC	12/18/09
46	91091	12/21/09	grease	Discharge of food waste. - Improper grease storage in alley west of 101 behind 1002.	WO#107433 : 12/21/2009 5:31:55 PM Site inspection took photos issued NOV and gave grease vendors info 12/28/2009 3:16:15 PM Received and granted time extension request to comply by 1/4/10 WO#107602 : 1/4/2010 12:45:59 PM Site inspection area cleaned up and overhead coverage installed took photos and signed off NOV Case closed	Yes	No	12/21/09	Yes			LUC	1/4/10
47	91099	12/21/09	vehicle wash water	Discharge of vehicle wash water - Auto detailer without containment	WO#107431 : 12/21/2009 5:20:27 PM Site inspection with owner issued NOV	Yes	Yes	12/21/09	Yes			ENC	1/4/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
48	91139	12/30/09	red ready mix	Discharge of concrete waste. - Concrete truck spilled ready mix entering the parking lot	WO#107590 : 12/30/2009 2:22:47 PM Site inspection took photos of worker washing down spilled concrete into storm drain issued citation WO#107595 : 12/30/2009 5:14:50 PM Site inspection area was cleaned up case closed	Yes	Yes		Yes	12/30/09		LCS	12/30/09
49	91140	9/25/09	grease and liquid trash debris	Discharge of food waste. - grease leaking into parking lot from dumpster	WO#107592 : 12/30/2009 4:25:35 PM Site inspection took photos contacted restaurant to clean grease spill and contacted property manager to get new dumpster WO#107593 : 12/30/2009 4:31:58 PM Site inspection took photos of cleaned up area but dumpsters still leak and need to be replaced WO#107594 : 12/30/2009 4:36:10 PM site inspection took photos of new dumpsters----case closed	Yes	No	9/25/09	Yes			ENC	10/7/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
50	91170	1/11/10	wash water	Discharge of building or sidewalk washwater Referred from County Watershed Protection Prog: On the afternoon of 1/8/10, an employee was washing the front of the restaurant with soapy water and sweeping all debris and soapy water into the storm drain.	WO#107733 : 1/11/2010 5:37:09 PM Site inspection no trace of discharge contacted manager and completed total storm water quality inspection which required a posted spill response plan and employee training log.	No	No		Yes		na	LCS	2/1/10
51	91174	1/11/10	wash water	Discharge of building or sidewalk washwater - Landscapers power washing driveway w/soap and no containment.	WO#107734 : 1/11/2010 6:16:55 PM Contacted worker and showed him how to clean without discharge. Called B&B,informed them of the code and how to comply	Yes	Yes		Yes			ENC	2/1/10
52	91183	1/12/10	h20	Discharge of water - Every afternoon, water shoots out from fire check system.	WO#107744 : 1/15/2010 2:32:56 PM Site inspection observed drainage coming out of SE outlet took photos. The janitor stated that this is not their water and believes that this is ground water draining and that it has been draining for 8 years. He was already contacted by SDWD and has turned off their irrigation for 45 days. In addition, he stated that the flow was twice as strong when the green houses were operating---case closed	No	No		Yes			ENC	2/1/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
53	91290	1/21/10	water	Discharge of water - Stormwater runoff running onto complainant's property.	WO#113185 : 3/30/2010 4:36:46 PM site inspection took photos sent email to PW	No	No		Yes			LUC	4/7/10
54	91337	1/27/10	drywall dust	Discharge of concrete cutting slurry or washwater. - Concrete cutting debris left in driveway.	WO#112799 : 3/22/2010 6:10:28 PM site inspection contacted worker to sweep up dry wall debris	Yes	No		Yes			ENC	4/7/10
55	91338	1/28/10	trash wash water	Discharge of trash - Drywall waste and trash smell in storage container behind Subway.	WO#112798 : 3/22/2010 6:04:09 PM Site inspection contacted maintenance worker who said it was rain water from a trash can in the storage unit. Requested that he clean it up asap took photos. WO#112800 : 3/22/2010 6:14:22 PM site inspection area cleaned up case closed	Yes	Yes		Yes			ENC	1/27/10
56	91340	1/27/10	vegetation	Discharge of yard waste - Leaf blowing into street.	WO#112796 : 3/22/2010 5:40:40 PM site inspection contacted landscaper and requested that he clean up all of the leaf blower debris and asked him how he sweeps it up without a broom	Yes	Yes		Yes			ENC	1/27/10
57	91356	2/1/10	wash water	Discharge of building or sidewalk washwater - Restaurant's driveways were wet, possible hosing off.	WO#111909 : 3/10/2010 3:04:37 PM Site inspection took photos of discharge and trails that lead to the NW customer entrance contacted respondent	Yes	No		Yes			ENC	2/12/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					3/10/2010 3:11:15 PM 2/25/10 received call from Angelo's burger regarding drainage problem-water pools in front of NW driveway. Site inspection took photos and emailed them to PW streets. Respondent believes that the palm tree is the reason that the cement is coming up and preventing flows into the storm drain. See SR 91466.								
58	91363	2/2/10	sediment	Discharge of sediment - Former Pacific View School has sediment runoff onto sidewalks. Is this still PW's responsibility or EUSD?	WO#112795 : 3/22/2010 5:18:38 PM no discharge	No	No					ENC	4/7/10
59	91389	2/1/10	sediment	Discharge of sediment - Sediment discharge due to rain event.	WO#112794 : 3/22/2010 5:14:54 PM site inspection BMPs appear to be working case closed	No	No					LUC	4/7/10
60	91391	2/1/10	silt	Discharge of sediment - Sediment discharge	WO#112030 : 3/11/2010 1:02:29 PM Site inspections show business cleaning up after each rain. took photos 3/08/10 met with property/business manager. He informed me that he has cleaned up the drainage ditch twice this season and is waiting for the rains to stop before he does his final clean up. Set up routine storm water inspection for 3/15/10. WO#121750 : 8/31/2010 5:00:51 PM site inspection drain	Yes	No		Yes		San Elijo Lagoon	CBS	9/7/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					cleared took photos case closed								
61	91393	2/1/10	silt	Discharge of sediment - Sediment discharge	WO#111918 : 3/10/2010 5:26:25 PM Site inspection appears PW streets cleaned up street WO#112792 : 3/18/2010 3:19:40 PM SDG&E easement at Mountain Vista. 3/22/2010 5:01:22 PM Sent email to SDG&E to clean street and maintain/replace BMPs 3/30/2010 4:29:44 PM 3/25/10 site inspection area cleaned up case closed took photos	Yes	Yes		Yes			LCS	4/1/10
62	91394	2/1/10	silt	Discharge of sediment - Sediment discharge	WO#111976 : 3/11/2010 10:29:44 AM site inspection took photos of discharge stains WO#112793 : 3/18/2010 3:18:28 PM SDG&E easement at	Yes	Yes		Yes			LCS	4/1/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Garden View 3/22/2010 5:06:41 PM Sent email to SDG&E to clean street and maintain/replace BMPs 3/30/2010 4:27:23 PM 3/25/10 site inspection area cleaned up took photos case closed								
63	91397	2/1/10	silt	Discharge of sediment - Sediment discharge	WO#111913 : 3/10/2010 4:18:13 PM Placed call on 2/18/10 with PM requesting maintenance of drainage ditch 2/18/10 (took photos on 2/3/10 2/10/10 and 2/18/10) Parks and rec informed me who owns property. 3/3/10 Contacted PM to clear drainage swale and install some BMPs. 3/8/10 drain ditch clear and BMPs installed no discharge during/after rain event. Appears some additional BMPs may be needed for slope stabilization. WO#111914 : 3/10/2010 4:28:59 PM	Yes	No		Yes			LCS	3/8/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					3/8/10 drain ditch clear and BMPs installed. no discharge onto road								
64	91446	2/12/10	wash water	Discharge of building or sidewalk washwater - Restaurant washing off inside floor, letting wash water run into street with no containment.	WO#111909 : 3/10/2010 3:04:37 PM Site inspection took photos of discharge and trails that lead to the NW customer entrance contacted respondent 3/10/2010 3:11:15 PM 2/25/10 received call from Angelo's burger regarding drainage problem-water pools in front of NW driveway. Site inspection took photos and emailed them to PW streets. Respondent believes that the palm tree is the reason that the cement is coming up and preventing flows into the storm drain.	Yes	No	2/12/10	Yes			ENC	2/12/10
65	91451	2/15/10	sudsy water	Discharge of water - Sudsy water coming from a pipe at the corner of Lake and Woodlake.	WO#108942 : 2/17/2010 3:15:01 PM Site inspection, no sign of illegal discharge coming from any curb cutouts or pipes in the area surrounding the intersection of Lake and Woodlake. Case closed. WO#111867 : 3/9/2010 3:41:02 PM 3/1/10 and 3/9/10 site inspections took photos and contacted SDG&E	No	No					CBS	9/13/10
66	91505	2/24/10	silt	Discharge of sediment - Lack of erosion control.	WO#111880 : 3/10/2010 11:59:06 AM Site inspection with clean water manager and business owner.	Yes	No		Yes			LUC	4/8/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Requested owner to implement some BMPs to prevent silt discharge.								
67	91528	2/26/10	sediment	Discharge of sediment - Company hosing down pile of sediment into street.	WO#111864 : 3/9/2010 1:48:06 PM site inspection contacted workers and business owner to issue citation for BMP and discharge took photos	Yes	Yes	3/1/10	Yes	3/1/10		ENC	4/8/10
68	91531	2/28/10	water	Discharge of water - Resident says there is sudsy water coming from a curb outlet on Woodlake. it was occurring Sunday at 12:35pm. This is the 2nd complaint. No discharge was found the first time.	WO#111874 : 3/10/2010 11:17:08 AM Called SDG&E representative to setup inspection of volt to ensure that there are no illegal connections. Took photos and emailed them to SDG&E. 3/10/2010 2:10:51 PM 3/10/10 received call from SDG&E representative (see inspection tab for rep info) stating that they need to determine if this is a "live" box. If live then only trained personnel can enter box. Requested photos of any connection to the box. 3/16/2010 2:05:34 PM 3/12 and 3/15 received email and voicemail from SDG&E stating that they have inspected the volt and found no leaks or dirty/sudsy water in volt. Discharge excess water into MS4	No	No		Yes			CBS	4/8/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					3/18/10 received call from SDG&E stating that the volt does have a pump that pumps the water when it reaches a certain height in the volt. The pump is designed so that when it pumps it takes the water not from the top Case closed.								

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
69	93576	3/8/10	sediment	Discharge of sediment - Resident concerned with lack of erosion controls at sidewalk repair jobs on 4th street.	WO#111838 : 3/8/2010 3:32:12 PM Site inspection contacted workers and business owner to dry clean street and use BMPs in the future	Yes	Yes		Yes			ENC	4/8/10
70	93649	3/16/10	h2O	Discharge of water - Large amount of water coming from commercial building.	WO#112296 : 3/16/2010 5:55:50 PM site inspection contacted Special Hazards Manager, of a Fire Protection Co. Inc. on site. He informed me that he was flushing the emergency fire sprinklers as required by the fire code. I confirmed this requirement with fire prevention informed contractor to discharge these flushes into landscaped areas whenever practicable and to inspect their flows so that the flows do not create erosion or other safety issues	No	No		Yes		ocean	CBS	4/8/10
71	93673	3/21/10	wash water	Discharge of building or sidewalk washwater - Washing off driveway without containment.	WO#113100 : 3/24/2010 5:01:32 PM Site inspection observed discharge took photos and tried to contact employee WO#113101 :	Yes	No	3/24/10	Yes	3/24/10		ENC	3/24/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					3/24/2010 5:14:38 PM 3/22/09 159pm called respondent and informed him of the illegal discharge and asked and received his email and sent photos requesting explanation. 3/23/10 received voice mail message from the respondent/business/property owner at 751am stating that the he had talked to his employee and that the employee had washed the driveway and drive through area with clean water no soap. The employee was trained not to discharge any liquid into the storm drain. 3/24/2010 5:17:43 PM Issued citation via mail and called respondent (4pm) to offer additional training material. Met with respondent and gave him training materials and a log to document the employee training. Case closed								
72	93699	3/26/10	wash water	Discharge of building or sidewalk washwater - Restaurant washes off drive thru without containment.	WO#113218 : 4/1/2010 9:19:21 AM site inspection contacted manager gave ed info	No	No		Yes			LCS	4/8/10
73	93700	3/26/10	dirt	Discharge of sediment - Uncovered stockpile of sediment.	WO#113217 : 4/1/2010 9:13:08 AM site inspection took photos and contacted worker and gave ed info 3/31/10 received call from owner stating that	Yes	No		Yes			LUC	4/1/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					he will take care of the stock pile of dirt WO#113284 : 4/6/2010 2:39:01 PM Took photos of stock pile with BMPs in place. Case closed								
74	93704	3/12/10	silt	Discharge of sediment - Silt discharge after rain event	WO#113176 : 3/30/2010 3:39:07 PM Site inspection left info at door	Yes	No		Yes			CBS	4/8/10
75	93741	4/2/10	Kitchen waste	Discharge of building or sidewalk washwater - Restaurant hosing off floor mats without containment.	WO#113285 : 4/6/2010 2:51:12 PM site inspection contacted Manager took photos WO#113496 : 4/20/2010 3:35:54 PM received sign off employee training form and faxed NOV sign off case closed	Yes	No	4/5/10	Yes			RSF	4/20/10
76	93781	4/12/10	silt	Discharge of sediment - Silt and rocks discharge after rain event.	WO#117174 : 5/5/2010 5:18:22 PM Sent email and called bus to maintain drainage I have contacted the business maintaining the citrus groves and other home owners in this area. It appears that the road may be eroding next to the oleanders east of 2276 WOODWIND DR. Here are the photos I:\200 bLk RSF erosion of road Let me know if you need more info/work	Yes	No		Yes			RSF	6/8/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					from me Thanks								
77	93786	4/12/10	odor	Other discharge - Neighbor says odor is coming from greenhouse and they may be dumping something.	WO#88462 : By INSPECTOR1, ENG: 4/20/2010 1:57:27 PM Site inspection did not smell an odor contacted all properties in area no reports of discharge. Call DEH regarding septic at residence inspector to report back	No	No		Yes			CBS	6/8/10
78	93788	4/12/10	silt	Discharge of sediment - Working on utility box #225 with no BMPs. Silt runoff.	WO#117172 : 5/5/2010 5:10:44 PM site inspection area cleaned up took photos case closed WO#88460 : By INSPECTOR1, ENG: 4/20/2010 1:37:38 PM site inspection took photos contacted AT&T on 4/20/10 to check site for run on/off	Yes	Yes					RSF	4/21/10
79	93789	4/9/10	silt and water	Discharge of sediment - Car hit a fire hydrant. OMWD responded, but no BMPs were put in place. Silt discharge occurred.	WO#113494 : 4/20/2010 3:22:19 PM Site inspection OMWD did not have a shut off valve and no BMPs were being used took photos and contacted lead worker to clean silt from street WO#113495 : 4/20/2010 3:26:18 PM site inspection area cleaned case closed	Yes	Yes		Yes		Batiquitos lagoon	LCS	4/12/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
80	93807	4/18/10	H2o wash water	Discharge of water - a man was hosing off the sidewalk just west of the restaurant's driveway	WO#113492 : 4/20/2010 12:10:05 PM Site inspection spoke to worker who said he was following recommendations of the health department to wash down all patio surfaces to reduce or eliminate vectors. He showed me how he directs the wash water to the landscaped area and does not wash the parking lot	No	No		Yes			LUC	5/27/10
81	93933	5/6/10	dirt	Discharge of sediment - Brow ditches on bank of property filled with sediment, spilling out onto street.	WO#120914 : 7/27/2010 5:33:11 PM site inspection took photos of dirt in drive way called manager to clean up WO#120915 : 7/27/2010 5:45:37 PM site inspection area cleaned took photos case closed	Yes	No		Yes			LCS	5/11/10
82	93934	5/6/10	dirt	Discharge of sediment - Uncovered stock pile of dirt.	WO#120927 : 7/28/2010 2:18:48 PM SITE Inspection took photos of uncovered dirt pile contacted PM WO#120929 : 7/28/2010 2:31:11 PM site inspection area cleaned took photos case closed	Yes	No		Yes			LCS	5/11/10
83	93939	5/12/10	dirt	Discharge of sediment - Bell systems manhole on ECR near 276 has sediment discharge.	WO#120943 : 7/28/2010 2:56:51 PM site inspection took photos 5/12/10 called AT&T to clean up street	Yes	Yes		Yes			LCS	7/29/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
84	93980	5/17/10	sand	Discharge of sediment - Broken sprinkler, reclaimed water, sediment going into storm drain.	WO#120944 : 7/28/2010 3:04:11 PM site inspection took photos of broken sprinkler and contacted PM to fix	Yes	No		Yes			CBS	7/29/10
85	95993	5/21/10	wash water	Discharge of building or sidewalk washwater - Clean Water staff witnessed a man hosing off sidewalk in front of restaurant with no BMPs. When asked to stop, he declined.	WO#119653 : 5/24/2010 12:07:55 PM Sent NOV letter and Warning Citation to restaurant owner/manager.	Yes	No	5/21/10	Yes	5/21/10		ENC	5/24/10
86	96014	5/26/10	hydraulic fluid	Discharge of oil. - Business owner says SDG&E spilled an oily liquid in his private business parking lot. They power washed the spill, but some residue remains.	WO#120953 : 7/29/2010 1:36:45 PM Site inspection took photos and contacted SDG&E to contact property owner to agree on clean up areas	Yes	Yes		Yes			LUC	8/4/10
87	96069	6/2/10	cement slurry	Discharge of concrete cutting slurry or washwater. - Cement slurry discharging into street.	WO#120987 : 7/30/2010 3:30:45 PM Site inspection took photos contacted PO and worker to clean up discharge issued NOV and placed cones and sandbags in street for safety and to stop discharge from entering the storm drain system discharge from entering the storm drain system WO#120988 : 7/30/2010 3:40:12 PM site inspection area clean up signed off NOV case closed	Yes	Yes	6/2/10	Yes			LUC	6/4/10
88	96070	6/8/10	improper storage of Hazardous Waste	Other discharge - Improper storage of hazardous waste	WO#120989 : 7/30/2010 4:15:45 PM site inspection took	Yes	No		Yes			LUC	8/4/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					photos and contacted manager								
89	96071	6/8/10	cardboard	Discharge of trash - Improper storage and maintenance of trash and recycling area.	WO#121023 : 8/2/2010 3:46:02 PM site inspection contacted manager to use proper recycle containers case closed	Yes	No		Yes			LCS	8/4/10
90	96074	6/1/10	pond water	Discharge of building or sidewalk washwater - Washing out pond filter with detergents, no BMPs.	WO#121026 : 8/2/2010 4:00:57 PM site inspection took photos contacted worker to discontinue discharge case closed	Yes	No		Yes			CBS	8/4/10
91	96075	6/2/10	dirt	Discharge of food waste. - Wastewater found grease in drainage line and sediment in permanent BMP.	WO#121027 : 8/2/2010 4:18:29 PM site inspection with waste water checked grease interceptors and storage areas. Waste water confirmed no grease came from restaurants. Did find large amount of sediment that needs to be cleaned. Called PM to clean case closed	Yes	No		Yes			LCS	8/4/10
Commercial Totals: 91					**Follow ups: 42**	**65**	**33**	**19**	**82**	**9**			

Appendix H-1 Industrial Complaint Response Summary FY 2009 - 2010

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	82645	9/29/09	wash water	Discharge of vehicle wash water - Bus washing, dumping wash water into drain. Complainant not sure if drain was connected to clarifier or not.	WO#98638 : 10/6/2009 9:22:06 AM Received voicemail from responsible party. Discharge points were dry, and all employees said wash water was going into the filter system or sanitary sewer. No violation, case closed.	No	No					CBS	10/6/09
2	82669	9/25/09	silt/sediment	Discharge of sediment - Pile of sediment left in street after work was done on the recycled water system at SE corner of Quail Gardens Dr and Leucadia Blvd. Attached complaint to golf course at 1265 because it was nearest address point.	WO#88435 : 10/21/2009 4:07:43 PM 10-1-09 site inspection took photos called parks and rec and they said it was JPA called JPA and they cleaned it up. case closed.	Yes	No		Yes			LUC	11/10/09
Industrial Totals: 2					**Follow ups: 0**	**1**	**0**	**0**	**1**	**0**			

Appendix H-1 Residential Complaint Response Summary FY 2009 - 2010

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	78076	7/2/09	bag of trash	Discharge of trash - Neighbor says bag of trash has been left on his property line. Complainant says bag of trash has been left on his property line and/or in the drain in front of his neighbor's house.	WO#88389 : By INSPECTOR1, ENG: 7/13/2009 11:33:48 AM 7-13-09 site inspection observed no drainage took photos case closed 7/14/2009 4:05:56 PM inspection date is 7/9/09	Yes	No					CBS	7/14/09
2	82113	7/9/09	trash	Discharge of trash - Complainant says neighbor is dumping trash into the storm drain again, and he wants her cited.	WO#88388 : By INSPECTOR1, ENG: 7/13/2009 11:27:48 AM 7-13-09 site inspection observed no drainage took photos case closed WO#96909 : 7/14/2009 4:17:21 PM on showed small amount of sediment, trash and glass in the storm drain. Took photos before and after clean up. Clean water met with code regarding next steps. It was agreed that an NOV should be sent from Code to include EMC chapter 20.08 and clean water will continue to respond to storm water complaints and communicate with code. Area cleaned up case closed	No	No					CBS	7/14/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
3	82183	7/20/09	trash	Discharge of water - Complainant says neighbor is running water down her driveway for the past 30 minutes and often dumps trash, gas, and other pollutants into storm drain.	WO#88395 : By INSPECTOR1, ENG: 7/22/2009 12:45:09 PM 7/22/09 site inspection took photos of storm drain and picked up small amount of trash. Neighbors contacted me and were given update on city action	Yes	No		Yes			CBS	7/28/09
4	82191	7/21/09	trash	Discharge of trash - Neighbor allegedly leaving trash in street and storm drain.	WO#88394 : By INSPECTOR1, ENG: 7/22/2009 12:38:57 PM 7/22/09 site inspection took photos of storm drain and picked up small amount of trash. Neighbors contacted me and were given update on city action	Yes	No		Yes			CBS	7/28/09
5	82214	7/23/09	Paint	Discharge of paint - Referred from Leucadia Wastewater. Paint was dumped into storm drain at north corner of Mountain Vista and Whitewood.	WO#97154 : 7/23/2009 2:19:37 PM Paint was still wet in storm drain. Called Encinitas Wastewater to vacuum paint from drain, and they were able to capture it all. Case closed.	Yes	No					ESC	7/23/09
6	82216	7/23/09	cement wash water	Discharge of concrete cutting slurry or washwater. - Looks like neighbor cleaned out cement wash water into street.	WO#97184 : 7/27/2009 10:04:47 AM Dried cement lined gutter west along Tucker Lane. Contractors began scraping and sweeping up the cement with inspectors on site. Informed contractors and resident of stormwater code. Issued Admin Citation Warning. Case closed.	Yes	No		Yes	7/23/09		LCS	7/27/09

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
7	82218	7/24/09	trash	Discharge of trash - Neighbor called to report trash being left in street. Also submitted photo via email.	WO#88400 : By INSPECTOR1, ENG: 7/27/2009 4:25:02 PM 7-27-09 site inspection took photos of debris and trash picked up 23 pieces of trash/debris.	Yes	No					CBS	7/28/09
8	82236	7/28/09	Concrete wash water	Other discharge - Residue in gutter along Melba between Ocean Knoll and Balour Dr. on north side of street.	WO#88405 : By INSPECTOR1, ENG: 7/28/2009 3:09:07 PM 7/28/09 site inspection of debris draining off the property. Contacted property owner to dry clean up wash debris. WO#88410 : By INSPECTOR1, ENG: 8/6/2009 2:47:37 PM 8/6/09 site inspection area cleaned up case closed	Yes	No		Yes			ENC	8/6/09
9	82249	7/30/09	white construction wash water	Discharge of concrete cutting slurry or washwater. - trail of cement residue in street at corner of Sky Loft and Burgundy.	WO#97229 : 7/30/2009 1:59:41 PM Inspection showed dried white marks leading from construction area, down street into storm drain. Resident was unaware of contractor's name. Informed her of our municipal code, gave educational information, sent NOV and Warning Citation via Certified mail.	Yes	No	7/30/09	Yes	7/30/09		LUC	7/30/09
10	82259	7/31/09	oil/sediment	Discharge of oil. - Neighbor's contractor has oil leak from equipment in street.	WO#88411 : By INSPECTOR1, ENG: 8/6/2009 3:28:55 PM 8/6/09 site inspection took photos contacted owners will speak to contractor	Yes	No		Yes			RSF	8/11/09

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11	82266	7/31/09	trash/sediment	Discharge of trash - Complainant says neighbor is breaking glass and hosing off driveway.	WO#88409 : By INSPECTOR1, ENG: 8/6/2009 1:30:21 PM 8/6/09 site inspection took photos and picked up <> 10 items of trash no discharge observed but evidence of sediment drainage trails on the north side of driveway. Case close	Yes	No					CBS	8/11/09
12	82303	8/6/09	yard waste	Discharge of yard waste - Staff witnessed landscapers using leaf blowers to blow yard waste into street.	WO#88414 : 8/11/2009 11:00:36 AM Contacted owner/resident and requested he speak to his landscaper about proper disposal of yard waste.	No	Yes		Yes			ENC	8/11/09
13	82313	8/5/09	mulch	Discharge of yard waste - Neighbors dumped out kids' pool, water took dirt and mulch into street.	WO#88418 : By INSPECTOR1, ENG: 8/12/2009 2:43:10 PM 8/6/09 site inspection took photos of mulch flowing into storm drain contacted property owner to clean it up. WO#97420 : 8/17/2009 12:53:10 PM 8/12/09 site inspection area cleaned up signed off NOV case closed	Yes	No	8/5/09	Yes			CBS	8/12/09
14	82332	8/11/09	water	Discharge of water - Large pool of water at Santa fe and nardo. source is unknown. address given by complainant doesn't exist.	WO#88416 : By INSPECTOR1, ENG: 8/11/2009 3:32:18 PM 8/11/09 site inspection no discharge observed case closed	No	No					ENC	8/26/09

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15	82337	8/11/09	trash	Discharge of trash - Complainant says the whole street is littered with garbage and wants it cleaned up.	WO#97422 : 8/17/2009 1:18:17 PM 8/12/09 site inspection took photos and cleaned up trash in street next to property street sweeping is on third Tuesday case closed	Yes	No					CBS	8/25/09
16	82347	8/12/09	Trash	Discharge of trash - Complainant says there is trash up and down the street. Neighbor is littering in storm drain.	WO#97423 : 8/17/2009 1:22:50 PM 8/12/09 site inspection took photos and cleaned up trash in street next to property street sweeping is on third Tuesday case closed	Yes	No					CBS	8/25/09
17	82359	8/16/09	anti freeze	Discharge of antifreeze - van parked next to dumpster is leaking large amount of antifreeze. Puddle collecting under tire.	WO#88421 : By INSPECTOR1, ENG: 8/17/2009 3:27:22 PM 8/17/09 site inspection took photos left door hanger and other ed materials	Yes	No		Yes			ENC	8/26/09
18	82364	8/17/09	Dried white substance	Discharge of concrete cutting slurry or washwater. - Construction materials in driveway at 316, dried white residue in curb line.	WO#88420 : By INSPECTOR1, ENG: 8/17/2009 3:05:42 PM 8/17/09 site inspection took photos left door hanger	No	No		Yes			ENC	8/26/09
19	82366	8/17/09	trash	Discharge of trash - Complainant says neighbor is dumping trash into the street and storm drain. He has it on video.	WO#97534 : 8/25/2009 12:56:41 PM 8/17/09 site inspection took photos and cleaned up trash in street next to property street sweeping is on third Tuesday Contacted complainant on site	Yes	No		Yes			CBS	8/25/09

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20	82412	8/25/09	trash and debris	Discharge of trash - Trash being blown under the gates of the fire lane to Seabulff Village. Also, 7 black trash bags and an oven not being properly disposed of.	WO#88422 : By INSPECTOR1, ENG: 8/25/2009 2:44:29 PM 8/25/09 site inspection took photos of trash and debris flowing from storm drain contacted property owner and landscaper to clean it up. WO#97729 : 9/10/2009 11:03:35 AM 8/27/09 site inspection took photos area cleaned up case closed	Yes	No					LUC	9/11/09
21	82418	8/20/09	unknown stain in curb line.	Discharge of other washwater - Resident said there is stain running from a curb hole into the street.	WO#97731 : 9/10/2009 12:42:06 PM 8/25/09 site inspection area appeared to have slight stain. Contacted residence and requested that they or their hired help makes sure that there is no discharge. Case closed	No	No		Yes			LUC	9/11/09
22	82459	8/30/09	Sediment/ water	Discharge of sediment - Staff noticed sediment laden water coming from curb cut on Leucadia Blvd, possibly from nearby grower.	WO#97738 : 9/10/2009 4:30:38 PM 9/3/09 site inspection took photos and contacted resident monitor discharge so that no sediment is released from property	No	No		Yes			LUC	9/11/09
23	82467	9/1/09	water	Discharge of other washwater - Unknown wash water periodically discharged from pipe on the west side of property.	WO#107313 : 12/7/2009 5:11:36 PM site inspection appeared to be clean drainage case closed WO#97726 : 9/10/2009 9:40:06 AM 9/1/09 site inspection took photos and contacted resident to get landlord's info	No	No		Yes			ENC	12/2/09

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					regarding constant drainage.								
24	82481	9/2/09	sewage smell	Discharge of sewage - Complainant says sewage smell comes from neighbor's property and sometimes there is leaching onto complainant's property.	WO#97785 : 9/14/2009 3:12:17 PM 9/10/09 site inspection took photos of DEH notice to repair septic no drainage or odor case closed	No	No					ESC	11/10/09
25	82492	9/3/09	sediment	Discharge of sediment - When the property owner waters the grass, dirt is flowing down the street.	WO#97724 : 9/9/2009 5:16:47 PM 9/09/09 site inspection took photos no drainage issue	No	No					ENC	9/11/09
26	82530	9/14/09	paint debris	Discharge of other washwater - Unknown substance draining into gutter causing bleaching. Complaint forwarded from Code Enforcement.	WO#88442 : By INSPECTOR1, ENG: 10/26/2009 2:38:04 PM Site inspection took photos of paint stain in street contacted owner and requested clean up WO#88443 : By INSPECTOR1, ENG: 10/26/2009 2:44:31 PM site inspection area cleaned up took photos case closed	Yes	No		Yes			LUX	9/22/09
27	82568	9/16/09	paint thinner	Discharge of paint - Neighbor dumping paint thinner on ground.	WO#88450 : By INSPECTOR1, ENG: 10/26/2009 5:25:49 PM left card at door. contacted owner and explained storm water regulations and that dumping paint thinner is illegal	No	No		Yes			ENC	11/10/09
28	82569	9/16/09	oil	Discharge of oil. - Oil spill in alley behind garage.	WO#88448 : By INSPECTOR1, ENG: 10/26/2009 5:14:15 PM Site inspection took photos of oil dumped in alley left info at possible	Yes	No		Yes			ENC	9/22/09

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					respondent's door Respondent called and said it was not his oil. WO#88449 : By INSPECTOR1, ENG: 10/26/2009 5:20:30 PM cleaned up site case closed								
29	82570	9/16/09	radiator water	Discharge of antifreeze - Van leaking large amount of fluid into driveway, running towards storm drain.	WO#88447 : By INSPECTOR1, ENG: 10/26/2009 5:05:09 PM Site inspection took photos of van leaking antifreeze local host resident found the owner of the van. Placed some sand bags to prevent the fluid from entering the storm drain. Owner said he will fix the van. Owner placed a drip pan under the van.	Yes	No		Yes			ENC	11/10/09
30	82583	9/17/09	erosion	Discharge of sediment - Lack of erosion control.	WO#103128 : 11/18/2009 4:29:42 PM Owner informed me that there are BMPs in place (drains under road and left vegetation in place to prevent run off. Owner stated that there has not been any run off in the last 6 years since he has owned the property case closed WO#88446 : By INSPECTOR1, ENG: 10/26/2009 4:25:17 PM Site inspection took photos of disturbed soil without required BMPs contacted owner and requested that BMPs be implemented.	Yes	No		Yes			RSF	11/5/09

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31	82661	9/30/09	none	Discharge of building or sidewalk washwater - Resident washing off driveway without containment.	WO#88437 : By INSPECTOR1, ENG: 10/22/2009 5:03:07 PM 10-22-09 site inspection no discharge observed case closed	No	No					LUX	11/10/09
32	82680	10/5/09	Sewage smell coming from lake	Discharge of sewage - Complainant says there is a sewage smell coming from her neighbor's lake. Please call complainant to discuss.	WO#88428 : By INSPECTOR1, ENG: 10/6/2009 5:54:45 PM 10/5/09 site inspection took photos of lake color (milky green) contacted the reporting party and the property owner. The Lake also smelled septic. PO gave me a photo of the white slick that he observed 3 or 4 days ago (10-2/3-2009). Called DEH and Waste water. Waste water confirmed that it could not be flows from the sewer. Called and left message with DEH for possible septic leak working and preventing flows in storm drain.	No	No		Yes			ESC	9/2/10
33	82700	10/8/09	trash	Other discharge - Complainant's neighbor is using a blue plastic tarp to cover leaky roof. The tarp is disintegrating, and blue pieces are blowing into the street.	WO#88432 : By INSPECTOR1, ENG: 10/21/2009 1:35:59 PM 10/8/09 site inspection complainant showed where the pollutant was located. Took photos of blue parts of old trap on the lower northern roof. Contacted the respondent and requested that they take action to ensure that the pollutant does not enter the storm drain system. WO#88433 : By INSPECTOR1, ENG: 10/21/2009 1:48:44 PM	Yes	No		Yes			CBS	10/19/09

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					10/19/09 site inspection Took photos of blue parts of old trap on the lower northern roof. Contacted the respondent and requested that they take action to ensure that the pollutant does not enter the storm drain system. He said that the remaining parts were stuck to the roof but he will try to sweep them off and keep an eye on the storm drain---case closed								
34	82707	10/8/09	unknown substance	Other discharge - Complainant thinks her neighbor dumped some chemicals into the pond near her house. Please call complainant to get details and gain access to the property.	WO#121755 : 8/31/2010 5:20:59 PM site inspection with dudek preformed tests received report case closed WO#98733 : : 10/13/2009 5:25:32 PM 10-9-09 site inspection took photos of the pond and contacted adjacent neighbor who confirmed that the pond had changed color about a week earlier and that this had not occurred in the recent past (5yrs). Also that there was a stop work issued for grading and that other agencies were involved (fish and game and army corps of engineers)	No	No		Yes			ESC	10/14/09
35	82713	10/9/09	rocks and dirt	Discharge of trash - Complaint says neighbor is leaving garden rubbish and tissue in the street.	WO#98710 : 10/12/2009 4:57:36 PM 10/12/09 site inspection took photos swept up area case closed	No	No					CBS	11/10/09

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36	82723	10/7/09	none	Discharge of sewage - Sewer smell between 12-6am	WO#98709 : 10/12/2009 4:27:58 PM 10/8/09 site inspection with waste water checked new sewer clean outs and investigated up stream Creek water appeared to be clear and did not have an odor. Called DEH septic and they do not respond to odors they require a visual and an address to respond. Case Closed	No	No		Yes			ESC	11/10/09
37	82725	10/13/09	vegetation	Discharge of yard waste - Storing large pile of tree clippings in street for 2 weeks	WO#98903 : 10/27/2009 2:27:00 PM site inspection took photos door hanger WO#98904 : 10/27/2009 2:30:09 PM site inspection took pho of cleaned up area Case Closed	Yes	No		Yes			CBS	10/19/09
38	82749	10/15/09	pet waste	Other discharge - Complainant stated that there are dog droppings all over the neighborhood and thinks that is coming from the dog owners at NW corner of La Veta and Silvia because it was observed that the dog owners let their dogs out without a leash.	WO#98791 : 10/20/2009 1:40:30 PM 10-15-09 site inspection contacted respondent who would like to be contacted by the complainant and does not let his dogs out. 10-20-09 called complaint and left message to call me back. Informed respondent of the progress. If complainant calls then they will be given respondents phone # and respondents thoughts on clean water---case closed	No	No		Yes			ENC	11/10/09

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39	82769	10/21/09	oil	Discharge of oil. - Car dripping oil across from 185 E. D. Street	WO#98864 : 10/23/2009 4:36:02 PM site inspection took photos and left info on vehicle called sheriff for expired tabs and oil leak they said they would call the FD for the oil and the tabs have to be expired for 6 months WO#98865 : 10/23/2009 4:44:43 PM site inspection kitty litter on oil case closed	Yes	No		Yes			ENC	10/22/09
40	82821	10/26/09	cement	Discharge of concrete waste. - plants are beginning to grow in the brow ditch, concrete has been dumped into it and a few near by homes have drain lines emptying into it	WO#98913 : 10/29/2009 11:18:53 AM Site inspection took photos of drainage ditch appears to be working. GIS shows it as private no violation case closed	No	No					ESC	11/10/09
41	82837	11/3/09	dirt	Discharge of sediment - uncovered disturbed slope	WO#107310 : 12/7/2009 4:54:26 PM Contractor informed me that the erosion was cause by a leaking sprinkler and that he replace and compacted the dirt. Site inspection showed that no sediment left the site during a rain event case closed WO#98965 : 11/3/2009 3:29:40 PM site contact requested BMPs ASAP	Yes	No		Yes			ENC	12/7/09
42	82863	11/9/09	trash dirt and rocks	Discharge of trash - Complainant says neighbor is dumping trash in street and storm drain.	WO#99092 : 11/10/2009 2:59:01 PM Site inspection took photos neighbors and sheriff contacted me. I	Yes	No		Yes			CBS	11/10/09

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					picked up trash and swept up rocks and dirt. Respondent started sweeping her driveway and pick up small pieces of trash								
43	82865	11/9/09	degreaser	Discharge of vehicle wash water - resident washing engine with degreaser when asked to clean it up used a push broom to sweep the wash water into the storm drain appears that he needs some education on stormwater	WO#99098 : 11/12/2009 9:58:04 AM Site inspection took photos area looked clean left educational info at door	Yes	No		Yes			CBS	11/30/09
44	82879	11/10/09	dirt, weeds, trash and rock	Discharge of trash - washing trash into storm drain	WO#99097 : 11/12/2009 9:20:40 AM Site inspection took photos neighbor contacted me. I picked up trash and swept up rocks and large amount of weeds and dirt ---case closed	Yes	No		Yes			CBS	11/30/09
45	86894	11/16/09	trash	Discharge of trash - Neighbor is putting trash in the street and storm drain.	WO#103124 : 11/18/2009 11:10:59 AM Site inspection took photos and picked up trash and swept up rocks and dirt. Took after photos case closed	Yes	No					ENC	11/30/09
46	88942	11/24/09	over-irrigation, potholes	Discharge of water - Over-irrigation causing potholes in road.	WO#107271 : 12/1/2009 5:24:14 PM Site inspection no discharge observed. Took photos of potholes. Contacted resident who stated that had reviewed her irrigation and there is no water leaving her property. Called PW regarding potholes.	No	No		Yes			RSF	12/4/09

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47	88943	11/24/09	vegetation	Discharge of yard waste - Lack of proper coverage of vegetation stockpiles.	WO#107270 : 12/1/2009 4:59:43 PM Site inspection no discharge observed. Took photos of pile of mulch. Contacted resident who stated that someone had dumped the 2nd or northern pile. Called PW and they do not removed/retrieve dumped piles of mulch. Respondent was informed of the policy---- case closed.	No	No		Yes			ESC	12/4/09
48	88944	11/24/09	manure stockpiles	Other discharge - Lack of BMPs for manure stockpiles.	WO#107308 : 12/7/2009 4:12:21 PM Site inspection took photos contacted resident to remove poop or provide BMPs. Received call from owner asked if he needed to remove the horses from his property as they are not his. Owner will store poop so that it does not wash down into the creek ASAP WO#107309 : 12/7/2009 4:17:40 PM Poop removed case closed took photo	Yes	No		Yes			ESC	12/7/09
49	88945	11/24/09	manure	Other discharge - Lack of BMPs for goat manure, and possible illegal connection to storm drain.	WO#107267 : 12/1/2009 12:52:57 PM Site inspection no discharge observed. Took photos of flexible black tube leading to the storm drain from the goat enclosure. Left card to call me. WO#107406 : 12/21/2009 2:27:04 PM	No	No		Yes			RSF	12/21/09

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					Site inspection with owner took photos of area drain and inspected goat lodging area no discharge or illegal connection was observed---case closed								
50	88946	11/25/09	none	Other discharge - Possible illegal connection to storm drain.	WO#107269 : 12/1/2009 1:23:12 PM Site inspection no discharge observed. Left card to call me. respondent called and informed me that it is a landscaping drain---case closed	No	No		Yes			RSF	12/4/09
51	88947	11/25/09	na- tree in storm drain	Other discharge - Citizen concerned with tree growing in storm drain.	WO#107268 : 12/1/2009 1:06:26 PM Site inspection no discharge observed. Took photos of tree growing. Called County watershed protection division regarding removal of tree. Waste water would like to have the tree removed. WO#107407 : 12/21/2009 2:32:08 PM site inspection took photos of cleared drain case closed	No	No		Yes			RSF	12/21/09
52	90958	11/30/09	wash water	Discharge of vehicle wash water - Forwarded from PW Director. Complainant concerned that neighbor might be running a car detailing business at his house.	WO#107266 : 12/1/2009 12:32:20 PM Site inspection no discharge observed contacted resident and gave educational information---case closed	No	No		Yes			LUC	12/4/09

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53	90965	12/1/09	recycle debris	Discharge of trash - Neighbor putting trash in the street and washing down items in her driveway.	WO#107306 : 12/7/2009 1:34:07 PM site inspection took photos swept up area case closed	Yes	No					LCS	1/4/10
54	90979	12/3/09	sediment/erosion	Discharge of sediment - Homeowners at 1183 Wales Place have placed an open drainage pipe at the rear of their property such that the stormwater spills onto the embankment below causing erosion. This erosion spills onto property at 1177 Wales Pl.	WO#107430 : 12/21/2009 5:06:08 PM Site inspection with owner took photos of area drain and inspected vegetated bank area no discharge was observed ter case closed	No	No		Yes			CBS	1/4/10
55	90982	12/2/09	gas	Discharge of liquid fuels. - Complainant is concerned with neighbor's RV parked in driveway, leaking fluid onto driveway.	WO#107305 : 12/7/2009 1:15:31 PM Site inspection observed small amount of fluid under vehicle took photos but there was no evidence of discharge into the storm drain. Called complainant who just wanted the RV removed. Referred him to code enforcement. He wanted a call after the respondent was contacted-case closed 12/10/2009 5:29:08 PM 12/10/09 received call from complainant stating that some further work had been done on the vehicle which created additional discharge and odors WO#107348 : 12/10/2009 5:39:45 PM Site inspection observed a constant	Yes	No	12/10/09	Yes			LCS	12/14/09

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					drip of oil or other fluid dripping about every 5-10 seconds took photos place Nov at door WO#107350 : 12/14/2009 10:59:39 AM site inspection rv gone spill cleaned up took photo case closed								
56	90985	12/5/09	wash water	Discharge of building or sidewalk washwater - At 10:30 am on Sat. Dec. 5 I was walking by 790 Neptune Ave. A man was cleaning off the backyard access to the driveway and then the driveway into the storm drain with his hose. Complainant also saw mobile detailer but didn't get name or number.	WO#107304 : 12/7/2009 12:54:14 PM Site inspection contacted owner regarding discharge. She said she does not use very mach water but will contact her gardener to discontinue practice. Case closed	No	Yes		Yes			LUC	1/4/10
57	91035	12/2/09	sediment	Discharge of sediment - Irrigation work had sediment discharge	WO#107340 : 12/9/2009 5:43:26 PM Site inspection took photos of sediment water in gutter left info at door and place 3 sand bags and cone in gutter WO#107341 : 12/9/2009 5:51:09 PM site inspection area cleaned up case closed	Yes	No		Yes			CBS	12/4/09
58	91082	12/15/09	trash	Discharge of trash - Trash in storm drain	WO#107437 : 12/22/2009 10:19:54 AM site inspection took photo of clean street no violation case closed	No	No					CBS	1/4/10

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59	91094	12/18/09	h2o	Discharge of water - Received complaint call that there is constant standing water in grassy swale BMP	WO#107404 : 12/21/2009 2:08:23 PM Site inspection took photos of drainage appears to be working. No pollutants were being discharged into the storm drain----case closed	No	No					LUC	1/4/10
60	91105	12/22/09	white "soap" debris	Discharge of paint - Neighbor dumping paint in street.	WO#107446 : 12/23/2009 12:49:55 PM Site inspection took photos of white stains in street contacted resident to use BMPs to -prevent discharges into the storm drain and to dry clean (sweep) white debris in street gutter to the MEP WO#107486 : 12/28/2009 11:50:49 AM Site inspection appeared storm drain cleaned up to the MEP---case closed	Yes	No		Yes			LCS	12/23/09
61	91106	12/18/09	vegetation	Discharge of yard waste - Structure in storm drain swale catching leaves and debris that block flow.	WO#107440 : 12/23/2009 9:56:28 AM Site inspection took photos of structures in storm drain swale which is privately maintained. Appears to be partially blocked with vegetation 12/28/2009 12:05:50 PM 12/28/09 received call from hunter properties that they will clear drain and consider removing structures over storm drains. WO#107832 :	Yes	No					CBS	2/1/10

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					1/21/2010 11:10:20 AM site inspection took photos cleared storm drain ---case closed								
62	91107	12/22/09	Palm Fronds	Discharge of yard waste - Palm Fronds in unmaintained alley	WO#107441 : 12/23/2009 10:16:25 AM site inspection alley cleaned up---case closed	No	No					ENC	1/5/10
63	91108	12/22/09	dirt and rocks	Discharge of sediment - complainant says that the drive way of dirt and rocks is flowing out to the street	WO#107442 : 12/23/2009 11:05:50 AM Site inspection took photos of dirt and rocks in storm drain gutter left door hanger with request to call me back. WO#107631 : 1/5/2010 9:37:00 AM site inspection took photos swept up area case closed	Yes	No		Yes			ENC	1/5/10
64	91109	12/22/09	sediment	Discharge of sediment - Received call from building inspector stating that an unmarked truck was dumping dirt	WO#107443 : 12/23/2009 12:06:18 PM Site inspection took photos drove around area looking for construction site--no luck called PW streets to clean up WO#107597 : 12/31/2009 12:01:21 PM Site inspection posted dirt with notice sign, took photos WO#107598 : 12/31/2009 12:08:13 PM Site inspection contacted two worker removing dirt. They were working for the owner of 3433 Lone Jack Road. They were required to sweep street when completed. Took photos. WO#107601 : 1/4/2010 12:29:34 PM site inspection area cleaned up took photos	Yes	Yes		Yes			ESC	1/4/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
65	91125	12/28/09	trash, leaves, rocks and dirt	Discharge of trash - Trash in street	WO#107491 : 12/28/2009 3:21:14 PM site inspection took photos swept up area case closed	Yes	No					CBS	1/4/10
66	91163	1/6/10	glass, trash, leaves and an old rotting pumpkin	Discharge of trash - Trash bags in storm drain	WO#107709 : 1/7/2010 4:15:27 PM site inspection took photos swept up area and was contacted by two neighbors case closed	Yes	No		Yes			CBS	1/11/10
67	91199	1/19/10	white milky liquid	Discharge of paint - White substance applied to roof washed into alley between 2nd and 3rd streets, south of I street during rain.	WO#107837 : 1/21/2010 11:57:14 AM Site inspection took photos. Contacted PO who stated that they painted "White Snow" on the roof of the garage on 1/14-10 and followed the instructions (tacky in 2hrs and dry within 24 hrs). No source that could be removed. PO will wait until there is a dry spell before painting the roof again. No corrective actions required ===case closed	Yes	No		Yes			ENC	2/1/10
68	91203	1/19/10	paint and trash	Discharge of paint - Paint and trash bags in street.	WO#107836 : 1/21/2010 11:41:57 AM site inspection took photos cleared storm drain spoke to north neighbor on site---case closed	Yes	No		Yes			CBS	2/1/10
69	91228	1/19/10	silt	Discharge of sediment - Sediment runoff during rain event.	WO#107830 : 1/21/2010 10:53:59 AM Site inspection took photos. Contacted PO(s) to clean up sediment in street and maintain BMPs at the top of slope.	Yes	No		Yes			RSF	3/8/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					WO#107831 : 1/21/2010 11:00:37 AM Site inspection took photos. Contacted west PO to clean up sediment in street and maintain BMPs at the top of slope. East PO installed BMPs = OK 1/27/2010 5:52:04 PM After discussing case with Clean Water Program Manager and Public Works streets, sent advisory notice and called property manager to implement BMPs to prevent discharge. 3/9/2010 10:53:03 AM 2/1/10 site inspection No BMPs in place called PM to install BMPs 3/9/2010 10:58:39 AM 3/1/10 site inspection Bmps not maintained called PM to maintain WO#111861 : 3/9/2010 12:39:24 PM 3/8/10 site inspection new bmp in place no discharge during recent rain event case closed								
70	91260	1/20/10	silt	Discharge of sediment - Sediment runoff from driveway during rain event.	WO#107828 : 1/21/2010 10:30:22 AM Site inspection took photos left card. Contacted PM will maintain and clean up BMPs	Yes	No		Yes			LUC	4/1/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					WO#121751 : 8/31/2010 5:09:34 PM site inspection area cleaned took photos								
71	91289	1/21/10	h20	Discharge of water - Stormwater runoff running on to complainant's property. Referred to Streets for storm drain clearing.	WO#113187 : 3/30/2010 4:43:14 PM site inspection met with PO took photos sent email to PW case closed	No	No		Yes			LUC	4/7/10
72	91316	1/25/10	feces	Discharge of trash - Bags of trash left in street.	WO#107972 : 1/27/2010 10:14:40 AM Site inspection took photos of feces on discarded furniture and in a plastic grocery bag in storm drain gutter on the SE corner of 1956 Lahoud drive. Picked up area took photo showing area cleaned up case closed	Yes	No		Yes			CBS	2/1/10
73	91339	1/26/10	pool water	Discharge of water - Pool water running down street.	WO#112797 : 3/22/2010 5:50:38 PM site inspection contacted home owner and gave him BMP info regarding pools	No	No		Yes			LUX	4/7/10
74	91341	1/27/10	none	Discharge of sediment - Sediment discharge into street.	WO#108008 : 1/29/2010 9:54:26 AM site inspection took photos of no discharge case closed	No	No					ENC	2/1/10
75	91342	1/27/10	silt	Discharge of sediment - Sediment discharge into street.	WO#108007 : 1/29/2010 9:50:56 AM Site inspection took photos sent email to PW streets with photos. Pw indicated that the street sweeper can clean on its normal rout case closed	No	No					ENC	2/1/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
76	91353	2/1/10	feces	Discharge of trash - Trash bags in street and on sidewalk.	WO#112036 : 3/11/2010 3:19:28 PM Site inspection took photos of feces in a plastic grocery bag in storm drain gutter on the SE corner of 1956 Lahoud drive. Picked up area took photo showing area cleaned up case closed	Yes	No					CBS	3/17/10
77	91377	2/3/10	silt	Discharge of sediment - Erosion from private property clogging City owned ditch.	WO#88456 : By INSPECTOR1, ENG: 2/10/2010 5:17:22 PM site inspection took photos of drainage ditch that requires maintenance WO#88457 : By INSPECTOR1, ENG: 2/10/2010 5:30:07 PM Site inspection appears addition silt washed into drainage ditch called association to clean ditch	Yes	No					LCS	2/10/10
78	91390	2/3/10	feces	Other discharge - Feces and trash in street	WO#112031 : 3/11/2010 1:28:11 PM Site inspection took photos of feces in a plastic grocery bag in storm drain gutter on the SE corner of 1956 Lahoud drive. Picked up area took photo showing area cleaned up case closed	Yes	No					CBS	3/17/10
79	91392	2/1/10	silt	Discharge of sediment - Sediment discharge	WO#112018 : 3/11/2010 11:26:05 AM Site inspection contacted worker took photos	Yes	No		Yes			RSF	3/17/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
80	91395	2/1/10	silt	Discharge of sediment - Sediment discharge	WO#111917 : 3/10/2010 5:15:51 PM Site inspection contacted owner and took photos. Owner had installed BMPs to prevent additional silt discharge	Yes	No		Yes			ESC	3/17/10
81	91396	2/1/10	sediment	Discharge of sediment - Sediment discharge	WO#111915 : 3/10/2010 5:08:11 PM site inspection took photos of silt discharge appears vegetation is growing in no discharge observed case closed	No	No					RSF	4/7/10
82	91429	2/9/10	feces	Discharge of trash - Trash and feces left in street.	WO#111912 : 3/10/2010 3:32:47 PM Site inspection took photos of feces in plastic grocery bags in storm drain gutter on the SE corner of 1956 Lahoud drive. Picked up area took photo showing area cleaned up case closed	Yes	No					CBS	4/8/10
83	91451	2/15/10	sudsy water	Discharge of water - Sudsy water coming from a pipe at the corner of Lake and Woodlake.	WO#108942 : 2/17/2010 3:15:01 PM Site inspection, no sign of illegal discharge coming from any curb cutouts or pipes in the area surrounding the intersection of Lake and Woodlake. Case closed. WO#111867 : 3/9/2010 3:41:02 PM 3/1/10 and 3/9/10 site inspections took photos and contacted SDG&E	No	No					CBS	2/17/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
84	91465	2/16/10	feces	Discharge of trash - Trash bags and feces in street.	WO#111908 : 3/10/2010 2:13:33 PM Site inspection took photos of feces in plastic grocery bags in storm drain gutter on the SE corner of 1956 Lahoud drive. Picked up area took photo showing area cleaned up case closed	Yes	No					CBS	4/8/10
85	91503	2/24/10	feces	Discharge of trash - Trash and feces in street.	WO#111905 : 3/10/2010 1:49:11 PM Site inspection took photos of feces in plastic grocery bags in storm drain gutter on the SE corner of 1956 Lahoud drive. Picked up area took photo showing area cleaned up case closed	Yes	No		Yes			CBS	4/8/10
86	91506	2/24/10	sediment	Discharge of sediment - Lack of erosion control.	WO#111879 : 3/10/2010 11:45:26 AM Site inspection requested resident to install some BMPs to prevent sediment run off	Yes	No		Yes			LUC	4/8/10
87	91529	3/1/10	cigarette Butts	Discharge of trash - Neighbor always leaves cigarette butts on the sidewalk and in the street.	WO#111872 : 3/10/2010 10:19:39 AM Site inspection took photos of cigarette waste in street sidewalk and entryway. Left card to call me. 3/10/10 sent advisory notice.	Yes	No		Yes			LCS	4/8/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
88	91532	3/1/10	odor complaint	Other discharge - Neighbor of greenhouse says odor comes from greenhouse on the weekends. Forwarded from wastewater for possible water testing?	WO#111873 : 3/10/2010 10:54:25 AM site inspection with PM view last cleaning of septic 11/27/09 from sunrise pumping service 760 747-5997	No	No		Yes			CBS	4/8/10
89	93552	3/2/10	feces	Discharge of trash - Trash bags in street.	WO#111865 : 3/9/2010 2:05:47 PM Site inspection took photos of feces in a plastic grocery bag in storm drain gutter on the SE corner of 1956 Lahoud drive. Picked up area took photo showing area cleaned up case closed	Yes	No					CBS	4/8/10
90	93582	3/8/10	paint wash	Discharge of paint - Observed trail of paint going down into the storm drain	WO#111837 : 3/8/2010 3:05:25 PM Site inspection took photos of paint left info at door	Yes	No		Yes			CBS	4/8/10
91	93586	3/9/10	feces	Discharge of trash - Trash in street.	WO#111862 : 3/9/2010 12:49:31 PM Site inspection took photos of feces in a plastic grocery bag in storm drain gutter on the SE corner of 1956 Lahoud drive. Picked up area took photo showing area cleaned up case closed	Yes	No					CBS	4/8/10
92	93622	3/15/10	dog feces	Discharge of trash - Trash on sidewalk and in street.	WO#112290 : 3/16/2010 2:44:24 PM Site inspection took photos of feces in a plastic grocery bag in storm drain gutter on the SE corner of 1956 Lahoud drive. Picked up area took photo showing area cleaned	Yes	No		Yes			CBS	4/8/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					up case closed requested resident to use trash receptacles for her dog feces. Received voicemail requesting that the city document that the south neighbor's gardener has been leaving cuttings on her property since 2001 and the north neighbor's gardener since 2006								
93	93629	3/15/10	water and sediment	Discharge of sediment - Sediment and water running down street.	WO#112292 : 3/16/2010 3:12:19 PM site inspection contacted owner. Owner understood law and was done with project case closed	Yes	No		Yes			LUC	4/8/10
94	93696	3/25/10	Garbage	Discharge of trash - Trash in street and on sidewalk	WO#113198 : 3/31/2010 11:58:42 AM Site inspection took photos of garbage in a plastic grocery bag in storm drain gutter on the SE corner of 1956 Lahoud drive. Picked up area took photo showing area cleaned up case closed	Yes	No					CBS	4/8/10
95	93702	3/12/10	silt	Discharge of sediment - Silt discharge after rain event	WO#113178 : 3/30/2010 3:50:00 PM Site inspection spoke to resident and left info	Yes	No		Yes			CBS	4/8/10
96	93705	3/12/10	silt	Discharge of sediment - Silt discharge after rain event	WO#113174 : 3/30/2010 3:14:35 PM Site inspection left info at gate 3/26/10 received call message from owner 3/30/10 spoke to owner and will install BMPs or clean up discharge. In	Yes	No		Yes			CBS	4/8/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					addition, informed owner that the city will send out wet weather letter this fall.								
97	93706	3/12/10	silt	Discharge of sediment - Silt discharge after rain event.	WO#113175 : 3/30/2010 3:30:08 PM Site inspection spoke to owner and will install BMPs or clean up discharge. In addition, informed owner that the city will send out wet weather letter this fall. 3/30/10 contacted owner regarding chance and amount of rain	Yes	No		Yes			CBS	4/8/10
98	93732	4/2/10	h2O	Discharge of building or sidewalk washwater - Sudsy water coming from neighbor's house. Sudsy water coming from neighbor's house. 4/5/10 received call stating that discharge occurs everyday at 945am	WO#113497 : 4/20/2010 3:48:34 PM Site inspection on 4/7/10 and 4/13/10 took photos of discharge spoke to clean water program manager not a clean water issue as it drains into dirt alley. Get documentation from respondent and close case Received email stating ground water issue case closed	No	No		Yes			CBS	6/8/10
99	93737	4/1/10	silt	Discharge of sediment - Sediment runoff after rain event	WO#117169 : 4/5/2010 4:55:33 PM Wet weather letter 5/5/2010 4:47:59 PM Site inspection took photos contacted workers and gave ed info	No	No		Yes			RSF	6/8/10
100	93738	4/1/10	silt	Discharge of sediment - Sediment discharge after rain event	WO#117170 : 4/5/2010 4:56:14 PM Wet weather letter	No	No		Yes			RSF	6/8/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					5/5/2010 4:52:54 PM Site inspection took photos left ed info								
101	93739	4/1/10	silt	Discharge of sediment - Sediment discharge after rain event.	WO#117171 : 4/5/2010 4:56:35 PM Wet weather letter 5/5/2010 4:58:32 PM Site inspection took photos contacted owner and gave ed info	No	No		Yes			RSF	6/8/10
102	93760	4/7/10	pool water silt	Discharge of water - Pool water discharge into street, causing erosion.	WO#88465 : By INSPECTOR1, ENG: 4/20/2010 2:58:56 PM site inspection contacted resident owner and showed erosion areas and requested clean up took photos WO#88466 : By INSPECTOR1, ENG: 4/20/2010 3:03:07 PM site inspection area cleaned up took photos	Yes	No		Yes			LUX	4/7/10
103	93779	4/11/10	trash	Discharge of trash - Trash left on street and sidewalk.	WO#88464 : By INSPECTOR1, ENG: 4/20/2010 2:23:00 PM Site inspection observed no discharge took photos of storm drain and called complainant and let him know it was not a violation	No	No					CBS	6/8/10
104	93787	4/12/10	woodchips	Discharge of yard waste - Wood chips in swale.	WO#88461 : By INSPECTOR1, ENG: 4/20/2010 1:48:24 PM site inspection took photos lest ed info. Received call from owner. reported no	No	No					RSF	4/21/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					discharge								
105	93796	4/14/10	trash	Discharge of trash - Trash in street.	WO#120909 : 7/27/2010 5:01:16 PM site inspection took photos	No	No					CBS	7/29/10
106	93902	5/6/10	H2O	Discharge of water - Large amounts of water in street on a regular basis. Possibly draining fish ponds.	WO#120488 : 7/1/2010 4:27:38 PM Site inspection took photos and contacted owner who informed me that it was run-on from another property uphill. He indicated that he drains his ponds into his vegetation when he needs to clean. Second time clean water responded to same complaint. Case closed	No	No		Yes			ENC	7/22/10
107	93913	5/10/10	oil	Discharge of oil. - Forwarded from County: Vehicle leaking a lot of oil on the street every day. Looks like the Exxon Valdez parks on the 1900 block of Oxford Ave.	WO#120906 : 7/27/2010 4:49:09 PM Site inspection took photos left card to call me	Yes	No		Yes			CBS	7/29/10
108	93935	5/4/10	salt pool water	Discharge of water - Over-flowing salt water pool	WO#120933 : 7/28/2010 2:38:36 PM site inspection took photos and contacted realtor to stop pump	Yes	No		Yes			LCS	7/29/10
109	93937	5/3/10	smelly water	Discharge of water - Resident concerned with water smell and residue at the end of her driveway.	WO#120923 : 7/28/2010 1:21:38 PM Site inspection took photos no discharge left door hanger	No	No		Yes			CBS	9/1/10
110	93938	5/3/10	Diatomaceous earth	Other discharge - White residue in street.	WO#120936 : 7/28/2010 2:46:45 PM Site inspection	Yes	No		Yes			ENC	7/29/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					contacted residence to filter discharge when cleaning								
111	95989	5/24/10	oil	Discharge of oil. - Someone left a black plastic bag with a container of oil out on the curb. it was moved to the sidewalk and is now leaking.	WO#120947 : 7/28/2010 4:44:42 PM site inspection left door hangers from 2140A to 2140N Newcastle and 2231,2245,2229,2227,2225,2219,2217 (east side of Newcastle) and check all dumpsters for evidence of recent oil change. Call PW and observed them cleaning up the mess	Yes	No		Yes			CBS	7/29/10
112	96013	5/26/10	white, sparkly residue	Discharge of other washwater - Resident concerned with a white, sparkly residue possibly coming from her neighbor's house.	WO#120948 : 7/28/2010 5:03:57 PM site inspection observed no discharge took photos resident showed me where the discharge pipe originated (area drain for NW patio	No	Yes		Yes			CBS	8/4/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
113	96016	5/26/10	oil	Discharge of oil. - Vehicle leaking oil into street	WO#120955 : 7/29/2010 1:46:50 PM site inspection took photos and left door hanger	Yes	No		Yes			CBS	8/4/10
114	96023	6/1/10	oil	Discharge of oil. - A car is leaking oil in the street at 1603.	WO#120956 : 7/29/2010 1:52:26 PM Site inspection took photos and left door hanger	Yes	No		Yes			CBS	8/4/10
115	96024	6/1/10	sewage smell, flow of water	Discharge of sewage - Resident says heavy flow of water coming from greenhouse on 2 separate occasions. Strong sewage smell.	WO#120957 : 7/29/2010 2:05:30 PM site inspection upstream no source located case closed	No	No		Yes			CBS	8/4/10
116	96061	6/8/10	salt water	Discharge of water - Large amount of water coming from storm drain outlet. Resident is unsure of source.	WO#120958 : 7/29/2010 2:41:34 PM site inspection took photos of water discharge contacted resident who indicated that he was discharging salt pool water. He was informed to watch out for erosion and or nuisance	No	No		Yes		ocean	LUC	8/4/10
117	96072	6/1/10	sediment	Discharge of sediment - Sand pile on property line, causing problems for complainant's drainage.	WO#121024 : 8/2/2010 3:51:13 PM site inspection took photos of where stock pile had been located no violation contacted the resident to discontinue temp storage in alley case closed	No	No		Yes			CBS	8/4/10
118	96073	6/10/10	white substance	Discharge of concrete waste. - White power substance running down gutter, originating at 1619.	WO#121025 : 8/2/2010 3:56:24 PM site inspection took photos left info	Yes	No		Yes			LCS	8/4/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
119	96106	6/16/10	wash water	Discharge of building or sidewalk washwater - Wash water puddled in front of driveway smells like Pine sol	WO#121028 : 8/2/2010 4:30:01 PM site inspection no discharge or smell observed case closed	No	No		Yes			LUC	8/4/10
120	96161	6/24/10	sediment	Discharge of sediment - Runoff from dirt driveway running into the storm drain	WO#121030 : 8/2/2010 4:38:18 PM site inspection no discharge took photos contacted resident case closed	No	No		Yes			ENC	8/4/10
121	96163	6/27/10	pure fiber	Discharge of other washwater - I noticed last week a large amount of fine white sandy-like debris along the curb in front of my house. This is the second time I observed this (first was during the winter). Tracing the origin – looks like it came from 1642 Debann Rd, Cardiff.	WO#121031 : 8/2/2010 4:43:27 PM site inspection took photos of discharge contacted resident to discontinue practice	Yes	No		Yes			CBS	8/4/10
Residential Totals: 121					**Follow ups: 31**	**71**	**4**	**3**	**85**	**2**			

Appendix H-1 Referrals or Requests for Info Summary FY 2009-10

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
1	82099	7/9/09	Residential	NA- request for info	Discharge of water - Resident wanted to know if Fire Dept wants his pool water for reuse. Told him he could dechlorinate the water and reuse it on his own landscaping, or discharge it into storm drain without causing erosion.		pool draining requirements		7/9/2009
2	82141	7/15/09	Commercial	NA- request for info	Discharge of building or sidewalk washwater - Request for info- hosing off sidewalks. Provided Encinitas Municipal Code section 20.08.040 B, Project Clean Water Toolbox, and Think Blue Mobile Business BMPs.		Power washing/hosing requirements		7/15/2009
3	82151	7/16/09	Residential	water buildup	Discharge of water - VP of HOA called to report buildup of water and algae in street. Inspector did drive by and saw that it's not a storm water issue; buildup caused by over-irrigation. Referred to OMWD.	OMWD		LCS	7/17/2009
4	82163	7/17/09	Residential	water from sump pump	Discharge of water - Resident concerned with mobile home park owner pumping water from catch basin to street. Water comes from wall next to donut shop. Also concerned with discharge of rain water onto Avocado from property at the top of Avocado- faulty drain.	Engineering		LUC	8/11/2009
5	82244	7/29/09	Residential	weeds in storm drain	Discharge of yard waste - Referred from SDWD. Over-irrigation causing buildup of weeds in storm drain near corner of Eugenie and Sidonia. Not sure if cleanup should be from Streets or Wastewater.	Streets		ENC	8/11/2009
6	82252	7/30/09	Municipal	antifreeze	Discharge of antifreeze - Bottle of antifreeze left in street. Referred to Streets Division for pick up.	Streets Division		LUC	7/30/2009
7	82273	8/3/09	Residential	water	Discharge of water - Resident at 1574 says water is constantly running down Bella Azul to swampy area across from her house and causing mosquitoes. She has already called vector control. Referred to OMWD.	OMWD		LUC	8/3/2009
8	82292	8/4/09	Residential	NA- request for info	Other discharge - Resident called to find out restrictions on car washing in terms of water conservation. Forwarded to SDWD	SDWD			8/4/2009
9	82294	8/4/09	Residential	water	Discharge of water - Resident concerned with drainage from Bella Azul Ct causing buildup of water, causing smell and mosquito breeding. Referred to Engineering and gave her Vector Control number.	Engineering- Sr Civil Engineer MM.		LUC	8/4/2009

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
10	82391	8/19/09	Residential	Other discharge	Other discharge - Request for info on pet waste disposal.		Pet waste info	CBS	8/19/2009
11	82443	8/28/09	Construction	Other discharge	Other discharge - Resident has concerns with construction being done at house next door. Forwarded his questions to Construction Inspector assigned to site.	Construction Inspector TB		LUX	8/28/2009
12	82483	9/2/09	Municipal	NA- dead raccoon	Other discharge - Dead raccoon reported in storm drain near 1010 Urania Ave. Forwarded to Wastewater.	Wastewater Division		LUC	9/2/2009
13	82562	9/16/09	Commercial	Request for info	Discharge of vehicle wash water - Local business worker calling to find out requirements for commercial mobile auto detailers.		Requirements for commercial mobile auto detailers	ENC	9/16/2009
14	82589	9/22/09	Residential	NA- Request for Info	Discharge of vehicle wash water - Resident wanted to know car washing requirements.	OMWD	Car washing requirements	RSF	9/22/2009
15	82846	10/21/09	Residential	na- vector issue	Other discharge - Vector problem in vacant lot. Referred to SD Vector Control.	San Diego County Vector Control		LCS	11/4/2009
16	82848	10/14/09	Residential	na- request for info	Discharge of water - Request for pool draining requirements.		Pool Draining Requirements	ENC	11/4/2009
17	91026	12/8/09	Municipal	NA- possible clogged storm drain	Other discharge - Resident concerned that custom-made box over storm drain at corner of Princehouse Lane and Encinitas Blvd was stolen. KR spoke to Wastewater, they are aware the box was stolen, and they are monitoring drain for blockages.	City of Encinitas Wastewater		ENC	12/9/2009
18	91064	12/16/09	Residential	broken glass	Discharge of trash - Neighbor called to report broken glass in the street. Referred to Streets Division for cleanup.	Street Maintenance		CBS	12/16/2009
19	91168	1/11/10	Residential	water	Discharge of water - Resident interested in installing a drainage pipe to handle rain water from her gutters. Referred her to Engineering.	Engineering		CBS	1/11/2010
20	91259	1/21/10	Municipal	clogged storm drain	Other discharge - Clogged storm drain on D Street in alley between 2nd and 3rd streets.	City of Encinitas Wastewater		ENC	1/21/2010
21	91306	1/25/10	Residential	Other discharge	Other discharge - Request for info and test results from Copper creek out near Lone Jack Rd.		Test results	ENC	1/25/2010
22	91311	1/25/10	Municipal	NA- storm drain needs repairs	Other discharge - Tree fell over during storms- roos tore up public stormdrain that runs down to ECR. Referred to Streets and Wastewater for repairs.	Streets/Wastewater		RSF	1/25/2010

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
23	91381	2/3/10	Residential	water	Discharge of water - Resident drilled a whole into a water pipe and is unable to turn off his water. Referred to SDWD.	SDWD		ENC	2/3/2010
24	91386	2/4/10	Commercial	illegal connection, soapy water	Discharge of other washwater - Hotel has illegal connection with soapy water sometimes running out of pipe.	SDWD		LUC	2/10/2010
25	91400	2/8/10	Municipal	pet waste	Discharge of other washwater - For over 14 years heavily use as a dog park poorly maintained. Located on a west facing slope the entire runoff from the park and fecal contaminants flow onto Paul Ecke Centeral. During inspection at the Park, no stormwater violations were noted. Referred complaint to Parks and Rec, re: maintenance issues.	Parks and Rec		LUC	2/8/2010
26	91409	NA	Residential	Other discharge	Other discharge - San Diego resident called to inquire about a beach cleanup in Encinitas. Told him about Creek to Bay on April 24 and referred him to SD Coastkeeper and ILACSD for monthly cleanups.	SD Coastkeeper, ILACSD		ENC	2/8/2010
27	91467	2/17/10	Residential	water encroachment	Other discharge - Backyard drain runs over sidewalk, causing buildup of algae and slip hazard. Referred to construction inspector for encroachment violation.	Construction Inspector		LCS	2/17/2010
28	91472	2/18/10	Residential	over-irrigation	Discharge of water - Over-irrigation coming from Jacob Ln into the mobile home park. Referred to SDWD.	SDWD		LUC	2/18/2010
29	93564	3/3/10	Residential	water	Discharge of water - SDWD reported water runoff from a storm drain west of Wastewater yard. Spoke with Wastewater, no illegal discharge was seen.	Wastewater		CBS	3/3/2010
30	93580	3/8/10	Residential	na- request for info	Discharge of water - Resident was following up on a complaint regarding an over-irrigation issue. Suggested she contact OMWD, as it wasn't a water quality issue.		Follow up on irrigation complaint	ESC	3/8/2010
31	93581	1/15/10	Residential	water	Discharge of water - Forwarded from County WPP. Resident is concerned with groundwater issues on her property. Not a water quality issue. Forwarded to OMWD.	OMWD		ESC	3/8/2010
32	93613	3/9/10	Commercial	NA- Request for info	Other discharge - Teacher from Cardiff School District wanted to know if she could work with ILACSD to label storm drains around her school. Referred her to HW in Streets Division.	Streets Division		CBS	3/12/2010

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
33	93790	4/14/10	Residential	water	Discharge of water - Call from Streets Division. Resident emptying pool water into street. No sign of erosion.		Pool discharge requirements	LCS	7/27/2010
34	93932	5/12/10	Residential	NA- Request for Info	Other discharge - Resident wanted to know car washing restrictions within the City.		Car washing requirements	ENC	5/12/2010
35	93936	4/29/10	Residential	NA- request for info	Discharge of water - Requesting information on pool draining		Pool draining requirements	LUC	5/12/2010
36	93982	5/20/10	Construction	sediment	Discharge of sediment - Sediment in brow ditch on south side of development. Per construction inspector: no discharge to storm drain; brow ditch will be cleaned out within the next week.	Construction Inspector		ENC	5/20/2010
37	96007	5/26/10	Residential	trash	Discharge of trash - Trash in street	City Manager Memo dated 5/27/10		CBS	8/4/2010
38	96088	6/14/10	Residential	paint	Discharge of paint - Resident wanted to know guidelines for disposal of water-based paint.		Water-based paint disposal		6/15/2010
39	96156	6/23/10	Residential	NA- request for info	Discharge of building or sidewalk washwater - Resident asking for guidelines for hosing off his driveway.		Regulations for hosing off driveway		6/23/2010
40	96176	6/30/10	Residential	NA- Request for info	Other discharge - Resident of Las Vegas called to get water quality information for MLB in preparation for her upcoming vacation.		Water quality info	LCS	6/30/2010

Commercial Total:	**4**
Residential Total:	**28**
Construction Total:	**2**
Municipal Total:	**6**
Total:	**40**

Appendix I

Special Investigations

I-1 Lone Jack Pond Water Quality Study

Lone Jack Pond Water Quality Investigation Summary

Background

Lone Jack Pond is located off of Lone Jack Road, north of Lone Hill Lane, in a rural residential area within the City of Encinitas (City). The pond is a man-made structure along Copper Creek, in the Carlsbad Watershed (Hydrologic Unit 904). The purpose of this study was to investigate the water quality of the pond.

Sampling Locations

To assess water quality visual observations, field tests, and laboratory analyses were performed on water samples at four locations in and around the pond, summarized in Table 1. Photos of each site and a map of the locations are included at the end of this report.

Table 1 – Sample Locations

Site ID	Location	Latitude	Longitude
Point A	Northeast of pond in Copper Creek, ~50 feet north of inflow location	33.07188	-117.21281
Point B	South of pond at outflow from pond to Copper Creek	33.07088	-117.21471
Point C	Southern border of pond, next to dock	33.07122	-117.21420
Point D	Northern border of pond	33.07167	-117.21485

Field Tests and Visual Observations

A monitoring field data sheet was completed to document visual observations and field tests at each of the four monitoring locations. Field meters were calibrated according to standard procedures prior to sampling. The results of field tests conducted to assess water quality are summarized in Table 2, and the data sheets are attached to this report.

Table 2 – Field Test Results

Site ID	Temperature (°C)	pH	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
Point A	18.5	7.8	2.51	2.25	6.46
Point B	21.0	7.3	2.58	14.14	2.10
Point C	21.4	7.8	2.55	0.04	7.23
Point D	22.1	7.2	2.58	67.7	4.74

At Point A, along the creek before it enters the pond, the water was flowing at approximately 20 gallons per minute (gpm), appeared to be clear, and lacked any notable odor. Where the water enters the east end of the pond, it falls from a short ledge and flows in a southwesterly direction. At Point C, near a small dock, water that had just entered the pond was still clear and odorless. Dense vegetation was clearly visible beneath the water's surface. On the opposite and north side of the pond, Point D, the area and the actual pond water smelled distinctly of hydrogen sulfide, an odor similar to rotten eggs. Samples of the water appeared slightly cloudy and greenish gray in color. Decaying algae and a white film were also noted on the surface. At the

pond's outflow location, Point B, a very strong hydrogen sulfide odor was observed, and the water appeared yellowish in color.

Field observations indicated that the typical path of water through the pond mainly traveled from Point A to Point B through the southern side close to Point C. The northern side of the pond close to Point D seemed to be largely bypassed and isolated from the flow through the southern side of the pond under dry season, low flow conditions like those observed at the time of the investigation.

The most notable results of the conducted field tests are the variations in turbidity and dissolved oxygen measurements between the four locations. Water samples from Point A and Point C, the two more upstream locations, had higher levels of dissolved oxygen and lower levels of turbidity than the other two samples. The water at Point D was very turbid and had low dissolved oxygen. Water at Point B, the outflow, was less turbid, but had very low dissolved oxygen. Variation in dissolved oxygen did not appear related to water temperature.

Laboratory Analytical Tests

A water sample was collected from each of the four locations using precleaned bottles obtained from EnviroMatrix Analytical, Inc. (EMA). The samples were preserved on ice and transferred to EMA using proper chain of custody procedures. The results of laboratory analyses conducted to assess water quality are summarized in Table 3, and the laboratory report is attached.

Table 3 – Laboratory Analysis Results

Site ID	Copper, Total (mg/L)	Ammonia as N (mg/L)	Biochemical Oxygen Demand (mg/L)	Nitrate/Nitrite as N (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Total Nitrogen (mg/L)	Sulfate as SO_4 (mg/L)
Point A	ND	ND	2.19	0.12	ND	ND	341
Point B	ND	ND	9.00	ND	3.2	3.2	281
Point C	ND	ND	2.15	ND	1.0	1.0	282
Point D	ND	0.16	12.0	ND	0.6	0.6	280
Reporting Limit	0.050	0.10	2.00	0.05	0.5	0.5	50.0
Method	EPA-200.7	SM4500 NH3 B,C	SM5210 B	SM4500 NO3 E	SM4500 N C	Calculation	SM4500 SO4 E

Note: ND = not detected at or above reporting limit

The sulfate concentration was significantly higher in the creek upstream of the pond than in the other three locations, and the BOD level was considerably higher at points B and D than at points A and C. The total nitrogen level at Point B was higher than the total nitrogen levels at the other three monitoring points, and virtually all of the total nitrogen was present as organic nitrogen. Copper was not detected at any of the four stations.

Discussion and Recommendations

The flow patterns through the pond appear likely to leave the water in the northern half of the pond with poor circulation, leading to comparatively stagnant conditions. Based on the higher levels of organic nitrogen and BOD in the northern portion of the pond, it appears that decomposing algal and/or plant material has accumulated in that area. It is unclear whether the material has accumulated via natural seasonal die-off of algae and aquatic plants, application of

algaecides or herbicides, or other factors. No detectable levels of copper, a common component in algaecides, were reported, although alternative algaecide formulations that do not include copper are also available for purchase.

When large amounts of organic material decompose in a less well-mixed water body, oxygen present in the water is depleted, resulting in high levels of activity from anaerobic bacteria to continue breaking down the organic material. Since sulfate is available, the dissolved oxygen concentration is relatively low, and decomposing organic material is abundant, conditions at Point D are favorable for the propagation of sulfate-reducing anaerobic bacteria. These naturally-occurring organisms thrive in anaerobic environments, where they degrade materials rich in cellulose and convert sulfates (SO_4) to hydrogen sulfide (H_2S). The presence of H_2S in the water leads to the creation of elemental sulfur, which increases turbidity, and the loss of H_2S to the air as a foul-smelling gas. This hypothesis is supported by the fact that the sulfate concentration upstream of the pond is much higher than that observed at the downstream locations. The conditions in the northern portion of the pond also appear to affect the dissolved oxygen, turbidity, and BOD levels at the outfall (Point B).

In order to prevent the over-activity of sulfate-reducing bacteria and reduce unpleasant odors, it is recommended that dissolved oxygen be introduced to the portions of the pond prone to anaerobic conditions. This may be done through physical alteration of the flow regime within the pond to reduce stagnation, such as through the installation of a “blade” type structure that diverts some of the main flow path toward the north, or through the use of a pond bubbler, fountain, or similar means to artificially aerate the water.

Point A



Point B



Point C



Point D



Lone Jack Pond Water Quality Investigation
Monitoring Stations



Legend

Monitoring Sites — Streams — Roads

0 170 340 Feet

Base data source: City of Encinitas

CITY OF ENCINITAS

Clean Water Program



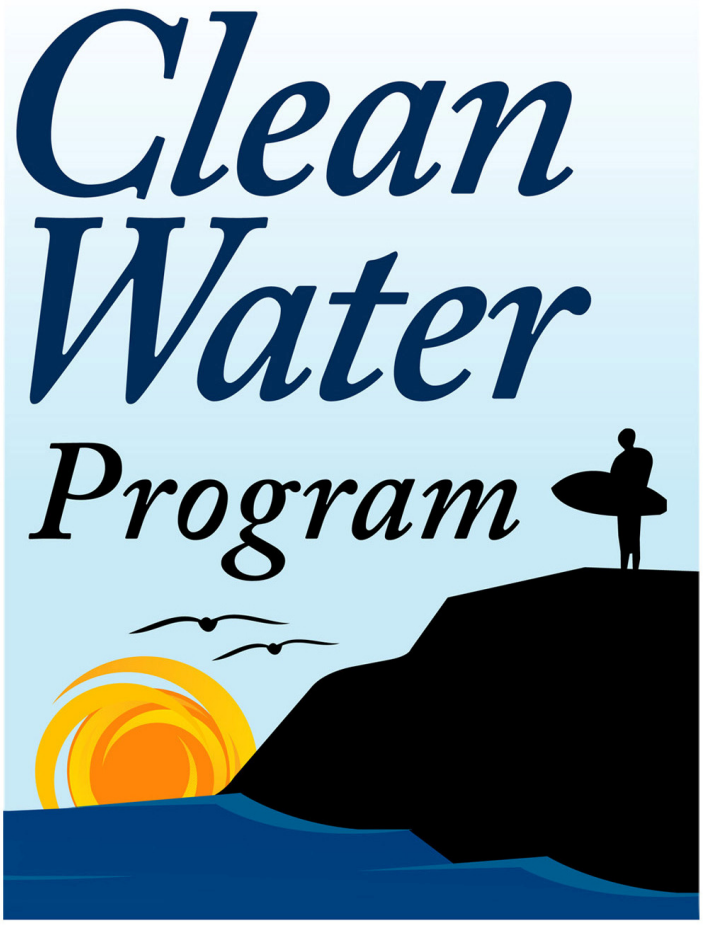
ENGINEERING SERVICES

Jurisdictional Urban Runoff Management Program
Annual Report

Section 7.0
Illicit Discharge Detection and Elimination Component

FY 2009-10

CITY OF ENCINITAS



ENGINEERING SERVICES

Jurisdictional Urban Runoff Management Program
Annual Report

Section 7.0
Illicit Discharge Detection and Elimination Component

FY 2009-10

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A Storm Water Complaints Service Request Form

B Hazardous Materials Incidents

C 2010 Dry Weather Monitoring Assessment Report

- C-1 2010 MS4 and Dry Weather Monitoring Stations Map
- C-2 2010 Dry Weather Monitoring Field Datasheets and Trash Assessment Forms
- C-3 2010 Dry Weather Monitoring Site Photos
- C-4 2010 Field Screening and Analytical Monitoring Results Table
- C-5 2010 Trash Assessment Map

D Administrative Citation Form

E JURMP Annual Report Requirements Checklist

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Phil Cotton

Phil Cotton, City Manager
City of Encinitas

12-6-10
Date

EXECUTIVE SUMMARY

On March 24, 2008, the City of Encinitas finalized an updated Jurisdictional Urban Runoff Management Program (JURMP) as required by Water Quality Order No. R9-2007-0001 (San Diego Municipal Stormwater Permit). The updated JURMP serves as the City's foundational program management tool, capturing newly developed process, procedure, and implementation strategies for overall program effectiveness and compliance. Within the updated JURMP document, the City of Encinitas also details the City's comprehensive update of the Illicit Discharge Detection and Elimination (IDDE) and Dry Weather Field Screening and Analytical Monitoring (Dry Weather Monitoring) programs.

As required by Water Quality Order No. R9-2007-0001 (San Diego Municipal Stormwater Permit), on September 30, 2009, the City of Encinitas submitted its 2008-2009 JURMP Annual Report to the San Diego Regional Water Quality Control Board (RWQCB). September 10, 2008, the RWQCB adopted Addendum 2 to Order No. 2007-0001 (Addendum 2) titled:

AN ADDENDUM EXTENDING THE DUE DATE FOR THE ILLICIT DISCHARGE DETECTION AND ELIMINATION REPORTING REQUIREMENT AND CHANGING THE BIOASSESSMENT MONITORING PROGRAM FOR ORDER NO. R9-2007-0001

Addendum 2 effectively extended the deadline for submittal of the JURMP Annual Report Section 7.0 – Illicit Discharge Detection and Elimination (IDDE) to December 15 of each year and established a separate submittal requirement. The following report culminates IDDE elements and supporting monitoring components to meet the standards established in Order No. 2007-0001 and the provisions of Addendum 2. This report covers IDDE program implementation for fiscal year 2009-2010, Dry Weather Monitoring from May 1, 2010 – September 30, 2010, and details all reporting, response, and enforcement actions related to illicit discharges and illicit connections to the City's MS4, Dry Weather Field Screening and Analytical Monitoring, follow-up investigations, sewer maintenance and spill prevention activities, and sewer spill response actions.

IDDE reporting and Dry Weather Monitoring results and analysis presented in the following report have been prepared in consideration of regulatory standards as well as a means to further advance programmatic elements in support of overall stormwater and water quality management in the City of Encinitas.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

7.1 INTRODUCTION

The Municipal Permit requires the establishment of an Illicit Discharge Detection and Elimination (IDDE) Program to actively seek and eliminate illicit connections and discharges into the MS4.

This component describes the IDDE program developed by the City of Encinitas to seek and eliminate illicit connections and discharges. Eliminating illicit connections and discharges helps minimize potentially negative impacts of human activities on receiving water bodies. Illicit connections and illicit discharges can be defined as the following:

- An *illicit connection* is a physical connection to the Storm Water Conveyance System or Receiving Waters which has not been reviewed and authorized by the City, or a permitted connection which conveys illegal discharges.

- An *illicit discharge* is any discharge to the Storm Water Conveyance System that is not composed entirely of storm water or is not discharged in compliance with the City's Storm Water Management Ordinance (Municipal Code Chapter 20.08).

The City of Encinitas uses its municipal personnel to assist in actively seeking, identifying, and reporting illicit connections and discharges during their daily activities. Detection, prevention, and elimination of illicit connections and discharges are achieved by:

1. Operating a public hotline (phone and email) and responding to complaints;
2. Inspecting commercial, industrial, and municipal facilities;
3. Conducting an annual Dry Weather Monitoring Program;
4. Maintaining municipal MS4 and sewer systems; and
5. Educating the local community.

The City investigates, inspects, and appropriately follows-up on every illicit connection and discharge that is reported or detected to identify the source(s) of the discharge. Voluntary compliance and escalating enforcement mechanisms are implemented to immediately eliminate the illicit connection and discharge once the source has been identified. Educational materials are distributed to help prevent future illicit connection and discharge occurrences. This program involves the City's Clean Water Program staff, two Sanitary Districts (Leucadia Wastewater District and the City of Encinitas Wastewater Division), the City's Fire Department, Public Works Department, the Engineering Department, and County Hazardous Incident Response Team (HIRT), as well as the public.

7.2 PUBLIC REPORTING OF ILLICIT DISCHARGES AND CONNECTIONS

7.2.1 METHODS OF REPORTING

To support the identification and notification of illicit discharges, the City actively promotes public and City staff reporting of all suspected illicit connections and discharges. Multiple opportunities are provided to facilitate public reporting of illicit discharges and connections to the City's Clean Water Program staff, and reporting of non-storm water discharges can be received from the public, City staff, or outside agencies. Clean Water Program staff maintains a 24 hour, bilingual Clean Water Hotline (760-633-2787) and email (npdesmail@cityofencinitas.org) for reporting storm water discharges. Additionally, the Public Works Wastewater Collection Division accepts calls at 760-753-5018 for sewage related discharges. The public can also notify any City employee (the City Lifeguards are often notified of spills), who will promptly notify the appropriate staff in the Clean Water Program or Public Works Department. In cases of incidents occurring after working hours, the City provides a hotline number (760-633-2922) where the public can call and report emergency cases of illicit discharges. Alternatively, a regional public reporting hotline is provided by the County of San Diego at 888-844-6525. The County hotline is answered Monday through Friday, 8:00 a.m. – 5:00 p.m. and provides a voice mail message for 24-hour public access in both English and Spanish.

7.2.2 STORM WATER COMPLAINT RECEIPT PROCEDURES

All complaints to the City's Clean Water Program are documented and investigated in a timely manner. The City of Encinitas has configured its enterprise Geographic Information System (GIS) to document and track all complaints as well as complaint driven storm water inspections in a spatially-based program called Cityworks. This system supports the entry of service requests for educational inquiries, citizen complaints, inspection results, ad-hoc and cyclical work orders, and report generation. All of the information stored in the system is accessible to any City user through the City's standard desktop GIS application – CityGIS. Refer to Appendix A for a copy of the "Storm Water Complaints Service Request Form." Clean Water Program staff investigates each case in a timely manner, and takes the appropriate action to educate the responsible party and/or enforce the City's Storm Water Management Ordinance when applicable. When education, a Notice of Violation, or an Administrative Citation is issued, this information is added to the case file created in Cityworks. The City's GIS system is a useful tool for tracking all complaints, follow-ups, enforcement, and education efforts, and to spatially locate historic or potential problem areas throughout the City.

For each complaint investigation, Clean Water staff is prepared to run field screening analysis, sample for laboratory analysis, and document the discharge for enforcement proceedings as deemed necessary. If immediate clean up actions are required, the City's Public Works Department maintenance crews are equipped with absorbent materials, vacuum trucks, and other equipment to contain large volumes of illegal discharge and/or cleanup large spills. If the violation or accident involves hazardous materials, the Fire Department is informed and the appropriate response actions are initiated. When necessary, the Fire Department calls other

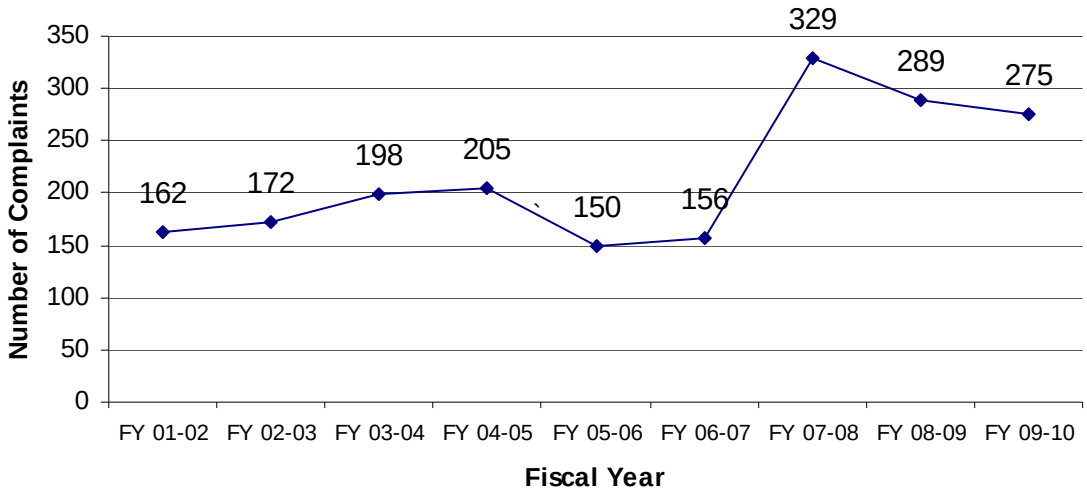
responsible agencies or contractors for cleanup and handling of hazardous materials, including the County of San Diego's Hazardous Incident Response Team.

7.2.3 HOTLINE AND EMAIL UTILIZATION

Through the ongoing education efforts of the Clean Water Program staff, both the general public and the City of Encinitas staff have become increasingly aware of the effects of illicit discharges on the environment and what to look out for in identifying potential illicit discharges and connections. Methods to report storm water issues were continually publicized throughout the FY 2009-10 reporting period. The hotline number and email can be found on inspection forms and the City's website and were also publicized in various newsletters, storm water brochures, the City's Environmental Services Guide, on product giveaways, and at all Clean Water Program presentations and public events.

In FY 2009-10, there were a total of 275 complaints filed with the Clean Water Program. Clean Water Program staff documented receipt of 156 complaints (57%) from the public, and an additional 119 complaints (43%) were reported by City staff. Figure 7-1 illustrates the complaints per year that have been received by the Clean Water Program since record keeping began in FY 2001-02. To date, both City staff and the public continue to actively participate in the reporting of suspected illicit discharges and connections throughout the City of Encinitas. Detailed summaries of all complaint cases that were reported and closed (illicit discharge abated) in FY 2009-10 are included in Appendix H-1 of the City of Encinitas' FY 2009-10 JURMP Annual Report.

Figure 7-1 Complaints per Year FY 2001-10



7.2.4 SOURCE CATEGORIES OF COMPLAINTS

In FY 2009-10, the majority of complaints reported to the Clean Water Hotline were related to residential and commercial activities. In total, 54% of the complaints reported were related to residential activities, 35% were related to commercial activities, 5% were related to construction activities, 5% were related to municipal activities, and 1% was related to industrial activities. Figure 7-2 shows the percentage of complaints by source category.

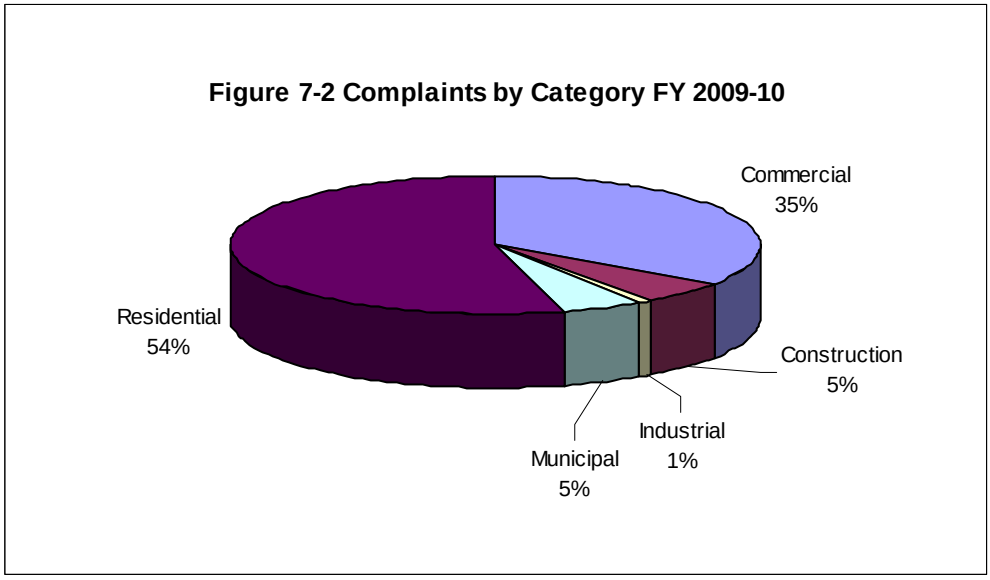
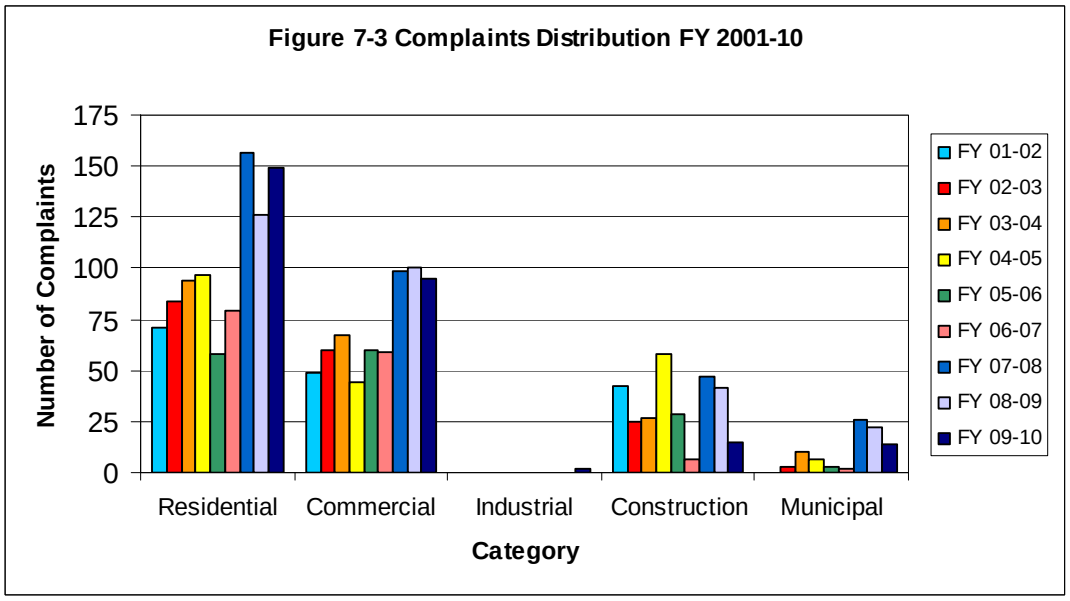
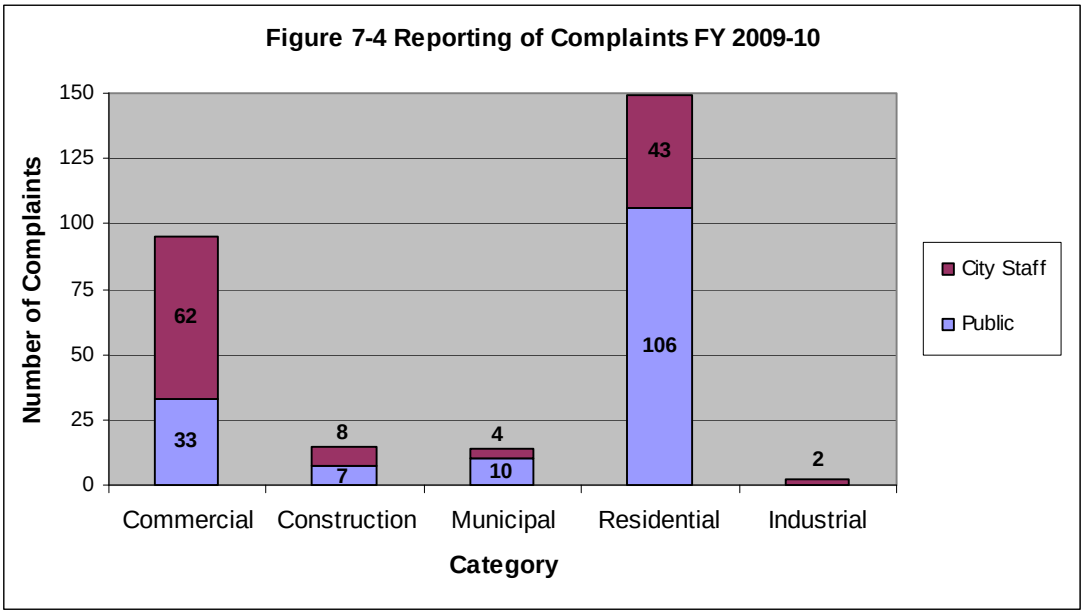


Figure 7-3 below illustrates the complaints distribution over the past nine reporting periods. The complaint distribution remains consistent across categories, with residential and commercial sectors receiving the most complaints.

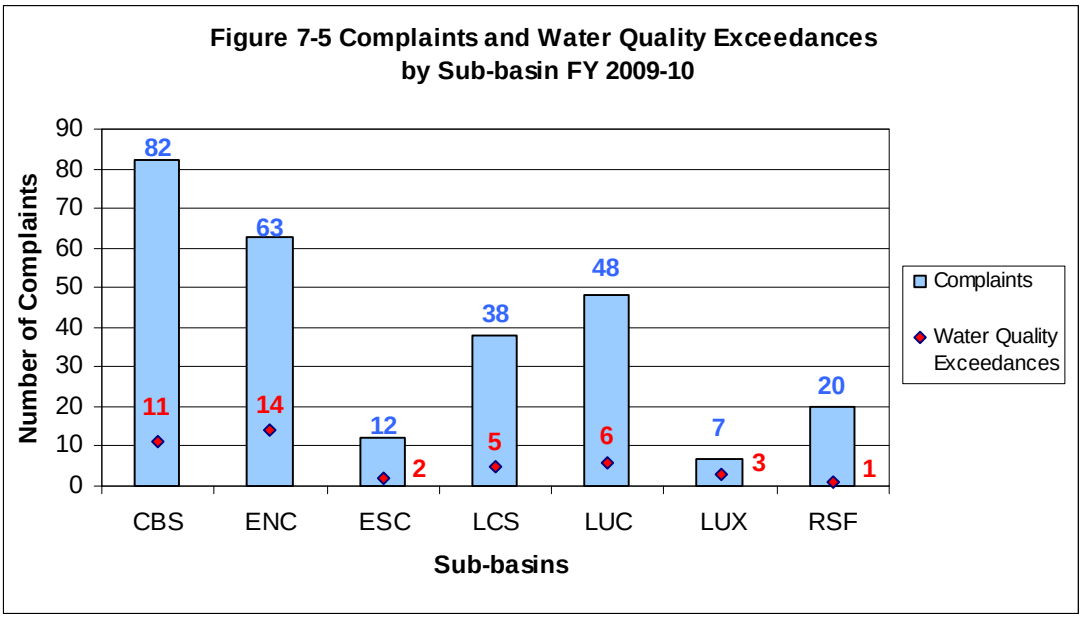


Clean Water Program staff provides annual education and training to City employees and City contractors on applicable storm water regulations to assure that proper storm water management practices are applied in all areas of the City. The City of Encinitas tracks all complaint calls or emails received and records whether each complaint is from the public or from City staff. Figure 7-4 below shows the breakdown of reported complaints by the public and City staff for each category.



7.2.5 DISTRIBUTION OF COMPLAINTS BY SUB-BASIN

The City of Encinitas is broken up into seven distinct drainage sub-basins which include: the Cardiff sub-basin (CBS), Encinitas sub-basin (ENC), Escondido sub-basin (ESC), La Costa South sub-basin (LCS), Leucadia sub-basin (LUC), Lux Canyon sub-basin (LUX,) and Rancho Santa Fe sub-basin (RSF). Detailed maps of each of these sub-basins can be found in the 2010 Dry Weather Monitoring Assessment Report in Appendix C. A full map of the entire city that outlines each of the sub-basins can be found in Appendix C-1. Of the City's seven sub-basins, the Cardiff sub-basin had the largest number of reported complaints followed by the Encinitas sub-basin and the Leucadia sub-basin. In Figure 7-5, the numbers of complaints are compared to water quality exceedances in the sub-basins. This correlation helps the City prioritize inspection activities in specific sub-basins.



7.3 SPILL PREVENTION, RESPONSE, AND REPORTING

The City implements spill prevention, spill response, and reporting mechanisms to prevent, respond to, contain, and clean up all sewage and other spills that may discharge to its MS4 from any source.

7.3.1 SEWAGE SPILL PREVENTION

The spill prevention measures outlined below were implemented in FY 2009-10 to prevent overflows, spills, and infiltration of seepage from sanitary sewer systems to the MS4.

Preventive Maintenance Activities

The City of Encinitas' sewage collection system consists of over 120 miles of pipeline. The City actively maintains its sewage collection system and MS4 by ensuring that the following measures are implemented:

- Sanitary sewer inspections
- MS4 inspections
- Thorough, routine preventive maintenance of both systems (annual cleaning of entire sanitary sewer system, and "high priority" sewer lines cleaned at least every three months)
- Dry Weather Monitoring
- Data tracking and management of all complaints in Cityworks GIS
- Video inspection of underground systems (televise sewer mains to visually detect any potential problems)
- Replacement and upgrade of sewer pipes as needed
- GIS mapping of sewer and MS4 intersects

- Alarm system at sewage pump stations

Sewer System Management Plan (SSMP)

In FY 2008-09, the City of Encinitas fully implemented a Sewer System Management Plan (SSMP) in order to comply with the new sewer regulations set forth by the State Water Resources Control Board (SWRCB) Order No. 2006-003-DWQ. This new permit describes the applicable set of regulations for sewer system maintenance and reporting with respect to Sanitary Sewer Overflows (SSOs). These regulations are met mainly through the development and implementation of a Sewer System Management Plan (SSMP). However, the City also continues to maintain a Sanitary Sewer Overflow Prevention Plan (SSOPP), and a Capacity, Management, Operations, and Maintenance (CMOM) program, which have been incorporated into the City's SSMP. The SSOPP has been designed to prevent or minimize the potential for SSOs. The CMOM describes how the City maintains and operates its sanitary sewer system, as follows:

- Manage, operate, and maintain at all times the parts of the collection system which the City owns or has operational control over,
- Provide adequate capacity using city wide sewage flow monitoring programs to convey base flows and peak flows,
- Take all feasible steps to stop and mitigate the impact of SSOs,
- Provide notification to parties with a reasonable potential to exposure to pollutants associated with the overflow event through the County of San Diego, and
- Keep records of all maintenance activities.

The City of Encinitas also has a Fats, Oil, and Grease (FOG) ordinance, EMC Section 18.04. The primary purpose of this ordinance is to reduce the amount of FOG introduced into the sanitary sewer system by residents and businesses. This ordinance requires all Food Service Establishments (FSE) which discharge fats, greases, and waxes to the sewer system to install a grease pre-treatment device on the sewer lateral, which connects their facility to the City's wastewater collection system.

The Municipal Permit also requires all sewage discharges caused by blockages or other problems within a privately owned lateral or failing septic systems to be dealt with appropriately. If a spill from a private sewer lateral is not being contained and the responsible party fails to take action to repair the lateral, the City can take necessary action to contain the spill, make necessary repairs to the lateral, and/or contact a contractor for appropriate maintenance and bill the responsible party. The City's Clean Water Program staff is tasked with handling all illicit connection and discharge citations. If there are sewage spills due to failing septic systems at private residences, the County Department of Environmental Health (DEH) is responsible for responding to these complaints.

7.3.2 SEWAGE SPILL RESPONSE

Spills from the sanitary sewer entering the MS4 may be discovered during routine maintenance activities or observed and reported to the City by the public. All municipal personnel field crews call the Clean Water Program or report sewage spills to the Public Works Wastewater

Collection Division. When spills occur, the appropriate agencies (as described in Table 7-1 below) are informed of all sewer related spills and are responsible for control, containment, and clean up of all reported discharges.

Table 7-1
Responsible Agency for Sewage Spills

Source	Responsible Agency
Leaks and spills from publicly owned collection system	City of Encinitas
Private residence (failing septic systems)	County of San Diego Department of Environmental Health (DEH)
Any spill reaching MS4	City of Encinitas

Both the City's Public Works Wastewater Collection Division and the City's Clean Water Program accept complaint calls for commercial lateral discharges. For any incidents that may occur after hours, callers are directed to contact the City's answering service at 760-633-2922. Based on the urgency, City crews are dispatched immediately, work orders are prepared, and each case is tracked in the City's GIS based system. The City also provides a 24- hour, on-call City staff member with the ability to call additional resources or other appropriate agencies if necessary.

The City of Encinitas' Wastewater Collection Division has implemented the following remedial actions to the extent that they are applicable to any discharges:

- Interception and rerouting of sewage flows around the sewage line failure,
- Vacuum truck recovery of SSOs and wash down water,
- Cleanup of debris of sewage origin at the overflow site, and
- Inform the responsible party to cease and desist, clean and abate, and repair the problem to ensure that the incident will not occur again.

7.3.3 SEWAGE SPILL REPORTING

The City reports all SSOs to the State Water Resources Control Board (SWRCB) online using the California Integrated Water Quality Management System (CIWQS) database, as required by SWRCB Order No. 2006-003-DWQ. Initial online reports are sent to the CIWQS within three days, and final, certified reports are sent within 15 days. The City reports all SSOs that are at least 1,000 gallons and SSOs that cause a beach closure (regardless of volume) to the CIWQS within 2 hours. All illicit connections and discharges are reported annually in the City of Encinitas JURMP Annual Report. In some cases, inspections are conducted and enforcement actions may be taken if necessary. If a Notice of Violation (NOV) for a SSO is issued by the Clean Water Program, copies of all NOVs will be sent to the Regional Board.

As required in the Municipal Permit, the City of Encinitas will provide oral notification to the Regional Water Quality Control Board (RWQCB) of all illicit connections and discharges within

its jurisdiction that are determined to pose a threat to human or environmental health within 24 hours of the discovery of non-compliance. Oral notification will be followed up by a written report to the RWQCB within five days of the incidence of non-compliance.

All sewage spills of at least 1,000 gallons, or any spills to surface waters are required to be reported to the RWQCB, the DEH, and the Office of Emergency Services (OES) within 2 hours by fax or telephone. Surface waters include rivers, streams, ephemeral streams, lagoons, the ocean, dry arroyos, and storm drains. In all instances, the City must fax an SSO Report Form to the RWQCB within five days of the spill. The completed SSO Report Form must also be faxed to the County of San Diego DEH. A quarterly report of all sewage spills, including those not meeting the criteria stated above, will also be submitted electronically to the RWQCB, as required.

In FY 2009-10, the City fully complied with the sewage spill reporting requirements outlined in Table 7-2 below.

Table 7-2
Summary of Sewage Spill Reporting Requirements

Spill Volume	Criteria	Agency Receiving Report	Reporting Timeframes
Any	Spills to waters of the State	RWQCB DEH OES SWRCB online-(CIWQS)	Immediate, but no later than 2 hours after becoming aware of the discharge
Any	Municipal Permit non-compliance threatening human or environmental health	RWQCB SWCRB	24 hours verbal and 5 days written 3 days (initial)
Any	Mitigated spills (absorbed, cleaned up, or captured)	DEH	24 hours
Any	Unmitigated spills to areas with potential public contact	DEH	Immediate, but no more than 2 hours after becoming aware of the discharge
Any	Unmitigated spills to areas without potential public contact	DEH	24 hours

Spill Volume	Criteria	Agency Receiving Report	Reporting Timeframes
>1000 gallons	Anywhere	RWQCB DEH OES SWRCB online – (CIWQS)	2 hours 2 hours 2 hours 3 days (initial)

Table 7-3 contains a summary of all SSOs in Encinitas in FY 2009-10.

Table 7-3
Sanitary Sewer Overflows in FY 2009-10

Date	Agency	Location	Approx. Volume Spilled (Gallons)	Approx. Volume Recovered (Gallons)	Approx. Volume Released (Gallons)	Cause	Reported To
11/11/09	Leucadia Wastewater District	247 S. El Camino Real	<100	50	<50	Private lateral spill in shopping center cleanout	RWQCB DEH CIWQS # 746741
11/16/09	City of Encinitas Wastewater Collection Division	840 Val Sereno	650	200	450	Root intrusion	RWQCB DEH CIWQS # 746771
12/03/09	Leucadia Wastewater District	1400 Pireaus St.	800	600	200	Main line blocked due to root intrusion	RWCQB DEH OES # 09-8081 CIWQS # 727303

Date	Agency	Location	Approx. Volume Spilled (Gallons)	Approx. Volume Recovered (Gallons)	Approx. Volume Released (Gallons)	Cause	Reported To
02/01/10	City of Encinitas Wastewater Collection Division	989 Sidonia Street	42	15	27	Pipe structural problem/ failure	RWQCB DEH CIWQS # 748988

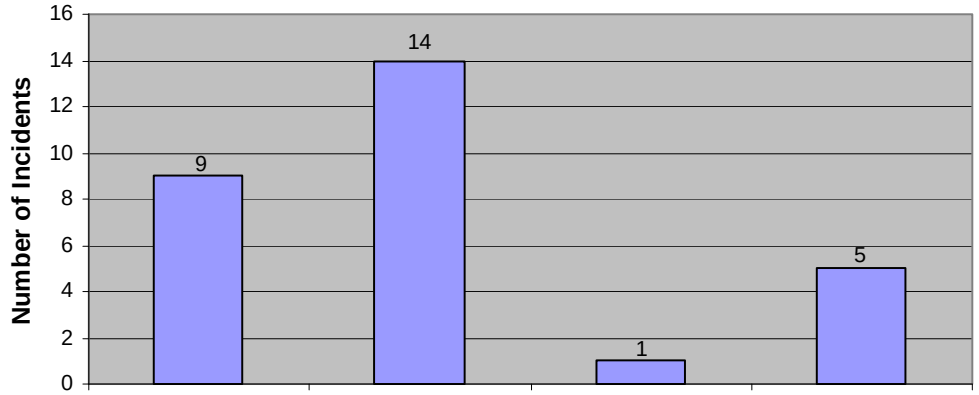
7.3.4 OTHER SPILL PREVENTION AND MITIGATION PROCEDURES

The City coordinates spill prevention, containment, and response activities throughout all appropriate departments, programs, and agencies so that maximum water quality protection is available at all times.

Spills are prevented and mitigated through the implementation and enforcement of minimum BMPs. These BMPs are described in the City of Encinitas' 2008 JURMP update in the Development Planning, Municipal, Construction, Industrial and Commercial, and Residential components located in Sections 4, 5, 6, 7, and 8 and in the City's BMP Manual Parts I and II.

In FY 2009-10, the City of Encinitas Fire Department responded to a total of 29 hazardous materials incidents. These incidents included gasoline spills, gas leaks, and other toxic or hazardous conditions. The Fire Department is equipped with containment booms, absorbent material, shovels, storm drain covers, and disposal equipment. When hazardous material incidents occur, the City's Fire Department is typically the first responder. They are equipped to capture and contain most discharges on site and will contact the Public Works Department and the Clean Water Program for additional help when it is warranted. The Public Works Department is available to respond with additional sandbags, absorbent materials, and increased manpower. Clean Water Program staff is notified to document the incident and to initiate any enforcement actions that may be necessary. If warranted, storm drain samples and pictures are taken for potential cost recovery and court action. The City of Encinitas also has a contract with the County of San Diego Hazardous Incident Response Team who will respond when the chemical is unknown or is determined to be hazardous. Figure 7-6 below shows a break down of the hazardous materials incidents that occurred in the City of Encinitas in FY 2009-10. All hazardous materials incidents that occurred in the City were documented by the Fire Department and are included in Appendix B - Hazardous Materials Incidents.

Figure 7-6 Hazardous Material Incidents FY 2009-10
Encinitas Fire Department



7.4 URBAN RUNOFF MONITORING

The City of Encinitas' Urban Runoff Monitoring Program incorporates MS4 Outfall Monitoring and the Dry Weather Field Screening and Analytical Monitoring Program.

7.4.1 MS4 OUTFALL MONITORING

The MS4 Outfall Monitoring Program is a new requirement of the RWQCB Order R9-2007-0001 (Section B.2 of the Receiving Waters and Urban Runoff Monitoring and Reporting Program). The purpose of the MS4 Outfall Monitoring Program is to characterize pollutant discharges from MS4 outfalls in each Watershed Management Area (WMA) throughout the County of San Diego during wet and dry weather.

The program was developed by the San Diego Regional Stormwater Copermittees (Copermittees) in FY 2007-08 and was designed to have four monitoring components: random dry weather, random wet weather, targeted dry weather, and targeted wet weather. The City of Encinitas is responsible for targeted dry weather sampling at four sites throughout Encinitas. A regional contractor is responsible for collecting all random dry weather, random wet weather, and targeted wet weather samples in each WMA throughout San Diego County.

The MS4 Outfall Monitoring Program was implemented during the 2008–2009 monitoring season. Random wet outfall monitoring, random dry outfall monitoring, and targeted dry outfall monitoring were all conducted. The Targeted Wet Outfall Monitoring Program was developed during spring 2009 and was implemented by a regional contractor as part of the 2009–2010 Regional Monitoring Program. Table 7-4 below presents the targeted dry weather monitoring sites the City of Encinitas visited during the 2009-10 fiscal year and the lab analytes that were assessed at each site in support of this regional monitoring effort.

Table 7-4
FY 2009-10 City of Encinitas Targeted Dry Weather Monitoring Sites

Station ID	Sample Date	Water Flow	Flow Rate (GPM)	Analysis
CBS-2	6/07/10	Flowing	1	Bacteria, TDS, TSS, Total Nitrogen-N, and Total Phosphorous-P
ESC-1	6/07/10	Flowing	100	Bacteria, TDS, TSS, Total Nitrogen-N, Total Phosphorous-P, Manganese, Selenium and Sulfates
ENC-10	6/07/10	Flowing	3	Bacteria, TDS, Total Nitrogen-N, and Total Phosphorous-P
LCS-1	6/07/10	Flowing	2	Bacteria, TDS, Total Nitrogen-N, and Total Phosphorous-P

The monitoring results for this program are presented in detail in the Copermittees' 2009-10 Urban Runoff Monitoring Report. It is anticipated that more meaningful spatial comparisons can be made as a more robust data set is developed in subsequent years for the MS4 Outfall Monitoring Program.

7.4.2 DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING

The Dry Weather Field Screening and Analytical Monitoring Program is a crucial part of the City's Urban Runoff Monitoring Program (Dry Weather Monitoring Program). The City of Encinitas has been conducting dry weather monitoring since 1996. The City's previously established Dry Weather Monitoring Program included selecting city-wide monitoring stations, creating a map of the MS4 in GIS, developing dry weather monitoring program procedures, conducting field sampling, testing, and follow-up investigations.

The updated requirements of the Dry Weather Monitoring Program component as outlined in the Municipal Permit (Order No. 2007-0001) are very similar to those in the previous Municipal Permit (Order No. 2001-01). However, the new Municipal Permit includes the following additional requirements: a trash assessment component and follow-up sampling conducted within two business days of receiving results which exceed identified action levels. The City of Encinitas 2010 Dry Weather Monitoring Assessment Report can be found in Appendix C.

There are four main components to the City's Dry Weather Monitoring Program:

1. Field observations (site description and qualitative observations),
2. Field screening monitoring (testing samples while at site and flow estimation),
3. Analytical monitoring (performing further tests of sample later at a laboratory),
4. Follow-up and investigations of all field screening and analytical exceedances.

As described in the City of Encinitas JURMP Update, dated March 24, 2008, the City revised its Dry Weather Monitoring Program in FY 2007-08 to meet all of the requirements that were established in the Municipal Permit (Order No. 2007-0001). Field screening and analytical lab results are included in Appendix C-2 and Appendix C-4 within the 2010 Dry Weather Monitoring Assessment Report.

7.4.2.1 MS4 MAP

The City has developed a detailed map of its entire MS4 that includes MS4 facilities, dry weather monitoring stations, and drainage basins. When field staff finds inaccuracies in the map during dry weather monitoring, the inaccuracies are reported to the City's GIS Department so that updates can be made. The current map of the City of Encinitas 2010 MS4 and Dry Weather Monitoring Stations is located within the 2010 Dry Weather Monitoring Assessment Report in Appendix C-1.

7.4.2.2 DRY WEATHER ANALYTICAL MONITORING STATIONS

In March 2008, the City of Encinitas revised its Dry Weather Monitoring Program as part of the Jurisdictional Urban Runoff Management Program (JURMP) Update. The goal of the revised program was to continue to retain existing sites that had been monitored for analytical laboratory testing to establish long-term trend analysis and select additional sites to facilitate a better understanding of the water quality in Encinitas. The City removed and added new dry weather monitoring locations based on adequate coverage of the MS4, characterization of flow, land use, previous water quality data, areas of historic illegal discharges, and environmentally sensitive areas. The Dry Weather Monitoring Program for 2010 included 39 primary sites and 16 alternate sites distributed across seven sub-basins in the City of Encinitas.

7.4.2.3 DRY WEATHER ANALYTICAL MONITORING PROCEDURES

The City's Dry Weather Monitoring Program utilizes methods and procedures in collecting and analyzing data which are consistent with those developed by the Copermittees' Dry Weather Monitoring Workgroup. The elements of the City's dry weather program include established sampling locations, sampling frequencies, field screening and sampling procedures, recommended action levels and data interpretation, follow-up investigations, and reporting.

In 2010, all 39 primary monitoring sites were field screened along with 2 alternate monitoring sites. Twenty five percent of the primary monitoring sites (10 of 39) were also analyzed in the laboratory. Qualitative observations were made at all sample locations. Each location had a unique field data sheet noting observations such as color, clarity, odor, and biological characteristics of the runoff. A multiparameter meter was used in the field to determine pH, conductivity, temperature, and turbidity. Ammonia, nitrate, ortho-phosphate, and MBAS analyses were performed with CHEMetrics instrumental field kits. Oil and grease, diazinon, chlorpyrifos, dissolved cadmium, dissolved copper, dissolved lead, dissolved zinc, total coliform bacteria, fecal coliform bacteria, and Enterococcus bacteria were all analyzed in the laboratory.

7.4.2.4 DRY WEATHER DATA ANALYSIS

Detailed analyses of the 2010 dry weather data are included in the Dry Weather Monitoring Assessment Report, May 1, 2010 – September 30, 2010 in Appendix C.

7.5 FOLLOW-UP AND ENFORCEMENT

7.5.1 INVESTIGATIONS/INSPECTIONS AND FOLLOW-UP

All potential illicit connections and discharges are investigated and eliminated in a timely manner after the City is notified of their occurrence. Illicit connections and discharges are mainly identified through public complaints; referrals; routine inspections of municipal, industrial, and commercial business facilities; and the Dry Weather Monitoring Program.

If an illicit connection or discharge is discovered as a result of the Dry Weather Monitoring Program, an investigation is required to be conducted within two business days of receiving dry weather field screening and/or analytical laboratory data. All sampling results are compared to the regionally developed dry weather monitoring numeric action levels to determine if follow-up investigations/inspections are warranted. The numeric action levels (determined by the Regional Copermittees' Dry Weather Monitoring Workgroup), is the primary approach for interpreting pH, ortho-phosphate, nitrate, ammonia, surfactants, oil and grease, diazinon, chlorpyrifos, total coliform bacteria, fecal coliform bacteria, and Enterococcus analytical results. The California Toxics Rule (CTR) is used to establish an action level for dissolved trace metals, including cadmium, copper, lead, and zinc. In general, best professional judgment is utilized as the primary approach for interpreting turbidity, water temperature, and conductivity and as a secondary approach for interpreting the results of all other field and laboratory analyses. Under best professional judgment, the need for a follow-up investigation is left to the discretion of the Clean Water Program field staff due to their familiarity with the City's Dry Weather Monitoring Program and their knowledge of typical results for the analytes being tested.

In the 2010 Dry Weather Monitoring season, one illicit discharge investigation was initiated in response to slightly elevated concentrations of surfactants (MBAS) that were detected at one dry weather monitoring site in the city (refer to the 2010 Dry Weather Monitoring Assessment Report in Appendix C for a more detailed discussion). Additionally, a complete table with all illicit connection and discharge complaints reported to the Clean Water Program throughout the entire FY 2009-10, which includes investigation dates, sources of discharge, investigation actions, follow-ups, and enforcement activities, can be found in the City of Encinitas FY 2009-10 JURMP Annual Report, Appendix H-1.

7.5.2 ELIMINATION OF ILLICIT DISCHARGES AND CONNECTIONS

The City utilizes the following primary methods for the identification of illicit discharges and connections: complaint responses via the Clean Water Hotline/Email, City staff complaints and observations, and detection and elimination through monitoring (primarily dry weather).

Action is taken to eliminate all detected illicit discharges and connections and their sources as soon as possible after detection. Illicit discharges and connections that pose a serious threat to public health or the environment are eliminated immediately. Illicit discharges and connections that are not deemed to pose serious threats to public health or the environment are eliminated through an escalating series of enforcement actions.

Remove Illicit Connections

The City ensures that the violator takes appropriate action to disconnect, block, stop, or divert drainage facilities and pipe connections that are determined to discharge pollutants to the MS4. Appropriate actions may include the following:

- Plug sinks and drains that are discharging illicit materials to the storm drain system
- Disconnect all drainage pipes found to discharge illicit pollutants to the storm drain system
- Dispose of illicit materials via the sanitary sewer or other appropriate disposal or storage methods
- Divert illicit discharges to the sanitary sewer or treat on-site

In some cases, special permits from the local wastewater authority are needed before material can be discharged to the sanitary sewer system.

Discontinue Illicit Discharges

As applicable to each individual circumstance, the City ensures that responsible parties implement the procedures outlined below to eliminate discharges that transport pollutant materials to the MS4:

- Eliminate the source of the discharge
- Remove pollutant materials from the site
- Prevent pollutant materials from coming in contact with the discharge
- Contain potential illicit discharges on site for treatment or proper disposal

In FY 2009-10, the Clean Water Program received a total of **275** complaints. A total of **40** complaints involved issues that were referred to other departments, other agencies, or were simple requests for information (regarding the City's Storm Water Ordinance, car washing, swimming pool discharge policies, etc.).

In FY 2009-10, there were **235** complaints investigated, resulting in **182** education actions, **25** NOVs, and **12** Administrative Citations for illegal discharges. Appendix H-1 in the City of Encinitas' FY 2009-10 JURMP Annual Report identifies all complaints received by the hotline and includes incident dates, details of substances discharged, and the resulting actions taken by City staff to eliminate and prevent discharges in the future.

The most serious violations observed by City staff resulted in Administrative Citations issued to the responsible party. Table 7-5 summarizes the violations and the resulting actions that occurred in FY 2009-10.

Table 7-5
Administrative Citations Issued FY 2009-10

Date	City Code Violation	Violation Description	Fine	Category
7/23/2009	20.08.040	Illegal discharge of construction debris	Warning	Residential
7/29/2009	20.08.040	Illegal discharge of trash wash water	$200.00	Commercial
7/30/2009	20.08.040	Illegal discharge of construction debris	Warning	Residential
8/28/2009	20.08.040	Illegal discharge of wash water	$200.00	Commercial
8/28/2009	20.08.040	Illegal discharge of wash water	$100.00	Commercial
10/21/2009	20.08.040	Illegal discharge of wash water	$200.00	Commercial
11/24/2009	20.08.040	Illegal discharge of wash water	$100.00	Commercial
12/30/2009	20.08.040	Illegal discharge of construction debris	Warning	Commercial
1/21/2010	20.08.040	Illegal discharge of sediment	$100.00	Construction
3/1/2010	20.08.040	Illegal discharge of sediment	$200.00	Commercial
3/24/2010	20.08.040	Illegal discharge of wash water	$200.00	Commercial
5/21/2010	20.08.040	Illegal discharge of wash water	Warning	Commercial
		TOTAL	**$1,300.00**	

7.5.3 ENFORCING THE DISCHARGE PROHIBITIONS ORDINANCE

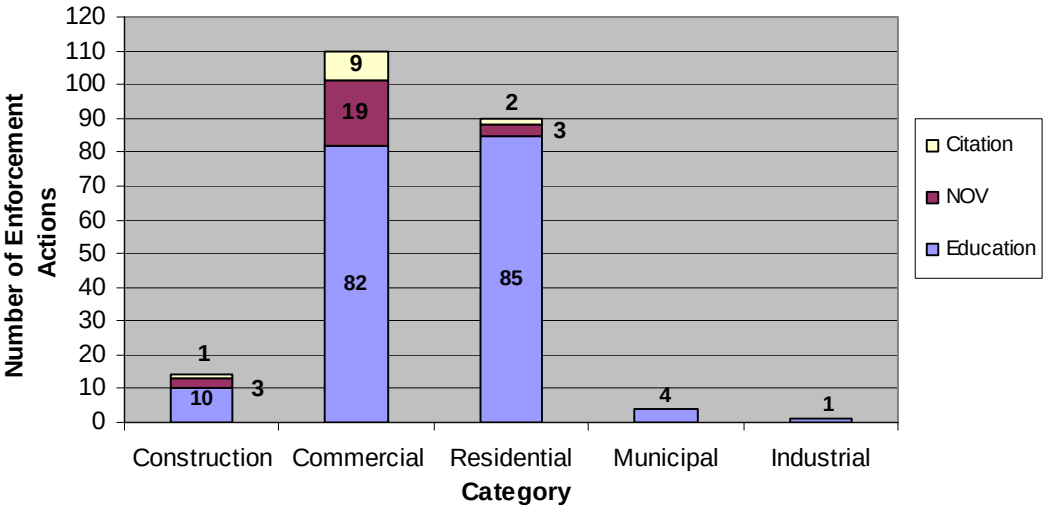
The City implements and enforces its ordinances, orders, or other legal authority to prevent illicit discharges and connections to its MS4. Many illicit connections and illegal discharges can be eliminated through voluntary compliance. Most violators are willing to change their behaviors when they learn that their actions are detrimental to the environment and local waterways. The City utilizes a variety of options under a flexible and graduated system of enforcement actions, emphasizing voluntary compliance when possible. Voluntary compliance

may be used for first-time, minor violations, whereas more serious violations or continued non-compliance may warrant a more aggressive and enforcement oriented approach. Increased enforcement actions are taken until compliance is achieved or the illicit connection or illegal discharge is otherwise eliminated.

In cases where further enforcement is needed, the typical progressive enforcement procedures that the City can implement are as follows: verbal warnings and education, written warnings (Stop/Correct Work notice or a NOV), and administrative citations. A copy of the City's Administrative Citation form can be found in Appendix D. The nature of the City's enforcement approach is determined on a case-by-case basis and is based on factors such as the severity of the violation, the threat to human or environmental health, site-specific circumstances, and past compliance history. If the situation is determined to pose an immediate risk to public health or the environment, the City may coordinate with other agencies or teams that are specially trained to assess and mitigate emergency situations (e.g., those involving hazardous wastes/materials, etc.).

In FY 2009-10, enforcement in each category varied according to the complaint. Overall, construction, commercial, residential, municipal, and industrial complaints were primarily resolved through education. A breakdown of the enforcement actions performed per category of complaint is presented below in Figure 7-7.

Figure 7-7 Enforcement Actions FY 2009-10

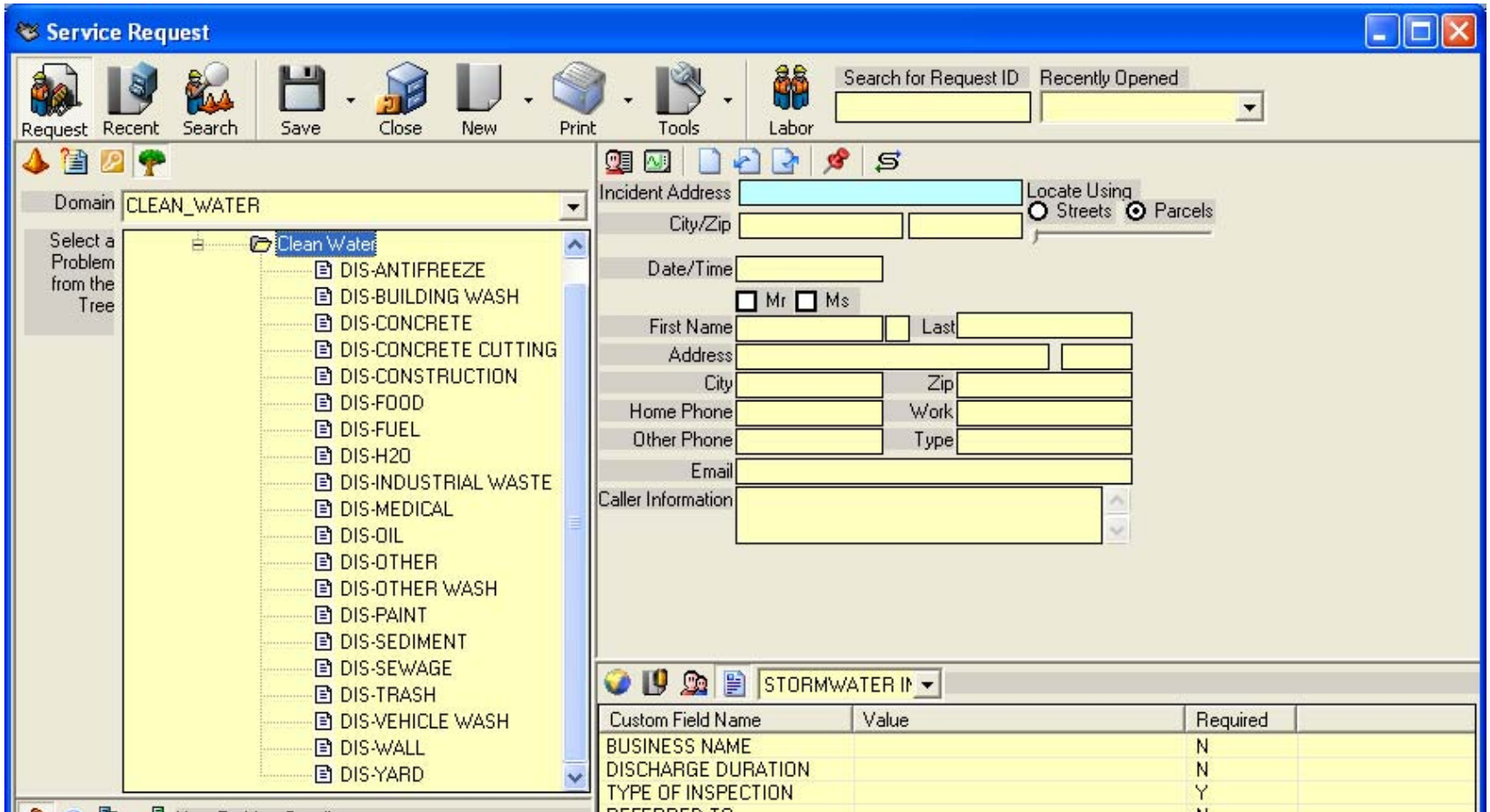


In FY 2009-10, residential complaints accounted for 54% of all complaints received and resulted in 85 educational actions, three Notices of Violation, and two citations. Commercial complaints totaled 35% of all complaints received and resulted in 82 educational actions, 19 Notices of Violation, and nine citations. Construction complaints totaled 5% of all complaints received and resulted in 10 educational actions, three Notices of Violation, and one citation. Municipal complaints accounted for 5% of all complaints received and resulted in four educational actions;

they were referred to the City's Public Works Department for immediate maintenance. Industrial complaints accounted for 1% of all complaints received and resulted in one educational action.

Clean Water Program staff evaluated all reported illegal discharges and proceeded with appropriate enforcement actions as determined necessary. Clean Water Program staff issued a total of **25** Notices of Violation and **12** Administrative Citations. The total amount of citations collected in FY 2009-10 was **$1,300.00** (see Table 7-5).

Stormwater Complaints Cityworks Service Request Form



Incident Listing

Wednesday July 1, 2009 through Thursday July 1, 2010

400 - Hazardous condition, other

Encinitas Fire Department

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0002602	000	07/12/2009 15:19:09	400	N	576 S Coast Highway 101	X		
0003624	000	09/17/2009 08:20:50	400	N	6200 Avenida Encinas	X		
0004105	000	10/23/2009 07:39:59	400	N	On Piraeus St at La Costa Ave	X		
0000538	000	02/07/2010 11:16:43	400	N	948 Neptune Ave	X		
0001359	000	04/06/2010 22:30:06	400	N	1028 Evergreen Dr	X		

End of Report

Incident Listing

Wednesday July 1, 2009 through Thursday July 1, 2010

410 - Flammable gas or liquid condition, other

Encinitas Fire Department

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0000104	000	01/08/2010 12:25:51	410	N	633 Cerro St	X		
0001143	000	03/23/2010 08:47:29	410	N	447 Ocean View Ave	X	X	

End of Report

Incident Listing

Wednesday July 1, 2009 through Thursday July 1, 2010

411 - Gasoline or other flammable liquid spill

Encinitas Fire Department

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0002930	000	08/04/2009 09:13:10	411	2	I-5 Sb	X		
0003226	000	08/22/2009 16:13:27	411	N	916 Bonita Dr	X		
0004136	000	10/25/2009 10:14:42	411	N	765 S Coast Highway 101	X		
0004274	000	11/04/2009 10:43:07	411	N	435 Via Malaga	X		
0004772	000	12/13/2009 10:59:58	411	N	On Manchester Ave at Via Poco	X		
0000212	000	01/16/2010 13:03:16	411	N	645 Via Cantebria	X		
0000777	000	02/25/2010 20:53:33	411	1	2655 S Coast Highway 101	X	X	

End of Report

Incident Listing

Wednesday July 1, 2009 through Thursday July 1, 2010

412 - Gas leak (natural gas or LPG)

Encinitas Fire Department

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0002736	000	07/21/2009 12:47:17	412	N	375 Ocean View Ave	X		
0003497	000	09/08/2009 15:44:44	412	N	1229 Swallowtail Ct	X		
0003644	000	09/18/2009 18:11:49	412	N	441 Saxony Rd	X		
0004049	000	10/18/2009 16:59:30	412	4	5527 El Camino Del Norte	X		
0000050	000	01/04/2010 21:45:32	412	4	17498 Los Morros	X		
0000390	000	01/26/2010 09:07:10	412	4	1818 Sea View Ave	X		
0000453	000	01/31/2010 14:18:48	412	N	1250 Meadow Wood Pl	X		
0000767	000	02/25/2010 02:43:25	412	N	494 La Veta Ave	X	X	
0000785	000	02/26/2010 14:45:59	412	N	1710 S El Camino Real	X	X	
0001347	000	04/06/2010 11:05:43	412	N	2516 El Camino Del Norte	X		
0001719	000	05/02/2010 16:57:06	412	4	12725 VIA CORTINA	X		
0001960	000	05/22/2010 14:33:53	412	4	143 S Cedros Ave	X	X	
0002079	000	05/31/2010 16:28:32	412	4	1042 N El Camino Real	X	X	
0002236	000	06/09/2010 23:31:04	412	4	6790 Embarcadero Ln	X		

End of Report

Incident Listing

Encinitas Fire Department

Wednesday July 1, 2009 through Thursday July 1, 2010

420 - Toxic condition, other

Encinitas Fire Department

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0004309	000	11/07/2009 07:58:21	420	N	318 N El Camino Real	X		

End of Report

Incident Listing

Wednesday July 1, 2009 through Thursday July 1, 2010

421 - Chemical hazard (no spill or leak)

Encinitas Fire Department

Number	Exp	Alarm Time	Type	Aid	Location	Complete	Reviewed	Released
0003474	000	09/07/2009 11:41:16	421	N	2064 Shadow Grove Way	X		

End of Report

Dry Weather Monitoring Assessment

May 1, 2010 - September 30, 2010

Prepared by:

City of Encinitas
Clean Water Program
505 South Vulcan Avenue
Encinitas, CA 92024

December 2010

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1.0 Introduction

The Dry Weather Monitoring Program is a crucial part of the City of Encinitas' Urban Runoff Monitoring Program. Since May 2002, the California Regional Water Quality Control Board, San Diego Region (Regional Board), has required the San Diego County Copermittees to implement an annual Dry Weather Storm Drain Monitoring Program (Dry Weather Program). On January 24, 2007, Order No. R9-2007-0001 (Municipal Permit), was adopted by the Regional Board, regulating the discharge of urban runoff from municipal separate storm sewer systems (MS4) draining the watersheds of the County of San Diego and the incorporated Cities of San Diego County, including the City of Encinitas. The updated requirements of the Dry Weather Monitoring Program can be found in Section II.B.3 of the Receiving Waters and Urban Runoff Monitoring and Reporting Program of the Municipal Permit.

Order No. R9-2007-0001 requires the City of Encinitas to implement a dry weather analytical monitoring program for the detection and elimination of illicit discharges and connections to the City's MS4 in addition to including a trash assessment component. The purpose of the City's Dry Weather Program is to actively seek and eliminate illicit connections and illegal discharges, to characterize dry weather flows and trash assessments throughout the City's Municipal Separate Storm Sewer System (MS4).

An illicit discharge is defined as a point source discharge of pollutants to the MS4 that is not comprised entirely of storm water, not exempted by the City's Storm Water Ordinance, or not authorized by an NPDES Permit. An illicit connection is defined as a physical connection to the Storm Water Conveyance System or Receiving Waters which has not been reviewed and authorized by the City. The regulatory backbone of this program is the establishment of discharge prohibitions in the City's Municipal Code, Chapter 20.08 (Storm Water Management).

Dry weather monitoring of the MS4 is performed by establishing monitoring locations throughout the City to adequately cover the entire storm drain system. In 2009, the City of Encinitas' Dry Weather Program encompassed 39 primary monitoring locations and 16 alternate monitoring locations throughout the city. Monitoring of these locations included recorded observations, field screening where water was present, and analytical laboratory testing at selected locations.

The City of Encinitas conducted dry weather monitoring during the period of May 1, 2010 to September 30, 2010. The analysis of the dry weather monitoring results for 2010 is documented in the following report.

2.0 Dry Weather Monitoring Stations

In March 2008, the City of Encinitas revised its Dry Weather Monitoring Program as part of the Jurisdictional Urban Runoff Management Program (JURMP) Update. The goal of the revised program was to continue to retain existing sites that had been monitored for analytical laboratory testing to support long-term trend analysis, select additional sites to facilitate a better understanding of the water quality in Encinitas, and to ensure compliance with Dry Weather Monitoring program standards established in Order No. 2007-0001.

Under the previous Municipal Permit (2001-01), the City of Encinitas conducted dry weather field screening at an average of 37 sites per year. On average, the City also visited another 13 dry sites per year, with the total number of sites visited varying from 48 to 52 sites per year. To make more efficient use of its resources, the City adjusted its Dry Weather Monitoring Program in 2008 to include 39 primary sites and 16 alternate sites. As part of the monitoring site evaluation, sites that had never had ponded or flowing water were removed from the monitoring site list. Sites that were regularly dry but had ponded or flowing water at least once during previous monitoring years were changed to alternate sites. The City also assessed whether any existing sites should be relocated and whether any new sites were necessary to provide better coverage of key areas of the MS4. This process relied on reviewing historical data from past monitoring programs and reviewing the MS4 and land use data. Geographic Information Systems (GIS) data files of the City's drainage system, watersheds, major water bodies, environmentally sensitive areas, existing dry weather monitoring locations, and approximate locations of potential sources of pollutants were all evaluated to assist in this process. In 2008, the City's Clean Water Program field staff, accompanied by Public Works maintenance staff familiar with the storm drain conveyance system, conducted field visits to assess the suitability of 29 potential new sites. This process included locating appropriate access points and then checking for the presence of ponded or flowing water, assessing accessibility, and recording GPS coordinates or the GIS ID name of the relevant storm water facility. As a result of this assessment, 12 suitable locations were identified and added to the City's lists of dry weather monitoring sites. Only one out of seven sub-basins retained the same primary sites that existed in the City's dry weather monitoring program under the previous Municipal Permit. Consequently, only the past four years of dry weather monitoring data (2007-2010) have been compared to each other in the water quality exceedance charts throughout this report.

A storm drain (MS4) database has been developed by the City of Encinitas in a GIS and is maintained in an ArcInfo platform by the City's Information Technology Division. The database is continually updated to include new additions to the MS4 as validation is ongoing. The City has also developed a detailed map of its entire MS4 that includes MS4 facilities, dry weather monitoring stations and drainage basins. A copy of the 2010 MS4 and Dry Weather Monitoring Stations Map can be found in Appendix C-1.

3.0 Dry Weather Monitoring Program

The City's dry weather monitoring program uses methods and procedures in collecting and analyzing data which are consistent with those developed by the San Diego Regional Copermittees' Dry Weather Monitoring Workgroup (DWM Workgroup). The elements of the dry weather program include establishing primary and alternate sampling sites, sampling frequencies, field screening and sampling procedures (including monitoring parameters), recommended action levels and data interpretation, follow-up investigations, and reporting. Each of these procedures is outlined in detail below.

Dry weather field screening and analytical monitoring consists of field observations, field screening and monitoring, and analytical monitoring at selected stations. The Municipal Permit requires each Copermittee to conduct field screening analysis of the following analytes at all dry weather monitoring stations where water is present: conductivity, turbidity, pH, ortho-phosphate, nitrate-nitrogen, ammonia-nitrogen, and surfactants (MBAS). The Municipal Permit also requires that each Copermittee conduct analytical laboratory analysis of the following constituents at twenty five percent of the dry weather monitoring stations where water is present: oil and grease, diazinon, chlorpyrifos, total hardness, cadmium (dissolved), lead (dissolved), zinc (dissolved), copper (dissolved), total coliform bacteria, fecal coliform bacteria and Enterococcus bacteria.

Dry weather monitoring was conducted at 39 primary sites and 2 alternate sites throughout Encinitas during the period of May 1 – September 30, 2010. Of the 41 locations monitored, flowing water was observed at 27 sites, ponded water was observed at 12 sites and 2 sites were observed to be dry. Field analysis was conducted at all sites with flowing or ponded water. A total of 10 monitoring locations or 25% of all 39 sites were sampled for full laboratory analysis to meet the minimum 25% requirement as established in the Municipal Permit. An additional 10 sites were analyzed for total coliform, fecal coliform, and *Enterococcus* in order to further characterize bacteria concentrations throughout the City's MS4.

As required by the Municipal Permit, a trash assessment was conducted at 39 primary sites and 2 alternate sites throughout the City to provide information on the spatial extent and amount of trash present, as well as the nature of the types of trash present. A more detailed analysis and results of the trash assessment program can be found in Section 7.0 of the Dry Weather Monitoring 2010 report. All of the completed 2010 Trash Assessment forms can be found in Appendix C-2.

Qualitative observations were made at all sample locations. A field data sheet noting observations such as color, clarity, odor, and biological characteristics was recorded at each monitoring site. The 2010 Dry Weather Monitoring Field Datasheets for each monitoring site are included in Appendix C-2. Photographs for all dry weather monitoring sites visited in 2010 can be found in Appendix C-3.

Field tests were performed by Clean Water Program field staff at all monitoring locations with flowing or ponded water. If the station was dry (no flowing or ponded runoff), Clean Water Program field staff recorded all applicable observations on the field data sheet and selected another station from the list of alternate stations for monitoring. Clean Water Program field staff use the following monitoring equipment to help create a more efficient and accurate sampling program: Hydrolab Quanta multi-parameter instrument to determine pH, conductivity, temperature, and turbidity, a Chemetrics V-2000 multi-analyte photometer to analyze ammonia-nitrogen, ortho-phosphate, nitrate-nitrogen, and Chemetrics visual test kits were also used to analyze Surfactants/Methylene Blue Active Substances (MBAS).

Action levels for the field screening analysis were pre-determined by the DWM Workgroup and are shown in Table 4.0. Follow-up sampling for exceedances detected in field screening were performed within two business days of receiving the results that exceeded action levels as required in section D.4.d of the Municipal Permit. In addition, all dry weather field screening and analytical monitoring stations identified to exceed dry weather monitoring criteria for any analyte are also screened in subsequent years. Source investigation actions are initiated based upon field screening and analytical monitoring results that have exceeded established action levels during initial testing and follow-up testing. Source investigation actions may include field investigations and/or formal facility inspection activities as determined necessary and appropriate. There was one source investigation at ENC-6 in this reporting period.

There were 10 samples collected for full laboratory analysis in order to further characterize the water quality at specific locations throughout the City. When feasible, laboratory testing was performed as far down in the watershed as possible to assess water quality prior to discharging into a receiving water. Methods for laboratory analysis were based on EPA approved methods described in the *Standard Methods for the Examination of Water and Wastewater, 20th Edition.* Follow-up sampling for exceedances detected in laboratory analyses were performed within two business days after receipt of data from the laboratory. The field and analytical results for each monitoring station are provided in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2010 Field Screening and Analytical Monitoring Results Table in Appendix C-4.

4.0 Dry Weather Monitoring Data Methods and Analysis

The following section describes the City of Encinitas Dry Weather Monitoring Program components which includes the qualitative observations at each monitoring location, monitoring methods performed during field site visits, laboratory analysis of water samples and illicit connections/illicit discharge (IC/ID) investigations.

4.1 Qualitative Observations

Qualitative observations are a routine and important part of the field screening program. Qualitative field observations are made during each site visit where ponded or flowing water is observed and sampled. These observations are intended to provide a general assessment of the runoff and include the following parameters: odor, color, clarity, presence of floatables (e.g. trash), deposits (e.g. sediment/gravel), vegetation and the biology present at each site (i.e. aquatic life). Weather conditions are also recorded at each site.

4.2 Flow Measurement

Flow measurements can be used to estimate pollutant loading, prioritize storm drains for future monitoring or to identify significant changes in flow that may indicate an illegal release upstream. There are three field methods approved by the DWM Workgroup that may be used to estimate flow rates for different types of conveyances. Clean Water Program field staff use the velocity-area method for a creek, channel or partially filled storm drain pipe where appropriate. The velocity-area method for a creek or channel requires the physical measurement of the velocity (V), depth (D), and width (W) of flowing water. At locations where the flow was too slow or the water too shallow to measure, the velocity was estimated by timing the travel of floating debris (e.g. a leaf). The velocity of the floating object is then calculated by dividing the travel distance (feet) by the recorded travel time (seconds). For the locations (such as manholes) in which flow is not able to be measured, these sites are noted as flowing or ponded and the flow is estimated on the Dry Weather Monitoring datasheets. Each value must be converted into a common unit (i.e. centimeters, feet or inches) prior to calculations. The formula for determining the flow is as follows:

$$\text{Flow} = V \times D \times W$$

The flow value is then multiplied by a factor of 0.8 for creek measurements or 0.9 for concrete channel measurements (to account for channel roughness) to attain the proper flow rate. The resulting answer is then converted into the desired value.

The velocity-area method for a partially filled storm drain pipe also requires the physical measurement of the velocity; however it is also necessary to determine the area of the partially filled pipe in order to perform this calculation. Prior to calculations, all measurements are converted to a common unit. The depth (D) of the pipe is divided by the inside pipe diameter

(d) and the result is squared (d^2). A chart with the tabulated values (Ta) of the partially filled pipe is used to calculate the area of the cross section of a partially full circular pipe with flowing water. The formula for determining the area of the pipe is as follows:

$$A = Ta \times d^2$$

The area is then multiplied by the water velocity to obtain the total flow rate. The resulting answer is then converted into the desired value.

4.3 Field Screening Analytes

Physiochemical properties such as pH, conductivity, turbidity and temperature are all important indicators of water quality. Clean Water Program field staff uses a Hydrolab Quanta multi-parameter probe to measure the water temperature, pH, conductivity, and turbidity at each sample location where there is flowing or ponded water. In addition, Clean Water Program field staff uses a Chemetrics Photometer Model V-2000, a portable microprocessor based LED colorimeter in the field to analyze all water samples for ammonia, phosphorous and nitrate. A Chemetrics visual colorimetric analysis is also used in the field to analyze all water samples for Surfactants/ Methylene Blue Active Substances (MBAS).

Water Temperature is measured in the field immediately upon sample collection at each site. The average temperature values in the City of Encinitas range from 22.04° C to 24.49 ° C (72° F to 76° F). If a sample exceeds these temperature ranges, Clean Water Program field staff uses best professional judgment to assess water quality based on the following additional factors: air temperature, structure type (pipe or open channel) and location (open area or shaded area) to determine if further investigations are necessary.

pH measurements can indicate the alkalinity or acidity of the water sample. pH measurements can range anywhere from acidic conditions at 1.0 to basic conditions at 14.0. The DWM Workgroup has determined that a range of 6.5 to 9.0 is an acceptable range for all dry weather samples. If a sample exceeds the pH ranges, Clean Water Program field staff uses best professional judgment to assess water quality based on the following additional factors: temperature of water sample, structure type (pipe or open channel) and exceedances of additional analytes to determine if further investigations are necessary.

Conductivity is the measurement of an electric current in a water sample. Conductivity in water is affected by the presence of inorganic dissolved solids such as chloride, nitrate, sulfate and phosphate anions (ions that carry a negative charge) or sodium, magnesium, calcium, iron and aluminum cations (ions that carry a positive charge). Organic compounds (e.g. oils, phenols, alcohol and sugars) do not conduct electrical current very well and therefore have low conductivity in water. Conductivity can be affected by temperature; the warmer the water the higher the conductivity results. The Clean Water Program considers 5.00 mS/cm to be an exceedance of dry weather monitoring action levels, however due to situations where

groundwater is or is likely to be present, or the water temperature is high, Clean Water Program field staff uses their best professional judgment to determine if further investigations are necessary.

Turbidity is a measure of water clarity. The turbidity meter measures the amount of light that passes through a water sample. Higher turbidity values indicate that there is a high concentration of suspended particles in a sample. Turbidity can be a useful indicator of the effects of sediment runoff from construction, and agricultural practices. The following runoff characteristics may cause an elevated reading in turbidity: floating or suspended organic material, fine or coarse particulates, algae, and insects. The U.S. Environmental Protection Agency (EPA) Multi-sector General Permit (MSGP) considers 5.00 NTU to be a water quality exceedance. The DWM Workgroup has adopted this value as a benchmark however; Clean Water Program field staff additionally applies their best professional judgment to assess water quality at each specific site, especially in situations where the water is ponded.

Ammonia occurs naturally in the environment; however in large concentrations it can be toxic in an aquatic environment. It is a common indicator of pollution from decomposing organic matter, agricultural/ household fertilizer runoff or the presence of sewage. The DWM Workgroup action level for ammonia is 1.0 mg/L. If a routine sample exceeds the ammonia action levels, Clean Water Program field staff will re-sample at the same location within two business days to confirm the exceedance. If the confirmation sample also exceeds the action level, a split sample is sent to a water quality lab for more accurate analysis. If the exceedance results are confirmed in the lab, Clean Water Program field staff immediately initiates an IC/ID investigation.

Phosphorus is a nutrient that is naturally occurring in soil and rocks which can also be introduced into our watersheds from anthropogenic sources such as fertilizers, failing septic systems, wastewater treatment plants and disturbed land areas. A modest increase in phosphorous concentrations, under the right conditions, can set off a chain of undesirable events in fresh water systems including accelerated plant growth, algae blooms and low dissolved oxygen. The DWM Workgroup action level for ortho-phosphate is 2.0 mg/L which is based on the EPA MSGP. If a routine sample exceeds the ortho-phosphate action levels, Clean Water Program field staff will re-sample at the same location within two business days to confirm the exceedance. If the confirmation sample also exceeds the action level, a split sample is sent to a water quality laboratory for more accurate analysis. If the exceedance results are confirmed in the laboratory, Clean Water Program field staff immediately initiates an IC/ID investigation.

Nitrate is a nutrient that is naturally occurring in soil, rocks and commonly found in groundwater samples. Nitrate can also be introduced into our watersheds from anthropogenic sources such as fertilizers, failing septic systems and animal waste. The DWM Workgroup action level for nitrate is 10.0 mg/L which is based on the San Diego Region Basin Plan and drinking water standards. If a routine sample exceeds the nitrate action levels, Clean Water

Program field staff will re-sample at the same location within two business days to confirm the exceedance. Due to situations where groundwater is present or the water temperature is high, Clean Water Program field staff uses their best professional judgment to determine if further investigations are necessary. The best professional judgment of Clean Water Program field staff takes into account the characteristics of each sample location, and historical data to determine whether sample data exceedances require follow-up or further investigation.

MBAS are analyzed to detect detergent pollution from residential, commercial, or industrial washing activities. The DWM workgroup action level for MBAS is 1.0 mg/L which is based on the San Diego Region Basin Plan standards. If a routine sample exceeds the nitrate action levels, Clean Water Program field staff will re-sample at the same location within two business days to confirm the exceedance. If the confirmation sample also exceeds the action level, a split sample is sent to a water quality laboratory for more accurate analysis. If the exceedance results are confirmed in the laboratory, Clean Water Program field staff immediately initiates a formal IC/ID investigation.

4.4 Laboratory Analytes

Twenty five percent of all primary dry weather monitoring sites are required to be analyzed for oil and grease, chlorpyrifos and diazinon, dissolved metals (cadmium, copper, lead and zinc), and bacteria indicators (total coliform, fecal coliform and *Enterococcus*) in the laboratory.

Oil and Grease analysis is used to detect hydrocarbon pollution that may originate from variety of sources including vehicle washing activities, illegal discharges from commercial restaurants, automobile repair facilities and parking lots and streets. The DWM Workgroup action level for Oil and Grease is 15 mg/L which is based on the EPA MSGP. If a routine sample exceeds the Oil and Grease action levels, Clean Water Program field staff will re-sample at the same location within two business days to confirm the exceedance. If the exceedance results are confirmed, Clean Water Program field staff immediately initiates an IC/ID investigation.

Total Hardness measures the amount of polyvalent cat ions in water. Results are expressed in mg/L of $CaCO_3$. Determining the total hardness in a sample is necessary in order to properly assess the toxicity of dissolved metals. The DWM Workgroup has adopted the California Toxics Rule (CTR) for assessing exceedances for dissolved metals. The CTR applies hardness-based water quality objectives to all dissolved metals. The CTR is used to establish an action level for dissolved trace metals. The CTR equations provide benchmarks based on the total hardness of the sampled water, with the action levels increasing as hardness increases.

Metal concentrations are naturally occurring in the environment, but can also be introduced into our watersheds from a variety of anthropogenic sources such as automobiles, automobile repair facilities, car washing, and industrial activities. All water samples were analyzed to determine the concentration of the following dissolved metals; cadmium, copper, lead and zinc. The DWM Workgroup has adopted the California Toxics Rule (CTR) for assessing exceedances

for dissolved metals. If a routine sample exceeds the action levels for dissolved metals, Clean Water Program field staff immediately initiates an IC/ID investigation.

Chlorpyrifos and diazinon are organophosphate pesticides used to control insect pests. At this time, chlorpyrifos is only available for agricultural use. As of December 31, 2004, it became unlawful to sell outdoor, non-agricultural products containing diazinon however; it is still legal for consumers to use diazinon products purchased before this date, provided that they follow all label directions and precautions. The DWM workgroup action level for chlorpyrifos and diazinon is .5 (μg/L). If a routine sample exceeds the action levels for chlorpyrifos and diazinon, Clean Water Program field staff immediately initiates an IC/ID investigation.

Bacteria and viruses are ubiquitous microorganisms that thrive under certain environmental conditions. Elevated bacteria levels can result from natural sources, stormwater pollution and sewage spills. Water containing excessive pathogens (bacteria, viruses and protozoa) can alter the aquatic habitat and create a harmful environment for humans and aquatic life. An 80th-percentile statistical confidence interval test, developed by the DWM Workgroup in 2009 is currently used to determine action level exceedances for all three bacteria indicators (total coliform, fecal coliform and *Enterococcus*). The current action levels are 130,000 MPN/100 ml for total coliform, 13,000 MPN/100 ml for fecal coliform and 7,000 MPN/100 ml for and *Enterococcus*. If a routine sample exceeds the action levels for bacteria indicators, Clean Water Program field staff will re-sample at the same location within two business days to confirm the exceedance. If the exceedance results are confirmed, Clean Water Program field staff immediately initiates an IC/ID investigation.

Table 4.0 Action Levels for Field Screening and Laboratory Analytical Parameters		
Field Screening Analytes	**Action Levels[1]**	**Source/Notes**
pH	<6.5 or >9.0	Basin plan with allowance for elevated pH due to excessive photosynthesis.
Ortho-Phosphate as P	2.0 mg/L	U.S. Environmental Protection Agency (EPA) Multi-sector General Permit (MSGP)
Nitrate-N	10.0 mg/L	Basin plan and drinking water standards.
Ammonia-N	1.0 mg/L	Dry Weather Monitoring Workgroup experience.
Turbidity (NTU)	Best Professional Judgment (BPJ)	EPA MSGP is 5 NTU. Typical levels in Encinitas are substantially higher. BPJ is considerate of structure type, natural sites with excessive vegetation and sites with ponded water.
Temperature (Celsius)	BPJ	Average temperature range in the City of Encinitas is 22.04° C to 24.49 ° C. BPJ is considerate of season, air temperature, structure type, and location.
Conductivity (mS/cm)	BPJ	Conductivity may be highly elevated in some regions due to high Total Dissolved Solids/groundwater exfiltration to surface water, mineral dissolution and seawater intrusion. Normal source identification and discharge elimination is not effective in these situations.
Surfactants/MBAS	1.0 mg/L	Basin plan with allowance based on DWM Workgroup field experience and possible field reagent interferences.
Laboratory Analytes	**Action Levels**	**Source/Notes**
Oil and Grease	15 mg/L	EPA MSGP
Chlorpyrifos	.5 (µg/L)	Highly elevated levels should be investigated aggressively as with other potential illicit connections and illicit discharges. Response to diazinon and chlorpyrifos levels above 0.5 (µg/L) should focus on education and outreach to potential dischargers in the target drainage basin.
Diazinon	.5 (µg/L)	
Dissolved Cadmium	California Toxics Rule (CTR)	Use CTR Table, 1-hour criteria to determine the appropriate action level for each sample.
Dissolved Copper		
Dissolved Lead		
Dissolved Zinc		
Total Coliform	130,000 (cfu/100ml)	Action levels are based on upper 80% confidence levels from the DWM Workgroup 2002-2007 dry weather analytical monitoring data.
Fecal Coliform	13,000 (cfu/100ml)	
Enterococcus	7,000 (cfu/100ml)	

[1]The referenced action levels are not the sole criteria for initiating a source identification investigation. Dry weather monitoring data are interpreted using a variety of available information.

5.0 Dry Weather Monitoring Results

The City of Encinitas lies on the northern coast of San Diego County, 21 miles north of the City of San Diego. The City covers approximately 19.57 square miles with a population of just over 65,171 people. The city is located entirely in the Carlsbad Watershed and is bounded to the west by the Pacific Ocean, to the north by the Batiquitos Lagoon in the City of Carlsbad, unincorporated areas of the County of San Diego and the City of San Marcos, to the east by unincorporated areas of the County of San Diego and to the south by the San Elijo Lagoon and the City of Solana Beach.

The City is comprised of the following seven sub-basins:

1. Cardiff (CBS)
2. Lower Escondido Creek (ESC)
3. La Costa South (LCS)
4. Leucadia (LUC)
5. Encinitas (ENC)
6. Rancho Santa Fe (RSF)
7. Lux Canyon (LUX)

The following subsections contain analyses of the 2010 dry weather data collected for each of the seven sub-basins located within the City of Encinitas.

5.1 Cardiff Sub-basin

Dry weather monitoring in the Cardiff sub-basin (CBS) was conducted at a total of seven primary locations. Land use in the sub-basin is primarily residential with some commercial and agricultural uses in the upper reaches of the sub-basin. All run-off in the Cardiff sub-basin drains into the San Elijo Lagoon.

Of the seven designated locations for routine monitoring in 2010, five locations were observed to have flowing water and two locations had ponded water. All seven locations with flowing and ponded water were field screened and analytical lab samples were collected at two locations (CBS-2 and SEL-2). CBS-2 and SEL-2 were both selected for full laboratory analysis to assure continuity from previous years of monitoring and to assist in long term trend analysis. CBS-1, CBS-4 and CBS -7 were selected for bacteria analysis to help further characterize the water quality in the Cardiff sub-basin.

Of the seven locations where routine field screening was performed, seven of the sites sampled exceeded the action levels for one of the following analytes: turbidity, conductivity, nitrate and fecal coliform. Table 5.0 summarizes the action levels exceeded in the Cardiff sub-basin.

Table 5.0 Cardiff Sub-Basin Action Level Exceedances						
Station ID	**Date**	**Water Flow**	**Analyte**	**Initial Result**	**Unit**	**Action Level**
CBS-1	8/11/10	Ponded	Turbidity	8.0	NTU	5.0
CBS-2	7/26/10	Flowing	Conductivity	5.04	mS/cm	5.0
CBS-2	7/26/10	Flowing	Turbidity	13.50	NTU	5.0
CBS-2	7/26/10	Flowing	Fecal Coliform	16,000	cfu/100ml	13,000
CBS-4	7/26/10	Flowing	Conductivity	7.29	mS/cm	5.0
CBS-7	7/26/10	Flowing	Turbidity	13.30	NTU	5.0
CBS-8	7/28/10	Flowing	Turbidity	13.30	NTU	5.0
CBS-9	9/28/10	Flowing	Nitrate (NO3-N	>11.3	mg/L	10.0
CBS-9	9/28/10	Flowing	Turbidity	6.40	NTU	5.0
SEL-2	8/18/10	Ponded	Conductivity	6.49	mS/cm	5.0
SEL-2	8/18/10	Ponded	Turbidity	37.50	NTU	5.0

CBS-1

CBS-1 is a concrete channel storm drain that drains both residential areas and an industrial facility into the north end of the San Elijo Lagoon. The water sample at CBS-1 contained slightly elevated turbidity due to ponding. No other constituents analyzed at this site including bacteria analysis exceeded the dry weather monitoring action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed at this site.

CBS-2

CBS-2 is an open channel that drains both residential and commercial areas into the north end of the San Elijo Lagoon. CBS-2 was one of the sites selected for full analytical monitoring in 2010. The routine water sample at CBS-2 contained elevated conductivity, turbidity and fecal coliform. While this site is continuously flowing, due to the fact that it is an open channel site, adjacent to Coast Highway 101 and an undeveloped North County Transit District Right of Way next to the train tracks, the channel is often exposed to sediment, trash and supports significant algal growth. A confirmation water sample taken within two business days at CBS-2 contained elevated conductivity, pH and turbidity; however the exceedance for fecal coliform was no longer present. The water temperature was higher than normal (27.5 degrees Celsius) which likely resulted in the pH exceedance. The exceedance for conductivity was consistent with the previous result and is believed to be attributable to the presence of groundwater in the surrounding area. The turbidity exceedance was likely a result of the algae and sediment in the storm drain channel. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation was not warranted and was not performed. Table 5.1 below summarizes the results of the confirmation sampling for CBS-2.

Table 5.1 CBS-2 Confirmation Sampling Results						
Station ID	**Date**	**Water Flow**	**Analyte**	**Confirmation Result**	**Unit**	**Action Level**
CBS-2	7/28/10	Flowing	Fecal Coliform	6,650	cfu/100ml	13,000
CBS-2	7/28/10	Flowing	Conductivity	6.54	mS/cm	5.0
CBS-2	7/28/10	Flowing	pH	9.36	pH	<6.5 or >9.0
CBS-2	7/28/10	Flowing	Turbidity	14.70	NTU	5.0

CBS-4

CBS-4 is located in a detention basin that drains both agricultural nurseries and residential areas and discharges directly to San Elijo Lagoon. The water sample at CBS-4 was obtained from a flowing outfall in the detention basin and contained elevated conductivity. The sample was clear in clarity and colorless and no other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity was not warranted and was not performed.

CBS-7

CBS-7 is a concrete channel located in an HOA park which drains both residential and commercial facilities (agricultural nurseries) that ultimately into the north end of the San Elijo Lagoon. The water sample at CBS-7 contained elevated turbidity most likely due to red clay/iron deposits located at the sampling site. Coarse particulates and insects and algae, were noted in the runoff characteristics at this site. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

CBS-8

CBS-8 is a concrete channel located in an HOA park which drains both residential and commercial facilities (agricultural nurseries) and ultimately into the north end of the San Elijo Lagoon. The water sample at CBS-8 contained elevated turbidity. Insects and algae were noted in the runoff characteristics at this site. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

CBS-9

CBS-9 is a catch basin located in a residential area that ultimately drains into the north end of the San Elijo Lagoon. This catch basin is historically dry but was noted as flowing during routine monitoring in 2010. A musty odor and yellow color, along with floating organic matter were noted in the runoff characteristics. The water sample at CBS-9 contained elevated nitrate and slightly elevated turbidity. No other constituents analyzed at this site exceeded action levels. Clean Water Program field staff drove through the residential neighborhood attempting

to find the source of the dry weather flow, but they were unable to determine the origin. Clean Water Program field staff returned to this site within one business days to confirm the sample exceedances; however they were unable to resample because the catch basin was dry. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity and nitrate was not warranted and was not performed.

SEL-2

SEL-2 is located in an open channel that drains a residential area directly into the San Elijo Lagoon. SEL-2 was one of the sites selected for full analytical monitoring in 2010. The water sample was taken from an area with excessive vegetation and ponded water. The sample contained elevated conductivity and turbidity. No other constituents analyzed at this site exceeded action levels. Historical data at this site indicates that conductivity and turbidity exceedances at this location are common due to saltwater intrusion, and the excessive vegetation and the ponding that occurs in this area. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity and turbidity was not warranted and was not performed.

All of the data results collected in the Cardiff sub-basin during the 2010 Dry Weather Monitoring Program are included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2010 Field Screening and Analytical Monitoring Results Table in Appendix C-4. The map in Figure 5.0 shows the locations of all the dry weather monitoring stations in the Cardiff sub-basin. Photographs of the monitoring sites are available in Appendix C-3.

Figure 5.0



Cardiff Sub-basin

5.2 Lower Escondido Creek Sub-basin

Dry weather monitoring in the Lower Escondido sub-basin (ESC) included a total of three primary locations. The land uses consist primarily of residential and open space areas with a few commercial establishments interspersed throughout the sub-basin. All run-off in the Lower Escondido Creek sub-basin drains to the San Elijo Lagoon.

Of the three designated locations for routine monitoring in 2010, two locations were observed to have flowing water and one location had ponded water. All three locations were field screened only. One of the sites (ESC-2) sampled had results exceeding the action levels for conductivity and turbidity. Table 5.2 below summarizes the action levels exceeded in the Lower Escondido Creek Sub-basin during routine monitoring.

Table 5.2 Lower Escondido Creek Sub-Basin Action Level Exceedances

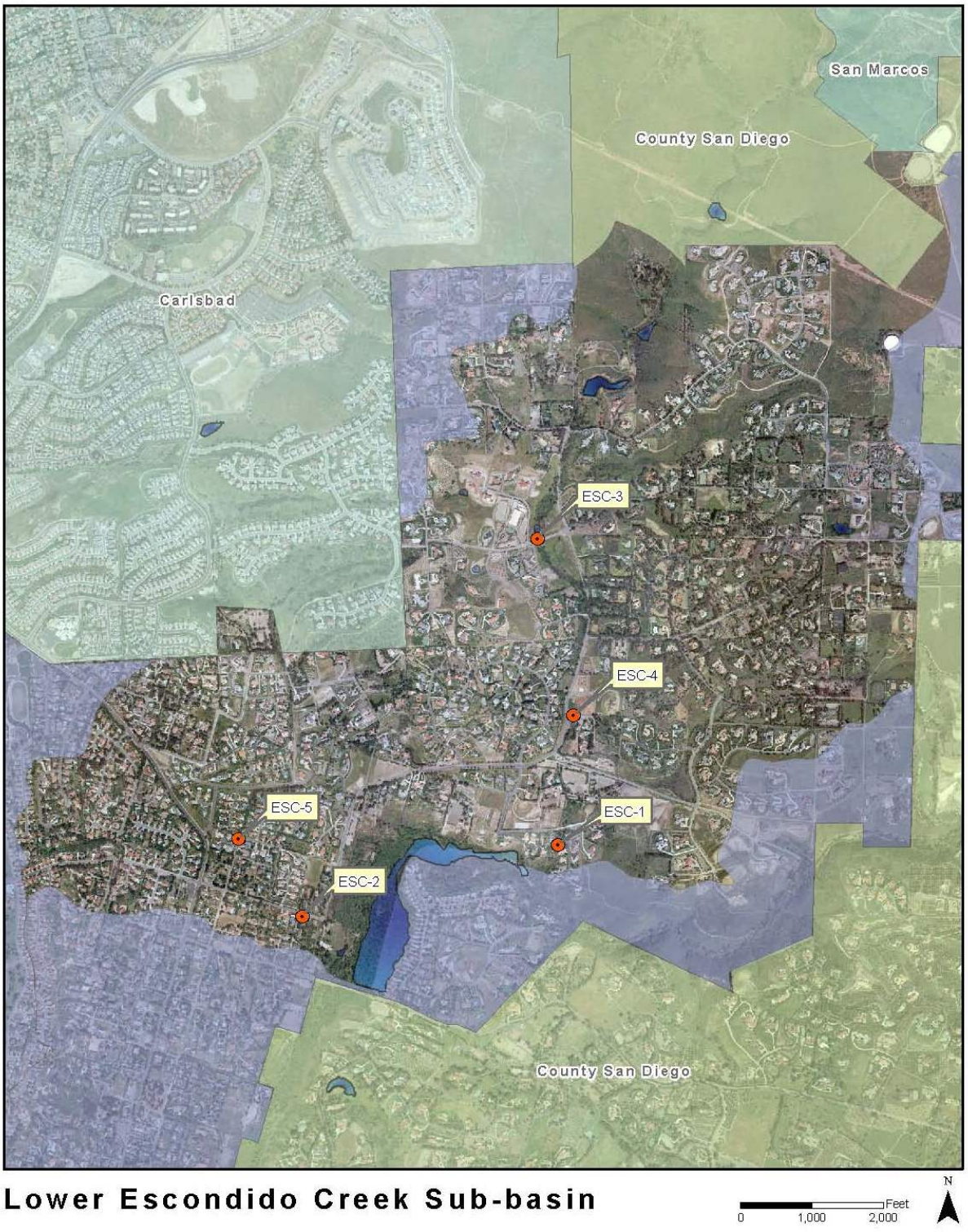
Station ID	Date	Water Flow	Analyte	Initial Result	Unit	Action Level
ESC-2	7/21/10	Ponded	Conductivity	8.23	mS/cm	5.0
ESC-2	7/21/10	Ponded	Turbidity	45.70	NTU	5.0

ESC-2

ESC-2 is located in an open channel adjacent to a residential area along Escondido Creek. The water sample at ESC-2 contained elevated conductivity and turbidity as a result of shallow water with excessive sediment and algae at this location. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

All of the data results collected in the Lower Escondido Creek sub-basin during the 2010 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2010 Field Screening and Analytical Monitoring Results Table in Appendix C-4. The map in Figure 5.1 shows the locations of all the dry weather monitoring stations in the Lower Escondido Creek sub-basin. Photographs of the monitoring sites are available in Appendix C-3.

Figure 5.1


San Marcos
County San Diego
Carlsbad
ESC-3
ESC-4
ESC-5
ESC-1
ESC-2
County San Diego
Lower Escondido Creek Sub-basin
N
Feet
0
1,000
2,000

5.3 La Costa South Sub-basin

Dry weather monitoring in the La Costa South sub-basin (LCS) included a total of six primary sites. Land use in this sub-basin encompasses one of the city's largest commercial zones in addition to a significant residential area. All runoff in the La Costa South sub-basin drains to Encinitas Creek. Encinitas Creek flows north into Batiquitos Lagoon in the City of Carlsbad. Monitoring locations in the La Costa South sub-basin were all located within the City of Encinitas.

Of the six designated locations for routine monitoring in 2010, four locations were observed to have flowing water and two locations had ponded water. All six locations were field screened and two were sampled for a full laboratory analysis (LCS-1 and LCS-5) to assure continuity from previous years of monitoring and to retain long-term trend analysis.

There were five routine monitoring water quality exceedances for turbidity in the La Costa South sub-basin in 2010. Table 5.3 summarizes the action levels exceeded in the La Costa sub-basin during routine monitoring.

Table 5.3 La Costa South Sub-Basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Initial Result	Unit	Action Level
LCS-1	8/9/10	Ponded	Turbidity	16.40	NTU	5.0
LCS-4	9/1/10	Ponded	Turbidity	69.10	NTU	5.0
LCS-5	8/18/10	Flowing	Turbidity	21.30	NTU	5.0
LCS-7	7/16/10	Flowing	Turbidity	14.60	NTU	5.0
LCS-8	9/1/10	Flowing	Turbidity	19.80	NTU	5.0

LCS-1

LCS-1 is located in an open channel that drains northward into Encinitas Creek. The surrounding land use in this sub-basin is primarily commercial. The water sample at LCS-1 was taken from ponded water in the channel and was field screened and sampled for full laboratory analysis. Water flow at LCS-1 was significantly constrained due to excessive vegetation and organic matter decay at this site. The sample at LCS-1 contained elevated turbidity. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

LCS-4

LCS-4 is located in a manhole that drains northward into Encinitas Creek. The surrounding land use at this location is primarily commercial. The water sample at LCS-4 was taken from ponded water with soft mud inside the catch basin and was field screened only. The sample at LCS-1 contained elevated turbidity. No other constituents analyzed at this site exceeded action levels.

In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

LCS-5

LCS-5 is located in a manhole that drains northward into Encinitas Creek. The surrounding land use at this location is primarily commercial. The water sample was taken from flowing water and was field screened and sampled for full laboratory analysis. The sample at LCS-5 contained elevated turbidity. Fine particulates and decaying organic matter, were noted in the runoff characteristics at this site. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

LCS-7

LCS-7 is located in a concrete channel that drains northward into Encinitas Creek. The surrounding land use at this location is primarily commercial. The water sample was taken from flowing water and was field screened only. The sample at LCS-7 contained elevated turbidity. Insects and algae were noted in the runoff characteristics at this site. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

LCS-8

LCS-8 is located in a manhole that drains west toward Encinitas Creek. The surrounding land use at this location is primarily residential. The water sample was taken from flowing water and was field screened only. The sample at LCS-8 contained elevated turbidity. The clarity of the water sample was noted as slightly cloudy in the runoff characteristics at this site. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

All of the data results collected in the La Costa South sub-basin during the 2010 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2010 Field Screening and Analytical Monitoring Results Table in Appendix C-4. The map in Figure 5.2 shows the locations of all the dry weather monitoring stations in the La Costa South sub-basin. Photographs of the monitoring sites are available in Appendix C-3.

Figure 5.2


Batiquitos Lagoon
Carlsbad
LCS-2
LCS-9
LCS-1
LCS-7
LCS-4
LCS-5
LCS-8
County San Diego
La Costa South Sub-basin
N
0
2,000
4,000
Feet

5.4 Leucadia Sub-basin

Dry weather monitoring in the Leucadia sub-basin (LUC) included a total of seven locations; six primary sites and one alternate site. Land uses in this area include both residential and commercial with significant, albeit decreasing, numbers of commercial nurseries and growers. All monitoring sites located in the Leucadia sub-basin drain to the Batiquitos Lagoon. Each of the monitoring sites cover very distinct drainage areas throughout the basin. Six of the seven sample locations had flowing water and one location had ponded water. Alternate site LUC-4 was monitored as a substitute for the primary dry site in another sub-basin (LUX-2). All six locations with water were field screened; one sample at LUC-8 was collected for full laboratory analysis to assure continuity from previous years of monitoring and to retain long-term trend analysis.

Of the seven locations where routine field screening was performed the resulting exceedances were variable. Three of the sample sites (LUC-4, LUC-6 and LUC-8) had elevated turbidity. LUC-1 had elevated nitrate results, LUC-6 had elevated pH and LUC-8 had elevated Enterococcus bacteria results.

Table 5.4 below summarizes the action levels exceeded in the Leucadia sub-basin.

Table 5.4 Leucadia Sub-basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Initial Result	Unit	Action Level
LUC-1	7/16/10	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10.0
LUC-4 (Alt)	9/30/10	Flowing	Turbidity	5.60	NTU	5.0
LUC-6	9/28/10	Ponded	pH	9.08	pH	<6.5 or >9.0
LUC-6	9/28/10	Ponded	Turbidity	60.50	NTU	5.0
LUC-8	8/18/10	Flowing	Turbidity	8.60	NTU	5.0
LUC-8	8/18/10	Flowing	Enterococcus	19,750	cfu/100 ml	10,000

LUC-1

LUC-1 is located in a detention basin in the lowest elevations of the Leucadia sub-basin. The basin is located 773 feet east of the Pacific Ocean Shoreline and 250 feet south west of Batiquitos Lagoon. The water sample at LUC-1 was taken from flowing water and was field screened. The water sample at LUC-1 contained elevated nitrates. No other constituents analyzed at this site exceeded action levels. LUC-1 has historically exceeded for nitrate seven times out of the past seven years of monitoring at this location and is identified as a site that is influenced by groundwater infiltration (refer to Table 6.3 and Section 6.4 Nitrate Exceedance for a more detailed discussion). In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated nitrate was not warranted and was not performed.

LUC-4

LUC-4 is located in a concrete detention basin in the upper reaches of the Leucadia sub-basin and drains into the Batiquitos Lagoon when it is full. The water sample was taken from shallow ponded water and was field screened. The sample at LUC-4 contained slightly elevated turbidity results. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

LUC-6

LUC-6 is located in a concrete detention basin in the lower reaches of the Leucadia sub-basin and drains into the Batiquitos Lagoon when it is full. The water sample at LUC-6 was taken from shallow ponded water and was field screened. The sample at LUC-6 contained elevated turbidity and slightly elevated pH results. The temperature at this location was also recorded as higher than average which had a likely effect on the elevated pH result. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity and pH result was not warranted and was not performed.

LUC-8

LUC-8 is located in a manhole that drains north into Batiquitos Lagoon**.** The land use upstream of this site consists of a golf course, residential area and an open space park area. LUC-8 was one of the sites selected for full analytical monitoring in 2010. The water sample at LUC-8 was taken from flowing water that contained elevated *Enterococcus* bacteria and slightly elevated turbidity results. No other constituents analyzed at this site exceeded action levels.

Despite an exceedance for *Enterococcus* and turbidity on the first sampling event, the confirmation sample was significantly below the initial sampling results and the action levels, indicating a transient nature of the source(s). No obvious residential, golf course or park related activities were found to be contributing to the initial exceedance during the confirmation investigation. Table 5.5 below summarizes the results of the confirmation sampling for LUC-8.

Table 5.5 LUC-8 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Confirmation Result	Unit	Action Level
LUC-8	8/19/10	Flowing	*Enterococcus*	2,800	cfu/100 ml	10,000
LUC-8	8/19/10	Flowing	Turbidity	0.60	NTU	5.00

All of the data results collected in the Leucadia sub-basin during the 2010 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2010 Field Screening and Analytical Monitoring Results Table in Appendix C-4. The map in Figure 5.3 shows the locations of all the dry weather monitoring stations in the Leucadia sub-basin. Photographs of the monitoring sites are available in Appendix C-3.

Figure 5.3


Carlsbad
Batiquitos Lagoon
LUC-6
LUC-7
LUC-8
LUC-10
LUC-4
LUC-3
Pacific Ocean
Leucadia Sub-basin
N
Feet
0
1,200
2,400

5.5 Encinitas Sub-basin

Dry weather monitoring in the Encinitas sub-basin (ENC) included a total of thirteen primary locations. This sub-basin covers the oldest area of development in the city and consists primarily of residential and commercial land uses including many nurseries. This sub-basin has the most monitoring locations in the city as it has historically had the most water quality exceedances. Sample locations were chosen based on sampling sites established in the previous dry weather monitoring program and other special studies. The locations monitored in this sub-basin are primarily located along Cottonwood Creek with a few sites located on tributaries to Cottonwood Creek. All run-off in the Encinitas sub-basin drains to the Pacific Ocean via Cottonwood Creek.

Of the thirteen primary locations, ten sites had flowing water to sample and three sites had ponded water. All thirteen locations with water were field screened. Four sites were collected for full laboratory analysis, and another five sites were analyzed for bacteria indicators at the laboratory. Of the thirteen locations sampled and tested, nine of those sites exceeded water quality standards for various field screened analytes. In total, five of the sample sites had elevated turbidity, five sites had elevated nitrates, three sites had elevated conductivity, and one site (ENC-6) exceeded for MBAS and required an IC/ID investigation. Table 5.6 summarizes all of the action levels exceeded in the Encinitas sub-basin during routine monitoring.

Table 5.6 Encinitas Sub-basin Action Level Exceedances						
Station ID	**Date**	**Water Flow**	**Analyte**	**Initial Result**	**Unit**	**Action Level**
ENC-1	8/2/10	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10.0
ENC-3	8/4/10	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10.0
ENC-5	7/28/10	Flowing	Turbidity	25.90	NTU	5.0
ENC-6	7/28/10	Ponded	Conductivity	7.02	mS/cm	5.0
ENC-6	7/28/10	Ponded	MBAS	1.00	mg/L	
ENC-6	7/28/10	Ponded	Nitrate (NO3-N)	>11.3	mg/L	10.0
ENC-6	7/28/10	Ponded	Turbidity	12.90	NTU	5.0
ENC-8	7/21/10	Flowing	Nitrate (NO3-N)	23.84	mg/L	10.0
ENC-10	8/16/10	Flowing	Turbidity	8.40	NTU	5.0
ENC-11	8/16/10	Flowing	Conductivity	7.62	mS/cm	5.0
ENC-11	8/16/10	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10.0
ENC-17	8/30/10	Flowing	Turbidity	62.20	NTU	5.0
ENC-18	8/30/10	Flowing	Conductivity	5.71	mg/L	5.0
ENC-18	8/30/10	Flowing	Turbidity	17.90	NTU	5.0

ENC-1

ENC-1 is located at an outfall at Moonlight Beach that drains directly into to the Pacific Ocean. ENC-1 was one of the sites selected for full analytical monitoring in 2010. The water sample was taken from a flowing outfall and contained elevated nitrates. No other constituents analyzed at this site exceeded action levels. It is has been reasoned that historic elevated nitrate levels are a result of groundwater infiltration observed in this sub-basin (refer to Table 6.3 and Section 6.4 Nitrate Exceedance for a more detailed discussion). In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity and nitrates was not warranted and was not performed.

ENC-3

ENC-3 is located in a natural channel in Cottonwood Creek that drains west toward the Pacific Ocean. Land use in this sub-basin is primarily commercial. The water sample was taken from low flowing water and it was field screened and analyzed for bacteria indicators. The water sample at ENC-3 contained elevated nitrates however, no other constituents analyzed at this site exceeded action levels. It has been reasoned that the elevated nitrates are a result of groundwater infiltration that is historically observed in this sub-basin (refer to Table 6.3 and Section 6.4 Nitrate Exceedance for a more detailed discussion). In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated nitrate was not warranted and was not performed.

ENC-5

ENC-5 is located in a natural channel in Cottonwood Creek that drains west toward the Pacific Ocean. Land use in this sub-basin is primarily commercial. The water sample was taken from flowing water and it was field screened and analyzed for bacteria indicators. The water sample at ENC-5 contained elevated turbidity. No other constituents analyzed at this site exceeded action levels. Fine and coarse particulates and algae were noted in the runoff characteristics at this site. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

ENC-6

ENC-6 is located in a natural channel in Moonlight Creek that drains south toward Cottonwood Creek and ultimately drains into the Pacific Ocean. Land use upstream from this site is primarily residential. The water sample was taken from ponded water and it was field screened and analyzed for bacteria indicators. The water sample at ENC-6 contained elevated conductivity, nitrates, turbidity and slightly elevated MBAS. No other constituents analyzed at this site exceeded action levels. A confirmation sample for the exceedances the next business day revealed that there were still exceedances for conductivity, nitrates, turbidity and slightly elevated MBAS in addition to low pH at this site. Table 5.7 below summarizes the results of the confirmation sampling for ENC-6.

Table 5.7 ENC-6 Confirmation Sampling Results

Station ID	Date	Water Flow	Analyte	Confirmation Result	Unit	Action Level
ENC-6	7/30/10	Ponded	Conductivity	7.06	mS/cm	5.0
ENC-6	7/30/10	Ponded	MBAS	1.25	mg/L	1.0
ENC-6	7/30/10	Ponded	Nitrate (NO3-N)	>11.3	mg/L	10.0
ENC-6	7/30/10	Ponded	pH	6.43	pH	<6.5 or >9.0
ENC-6	7/30/10	Ponded	Turbidity	13.30	NTU	5.0
ENC-6	8/2/10	Ponded	Conductivity	7.01	mS/cm	5.0
ENC-6	8/2/10	Ponded	MBAS	1.25	mg/L	1.0

It has been well reasoned that the elevated nitrates are a result of groundwater infiltration that is often observed in this sub-basin. In consideration of these factors and supported by best professional judgment, an upstream investigation specifically for the elevated nitrate and conductivity was not warranted and was not performed. Clean Water Program field staff did, however initiate an IC/ID investigation upstream of ENC-6 to determine the source of the slightly elevated MBAS. Table 5.12 summarizes all of the investigation activities that were performed in the area.

Table 5.8 ENC-6 IC/ID Investigation Activities			
Station ID	**Date of Inspection**	**Address/Location**	**Result**
ENC-6	8/2/10	ENC-6	Clean Water Program staff collected a split sample at the original sampling site with ponded water. The sample was field screened with a Chemetrics MBAS test kit and resulted in a slightly elevated MBAS (1.25 mg/L). Clean Water Program field staff continued analysis further upstream.
ENC-6b	8/2/10	Upstream from ENC-6 in Moonlight Creek	Investigation sample was taken from a ponded location upstream of original site. The sample was field screened with a Chemetrics MBAS test kit and resulted in a slightly elevated MBAS (1.25 mg/L). Clean Water Program field staff continued analysis further upstream.
ENC-6c	8/2/10	Further upstream from ENC-6b in Moonlight Creek	Investigation sample was taken from a ponded location upstream of original site. The sample was field screened with a Chemetrics MBAS test kit and resulted in a slightly elevated MBAS (1.00 mg/L). The results from the field screening were inconsistent and inconclusive.

Clean Water Program field staff temporarily suspended the investigation pending the MBAS laboratory results for ENC-6. On 8/04/10, laboratory results confirmed that the MBAS results were far below the MBAS action level (refer to Table 5.13). Clean Water Program field staff also investigated possible interferences with the CHEMetrics test kit and believe that the suspected groundwater infiltration which often contains higher chloride values may have positively interfered with the test kit results. In consideration of these factors and supported by best professional judgment, continued investigation for the elevated MBAS was not warranted and was not performed. Table 5.9 summarizes the laboratory sampling results for ENC-6.

Table 5.9 ENC-6 IC/ID Laboratory Sampling Results						
Station ID	**Sample Date**	**Water Flow**	**Analyte**	**IC/ID Result**	**Unit**	**Action Level**
ENC-6	8/2/10	Ponded	MBAS	<0.04	mg/L	1.0

ENC-8

ENC-8 is located in a natural channel in Cottonwood Creek that drains west toward the Pacific Ocean. Land use surrounding this site is primarily commercial. The water sample was taken from flowing water and it was field screened and analyzed for bacteria indicators. The water sample at ENC-8 contained elevated nitrates. No other constituents analyzed at this site exceeded action levels. Follow-up sampling on the next business day concluded that nitrate concentrations still exceeded action levels at this site. Table 5.10 below summarizes the results of the confirmation sampling for ENC-8.

Table 5.10 ENC-8 Confirmation Sampling Results						
Station ID	**Date**	**Water Flow**	**Analyte**	**Confirmation Result**	**Unit**	**Action Level**
ENC-8	7/22/10	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10.0

It has been well reasoned that the elevated nitrates are a result of groundwater infiltration that is often observed in this sub-basin. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated nitrate was not warranted and was not performed.

ENC-10

ENC-10 is located in a natural channel in Cottonwood Creek that drains west toward the Pacific Ocean. Land use upstream from this site is comprised of both residential and commercial areas. ENC-10 was one of the sites selected for full analytical monitoring in 2010. The water sample was taken from flowing water in a naturally vegetated area. The water sample at ENC-10 contained slightly elevated turbidity. No other constituents analyzed at this site exceeded action levels. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

ENC-11

ENC-11 is located in a natural channel in Cottonwood Creek that drains west toward the Pacific Ocean. Land use upstream from this site is primarily residential. The water sample was taken from flowing water and it was field screened and analyzed for bacteria indicators. The water sample at ENC-11 contained elevated conductivity and nitrates. No other constituents analyzed at this site exceeded action levels. Follow-up sampling on the next business day concluded that conductivity and nitrate concentrations still exceeded action levels at this site. Table 5.11 below summarizes the results of the confirmation sampling for ENC-11.

Table 5.11 ENC-11 Confirmation Sampling Results						
Station ID	**Date**	**Water Flow**	**Analyte**	**Confirmation Result**	**Unit**	**Action Level**
ENC-11	8/18/10	Flowing	Conductivity	7.32	mS/cm	5.0
ENC-11	8/18/10	Flowing	Nitrate (NO3-N)	>11.3	mg/L	10.0

It is believed that the elevated conductivity and nitrates are a result of groundwater infiltration that is often observed in this sub-basin (refer to Table 6.3 and Section 6.4 Nitrate Exceedance for a more detailed discussion). In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity and nitrate was not warranted and was not performed.

ENC-17

ENC-17 is located in a manhole that drains west toward the Pacific Ocean. Land use upstream from this site is primarily residential. The water sample was taken from flowing water in the storm drain and was field screened only. The water sample at ENC-12 contained elevated turbidity. No other constituents analyzed at this site exceeded action levels. Fine and coarse particulates, decaying organic matter and trash and were noted in the runoff characteristics at this site. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

ENC-18

ENC-18 is located in a manhole in the upper reaches of the Encinitas sub-basin. Land uses near this site include residential areas, a golf course and significant, albeit decreasing numbers of commercial nurseries and growers. The water sample was taken from flowing water and was field screened only. The water sample contained elevated concentrations of conductivity and turbidity. No other constituents analyzed at this site exceeded action levels. Fine particulates, decaying organic matter and insects were noted in the runoff characteristics at this site. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity and turbidity was not warranted and was not performed.

Groundwater in the Encinitas Sub-basin

Historically consistent nitrate and conductivity exceedances in the Encinitas sub-basin support a groundwater source. As such, in 2010 it has been reasoned that groundwater flows are the cause for the exceedances in nitrate and the high results or exceedances of conductivity at ENC-1, ENC-3, ENC-6, ENC-8, and ENC-11. The conductivity exceedances are persistent from year to year and have been consistently detected at the primary groundwater tributaries in the sub-basin where ENC-6 and ENC-11 are located. A historical analysis of these sites show that they have exceeded for nitrates multiple times since 2002 (refer to Table 6.3). The conductivity exceedances have been consistently accompanied by elevated levels of nitrate. The five nitrate

exceedances in 2010 are all located downstream of the confluence of the groundwater tributaries and the other flows in Cottonwood Creek. Three of these stations, ENC-1, ENC-3 and ENC-6, are all located west of Pacific Coast Highway 101 and samples at these locations are collected within 1,500 feet of each other. All of these sampling locations are near the topographic low point in this sub-basin near the coast. Nitrate concentrations remain consistent in the reach along Moonlight Creek and Cottonwood Creek. Further discussion of nitrate and conductivity exceedances is located in Section 6.3 of this report.

All of the data results collected in the Encinitas sub-basin during the 2010 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2010 Field Screening and Analytical Monitoring Results Table in Appendix C-4. The map in Figure 5.4 shows the locations of all the dry weather monitoring stations in the Encinitas sub-basin Photographs of the monitoring sites are available in Appendix C-3.

Figure 5.4


ENC-18
ENC-15
ENC-14
ENC-8
ENC-3
ENC-1
ENC-6
ENC-9
ENC-17
ENC-12
ENC-10
ENC-4
ENC-5
ENC-11
Encinitas Sub-basin
N
Feet
0
1,200
2,400

5.6 Rancho Santa Fe Sub-basin

The dry weather monitoring locations included two primary sites in the Rancho Santa Fe (RSF) sub-basin. Land use in this area is primarily residential with few commercial facilities also located in the sub-basin. All run-off in this sub-basin drain to Escondido Creek which feeds into the San Elijo Lagoon.

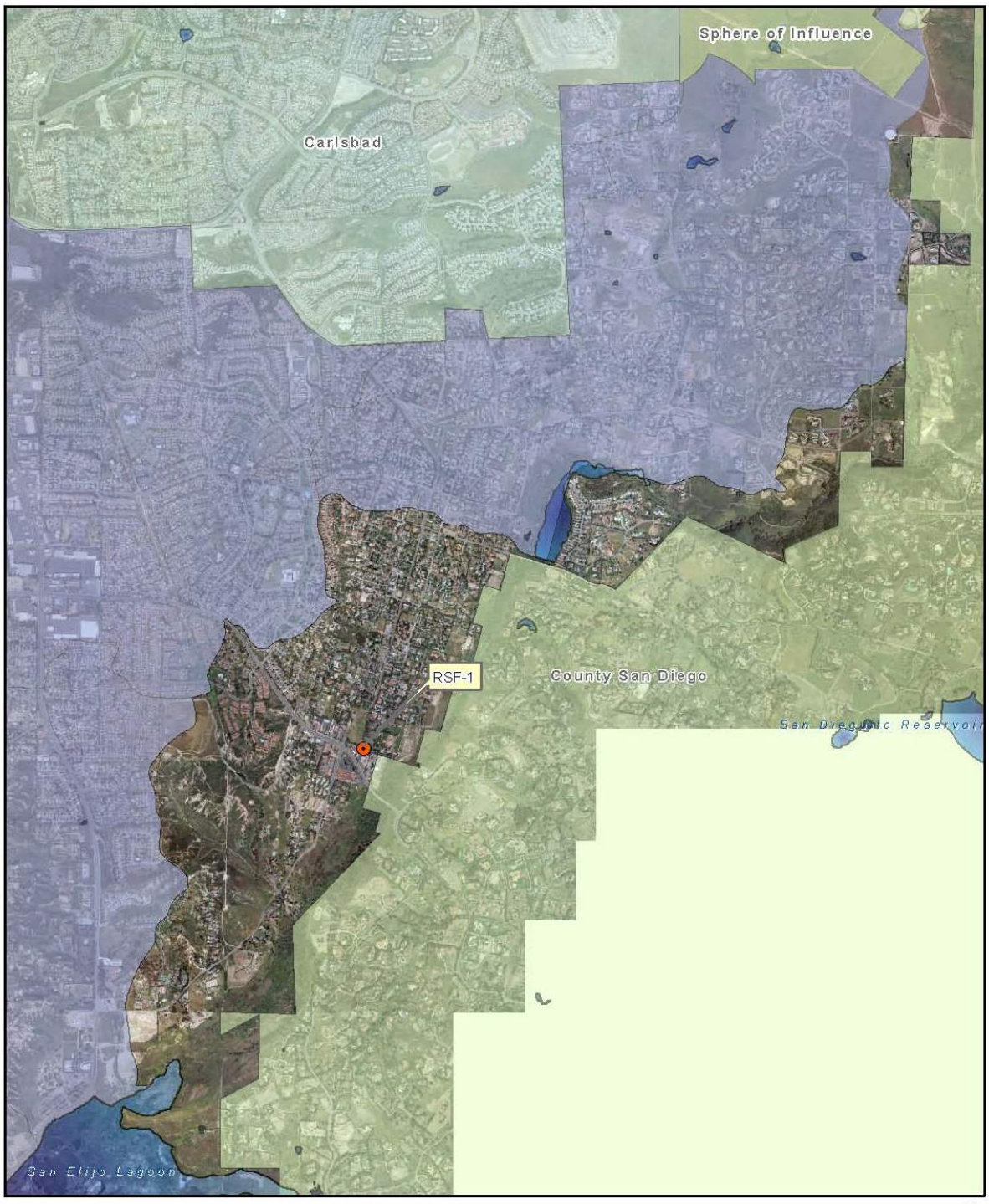
Of the two designated locations for routine monitoring in 2010, one location had flowing water (RSF-4) and one location was ponded (RSF-1). Both locations were field screening and analytical lab samples were also collected at RSF-4. Of the two sites that were sampled, there was one water quality exceedance for turbidity in this sub-basin in 2010. Table 5.12 summarizes the action level that was exceeded in the Rancho Santa Fe sub-basin during routine monitoring.

Table 5.12 Rancho Santa Fe Sub-basin Action Level Exceedance

Station ID	Date	Water Flow	Analyte	Initial Result	Unit	Action Level
RSF-1	8/11/10	Ponded	Turbidity	7.30	NTU	5.0

All of the data results collected in the Rancho Santa Fe sub-basin during the 2010 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2010 Field Screening and Analytical Monitoring Results Table in Appendix C-4. The map in Figure 5.5 shows the locations of all the dry weather monitoring stations in the Rancho Santa Fe sub-basin. Photographs of the monitoring sites are available in Appendix C-3.

Figure 5.5


Sphere of Influence
Carlsbad
RSF-1
County San Diego
San Elijo Lagoon
Rancho Santa Fe Sub-basin
N
Feet
0
1,500
3,000

5.7 Lux Canyon Sub-basin

The dry weather monitoring locations included three primary sites and one alternate site in the Lux Canyon sub-basin (LUX). Land use in this area is primarily residential with a few commercial facilities located in the sub-basin. All run-off in the Lux Canyon sub-basin drains to the San Elijo Lagoon.

Of the four designated locations for routine monitoring in 2010, two sites, LUX-1 and SEL-3 had ponded water, and LUX-2 and LUX-3 were completely dry. Both locations with ponded water were field screened and one of the sites (SEL-3) was analyzed for bacteria indicators at the laboratory. Table 5.13 summarizes the action level exceedances in the LUX Canyon sub-basin.

Table 5.13 Lux Canyon Sub-basin Action Level Exceedances

Station ID	Date	Water Flow	Analyte	Initial Result	Unit	Action Level
LUX-1 (Alt)	9/28/10	Ponded	Turbidity	49.70	NTU	5.0
SEL-3	8/11/10	Ponded	Conductivity	7.20	mS/cm	5.0
SEL-3	8/11/10	Ponded	Turbidity	28.20	NTU	5.0

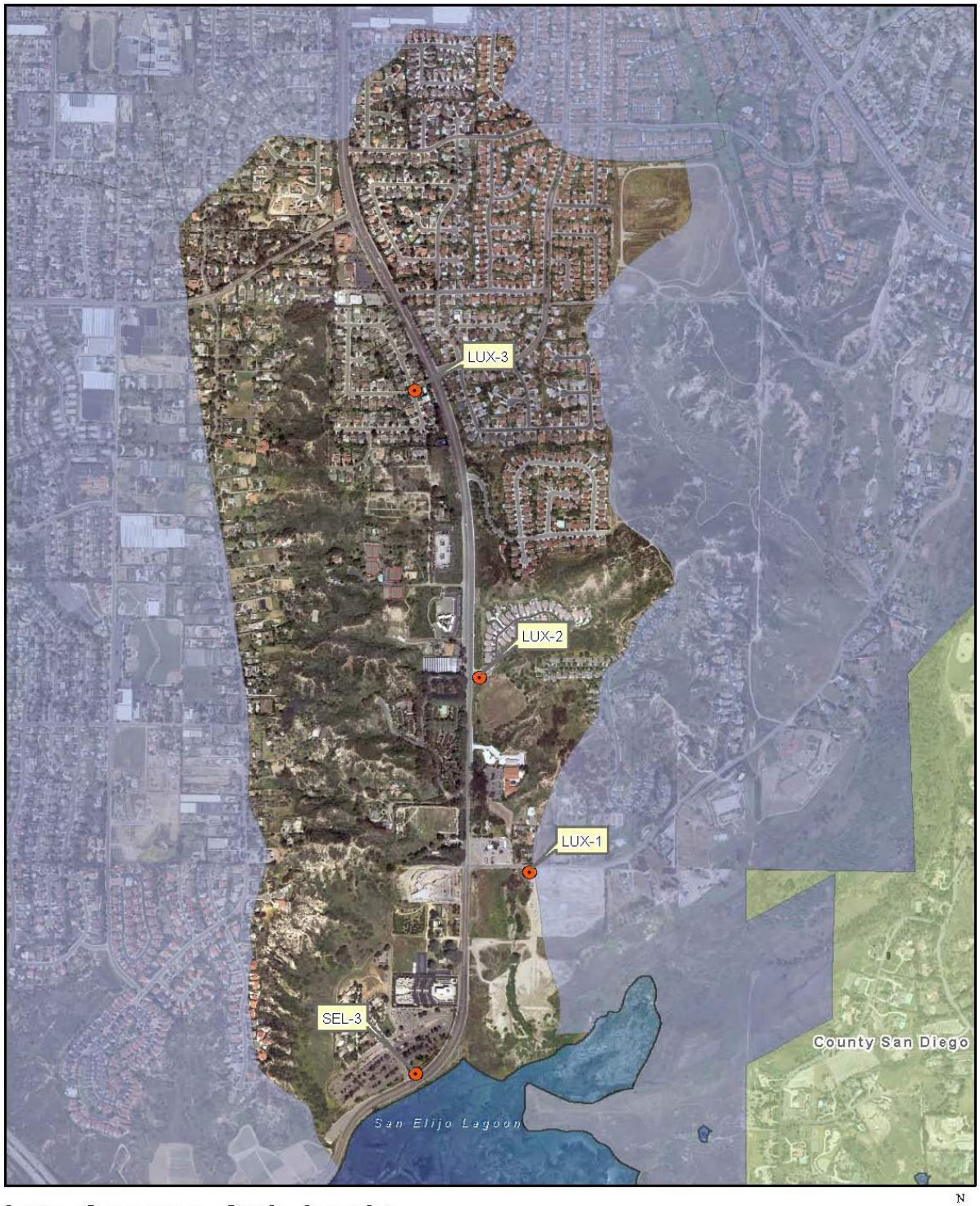
LUX-1
LUX-1 is a concrete channel storm drain that drains into the north east end of the San Elijo Lagoon. Land uses near this site include primarily residential areas. The water sample was taken from shallow ponded water and was field screened only. The water sample contained elevated turbidity. No other constituents analyzed at this site exceeded action levels. Fine particulates, decaying organic matter and algae were noted in the runoff characteristics at this site. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated turbidity was not warranted and was not performed.

SEL-3
SEL-3 is located in a detention basin that drains a community college campus and a residential area. The water sample was taken from ponded water in an area with excessive algae. The water sample at SEL-3 contained elevated conductivity and turbidity. No other constituents analyzed at this site exceeded action levels. Fine particulates, floating algae, and biology that included; ducks, fish and insects were noted in the runoff characteristics at this site. In consideration of these factors and supported by best professional judgment, an upstream investigation for the elevated conductivity and turbidity was not warranted and was not performed.

All of the data results collected in the Lux Canyon sub-basin during the 2010 Dry Weather Monitoring Program is included in the Dry Weather Monitoring Field Datasheets in Appendix C-2 and the 2010 Field Screening and Analytical Monitoring Results Table in Appendix C-4. The

map in Figure 5.6 shows the locations of all the dry weather monitoring stations in the Lux Canyon sub-basin. Photographs of the monitoring sites are available in Appendix C-3.

Figure 5.6



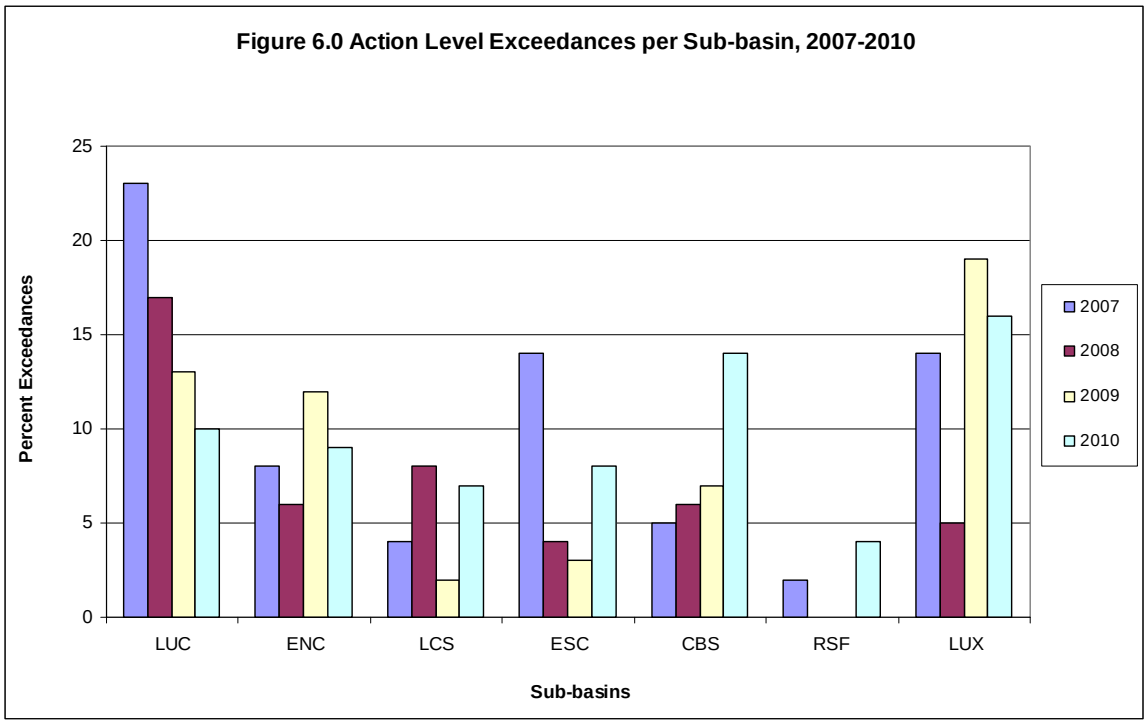
Lux Canyon Sub-basin

6.0 Summary

The City's comprehensive dry weather water quality monitoring conducted in 2010 meets all of the Dry Weather Monitoring requirements as established in the Municipal Storm Water Permit (Order 2007-01) in section II.B.3 of the Receiving Water and Urban Runoff Monitoring and Reporting Program. The data that was collected served to monitor local storm drain facilities and creeks for illicit connections and illicit discharges, allows for characterization of the water quality in the City and subsequent prioritization of sub-basins in the watershed and pollutants of concern in those sub-basins. This section presents a summary of all the dry weather monitoring results.

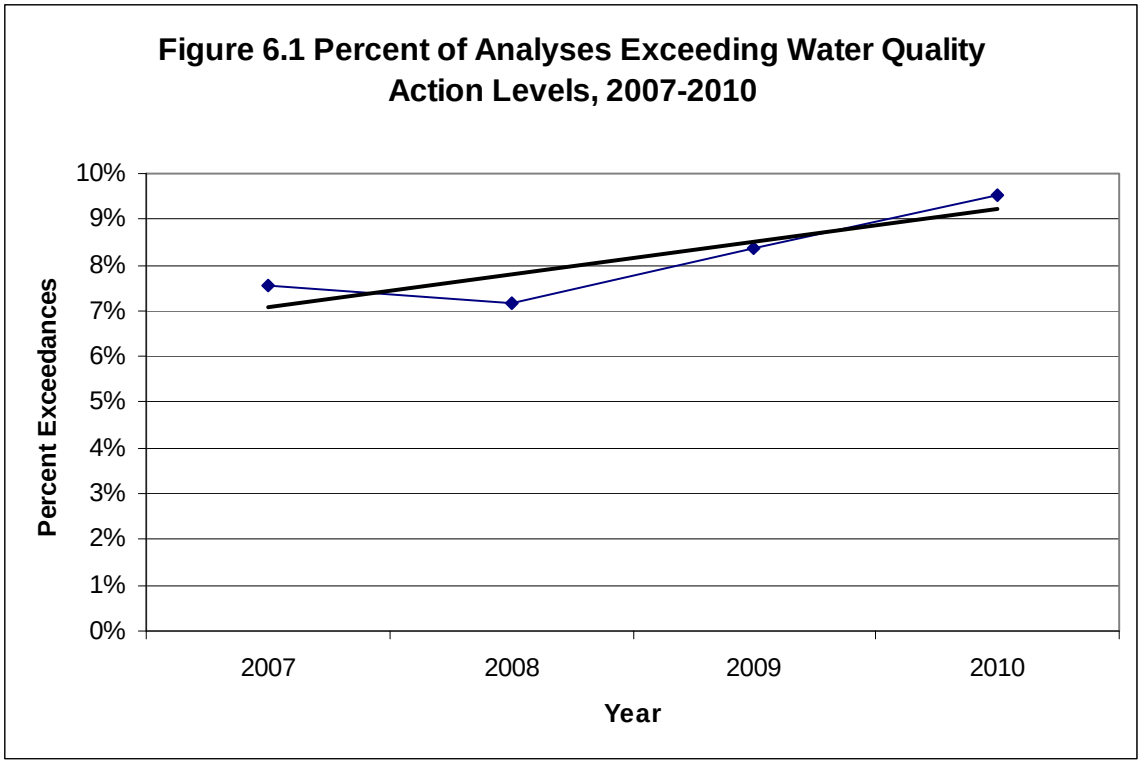
6.1 Water Quality Exceedances and Trends

The City of Encinitas can be sub-divided into seven distinct drainage sub-basins. Figure 6.0 illustrates the percent of analytes exceeding action levels in each sub-basin according to dry weather monitoring data collected from 2007 through 2010.



Data from Figure 6.0 illustrates that water quality results are variable from one year to the next. In 2010, there were increasing exceedance trends in the Cardiff sub-basin (CBS), Rancho Santa Fe sub-basin (RSF) and the LUX Canyon sub-basin (LUX) due primarily to exceedances in turbidity and conductivity.

Figure 6.1 illustrates the total exceedance rate for all sites sampled during each dry weather monitoring year since 2007. In 2010, the total exceedance rate for all analytes was 9.5%, a slight (1%) increase over last year. It is important to note that this increase was due primarily to the multiple exceedances for turbidity, conductivity and nitrate (which are primarily attributed to groundwater influence) and the overall exceedance rates remain low. Overall, less than 10% of all sites sampled in the Dry Weather Monitoring program in 2010 exceeded water quality action levels.



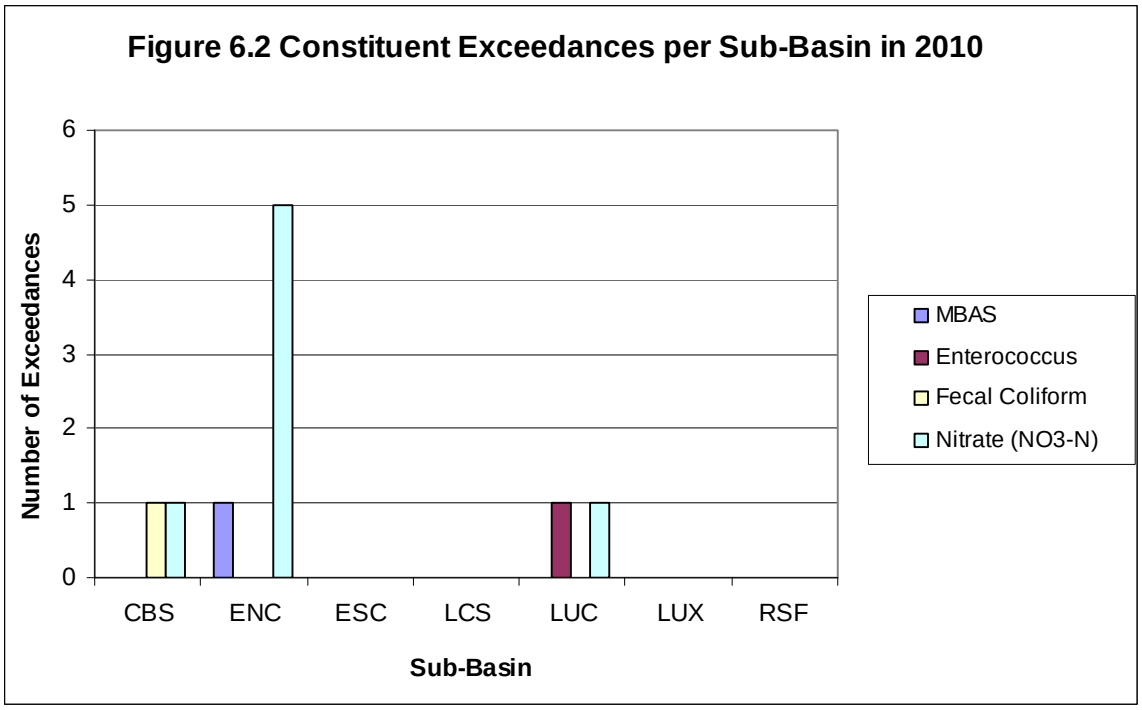
6.2 Prioritization of Constituents of Concern

The following field screened and laboratory analytes in Table 6.0 all have defined action levels and have the potential to be identified as constituents of concern in any given year depending on the exceedance ratios for each analyte.

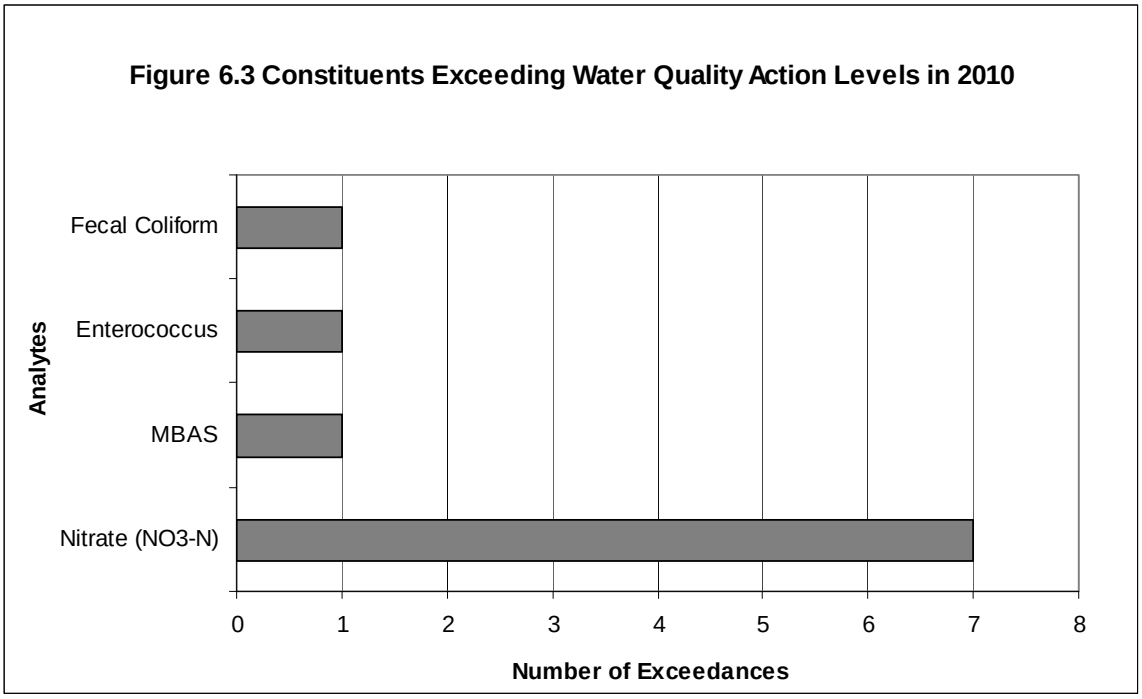
Table 6.0 Potential Constituents of Concern	
Ortho-phosphate	Dissolved Cadmium
Nitrate	Dissolved Copper
Ammonia	Dissolved Lead
Surfactants/MBAS	Dissolved Zinc
Oil and Grease	Total Coliform
Diazinon	Fecal Coliform
Chlorpyrifos	Enterococcus

Turbidity, Temperature, Conductivity and pH are all field screened analytes which are subject to best professional judgment and are not considered in the following COC analysis.

Constituents of Concern (COCs) are identified annually in the Dry Weather Monitoring Report to help prioritize dry weather monitoring activities and inspection activities throughout the City for the following monitoring year. Figure 6.2 illustrates all water quality exceedances for each sub-basin in 2010. Nitrate and bacteria continue to be predominant constituents of concern in the Cardiff, Encinitas and Leucadia sub-basins and are consistent with what the known water quality impairments in the City of Encinitas.



To further prioritize water quality issues in the sub-basins, COCs that exceeded most often were identified in 2010 as illustrated in Figure 6.3. There were seven exceedances for nitrate and one exceedance for MBAS, *Enterococcus* and fecal coliform. Notably, results for ortho-phosphate, ammonia, oil and grease, diazinon, chlorpyrifos, dissolved metals (cadmium, copper, lead and zinc) and total coliform bacteria were not included in the analysis for 2010 because there were no action level exceedances for any of those constituents.



Clean Water Program staff uses the criteria presented in Table 6.1 below for assigning COC priorities. The COCs can be divided into three priority categories of low, medium and high.

Table 6.1 Constituents of Concern Prioritization Criteria

	Criteria	Priority	Recommended Action*
I	Exceedance Ratio <10% and trends are not increasing	Low	Continue routine monitoring and place COC on watch list.
II	Exceedance Ratio greater than 10%, less than 50%	Medium	Increase Monitoring Frequency in Following Dry Weather Program
III	Persistent Exceedances	Medium	Increase Monitoring Frequency in Following Dry Weather Program
IV	Impacting Receiving Waters, 303d listed	High	Special Study, ICID Investigations, BMP implementation
V	Exceedance Ratio >50%	High	Special Study/Investigations
VI	II and III	High	Special Study/Investigations

* Best professional judgment may indicate otherwise.

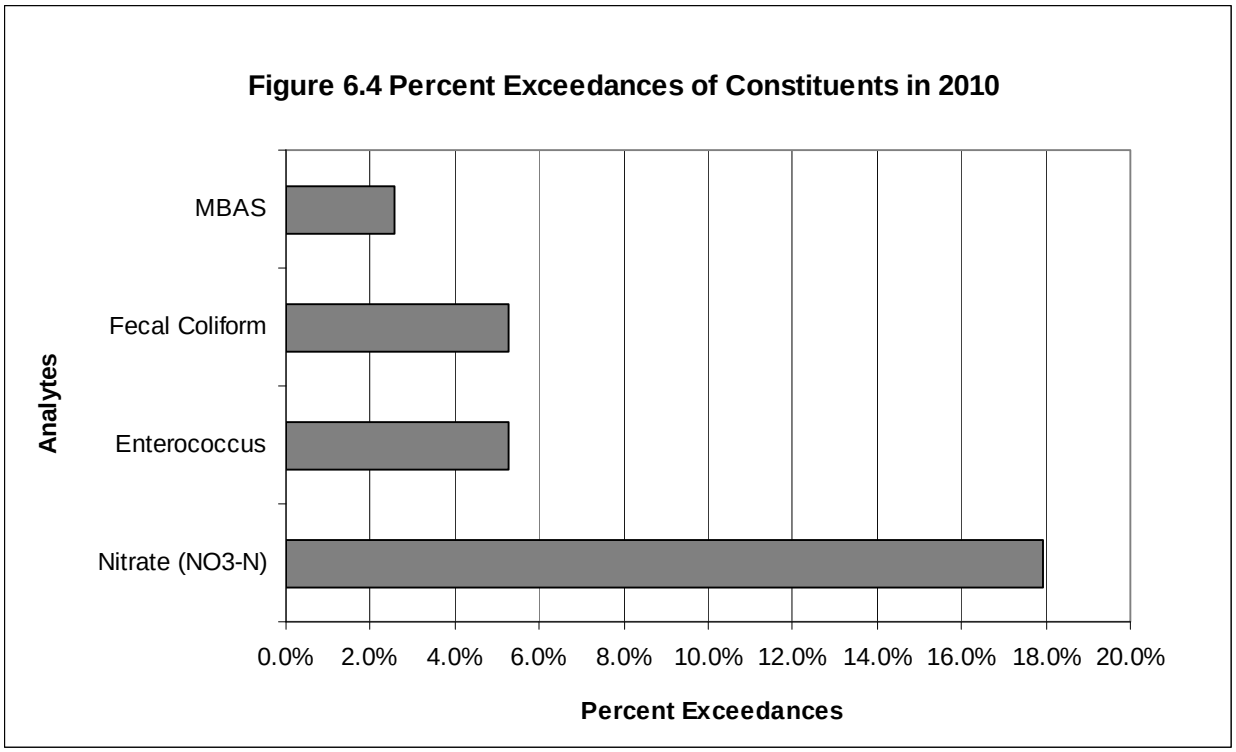
In order to lower the priority for a constituent from one year to the next, the COC must qualify for the next lower category according to the criteria listed above and not show an increasing

trend in exceedances. A constituent may only decrease one step per year and may be removed from the list if the constituent was ranked low the previous year and had no exceedances in monitoring for the current year. Figure 6.4 below illustrates the exceedance ratios per COC in the 2010 monitoring period. The exceedance ratio is calculated by the following formula:

$$E=x/y*100$$

where,
E = exceedance ratio
x = total number of exceedances for selected COC
y = total number of analyses for the COC

This method allows for a comparison of the exceedance rates for each indicator. For 2010, the constituents that exceeded water quality action levels the most were nitrate, *Enterococcus* and Fecal Coliform bacteria followed by MBAS. The indicator exceedance ratios in Figure 6.4 define the prioritizations assigned to each constituent in Table 6.2 and 6.3.



The City of Encinitas COCs were selected and prioritized according to criteria in Table 6.0 and the data that is presented in Figure 6.4. The high priority COCs identified in the 2010 monitoring season and the suggested action plan for each of those COCs is presented in Table 6.2.

Table 6.2 2010 High Priority Constituents of Concern		
COC	**Priority**	**Action Plan**
Nitrate-nitrogen	High	Although, the number of nitrate exceedances have been trending downward since 2002, the COC matrix analyses continually identifies nitrate as a high priority constituent. In sub-basins where exceedances are caused by irrigation runoff, or in sub-basins that drain directly to the San Elijo Lagoon (which is on the 303(d) list of impaired water bodies for nutrients), Clean Water Program staff will focus on education targeting irrigation runoff and increased inspections of nurseries.
Bacteria • Total Coliform • Fecal Coliform • *Enterococcus*		• Continued BMP implementation at commercial businesses (grease removal equipment and proper coverage/containment for all outdoor grease bins), • Continued maintenance of the Urban Runoff Treatment Facility located at Cottonwood Creek, • Continue to assess bacteria data by land use and conveyance type, • Analyze the data results from the 2010 *Storm Drains as Sources of Enterococcus to San Diego Beaches* study, and • Participate in the San Diego Copermittees Bacteria Reference Study • TMDL for Indicator Bacteria Project I – Twenty Beaches & Creeks in San Diego County

A complete list of all COCs identified as Medium and Low priorities along with a justification for the 2010 COC prioritization and the reasons supporting any changes are described in Table 6.3.

Table 6.3 Annual Prioritization of Medium/Low Constituents of Concern, 2007-2010					
Constituent	**2007 Priority**	**2008 Priority**	**2009 Priority**	**2010 Priority**	**Reason for Change**
MBAS	None	Low	None	Low	The exceedance ratio for MBAS is 2.6%, due to only one exceedance in 2010. MBAS has been reassigned to a low priority and Clean Water Program staff will continue with routine monitoring in 2011.
Ortho-phosphate	Low	Medium	Medium	Low	There were no exceedances for ortho-phosphate in 2010. This constituent has been reassigned to a low priority. Clean Water Program staff will continue with routine monitoring in 2011.
Ammonia	None	Low	Low	None	There were no exceedances for ammonia in 2010. This constituent is no longer considered as a COC.

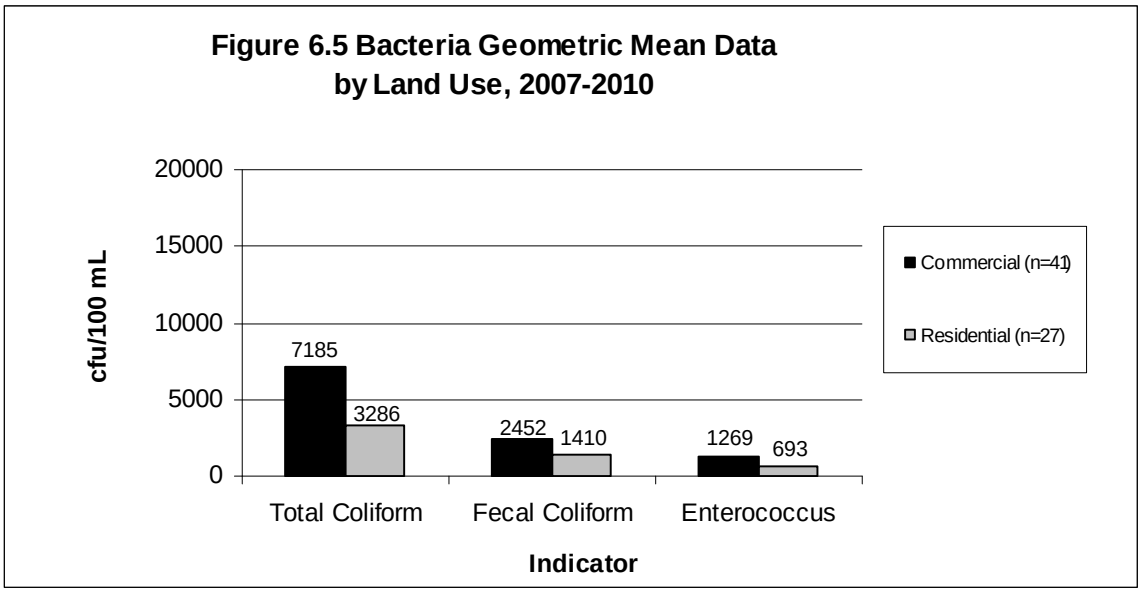
Using the prioritization methodology described in Table 6.1, nitrate and bacteria remain high priority COCs, MBAS was reassigned as a low priority COC due to one exceedance and ortho-phosphate was reassigned from a medium priority COC to a low priority COC since there were no exceedances in 2010.

6.3 Bacteria Indicator Exceedances

Extensive bacteria data has been collected for the past four dry weather seasons, allowing for a better overall characterization of bacteria sources and loading in the City. Enough data has been collected to attempt to characterize bacteria concentrations based on land use. The additional data collection at 10 sites located throughout the City also allows for long term trend assessments of bacteria concentrations in the City.

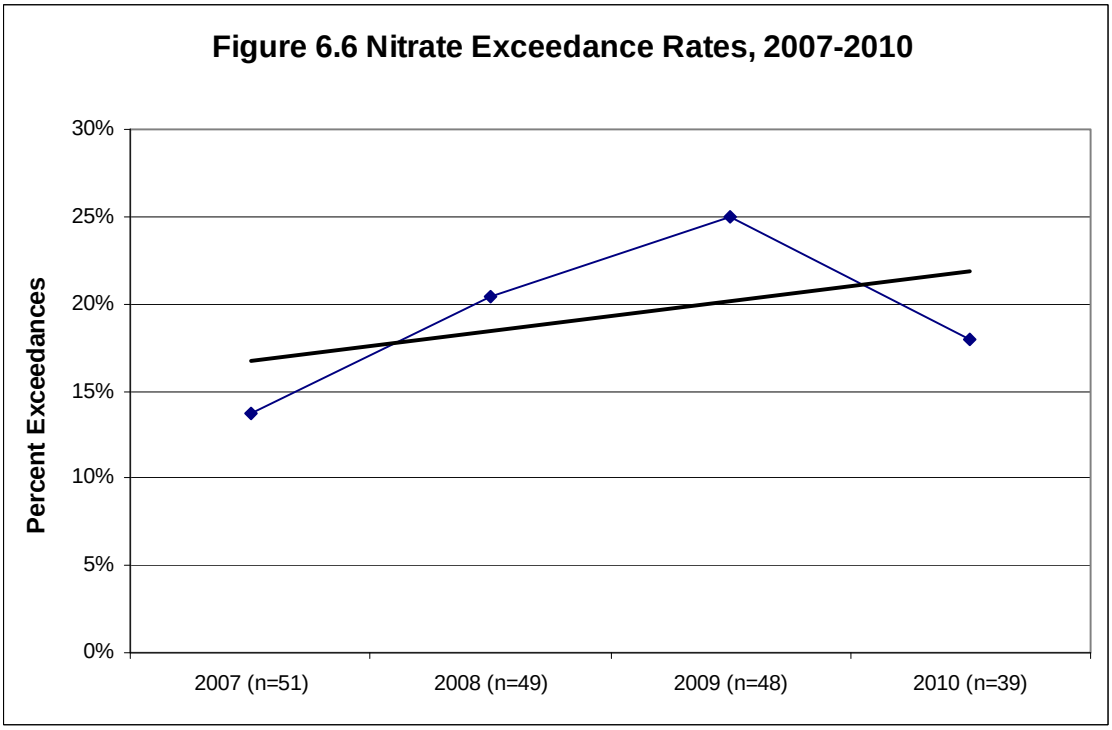
The two major land uses in the City of Encinitas are commercial and residential and are often not distinct to a drainage basin, but are mixed. The assessment of bacteria loading from these areas is based on primary land use as listed in the data set. Figure 6.5 illustrates the geometric mean concentrations of total coliform, fecal coliform and *Enterococcus* based on residential and commercial land use. According to the data collected from 2007 to 2010, the commercial areas contribute more bacteria to the MS4 for all three indicators, as calculated based on concentration only. The total coliform concentrations are approximately 54% higher, fecal coliform are approximately 42% higher, and Enterococcus concentrations are approximately 45% higher in

commercial areas. The differences between commercial and residential areas are illustrated below in Figure 6.5.



6.4 Nitrate Exceedances

The exceedance rates for nitrate decreased from 25% in 2009 to 18% in 2010. Exceedance rates for nitrate for the past four years of dry weather monitoring are illustrated below in Figure 6.6.



Over the four years of monitoring, groundwater remains a constant source of dry weather flow within Cottonwood Creek in the Encinitas Sub-basin. There are six monitoring locations in the City's dry weather monitoring program that are located within this geographical area. Since 2002, five primary monitoring sites, ENC-1, ENC-3, ENC-6, ENC-8 and ENC-11 have consistently exceeded for nitrates and are often accompanied by elevated conductivity. Over the monitoring periods, other nitrate exceedances have been present on occasion.

Most of the nitrate exceedances in the Encinitas sub-basin are consistent with elevated nitrate results from previous years of monitoring and have been reasoned to be a result of groundwater in the region. The San Diego region has elevated concentrations of nitrates in the groundwater as documented in the 1997 Groundwater Report by the San Diego County Water Authority and most recently in the 2007 Groundwater Assessment Study by the Metropolitan Water District of Southern California. It is common to find elevated nitrates in groundwater in regions of agriculture and it is likely that the sources of nitrogen in the groundwater in Encinitas are from historical agricultural land uses. It should be noted, however, that local water authorities do not consider Encinitas groundwater a viable source of drinking water because it is subject to sea water intrusion. As a result, there is little groundwater quality data specific to Encinitas. Since the inception of the dry weather monitoring program, all of the dry weather monitoring sites throughout the city have been analyzed for nitrates. Table 6.4 summarizes all the sites in Encinitas with consistent exceedances for nitrates and their suspected sources.

Table 6.4 Nitrate Exceedances, 2002-2010										
Site	Nitrate Exceedances									Suspected Source
	2002	2003	2004	2005	2006	2007	2008	2009	2010	
CBS-1			X							Groundwater
CBS-2				X						Combination
CBS-3N			X					NS	NS	Irrigation
CBS-3S			X					NS	NS	Irrigation
CBS-8*							X	NS		Groundwater
CBS-9									X	Irrigation
ENC-1	X	X	X	X	X			X	X	Groundwater
ENC-3	X	X	X	X	X		X	X	X	Groundwater
ENC-4			X							Irrigation
ENC-5	X	X	X			X		X		Groundwater
ENC-6	X	X	X	X	X	X	X	X	X	Groundwater
ENC-8	X	X	X	X	X		X	X	X	Groundwater
ENC-9			X		NS					Irrigation
ENC-10	X		X							Irrigation
ENC-11	X	X	X	X	X	X		X	X	Groundwater
ENC-12		X			NS					Irrigation
ENC-14			X		NS				NS	Irrigation
ENC-15		X	X							Irrigation
ENC-17		X	X					NS		Irrigation
ENC-18								X		Irrigation
ESC-1			X							Groundwater
ESC-2			X							Irrigation
LCS-1			X			X				Irrigation
LCS-2			X							Irrigation
LCS-5						X				Irrigation
LUC-1	NS	NS	X	X	X	X	X	X	X	Groundwater
LUC-7			X	NS	NS				NS	Groundwater
LUC-9*							X	NS	NS	Groundwater
LUC-10							X	X		Groundwater
LUX-2			X		NS			NS	NS	Irrigation
SEL-2						X				Combination
SEL-5	NS	NS	NS	X	NS				NS	Irrigation

The sites with nitrate exceedances attributable to groundwater are typically not causing water quality problems in the receiving waters. These locations do not contribute excessive bacteria, other nutrients, or metals to the waters downstream due to the natural filtration occurring within the sub-surface soils. In 2010, all nitrate exceedances except one location (CBS-9)

appeared to be attributable to groundwater. A more detailed discussion of nitrate and conductivity exceedances was included in Appendix J of the City of Encinitas' 2007 Dry Weather Monitoring Assessment.

6.5 Water Quality Trends by Receiving Waters

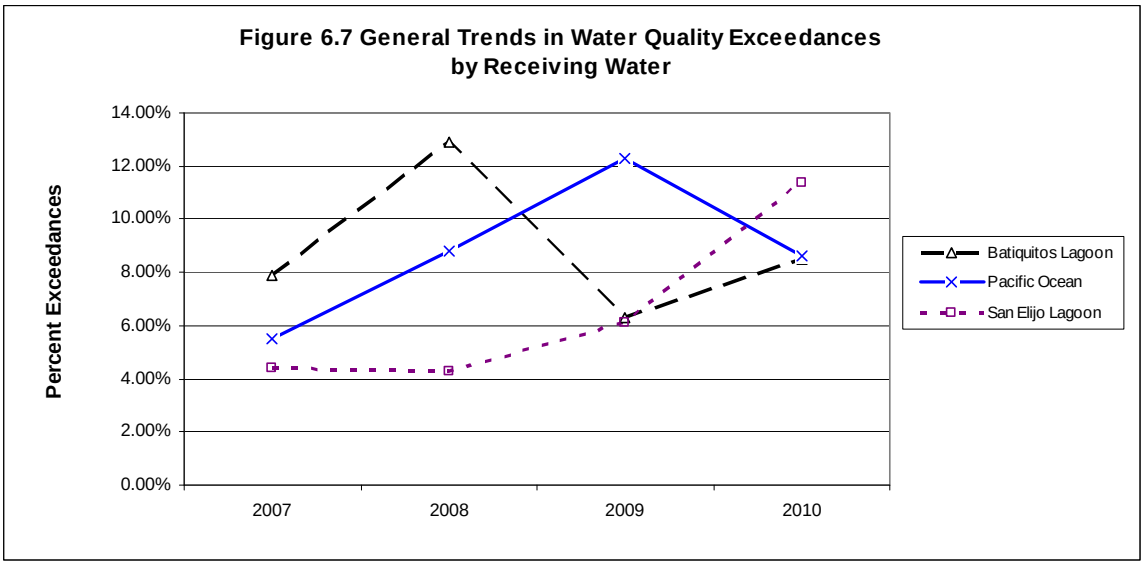
Finally, the sub-basins can be divided by respective receiving waters. Runoff in the City of Encinitas drains either north to Batiquitos Lagoon, south to San Elijo Lagoon, or west to the Pacific Ocean at Moonlight Beach.

Table 6.5 shows the all of the sub-basins in the City of Encinitas and their associated receiving water.

Table 6.5 Receiving Waters and Associated Sub-basins

Batiquitos Lagoon	Pacific Ocean	San Elijo Lagoon
Leucadia Sub-Basin	Encinitas Sub-Basin	Cardiff Sub-Basin
		Lux Canyon Sub-Basin
La Costa South Sub-Basin		Lower Escondido Creek Sub-Basin
		Rancho Santa Fe Sub-Basin

In dividing the City of Encinitas into receiving water drainage areas, general conclusions as to the water quality entering these waters can be inferred. In order to compare the water quality across these three drainage areas, a ratio of the number of water quality exceedances to analytes tested is calculated. Figure 6.7 presents the exceedance ratios calculated for the three drainage areas over the past four years of dry weather monitoring.



According to these ratios, the waters flowing south into San Elijo Lagoon exceeded action levels more than flows to the Pacific Ocean or the Batiquitos Lagoon in 2010. The majority of the analyte exceedances draining to the San Elijo Lagoon occurred in the Cardiff Sub-basin and were primarily for conductivity and turbidity. Of the priority COCs identified in 2010, there was also one exceedance for nitrate and fecal coliform in the Cardiff sub-basin. There were no priority COC exceedances in the Lux Canyon sub-basin, Lower Escondido sub-basin or the Rancho Santa Fe sub-basin in 2010.

7.0 Conclusions

Throughout the past eight years of dry weather monitoring the City of Encinitas has succeeded in identifying jurisdictionally significant water quality COCs. The sources of these COCs have been identified and eliminated where possible. Ongoing monitoring for the Dry Weather Monitoring Program will allow for continuous trend assessments and prioritization within each of the sub-basins and the receiving waters in future years. Currently, these trends are captured in the exceedance ratios which are delineated by sub-basin and by land use.

The high priority COCs in Encinitas continue to be nitrates followed by bacteria indicators (fecal coliform and *Enterococcus* bacteria). High bacteria levels occur most often in commercial land use areas throughout the City of Encinitas. Sources for bacteria have been identified in several instances in years past and have included natural loading from wildlife, bacteria re-growth in the MS4, and various illegal connections to the MS4. Bacteria indicators in the MS4 have been trending downward since 2007 for both residential and commercial areas in Encinitas.

It is not known if the elevated nitrates observed throughout Encinitas are entirely from anthropogenic sources. The most likely sources of nitrates have been identified as groundwater, nursery irrigation run-off and residential irrigation run-off containing fertilizers. With the exception of one nitrate exceedance in 2010, most exceedances appear to be groundwater related and have been relatively consistent (Refer to Figure 5.6). In 2010, 6 out of 7 nitrate exceedances were determined to be caused by groundwater intrusion. In these locations, the high nitrate concentrations are accompanied by elevated conductivity and no other COC exceedances. Nitrate is a constituent of concern for the groundwater in the San Diego region, and historical agricultural land uses in Encinitas are likely sources of nitrogen in the groundwater. The elevated conductivity may be from various minerals entering the groundwater from the sedimentary soils and in some locations in the lower reaches of the city are due to seawater intrusion. The City's Clean Water Program continues to focus on residential and commercial education targeting irrigation runoff and routine inspections of nurseries to minimize the amount of runoff to the maximum extent practicable.

Using the COC prioritization method described in Table 6.0, City staff has evaluated and ranked water quality concerns in the City, which will allow appropriate attention in the upcoming year. The City of Encinitas Clean Water Program shall continue to focus on illicit discharges and connections as a means to improve water quality, as well as broadly focused programmatic areas to protect water quality and ensure ongoing improvements. The dry weather monitoring program assists the City in focusing efforts targeting identifiable pollution problems throughout the City. Efforts, including targeting specific audiences for education, enforcement activity, and Best Management Plan (BMP) implementation, have expanded as a result of the water quality characterization gained from the Dry Weather Monitoring Program.

In 2010, the City of Encinitas initiated two notable activities that will help to better identify, prioritize and manage COCs specific to our area. First, the City collaborated with the Carlsbad

Watershed Copermittees to assess all monitoring data across the Carlsbad Hydrologic Unit in order to identify monitoring data gaps. This will ultimately help to improve the development of appropriate watershed-based water quality education activities and stormwater BMPs. Secondly, in FY 2009-10, the City of Encinitas participated in a regional source identification study (*Storm Drains as Sources of Enterococcus to San Diego Beaches)* at Moonlight Beach to assess storm drains as a potential source of Enterococcus into our regions receiving waters during dry weather.

In 2010, the following recommendations for future dry weather monitoring include:

1. Continued assessment of all monitoring data within the watershed to identify current data gaps, compare constituents of concern across the Carlsbad Hydrologic Area, and ultimately develop appropriate watershed activities and BMPs as a group.

2. Assess the bacteria data collected in the source identification study (*Storm Drains as Sources of Enterococcus to San Diego Beaches).*

8.0 Trash Assessment

8.1 Regulatory Requirements

Section II.B.3.c.(7) of the Municipal Permit's Receiving Waters and Urban Runoff Monitoring and Reporting Program requires Copermittees to assess the presence of trash in receiving waters and urban runoff at each dry weather field screening site. This trash assessment program is designed to provide information on the spatial extent and relative amount of trash present, as well at the nature and origin of the trash at the site.

8.2 Procedure and Definitions

The San Diego County Copermittee Dry Weather Monitoring Workgroup developed a two-page Trash Assessment Form (Appendix C-2) to document the amount and extent of trash and the threat to human and aquatic health. The first page is completed at every site. The second page, which includes information about the types, prevalence, potential routes, and sources of trash, is also completed at sites where a larger amount of trash is observed.

A qualitative estimate of the abundance of trash is made based upon a general impression of the site. The Trash Assessment Form includes five categories to describe the amount and extent of trash. The definitions are primarily qualitative, although numbers of trash pieces are also included in each category as a rough guideline. The five categories are listed below.

- *Optimal:* On first glance, no trash is visible. Little or no trash (<10 pieces) is evident when the evaluated area is closely examined for litter and debris.
- *Suboptimal:* On first glance, little or no trash is visible. After close inspection, small levels of trash (~10-50 pieces) are evident in the evaluated area.
- *Marginal:* Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing are present.
- *Submarginal:* Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100-400 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing are present.
- *Poor:* Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

The threat to human health and threat to aquatic health is assessed at each site using the following definitions:

- *Threat to Human Health* - Presence of more than one of, or a combination of, the following items: hypodermic needles or other medical waste; used diapers, animal

waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard), or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.

- *Threat to Aquatic Health* – Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of, the following items: toxic items such as vehicle batteries or spray cans; any evidence of large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

In the event that a site is noted as potentially posing a threat to human or aquatic health, additional descriptive comments are recorded in the "Comments" section of the Trash Assessment Forms.

If a site is labeled as submarginal or poor, it is then assessed for types of trash present (e.g., automotive, biohazard, food waste), which are ranked based on the prevalence and potential threat to water quality of the items. Lastly, the potential mechanism through which trash reached the site (e.g., dumping, littering, upstream sources) and the potential source of the trash (e.g., construction, commercial, transient) are also identified on the Trash Assessment Form.

8.3 Trash Assessment Results

Trash assessments were conducted at 39 primary dry weather monitoring sites and 2 alternate dry weather monitoring sites throughout the monitoring period (May 1, 2010 – September 30, 2010). Notably, in FY 2009-10, there were no sites identified as poor or a threat to human or aquatic health. Table 8.0 summarizes all of the trash assessment results for this fiscal year and Figure 8.0 compares the trash assessments with the previous two years of monitoring. A map of all the sampling sites in the City of Encinitas and their corresponding trash assessment is located in Appendix C-5.

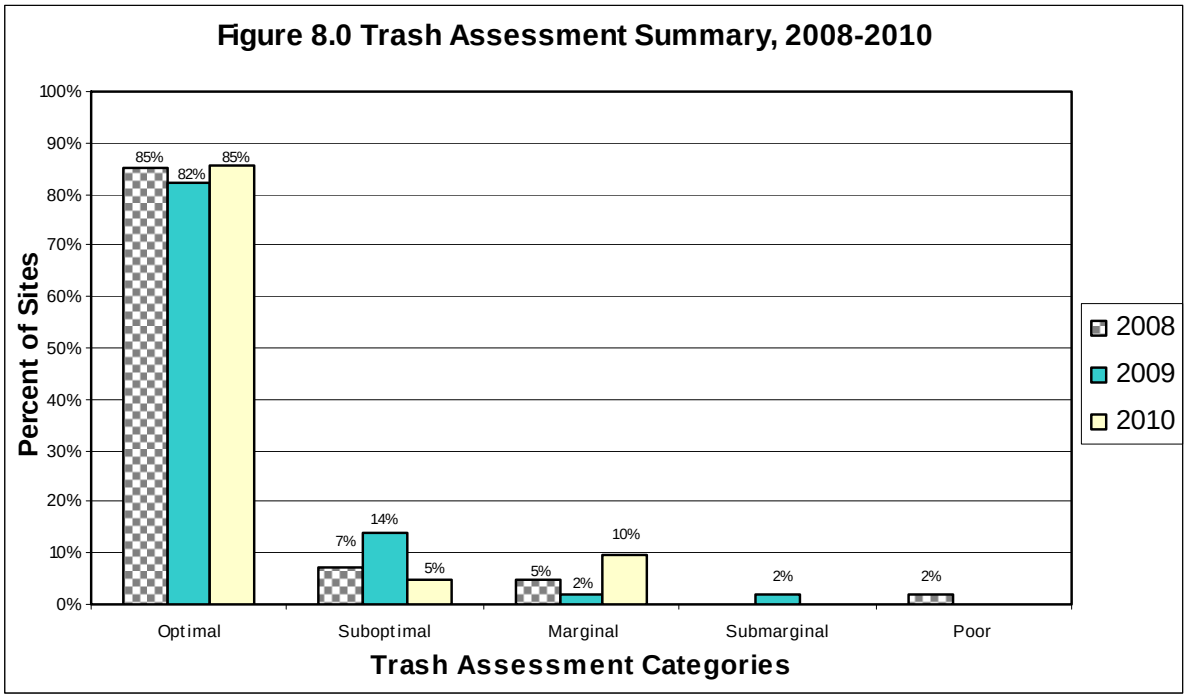
Table 8.0 Trash Assessment Results				
Optimal (35 sites)	**Suboptimal** (2 sites)	**Marginal** (4 sites)	**Submarginal** (0 sites)	**Poor** (0 sites)
CBS-1	ENC-12	CBS-2		
CBS-4	ENC-15	ENC-9		
CBS-7		ENC-10		
CBS-8		RSF-1		
CBS-9				
SEL-2				
SEL-3				
ENC-1				
ENC-3				
ENC-4				
ENC-5				
ENC-6				
ENC-8				
ENC-11				
ENC-17				
ENC-18				
LCS-1				
LCS-2				
LCS-4				
LCS-5				
LCS-7				
LCS-8				
LUC-1				
LUC-3				
LUC-4 (ALT)				
LUC-6				
LUC-8				
LUC-10				
ESC-1				
ESC-2				
ESC-5				
LUX-1 (ALT)				
LUX-2				
LUX-3				
RSF-4				

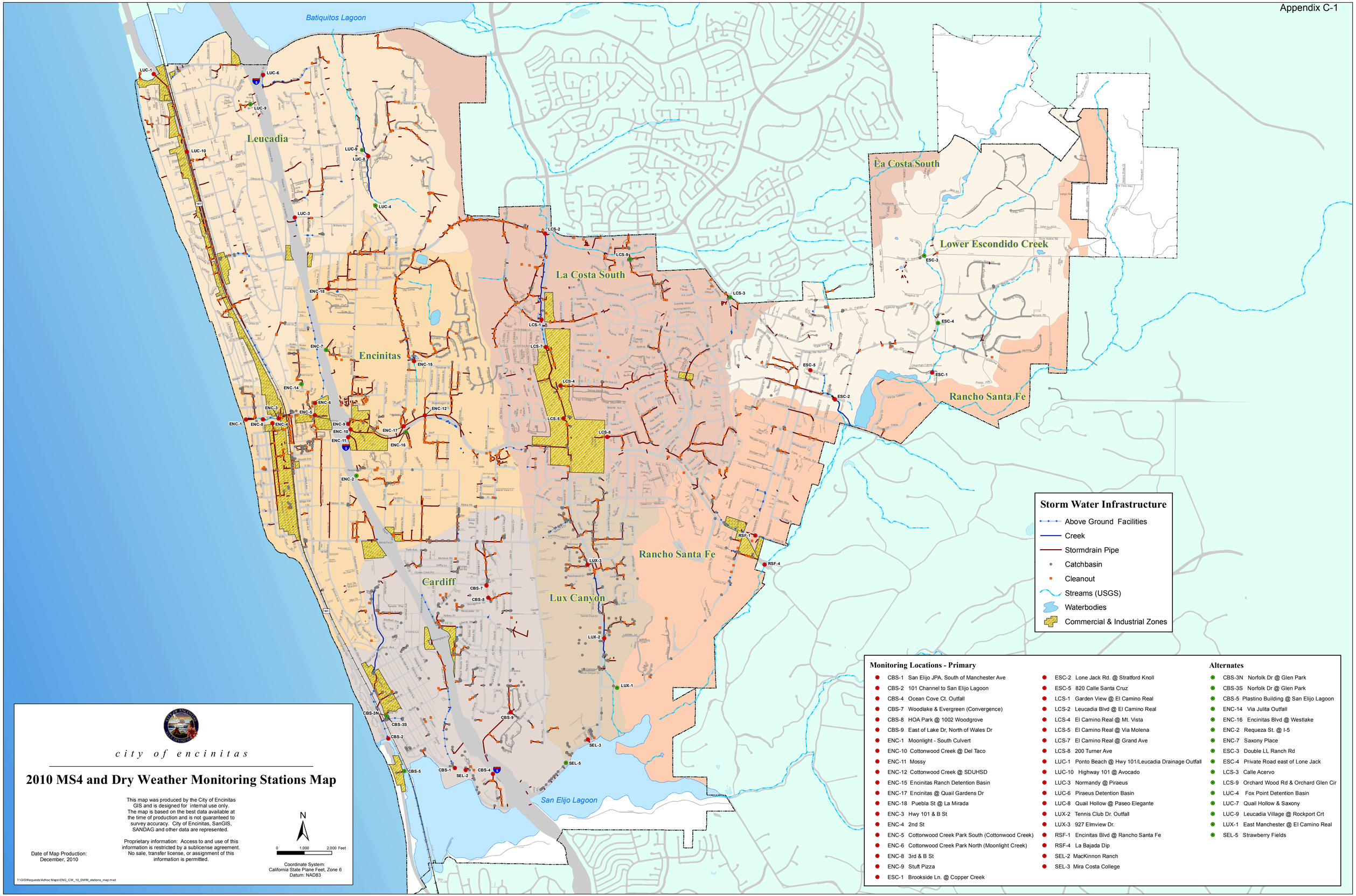
8.3.1 Threat to Human or Aquatic Health

In FY 2009-10 there were no sites identified as a threat to human or aquatic health.

8.3.2 Trash Assessment - Poor Sites

In FY 2009-10, there were no sites identified as sub marginal or poor.




Batiquitos Lagoon
Leucadia
Encinitas
La Costa South
Ea Costa South
Lower Escondido Creek
Rancho Santa Fe
Cardiff
Lux Canyon
San Elijo Lagoon
LUC-1
LUC-6
LUC-9
LUC-10
LUC-8
LUC-4
LUC-3
LCS-2
LCS-9
LCS-3
LCS-1
LCS-7
LCS-4
LCS-5
LCS-8
ESC-3
ESC-4
ESC-5
ESC-1
ESC-2
RSF-1
RSF-4
LUX-3
LUX-2
LUX-1
ENC-18
ENC-7
ENC-15
ENC-14
ENC-6
ENC-5
ENC-3
ENC-1
ENC-8
ENC-4
ENC-9
ENC-10
ENC-11
ENC-12
ENC-17
ENC-16
ENC-2
CBS-7
CBS-8
CBS-9
CBS-3N
CBS-3S
CBS-2
CBS-5
CBS-1
SEL-2
CBS-4
SEL-3
SEL-5
Storm Water Infrastructure
Above Ground Facilities
Creek
Stormdrain Pipe
Catchbasin
Cleanout
Streams (USGS)
Waterbodies
Commercial & Industrial Zones
Monitoring Locations - Primary
CBS-1 San Elijo JPA, South of Manchester Ave
CBS-2 101 Channel to San Elijo Lagoon
CBS-4 Ocean Cove Ct. Outfall
CBS-7 Woodlake & Evergreen (Convergence)
CBS-8 HOA Park @ 1002 Woodgrove
CBS-9 East of Lake Dr, North of Wales Dr
ENC-1 Moonlight - South Culvert
ENC-10 Cottonwood Creek @ Del Taco
ENC-11 Mossy
ENC-12 Cottonwood Creek @ SDUHSD
ENC-15 Encinitas Ranch Detention Basin
ENC-17 Encinitas @ Quail Gardens Dr
ENC-18 Puebla St @ La Mirada
ENC-3 Hwy 101 & B St
ENC-4 2nd St
ENC-5 Cottonwood Creek Park South (Cottonwood Creek)
ENC-6 Cottonwood Creek Park North (Moonlight Creek)
ENC-8 3rd & B St
ENC-9 Stuft Pizza
ESC-1 Brookside Ln. @ Copper Creek
ESC-2 Lone Jack Rd. @ Stratford Knoll
ESC-5 820 Calle Santa Cruz
LCS-1 Garden View @ El Camino Real
LCS-2 Leucadia Blvd @ El Camino Real
LCS-4 El Camino Real @ Mt. Vista
LCS-5 El Camino Real @ Via Molena
LCS-7 El Camino Real @ Grand Ave
LCS-8 200 Turner Ave
LUC-1 Ponto Beach @ Hwy 101/Leucadia Drainage Outfall
LUC-10 Highway 101 @ Avocado
LUC-3 Normandy @ Piraeus
LUC-6 Piraeus Detention Basin
LUC-8 Quail Hollow @ Paseo Elegante
LUX-2 Tennis Club Dr. Outfall
LUX-3 927 Elmview Dr.
RSF-1 Encinitas Blvd @ Rancho Santa Fe
RSF-4 La Bajada Dip
SEL-2 MacKinnon Ranch
SEL-3 Mira Costa College
Alternates
CBS-3N Norfolk Dr @ Glen Park
CBS-3S Norfolk Dr @ Glen Park
CBS-5 Plastino Building @ San Elijo Lagoon
ENC-14 Via Julita Outfall
ENC-16 Encinitas Blvd @ Westlake
ENC-2 Requeza St. @ I-5
ENC-7 Saxony Place
ESC-3 Double LL Ranch Rd
ESC-4 Private Road east of Lone Jack
LCS-3 Calle Acervo
LCS-9 Orchard Wood Rd & Orchard Glen Cir
LUC-4 Fox Point Detention Basin
LUC-7 Quail Hollow & Saxony
LUC-9 Leucadia Village @ Rockport Crt
LUX-1 East Manchester @ El Camino Real
SEL-5 Strawberry Fields
city of encinitas
2010 MS4 and Dry Weather Monitoring Stations Map
This map was produced by the City of Encinitas GIS and is designed for internal use only. The map is based on the best data available at the time of production and is not guaranteed to survey accuracy. City of Encinitas, SanGIS, SANDAG and other data are represented.
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Date of Map Production: December, 2010
N
0 1,000 2,000 Feet
Coordinate System: California State Plane Feet, Zone 6 Datum: NAD83
T:\GIS\Requests\Adhoc Maps\ENG_CW_10_DWM_stations_map.mxd

San Diego Stormwater Copermittees

Dry Weather Monitoring Field Datasheet

Print Date: 12/8/2010

Report for Site: CBS-1

Site Description:

				Station	MS4
Location	SEJPA Outfall				
		LandUse	Residential	Copermittee	EN
Latitude	33.01	LandUse_2	Industrial		
Longitude	-117.27	Convey_Type	Concrete Channel	Watershed	904.61

Field Observation:

Date	11-Aug-2010	**Atmospheric Conditions**		**Comments**
Time	2:21 pm	Weather	Sunny	
		Tide	NA	
Observer	MM	Last Rain	>72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

				Conveyance Conditions		
Odor	Musty	Deposits	Fine particulate	Flow Rate	0.00	gpm
Color	None	Vegetation	Normal	Water Flow	Ponded	
Clarity	Clear	Biology	Insects	Overland Flow?	No	
Floatables	None			Does the flow reach Receiving Water?		Yes
				Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
Ammonia (NH3-N)	0.49	mg/L
Nitrate (NO3-N)	3.6433	mg/L
Dissolved oxygen	7.36	mg/L
Conductivity	4.4	mS/cm
Orthophosphate (PO4-P)	0.0749	mg/L
pH	8.09	pH unit
Temperature	21.4	ºC
Turbidity	8	NTU
MBAS	0.35	mg/L

Lab Results

Enterococcus	1,400.00	CFU/100 mL
Fecal Coliform	2,900.00	CFU/100 mL
Total Coliform	3,200.00	CFU/100 mL

Print Date: 12/8/2010

Trash Assessment:

StationID	CBS-1	**Overall Rating (Amount and Extent)**	optimal
Date	11-Aug-2010	Previous Assmet.Rating	optimal
Time	2:21 pm	Comments	
Station Type	MS4		
Estimated Area Length	10.00		
Estimated Area Width	10.00		

Threat to Human Health: No Threat to Aquatic Health: No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station CBS-1

Print Date: 12/8/2010

Report for Site: CBS-2

Site Description:

				Station	MS4
Location	Hwy 101 Channel @ San Elijo Lagoon Outlet	LandUse	Commercial	Copermittee	EN
Latitude	33.02	LandUse_2	Residential		
Longitude	-117.28	Convey_Type	Concrete Channel	Watershed	904.61

Field Observation:

Date	26-Jul-2010
Time	2:45 pm
Observer	MM
SampleEventType	Field Screening

Atmospheric Conditions

Weather	Overcast
Tide	NA
Last Rain	>72 hours
Rainfall	None

Comments

Significant amounts of plastic debris and trash in storm drain. Ask PW to clean out.

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	Limited
Clarity	Clear	Biology	Insect & Algae
Floatables	None		

Conveyance Conditions

Flow Rate	1.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
pH	7.45	pH unit
Orthophosphate (PO4-P)	0	mg/L
Conductivity	5.04	mS/cm
MBAS	0.25	mg/L
Nitrate (NO3-N)	1.32	mg/L
Ammonia (NH3-N)	0.25	mg/L
Turbidity	13.5	NTU
Temperature	22.18	ºC

Lab Results

Ammonia	ND	mg/L
Conductivity	5,040.00	umhos/cm
Enterococcus	800.00	CFU/100 mL
Fecal Coliform	16,000.00	CFU/100 mL
MBAS	0.10	mg/L
MBAS	0.10	mg/L
Nitrate as N	2.61	mg/L
Ortho Phosphate as PO4	ND	mg/L
Total Coliform	26,200.00	CFU/100 mL
Turbidity	1.73	NTU

Field Observation:

Date 28-Jul-2010
Time 2:45 pm
Observer MM
SampleEventType Confirmation

Atmospheric Conditions
Weather Partly cloudy
Tide NA
Last Rain >72 hours
Rainfall None

Comments
Significant amounts of trash in storm drain. Ask PW to clean out.

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	Limited
Clarity	Clear	Biology	Insect & Algae
Floatables	None		

Conveyance Conditions
Flow Rate 1.00 gpm
Water Flow Flowing
Overland Flow? No
Does the flow reach Receiving Water? Yes
Photo Taken? No

Field Measurements:

Analyte	Result	Unit
Dissolved oxygen	7.45	mg/L
Conductivity	6.54	mS/cm
Temperature	27.53	ºC
Turbidity	14.7	NTU
pH	9.36	pH unit

Lab Results

Fecal Coliform	6,650.00	CFU/100 mL

Field Observation:

Date 09-Aug-2010
Time 11:00 am
Observer MM
SampleEventType Field Screening

Atmospheric Conditions
Weather Sunny
Tide NA
Last Rain >72 hours
Rainfall None

Comments
Lab samples only

Runoff Characteristics

Odor	Deposits
Color	Vegetation
Clarity	Biology
Floatables	

Conveyance Conditions
Flow Rate 1.00 gpm
Water Flow Flowing
Overland Flow? No
Does the flow reach Receiving Water? Yes
Photo Taken? Yes

Field Measurements:

Analyte	Result	Unit
pH	8.01	pH unit
Turbidity	3.4	NTU
Conductivity	5.86	mS/cm
Dissolved oxygen	6.73	mg/L
Temperature	27.28	ºC

Print Date: 12/8/2010

Lab Results

Cadmium, Diss	ND	mg/L
Chlorpyrifos	ND	ug/L
Copper, Diss	0.02	mg/L
Diazinon	ND	ug/L
Hardness, Total as CaCO3	830.00	mg/L
Lead, Diss	ND	mg/L
Oil & Grease	ND	mg/L
Zinc, Diss	0.01	mg/L

Trash Assessment:

StationID	CBS-2	**Overall Rating (Amount and Extent)**	marginal
Date	26-Jul-2010	Previous Assmet.Rating	suboptimal
Time	11:00 am	Comments	
Station Type	MS4		
Estimated Area Length	40.00		
Estimated Area Width	10.00		

Threat to Human Health: No Threat to Aquatic Health: No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station CBS-2

Print Date: 12/8/2010

Report for Site: CBS-4

Site Description:

				Station	MS4
Location	Cardiff Cove				
		LandUse	Residential	Copermittee	EN
Latitude	33.01	LandUse_2	None		
Longitude	-117.27	Convey_Type	Outlet	Watershed	904.61

Field Observation:

Date	26-Jul-2010	**Atmospheric Conditions**		**Comments**
Time	1:45 pm	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	>72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

				Conveyance Conditions		
Odor	Musty	Deposits	Coarse particulate	Flow Rate	1.50	gpm
Color	None	Vegetation	None	Water Flow	Flowing	
Clarity	Clear	Biology	Algae	Overland Flow?	No	
Floatables	None			Does the flow reach Receiving Water?	Yes	
				Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Turbidity	15.5	NTU
Nitrate (NO3-N)	2.9	mg/L
pH	7.88	pH unit
Orthophosphate (PO4-P)	0.06	mg/L
Dissolved oxygen	5.95	mg/L
Ammonia (NH3-N)	0.19	mg/L
Conductivity	7.31	mS/cm
MBAS	0.75	mg/L
Temperature	24.42	ºC

Lab Results

Ammonia	ND	mg/L
Conductivity	7,290.00	umhos/cm
Enterococcus	300.00	CFU/100 mL
Fecal Coliform	200.00	CFU/100 mL
MBAS	0.07	mg/L
MBAS	0.07	mg/L
Nitrate as N	3.92	mg/L
Ortho Phosphate as PO4	ND	mg/L
Total Coliform	2,600.00	CFU/100 mL
Turbidity	4.35	NTU

Trash Assessment:

StationID	CBS-4	**Overall Rating (Amount and Extent)**	optimal
Date	26-Jul-2010	Previous Assmet.Rating	optimal
Time	1:45 pm	Comments	
Station Type	MS4		
Estimated Area Length	20.00		
Estimated Area Width	20.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station CBS-4

Print Date: 12/8/2010

Report for Site: CBS-7

Site Description:

				Station	MS4
Location	Woodlake and Evergreen				
		LandUse	Residential	Copermittee	EN
Latitude	33.03	LandUse_2	Commercial		
Longitude	-117.28	Convey_Type	Concrete Channel	Watershed	904.61

Field Observation:

Date	26-Jul-2010
Time	2:55 pm
Observer	MM
SampleEventType	Field Screening

Atmospheric Conditions

Weather	Partly cloudy
Tide	NA
Last Rain	>72 hours
Rainfall	None

Comments

Visible red/iron discharge in storm drain channel.

Runoff Characteristics

Odor	Musty	Deposits	Coarse particulate
Color	Yellow	Vegetation	None
Clarity	Clear	Biology	Insect & Algae
Floatables	None		

Conveyance Conditions

Flow Rate	0.87	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	No	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Orthophosphate (PO4-P)	0.15	mg/L
pH	6.81	pH unit
Ammonia (NH3-N)	0.21	mg/L
Conductivity	2.01	mS/cm
MBAS	0.4	mg/L
Temperature	21.1	ºC
Turbidity	13.3	NTU
Nitrate (NO3-N)	0.11	mg/L
Dissolved oxygen	6.55	mg/L

Lab Results

Enterococcus	200.00	CFU/100 mL
Fecal Coliform	800.00	CFU/100 mL
Total Coliform	1,600.00	CFU/100 mL

Print Date: 12/8/2010

Trash Assessment:

StationID	CBS-7	**Overall Rating (Amount and Extent)**	optimal
Date	26-Jul-2010	Previous Assmet.Rating	optimal
Time	2:55 pm	Comments	
Station Type	MS4		
Estimated Area Length	100.00		
Estimated Area Width	10.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station CBS-7

Print Date: 12/8/2010

Report for Site: CBS-8

Site Description:

				Station	MS4
Location	HOA Park at 1002 Woodgrove	LandUse	Residential	Copermittee	EN
Latitude	33.03	LandUse_2	Parks		
Longitude	-117.27	Convey_Type	Outlet	Watershed	904.61

Field Observation:

Date	28-Jul-2010	**Atmospheric Conditions**		**Comments**
Time	10:52 am	Weather	Overcast	
		Tide	NA	
Observer	MM	Last Rain	>72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	None
Clarity	Clear	Biology	Insect & Algae
Floatables	None		

Conveyance Conditions

Flow Rate	0.86	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Nitrate (NO3-N)	0.68	mg/L
Ammonia (NH3-N)	0.16	mg/L
Dissolved oxygen	8.52	mg/L
Conductivity	2	mS/cm
MBAS	0.25	mg/L
Orthophosphate (PO4-P)	0.76	mg/L
pH	8.03	pH unit
Turbidity	13.3	NTU
Temperature	21.14	oC

Print Date: 12/8/2010

Trash Assessment:

StationID	CBS-8	**Overall Rating (Amount and Extent)**	optimal
Date	28-Jul-2010	Previous Assmet.Rating	optimal
Time	10:52 am	Comments	
Station Type	MS4		
Estimated Area Length	100.00		
Estimated Area Width			

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station CBS-8

Print Date: 12/8/2010

Report for Site: CBS-9

Site Description:

				Station	MS4
Location	Lake Dr and Wales				
		LandUse	Residential	Copermittee	
Latitude	33.08	LandUse_2	None		
Longitude	-117.30	Convey_Type	Catch Basin	Watershed	904.61

Field Observation:

Date	28-Sep-2010	**Atmospheric Conditions**		**Comments**
Time	2:32 pm	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	>72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	None
Color	Yellow	Vegetation	None
Clarity	Clear	Biology	Insects
Floatables	Other		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	Yes
Photo Taken?	Yes

Field Measurements:

Analyte	Result	Unit
Nitrate (NO3-N)	>11.3	mg/L
pH	8.54	pH unit
Ammonia (NH3-N)	0.1	mg/L
Conductivity	2.68	mS/cm
Temperature	26.81	ºC
Dissolved oxygen	7.43	mg/L
MBAS	0.6	mg/L
Turbidity	6.4	NTU
Orthophosphate (PO4-P)	0.5	mg/L

Print Date: 12/8/2010

Field Observation:

Date	29-Sep-2010
Time	2:32 pm
Observer	MM
SampleEventType	Confirmation

Atmospheric Conditions

Weather	Partly cloudy
Tide	NA
Last Rain	>72 hours
Rainfall	None

Comments

Storm drain box was dry. No Sample was taken.

Runoff Characteristics

Odor	Deposits
Color	Vegetation
Clarity	Biology
Floatables	

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	No
Photo Taken?	Yes

Field Measurements:

Analyte	Result	Unit

Trash Assessment:

StationID	CBS-9	**Overall Rating (Amount and Extent)**	optimal
Date	28-Sep-2010	Previous Assmet.Rating	optimal
Time	2:32 pm	Comments	
Station Type	MS4		
Estimated Area Length	5.00		
Estimated Area Width	5.00		

Threat to Human Health: No Threat to Aquatic Health: No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station CBS-9

Print Date: 12/8/2010

Report for Site: ENC-1

Site Description:

				Station	MS4
Location	Moonlight Beach				
		LandUse	Commercial	Copermittee	EN
Latitude	33.05	LandUse_2	Residential		
Longitude	-117.30	Convey_Type	Outlet	Watershed	904.51

Field Observation:

Date	02-Aug-2010	**Atmospheric Conditions**		**Comments**
Time	1:53 pm	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	>72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

				Conveyance Conditions		
Odor	Musty	Deposits	Coarse particulate	Flow Rate	30.00	gpm
Color	None	Vegetation	None	Water Flow	Flowing	
Clarity	Clear	Biology	Insect & Algae	Overland Flow?	No	
Floatables	None			Does the flow reach Receiving Water?	Yes	
				Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
MBAS	0.6	mg/L
Orthophosphate (PO4-P)	0.06	mg/L
Nitrate (NO3-N)	>11.3	mg/L
Ammonia (NH3-N)	0.15	mg/L
Temperature	24.14	ºC
Turbidity	1.5	NTU
Dissolved oxygen	4.5	mg/L
Conductivity	5	mS/cm
pH	7.62	pH unit

Lab Results

Cadmium, Diss	ND	mg/L
Chlorpyrifos	ND	ug/L
Copper, Diss	ND	mg/L
Diazinon	ND	ug/L
Enterococcus	200.00	CFU/100 mL
Fecal Coliform	1,300.00	CFU/100 mL
Hardness, Total as CaCO3	1,180.00	mg/L
Lead, Diss	ND	mg/L
Oil & Grease	ND	mg/L
Total Coliform	4,900.00	CFU/100 mL
Zinc, Diss	0.02	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	ENC-1	**Overall Rating (Amount and Extent)**	optimal
Date	02-Aug-2010	Previous Assmet.Rating	optimal
Time	1:53 pm	Comments	
Station Type	MS4		
Estimated Area Length	30.00		
Estimated Area Width	10.00		

Threat to Human Health: No Threat to Aquatic Health: No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station ENC-1

Print Date: 12/8/2010

Report for Site: ENC-10

Site Description:

				Station	MS4
Location	Cottonwood Creek @ Del Taco	LandUse	Commercial	Copermittee	EN
Latitude	33.05	LandUse_2	Residential		
Longitude	-117.29	Convey_Type	Outlet	Watershed	904.51

Field Observation:

Date	16-Aug-2010
Time	10:16 am
Observer	MM
SampleEventType	Field Screening

Atmospheric Conditions

Weather	Partly cloudy
Tide	NA
Last Rain	>72 hours
Rainfall	None

Comments

Active encampments at this location- a couple living in a tent with a dog.

Runoff Characteristics

Odor	Musty	Deposits	None
Color	Yellow	Vegetation	None
Clarity	Clear	Biology	None
Floatables	None		

Conveyance Conditions

Flow Rate	7.50	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
MBAS	0.65	mg/L
Temperature	20.31	ºC
Conductivity	2.73	mS/cm
Dissolved oxygen	8.54	mg/L
Ammonia (NH3-N)	0.27	mg/L
pH	7.43	pH unit
Turbidity	8.4	NTU
Nitrate (NO3-N)	<1.13	mg/L
Orthophosphate (PO4-P)	0.4596	mg/L

Lab Results

Cadmium, Diss	ND	mg/L
Chlorpyrifos	ND	ug/L
Copper, Diss	0.01	mg/L
Diazinon	ND	ug/L
Enterococcus	3,900.00	CFU/100 mL
Fecal Coliform	5,800.00	CFU/100 mL
Hardness, Total as CaCO3	610.00	mg/L
Lead, Diss	ND	mg/L
Oil & Grease	ND	mg/L
Total Coliform	23,000.00	CFU/100 mL
Zinc, Diss	0.02	mg/L

Trash Assessment:

StationID	ENC-10	**Overall Rating (Amount and Extent)**	Marginal
Date	16-Aug-2010	Previous Assmet.Rating	Submarginal
Time	10:16 am	Comments	
Station Type	MS4		
Estimated Area Length	40.00		
Estimated Area Width	20.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station ENC-10

Print Date: 12/8/2010

Report for Site: ENC-11

Site Description:

				Station	MS4
Location	Requeza Channel- West of PW Yard	LandUse	Commercial	Copermittee	EN
Latitude	33.05	LandUse_2	Residential		
Longitude	-117.29	Convey_Type	Natural Creek	Watershed	904.51

Field Observation:

Date	16-Aug-2010
Time	11:05 am
Observer	MM
SampleEventType	Field Screening

Atmospheric Conditions

Weather	Partly cloudy
Tide	NA
Last Rain	>72 hours
Rainfall	None

Comments

Excessive algal growth downstream from outfall.

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	None
Clarity	Clear	Biology	None
Floatables	None		

Conveyance Conditions

Flow Rate	2.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Conductivity	7.62	mS/cm
pH	7.42	pH unit
MBAS	0.9	mg/L
Dissolved oxygen	8.21	mg/L
Turbidity	0.5	NTU
Orthophosphate (PO4-P)	0.0032	mg/L
Nitrate (NO3-N)	>11.3	mg/L
Ammonia (NH3-N)	0.65	mg/L
Temperature	20.41	ºC

Lab Results

Enterococcus	200.00	CFU/100 mL
Fecal Coliform	1,500.00	CFU/100 mL
Total Coliform	3,500.00	CFU/100 mL

Print Date: 12/8/2010

Field Observation:

Date	18-Aug-2010
Time	2:30 pm
Observer	MM
SampleEventType	Confirmation

Atmospheric Conditions

Weather	Sunny
Tide	NA
Last Rain	>72 hours
Rainfall	None

Comments

Historical exceedance for nitrate. Conductivity is also high at this location.

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	None
Clarity	Clear	Biology	None
Floatables	None		

Conveyance Conditions

Flow Rate	2.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
Turbidity	1	NTU
Conductivity	7.32	mS/cm
Dissolved oxygen	8.22	mg/L
Nitrate (NO3-N)	>11.3	mg/L
Temperature	23.16	ºC
pH	7.48	pH unit

Trash Assessment:

StationID	ENC-11	**Overall Rating (Amount and Extent)**	Optimal
Date	16-Aug-2010	Previous Assmet.Rating	Optimal
Time	11:05 am	Comments	
Station Type	MS4		
Estimated Area Length	20.00		
Estimated Area Width	20.00		

Threat to Human Health: No Threat to Aquatic Health: No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station ENC-11

Print Date: 12/8/2010

Report for Site: ENC-12

Site Description:

				Station	MS4
Location	Encinitas Blvd @ SDUHSD				
		LandUse	Residential	Copermittee	EN
Latitude	33.05	LandUse_2	Commercial		
Longitude	-117.28	Convey_Type	Manhole	Watershed	904.51

Field Observation:

Date	30-Aug-2010	**Atmospheric Conditions**		**Comments**
Time	10:00 am	Weather	Sunny	
		Tide	NA	
Observer	MM	Last Rain	>72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

				Conveyance Conditions		
Odor	Musty	Deposits	Coarse particulate	Flow Rate	0.00	gpm
Color	Yellow	Vegetation	None	Water Flow	Ponded	
Clarity	Clear	Biology	Insects	Overland Flow?	No	
Floatables	Trash\Other			Does the flow reach Receiving Water?		Yes
				Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
Turbidity	4.3	NTU
Conductivity	1.56	mS/cm
MBAS	0.4	mg/L
Nitrate (NO3-N)	3	mg/L
Orthophosphate (PO4-P)	0.7628	mg/L
Temperature	23.29	ºC
Ammonia (NH3-N)	0.19	mg/L
pH	8.39	pH unit

Print Date: 12/8/2010

Trash Assessment:

StationID	ENC-12	**Overall Rating (Amount and Extent)**	Suboptimal
Date	30-Aug-2010	Previous Assmet.Rating	Optimal
Time	10:00 am	Comments	
Station Type	MS4		
Estimated Area Length	5.00		
Estimated Area Width	5.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station ENC-12

Print Date: 12/8/2010

Report for Site: ENC-15

Site Description:

				Station	MS4
Location	Encinitas Ranch Detention Basin				
		LandUse	Residential	Copermittee	EN
Latitude	33.06	LandUse_2	Commercial		
Longitude	-117.28	Convey_Type	Outlet	Watershed	904.51

Field Observation:

Date	09-Aug-2010	**Atmospheric Conditions**		**Comments**	
Time	2:15 pm	Weather	Sunny		
		Tide	NA		
Observer	MM	Last Rain	>72 hours		
SampleEventType	Field Screening	Rainfall	None		

Runoff Characteristics

				Conveyance Conditions		
Odor	Musty	Deposits	None	Flow Rate	8.20	gpm
Color	None	Vegetation	Normal	Water Flow	Flowing	
Clarity	Clear	Biology	Insect & Algae	Overland Flow?	No	
Floatables	None			Does the flow reach Receiving Water?	No	
				Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Dissolved oxygen	5.6	mg/L
Conductivity	2.75	mS/cm
Ammonia (NH3-N)	0.21	mg/L
Orthophosphate (PO4-P)	0.7889	mg/L
Temperature	23.89	ºC
pH	7.56	pH unit
Nitrate (NO3-N)	0.1941	mg/L
Turbidity	1.9	NTU
MBAS	0.15	mg/L

Lab Results

Cadmium, Diss	ND	mg/L
Chlorpyrifos	ND	ug/L
Copper, Diss	0.01	mg/L
Diazinon	ND	ug/L
Enterococcus	600.00	CFU/100 mL
Fecal Coliform	1,200.00	CFU/100 mL
Hardness, Total as CaCO3	670.00	mg/L
Lead, Diss	ND	mg/L
Oil & Grease	ND	mg/L
Total Coliform	2,200.00	CFU/100 mL
Zinc, Diss	0.03	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	ENC-15	**Overall Rating (Amount and Extent)**	suboptimal
Date	09-Aug-2010	Previous Assmet.Rating	optimal
Time	2:15 pm	Comments	
Station Type	MS4		
Estimated Area Length	10.00		
Estimated Area Width	10.00		

Threat to Human Health: No Threat to Aquatic Health: No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station ENC-15

Print Date: 12/8/2010

Report for Site: ENC-17

Site Description:

				Station	MS4
Location	Sunshine Gardens (NE Corner of Enc Blvd and Quail Gardens Dr)	LandUse	Commercial	Copermittee	EN
Latitude	33.05	LandUse_2	Commercial		
Longitude	-117.28	Convey_Type	Manhole	Watershed	904.51

Field Observation:

Date	30-Aug-2010	**Atmospheric Conditions**		**Comments**
Time	9:20 am	Weather	Partly cloudy	
Observer	MM	Tide	NA	
SampleEventType	Field Screening	Last Rain	>72 hours	
		Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	Coarse
Color	Brown	Vegetation	None
Clarity	Slightly Cloudy	Biology	Insects
Floatables	Trash\Other		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	Yes
Photo Taken?	No

Field Measurements:

Analyte	Result	Unit
MBAS	0.75	mg/L
Turbidity	62.2	NTU
Conductivity	0.17	mS/cm
Temperature	22.01	ºC
Orthophosphate (PO4-P)	1.0269	mg/L
pH	8.24	pH unit
Ammonia (NH3-N)	0.41	mg/L
Nitrate (NO3-N)	2.43	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	ENC-17	**Overall Rating (Amount and Extent)**	Optimal
Date	30-Aug-2010	Previous Assmet.Rating	Optimal
Time	9:20 am	Comments	
Station Type	MS4		
Estimated Area Length	5.00		
Estimated Area Width	5.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station ENC-17

Print Date: 12/8/2010

Report for Site: ENC-18

Site Description:

				Station	MS4
Location	Puebla St and La Mirada St	LandUse	Residential	Copermittee	EN
Latitude	33.06	LandUse_2	None		
Longitude	-117.29	Convey_Type	Manhole	Watershed	904.51

Field Observation:

Date	30-Aug-2010	**Atmospheric Conditions**		**Comments**
Time	10:45 am	Weather	Sunny	
		Tide	NA	
Observer	MM	Last Rain	>72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

				Conveyance Conditions	
Odor	Musty	Deposits	Fine particulate	Flow Rate	Unknown gpm
Color	None	Vegetation	None	Water Flow	Flowing
Clarity	Clear	Biology	Insects	Overland Flow?	No
Floatables	Other			Does the flow reach Receiving Water?	Yes
				Photo Taken?	No

Field Measurements:

Analyte	Result	Unit
pH	7.91	pH unit
MBAS	0.9	mg/L
Conductivity	5.71	mS/cm
Orthophosphate (PO4-P)	1.1279	mg/L
Turbidity	17.9	NTU
Ammonia (NH3-N)	0.96	mg/L
Temperature	22.28	ºC
Nitrate (NO3-N)	4.29	mg/L

Trash Assessment:

StationID	ENC-18	**Overall Rating (Amount and Extent)**	Optimal
Date	30-Aug-2010	Previous Assmet.Rating	Optimal
Time	10:45 am	Comments	
Station Type	MS4		
Estimated Area Length	5.00		
Estimated Area Width	5.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station ENC-18

Print Date: 12/8/2010

Report for Site: ENC-3

Site Description:

				Station	Both
Location	Pacific Coast Hwy and B St	LandUse	Commercial	Copermittee	EN
Latitude	33.05	LandUse_2	Residential		
Longitude	-117.29	Convey_Type	Natural Creek	Watershed	904.51

Field Observation:

Date	04-Aug-2010	**Atmospheric Conditions**		**Comments**	
Time	9:30 am	Weather	Overcast		
		Tide	NA		
Observer	MM	Last Rain	>72 hours		
SampleEventType	Field Screening	Rainfall	None		

Runoff Characteristics

				Conveyance Conditions		
Odor	Musty	Deposits	Fine particulate	Flow Rate	125.00	gpm
Color	None	Vegetation	None	Water Flow	Flowing	
Clarity	Clear	Biology	None	Overland Flow?	No	
Floatables	None			Does the flow reach Receiving Water?	Yes	
				Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Conductivity	5	mS/cm
Ammonia (NH3-N)	0.11	mg/L
Nitrate (NO3-N)	>11.3	mg/L
MBAS	0.75	mg/L
Turbidity	4.8	NTU
Orthophosphate (PO4-P)	0.0163	mg/L
pH	7.19	pH unit
Dissolved oxygen	8.44	mg/L
Temperature	20.63	ºC

Lab Results

Enterococcus	400.00	CFU/100 mL
Fecal Coliform	3,200.00	CFU/100 mL
Total Coliform	17,400.00	CFU/100 mL

Print Date: 12/8/2010

Field Observation:

Date	05-Aug-2010	**Atmospheric Conditions**		**Comments**	
Time	9:25 am	Weather	Overcast		
		Tide	NA		
Observer	MM	Last Rain	>72 hours		
SampleEventType	Confirmation	Rainfall	None		

Runoff Characteristics

				Conveyance Conditions		
Odor	Musty	Deposits	None	Flow Rate	125.00	gpm
Color	None	Vegetation	None	Water Flow	Flowing	
Clarity	Clear	Biology	None	Overland Flow?	No	
Floatables	None			Does the flow reach Receiving Water?		Yes
				Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
Turbidity	3.1	NTU
Conductivity	2.82	mS/cm
Dissolved oxygen	8.44	mg/L
pH	6.57	pH unit
Temperature	20.72	ºC

Trash Assessment:

StationID	ENC-3	**Overall Rating (Amount and Extent)**	optimal
Date	04-Aug-2010	Previous Assmet.Rating	optimal
Time	9:30 am	Comments	
Station Type	Both		
Estimated Area Length	50.00		
Estimated Area Width	30.00		

Threat to Human Health: No Threat to Aquatic Health: No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station ENC-3

Print Date: 12/8/2010

Report for Site: ENC-4

Site Description:

				Station	MS4
Location	Second St				
		LandUse	Commercial	Copermittee	EN
Latitude	33.05	LandUse_2	Residential		
Longitude	-117.30	Convey_Type	Outlet	Watershed	904.51

Field Observation:

		Atmospheric Conditions		Comments
Date	02-Aug-2010	Weather	Partly cloudy	
Time	2:55 pm	Tide	NA	
Observer	MM	Last Rain	>72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

				Conveyance Conditions		
Odor	Musty	Deposits	Fine particulate	Flow Rate	0.00	gpm
Color	None	Vegetation	None	Water Flow	Ponded	
Clarity	Clear	Biology	Insect & Algae	Overland Flow?	No	
Floatables	None			Does the flow reach Receiving Water?	Yes	
				Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Temperature	20.9	ºC
pH	8.04	pH unit
Ammonia (NH3-N)	0.02	mg/L
Conductivity	1.46	mS/cm
Dissolved oxygen	8.16	mg/L
Nitrate (NO3-N)	0.93	mg/L
Orthophosphate (PO4-P)	0.22	mg/L
Turbidity	1.9	NTU
MBAS	0.4	mg/L

Lab Results

Cadmium, Diss	ND	mg/L
Chlorpyrifos	ND	ug/L
Copper, Diss	0.01	mg/L
Diazinon	ND	ug/L
Enterococcus	100.00	CFU/100 mL
Fecal Coliform	1,300.00	CFU/100 mL
Hardness, Total as CaCO3	410.00	mg/L
Lead, Diss	ND	mg/L
Oil & Grease	ND	mg/L
Total Coliform	8,300.00	CFU/100 mL
Zinc, Diss	0.02	mg/L

Trash Assessment:

StationID	ENC-4	**Overall Rating (Amount and Extent)**	optimal
Date	02-Aug-2010	Previous Assmet.Rating	optimal
Time	2:55 pm	Comments	
Station Type	MS4		
Estimated Area Length	10.00		
Estimated Area Width	10.00		

Threat to Human Health: No Threat to Aquatic Health: No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station ENC-4

Print Date: 12/8/2010

Report for Site: ENC-5

Site Description:

				Station	Both
Location	Cottonwood Creek Park South	LandUse	Commercial	Copermittee	EN
Latitude	33.02	LandUse_2	Parks		
Longitude	-117.29	Convey_Type	Natural Creek	Watershed	904.51

Field Observation:

Date	28-Jul-2010	**Atmospheric Conditions**		**Comments**
Time	1:20 pm	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	>72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

				Conveyance Conditions		
Odor	Musty	Deposits	Coarse & Fine	Flow Rate	10.00	gpm
Color	Yellow	Vegetation	Limited	Water Flow	Flowing	
Clarity	Clear	Biology	Insect & Algae	Overland Flow?	No	
Floatables	Bubbles/Foam			Does the flow reach Receiving Water?	Yes	
				Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
MBAS	0.5	mg/L
pH	8.07	pH unit
Dissolved oxygen	9.05	mg/L
Conductivity	1.5	mS/cm
Orthophosphate (PO4-P)	0.3	mg/L
Temperature	22.95	oC
Turbidity	25.9	NTU
Ammonia (NH3-N)	0.26	mg/L
Nitrate (NO3-N)	3.16	mg/L

Lab Results

Enterococcus	600.00	CFU/100 mL
Fecal Coliform	1,300.00	CFU/100 mL
Total Coliform	2,900.00	CFU/100 mL

Trash Assessment:

StationID	ENC-5	**Overall Rating (Amount and Extent)**	optimal
Date	28-Jul-2010	Previous Assmet.Rating	optimal
Time	1:20 pm	Comments	
Station Type	Both		
Estimated Area Length			
Estimated Area Width			

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station ENC-5

Print Date: 12/8/2010

Report for Site: ENC-6

Site Description:

				Station	MS4
Location	Moonlight Creek				
		LandUse	Residential	Copermittee	EN
Latitude	33.05	LandUse_2	None		
Longitude	-117.29	Convey_Type	Natural Creek	Watershed	904.51

Field Observation:

Date	28-Jul-2010	**Atmospheric Conditions**		**Comments**
Time	11:40 am	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	>72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

				Conveyance Conditions		
Odor	Musty	Deposits	Fine particulate	Flow Rate	0.00	gpm
Color	None	Vegetation	Excessive	Water Flow	Ponded	
Clarity	Clear	Biology	Insects	Overland Flow?	No	
Floatables	None			Does the flow reach Receiving Water?	Yes	
				Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Conductivity	7.02	mS/cm
pH	7.34	pH unit
Temperature	23.26	oC
Turbidity	12.9	NTU
Orthophosphate (PO4-P)	0.08	mg/L
Dissolved oxygen	9.29	mg/L
MBAS	1	mg/L
Ammonia (NH3-N)	0.14	mg/L
Nitrate (NO3-N)	>11.3	mg/L

Lab Results

Enterococcus	400.00	CFU/100 mL
Fecal Coliform	400.00	CFU/100 mL
Total Coliform	800.00	CFU/100 mL

Field Observation:

Date	30-Jul-2010	**Atmospheric Conditions**	**Comments**
Time	9:30 am	Weather: Overcast	
Observer	MM	Tide: NA	
SampleEventType	Confirmation	Last Rain: >72 hours	
		Rainfall: None	

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	Excessive
Clarity	Clear	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
MBAS	1.25	mg/L
Conductivity	7.06	mS/cm
Nitrate (NO3-N)	>11.3	mg/L
Temperature	19.56	ºC
Turbidity	13.3	NTU
pH	6.43	pH unit
Dissolved oxygen	12.7	mg/L

Field Observation:

Date	02-Aug-2010	**Atmospheric Conditions**	**Comments**
Time	1:08 pm	Weather: Partly cloudy	
Observer	MM	Tide: NA	
SampleEventType	ICID	Last Rain: >72 hours	
		Rainfall: None	

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	Excessive
Clarity	Clear	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
pH	7.03	pH unit
Temperature	20.98	ºC
Dissolved oxygen	6.86	mg/L
Turbidity	0.7	NTU

	Conductivity	7.01	mS/cm

Lab Results

	MBAS	ND	mg/L

Trash Assessment:

StationID	ENC-6	**Overall Rating (Amount and Extent)**	optimal
Date	28-Jul-2010	Previous Assmet.Rating	suboptimal
Time	1:08 pm	Comments	
Station Type	MS4		
Estimated Area Length			
Estimated Area Width			

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station ENC-6

Print Date: 12/8/2010

Report for Site: ENC-6B

Site Description:

				Station	MS4
Location	Moonlight Creek				
		LandUse	Residential	Copermittee	EN
Latitude	33.05	LandUse_2	None		
Longitude	-117.29	Convey_Type	Concrete Channel	Watershed	904.51

Field Observation:

Date	02-Aug-2010
Time	12:00 pm
Observer	MM
SampleEventType	ICID

Atmospheric Conditions

Weather	Partly cloudy
Tide	NA
Last Rain	>72 hours
Rainfall	None

Comments

ENC-6B sample was taken upstream of ENC-6 from concrete channel.

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	Excessive
Clarity	Clear	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	Yes
Photo Taken?	Yes

Field Measurements:

Analyte	Result	Unit
pH	7.19	pH unit
Conductivity	6.86	mS/cm
Turbidity	0.2	NTU
Dissolved oxygen	6.31	mg/L
Temperature	20.62	ºC
MBAS	1.25	mg/L

Trash Assessment:

End of Report for station ENC-6B

Print Date: 12/8/2010

Report for Site: ENC-6C

Site Description:

				Station	MS4
Location	Moonlight Creek				
		LandUse	Residential	Copermittee	EN
Latitude	33.05	LandUse_2	None		
Longitude	-117.29	Convey_Type	Natural Creek	Watershed	904.51

Field Observation:

Date	02-Aug-2010
Time	12:35 pm
Observer	MM
SampleEventType	ICID

Atmospheric Conditions

Weather	Partly cloudy
Tide	NA
Last Rain	>72 hours
Rainfall	None

Comments

ENC-6C sample was taken upstream of ENC-6B.

Runoff Characteristics

Odor	None	Deposits	None
Color	None	Vegetation	Excessive
Clarity	Clear	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
MBAS	1	mg/L
Temperature	20.4	ºC
Dissolved oxygen	7.21	mg/L
Conductivity	6.57	mS/cm
pH	7.29	pH unit
Turbidity	10.5	NTU

Print Date: 12/8/2010

Trash Assessment:

End of Report for station ENC-6C

Print Date: 12/8/2010

Report for Site: ENC-8

Site Description:

				Station	MS4
Location	Third St and B St				
		LandUse	Commercial	Copermittee	EN
Latitude	33.05	LandUse_2	Residential		
Longitude	-117.30	Convey_Type	Natural Creek	Watershed	904.51

Field Observation:

Date	21-Jul-2010	**Atmospheric Conditions**		**Comments**	
Time	2:44 pm	Weather	Overcast	algae chunks in stormwater sample	
		Tide	NA		
Observer	MM	Last Rain	<72 hours		
SampleEventType	Field Screening	Rainfall	<0.1"		

Runoff Characteristics

				Conveyance Conditions		
Odor	Musty	Deposits	Coarse particulate	Flow Rate	78.00	gpm
Color	None	Vegetation	Limited	Water Flow	Flowing	
Clarity	Clear	Biology	Insect & Algae	Overland Flow?	No	
Floatables	None			Does the flow reach Receiving Water?	Yes	
				Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
MBAS	0.041	mg/L
Dissolved oxygen	6.04	mg/L
Temperature	21.46	ºC
pH	7.86	pH unit
Turbidity	2.66	NTU
Nitrate (NO3-N)	23.84	mg/L
Ammonia (NH3-N)	0.11	mg/L
Conductivity	4.94	mS/cm
Orthophosphate (PO4-P)	0.13	mg/L

Lab Results

Ammonia	ND	mg/L
Conductivity	4,940.00	umhos/cm
Enterococcus	100.00	CFU/100 mL
Fecal Coliform	ND	CFU/100 mL
MBAS	0.04	mg/L
Nitrate as N	23.84	mg/L
Ortho Phosphate as PO4	0.45	mg/L
Total Coliform	1,800.00	CFU/100 mL
Turbidity	2.66	NTU

Print Date: 12/8/2010

Field Observation:

Date	22-Jul-2010			**Atmospheric Conditions**	**Comments**
Time	2:44 pm			Weather	Overcast
Observer	MM			Tide	NA
SampleEventType	Confirmation			Last Rain	<72 hours
				Rainfall	<0.1"

Runoff Characteristics

				Conveyance Conditions		
Odor	Musty	Deposits	None	Flow Rate	78.00	gpm
Color	None	Vegetation	None	Water Flow	Flowing	
Clarity	Clear	Biology	Insect & Algae	Overland Flow?	No	
Floatables	None			Does the flow reach Receiving Water?		Yes
				Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
Temperature	21.61	ºC
Turbidity	1.5	NTU
pH	6.97	pH unit
Nitrate (NO3-N)	>11.3	mg/L
Dissolved oxygen	5.9	mg/L
Conductivity	5.05	mS/cm

Trash Assessment:

StationID	ENC-8	**Overall Rating (Amount and Extent)**	optimal
Date	21-Jul-2010	Previous Assmet.Rating	optimal
Time	2:44 pm	Comments	
Station Type	MS4		
Estimated Area Length	50.00		
Estimated Area Width	30.00		

Threat to Human Health: No Threat to Aquatic Health: No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station ENC-8

Print Date: 12/8/2010

Report for Site: ENC-9

Site Description:

				Station	MS4
Location	Enc. Blvd @ Saxony Rd				
		LandUse	Commercial	Copermittee	EN
Latitude	33.05	LandUse_2	None		
Longitude	-117.29	Convey_Type	Concrete Channel	Watershed	904.51

Field Observation:

Date	01-Sep-2010	**Atmospheric Conditions**	**Comments**
Time	11:00 am	Weather	Sunny
		Tide	NA
Observer	MM	Last Rain	>72 hours
SampleEventType	Field Screening	Rainfall	None

Runoff Characteristics

Odor	Musty	Deposits	Coarse
Color	Yellow	Vegetation	Limited
Clarity	Clear	Biology	Insects
Floatables	Trash		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	Yes
Photo Taken?	Yes

Field Measurements:

Analyte	Result	Unit
pH	8.16	pH unit
Orthophosphate (PO4-P)	0.39	mg/L
Turbidity	2.9	NTU
Nitrate (NO3-N)	<1.13	mg/L
MBAS	0.6	mg/L
Conductivity	1.78	mS/cm
Temperature	25.71	ºC
Ammonia (NH3-N)	0.2	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	ENC-9	**Overall Rating (Amount and Extent)**	marginal
Date	01-Sep-2010	Previous Assmet.Rating	optimal
Time	11:00 am	Comments	
Station Type	MS4		
Estimated Area Length	40.00		
Estimated Area Width	10.00		

Threat to Human Health: No Threat to Aquatic Health: No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station ENC-9

Print Date: 12/8/2010

Report for Site: ESC-1

Site Description:

				Station	MS4
Location	Brookside Ln @ Copper Creek	LandUse	Residential	Copermittee	EN
Latitude	33.05	LandUse_2	Open		
Longitude	-117.22	Convey_Type	Natural Creek	Watershed	904.61

Field Observation:

Date	21-Jul-2010	**Atmospheric Conditions**		**Comments**
Time	11:35 am	Weather	Overcast	
		Tide	NA	
Observer	MM	Last Rain	<72 hours	
SampleEventType	Field Screening	Rainfall	<0.1"	

Runoff Characteristics

				Conveyance Conditions		
Odor	Musty	Deposits	None	Flow Rate	208.00	gpm
Color	None	Vegetation	Normal	Water Flow	Flowing	
Clarity	Clear	Biology	Insect & Algae	Overland Flow?	No	
Floatables	None			Does the flow reach Receiving Water?	Yes	
				Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Nitrate (NO3-N)	0.02	mg/L
MBAS	0.25	mg/L
Conductivity	3.38	mS/cm
Turbidity	2	NTU
Temperature	19.99	ºC
pH	8.21	pH unit
Orthophosphate (PO4-P)	0.04	mg/L
Ammonia (NH3-N)	0.1	mg/L
Dissolved oxygen	4.66	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	ESC-1	**Overall Rating (Amount and Extent)**	optimal
Date	21-Jul-2010	Previous Assmet.Rating	optimal
Time	11:35 am	Comments	
Station Type	MS4		
Estimated Area Length			
Estimated Area Width	10.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station ESC-1

Print Date: 12/8/2010

Report for Site: ESC-2

Site Description:

				Station	MS4
Location	Lone Jack Rd @ Stratford Knoll				
		LandUse	Residential	Copermittee	EN
Latitude	33.41	LandUse_2	Residential		
Longitude	-117.23	Convey_Type	Outlet	Watershed	904.61

Field Observation:

Date	21-Jul-2010
Time	12:33 pm
Observer	MM
SampleEventType	Field Screening

Atmospheric Conditions

Weather	Overcast
Tide	NA
Last Rain	<72 hours
Rainfall	<0.1"

Comments

Sampled from a ponded area with excessive algal and plant growth.

Runoff Characteristics

Odor	Rotten eggs	Deposits	Fine particulate
Color	Brown	Vegetation	Excessive
Clarity	Clear	Biology	Insect & Algae
Floatables	None		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
pH	7.64	pH unit
Conductivity	8.23	mS/cm
Dissolved oxygen	5.53	mg/L
Nitrate (NO3-N)	0.466	mg/L
Ammonia (NH3-N)	0.6	mg/L
MBAS	0.078	mg/L
Turbidity	45.7	NTU
Temperature	22.85	ºC
Orthophosphate (PO4-P)	0.11	mg/L

Lab Results

Ammonia	ND	mg/L
Conductivity	8,230.00	umhos/cm
MBAS	0.08	mg/L
Nitrate as N	0.47	mg/L
Ortho Phosphate as PO4	0.09	mg/L
Turbidity	45.70	NTU

Trash Assessment:

StationID	ESC-2	**Overall Rating (Amount and Extent)**	optimal
Date	21-Jul-2010	Previous Assmet.Rating	optimal
Time	12:33 pm	Comments	
Station Type	MS4		
Estimated Area Length	50.00		
Estimated Area Width	20.00		

Threat to Human Health: No Threat to Aquatic Health: No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station ESC-2

Print Date: 12/8/2010

Report for Site: ESC-5

Site Description:

				Station	MS4
Location	872 Chelsea				
		LandUse	Residential	Copermittee	EN
Latitude	33.05	LandUse_2	None		
Longitude	-117.23	Convey_Type	Manhole	Watershed	904.61

Field Observation:

Date	01-Sep-2010	**Atmospheric Conditions**		**Comments**
Time	9:15 am	Weather	Sunny	
		Tide	NA	
Observer	MM	Last Rain	>72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	Coarse
Color	None	Vegetation	None
Clarity	Clear	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	No
Photo Taken?	No

Field Measurements:

Analyte	Result	Unit
Nitrate (NO3-N)	<1.13	mg/L
Turbidity	2.6	NTU
Conductivity	2.78	mS/cm
MBAS	0.15	mg/L
pH	7.16	pH unit
Ammonia (NH3-N)	0.1	mg/L
Orthophosphate (PO4-P)	0.21	mg/L
Temperature	21.61	ºC

Print Date: 12/8/2010

Trash Assessment:

StationID	ESC-5	**Overall Rating (Amount and Extent)**	Optimal
Date	01-Sep-2010	Previous Assmet.Rating	Optimal
Time	9:15 am	Comments	
Station Type	MS4		
Estimated Area Length	5.00		
Estimated Area Width	5.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station ESC-5

Print Date: 12/8/2010

Report for Site: LCS-1

Site Description:

				Station	MS4
Location	Garden View @ ECR				
		LandUse	Commercial	Copermittee	EN
Latitude	33.06	LandUse_2	Residential		
Longitude	-117.29	Convey_Type	Natural Creek	Watershed	904.51

Field Observation:

Date	09-Aug-2010
Time	1:04 pm
Observer	MM
SampleEventType	Field Screening

Atmospheric Conditions

Weather	Sunny
Tide	NA
Last Rain	>72 hours
Rainfall	None

Comments

A lot of mosquitos. Contact vector control.

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	Limited
Clarity	Clear	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
MBAS	0.4	mg/L
Nitrate (NO3-N)	0.6794	mg/L
Turbidity	16.4	NTU
Orthophosphate (PO4-P)	0.0619	mg/L
Temperature	20.62	ºC
Ammonia (NH3-N)	0.91	mg/L
Dissolved oxygen	4.92	mg/L
Conductivity	3.55	mS/cm
pH	7.32	pH unit

Lab Results

Cadmium, Diss	0.00	mg/L
Chlorpyrifos	ND	ug/L
Copper, Diss	0.01	mg/L
Diazinon	ND	ug/L
Enterococcus	700.00	CFU/100 mL
Fecal Coliform	1,200.00	CFU/100 mL
Hardness, Total as CaCO3	750.00	mg/L
Lead, Diss	ND	mg/L
Oil & Grease	ND	mg/L
Total Coliform	5,100.00	CFU/100 mL
Zinc, Diss	0.03	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	LCS-1	**Overall Rating (Amount and Extent)**	optimal
Date	09-Aug-2010	Previous Assmet.Rating	optimal
Time	1:04 pm	Comments	
Station Type	MS4		
Estimated Area Length	30.00		
Estimated Area Width	10.00		

Threat to Human Health: No Threat to Aquatic Health: No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station LCS-1

Print Date: 12/8/2010

Report for Site: LCS-2

Site Description:

				Station	MS4
Location	Leucadia Blvd @ ECR				
		LandUse	Commercial	Copermittee	EN
Latitude	33.07	LandUse_2	Commercial		
Longitude	-117.26	Convey_Type	Natural Creek	Watershed	904.51

Field Observation:

Date	19-Jul-2010	**Atmospheric Conditions**		**Comments**
Time	1:47 pm	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	>72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Rotten eggs	Deposits	None
Color	None	Vegetation	Excessive
Clarity	Clear	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	200.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
pH	7.55	pH unit
Orthophosphate (PO4-P)	0.25	mg/L
Turbidity	1.6	NTU
Temperature	23.07	ºC
Nitrate (NO3-N)	0.64	mg/L
Conductivity	2.48	mS/cm
Ammonia (NH3-N)	0.2	mg/L
MBAS	0.35	mg/L
Dissolved oxygen	7.14	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	LCS-2	**Overall Rating (Amount and Extent)**	optimal
Date	19-Jul-2010	Previous Assmet.Rating	suboptimal
Time		Comments	
Station Type	MS4		
Estimated Area Length	20.00		
Estimated Area Width	20.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station LCS-2

Print Date: 12/8/2010

Report for Site: LCS-4

Site Description:

				Station	MS4
Location	ECR @ Mtn Vista (NE corner of intersection)	LandUse	Commercial	Copermittee	EN
Latitude	33.05	LandUse_2	Residential		
Longitude	-117.26	Convey_Type	Manhole	Watershed	904.51

Field Observation:

Date	01-Sep-2010
Time	9:55 am
Observer	MM
SampleEventType	Field Screening

Atmospheric Conditions

Weather	Sunny
Tide	NA
Last Rain	>72 hours
Rainfall	None

Comments

Soft mud inside the catch basin.

Runoff Characteristics

Odor	Musty	Deposits	Fine particulate
Color	Yellow	Vegetation	None
Clarity	Opaque	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	No	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Temperature	22.33	ºC
Ammonia (NH3-N)	0.65	mg/L
Conductivity	2.37	mS/cm
Orthophosphate (PO4-P)	0.05	mg/L
pH	7.2	pH unit
Turbidity	69.1	NTU
Nitrate (NO3-N)	<1.13	mg/L
MBAS	0.4	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	LCS-4	**Overall Rating (Amount and Extent)**	optimal
Date	01-Sep-2010	Previous Assmet.Rating	optimal
Time	9:55 am	Comments	
Station Type	MS4		
Estimated Area Length	10.00		
Estimated Area Width	10.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station LCS-4

Print Date: 12/8/2010

Report for Site: LCS-5

Site Description:

				Station	MS4
Location	Via Molena @ ECR				
		LandUse	Commercial	Copermittee	EN
Latitude	33.05	LandUse_2	None		
Longitude	-117.26	Convey_Type	Manhole	Watershed	904.51

Field Observation:

Date	18-Aug-2010	**Atmospheric Conditions**		**Comments**
Time	11:05 am	Weather	Sunny	
		Tide	NA	
Observer	MM	Last Rain	>72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	Fine particulate
Color	Yellow	Vegetation	None
Clarity	Clear	Biology	None
Floatables	Other		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	Yes
Photo Taken?	No

Field Measurements:

Analyte	Result	Unit
Dissolved oxygen	7.6	mg/L
Conductivity	4.15	mS/cm
MBAS	0.6	mg/L
Nitrate (NO3-N)	1.16	mg/L
Orthophosphate (PO4-P)	<0.1	mg/L
Temperature	25.8	ºC
Turbidity	21.3	NTU
pH	7.7	pH unit
Ammonia (NH3-N)	0.48	mg/L

Lab Results

Cadmium, Diss	ND	mg/L
Chlorpyrifos	ND	ug/L
Copper, Diss	0.01	mg/L
Diazinon	ND	ug/L
Enterococcus	4,500.00	CFU/100 mL
Fecal Coliform	2,200.00	CFU/100 mL
Hardness, Total as CaCO3	750.00	mg/L
Lead, Diss	ND	mg/L
Oil & Grease	ND	mg/L
Total Coliform	8,900.00	CFU/100 mL
Zinc, Diss	0.02	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	LCS-5	**Overall Rating (Amount and Extent)**	Optimal
Date	18-Aug-2010	Previous Assmet.Rating	Optimal
Time	11:05 am	Comments	
Station Type	MS4		
Estimated Area Length	5.00		
Estimated Area Width	5.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station LCS-5

Print Date: 12/8/2010

Report for Site: LCS-7

Site Description:

				Station	MS4
Location	ECR (South of La Entrada Lane)	LandUse	Commercial	Copermittee	EN
Latitude	33.06	LandUse_2	None		
Longitude	-117.26	Convey_Type	Concrete Channel	Watershed	904.51

Field Observation:

Date	19-Jul-2010	**Atmospheric Conditions**		**Comments**
Time	11:36 am	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	>72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

				Conveyance Conditions		
Odor	Other	Deposits	None	Flow Rate	61.00	gpm
Color	Yellow	Vegetation	None	Water Flow	Flowing	
Clarity	Clear	Biology	Insect & Algae	Overland Flow?	No	
Floatables	Bubbles/Foam			Does the flow reach Receiving Water?		No
				Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Orthophosphate (PO4-P)	0.13	mg/L
MBAS	0.25	mg/L
Turbidity	14.6	NTU
Temperature	22.74	ºC
Nitrate (NO3-N)	1.25	mg/L
Conductivity	2.81	mS/cm
Ammonia (NH3-N)	0.38	mg/L
Dissolved oxygen	5.76	mg/L
pH	7.13	pH unit

Print Date: 12/8/2010

Trash Assessment:

StationID	LCS-7	**Overall Rating (Amount and Extent)**	optimal
Date	19-Jul-2010	Previous Assmet.Rating	suboptimal
Time	11:36 am	Comments	
Station Type	MS4		
Estimated Area Length	40.00		
Estimated Area Width	10.00		

Threat to Human Health: No Threat to Aquatic Health: No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station LCS-7

Print Date: 12/8/2010

Report for Site: LCS-8

Site Description:

				Station	MS4
Location	200 Turner Ave				
		LandUse	Residential	Copermittee	EN
Latitude	33.05	LandUse_2	Parks		
Longitude	-117.26	Convey_Type	Manhole	Watershed	904.51

Field Observation:

Date	01-Sep-2010	**Atmospheric Conditions**		**Comments**
Time	9:40 am	Weather	Sunny	
		Tide	NA	
Observer	MM	Last Rain	>72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	None
Color	Yellow	Vegetation	None
Clarity	Slightly Cloudy	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	No
Photo Taken?	No

Field Measurements:

Analyte	Result	Unit
pH	7.21	pH unit
Temperature	22.25	ºC
Orthophosphate (PO4-P)	<0.1	mg/L
Nitrate (NO3-N)	<1.13	mg/L
Turbidity	19.8	NTU
Ammonia (NH3-N)	0.86	mg/L
Conductivity	3.91	mS/cm
MBAS	0.6	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	LCS-8	**Overall Rating (Amount and Extent)**	Optimal
Date	01-Sep-2010	Previous Assmet.Rating	Optimal
Time	9:40 am	Comments	
Station Type	MS4		
Estimated Area Length	5.00		
Estimated Area Width	5.00		

Threat to Human Health: No Threat to Aquatic Health: No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station LCS-8

Print Date: 12/8/2010

Report for Site: LUC-1

Site Description:

				Station	MS4
Location	Ponto Beach Detention Basin				
		LandUse	Residential	Copermittee	EN
Latitude	33.08	LandUse_2	Commercial		
Longitude	-117.31	Convey_Type	Outlet	Watershed	904.51

Field Observation:

Date	19-Jul-2010
Time	3:11 pm
Observer	MM
SampleEventType	Field Screening

Atmospheric Conditions

Weather	Overcast
Tide	NA
Last Rain	>72 hours
Rainfall	None

Comments

Biology- Crawdads

Runoff Characteristics

Odor	None	Deposits	Coarse & Fine
Color	None	Vegetation	Excessive
Clarity	Clear	Biology	Other
Floatables	None		

Conveyance Conditions

Flow Rate	275.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	No	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Temperature	24.33	ºC
Conductivity	2.5	mS/cm
pH	7.69	pH unit
MBAS	0.25	mg/L
Nitrate (NO3-N)	>11.3	mg/L
Dissolved oxygen	7.89	mg/L
Ammonia (NH3-N)	0.18	mg/L
Orthophosphate (PO4-P)	0.08	mg/L
Turbidity	0.4	NTU

Print Date: 12/8/2010

Field Observation:

Date	20-Jul-2010
Time	3:11 pm
Observer	MM
SampleEventType	Confirmation

Atmospheric Conditions

Weather	Overcast
Tide	NA
Last Rain	>72 hours
Rainfall	None

Comments

BIology- Crawdads

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	Normal
Clarity	Clear	Biology	Other
Floatables	None		

Conveyance Conditions

Flow Rate	270.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
Dissolved oxygen	4.92	mg/L
Conductivity	2.46	mS/cm
Turbidity	0	NTU
Temperature	22.04	ºC
pH	7.33	pH unit
Nitrate (NO3-N)	11.3	mg/L

Trash Assessment:

StationID	LUC-1	**Overall Rating (Amount and Extent)**	optimal
Date	19-Jul-2010	Previous Assmet.Rating	optimal
Time		Comments	
Station Type	MS4		
Estimated Area Length	30.00		
Estimated Area Width	30.00		

Threat to Human Health: No Threat to Aquatic Health: No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station LUC-1

Print Date: 12/8/2010

Report for Site: LUC-10

Site Description:

				Station	MS4
Location	101 @ Avocado St				
		LandUse	Residential	Copermittee	EN
Latitude	33.08	LandUse_2	None		
Longitude	-117.31	Convey_Type	Manhole	Watershed	904.51

Field Observation:

Date	28-Sep-2010	**Atmospheric Conditions**		**Comments**
Time	9:47 am	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	>72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	None	Deposits	None
Color	None	Vegetation	None
Clarity	Clear	Biology	None
Floatables	None		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	Yes
Photo Taken?	No

Field Measurements:

Analyte	Result	Unit
MBAS	0.6	mg/L
Orthophosphate (PO4-P)	0.1	mg/L
Conductivity	2.52	mS/cm
Nitrate (NO3-N)	9.2	mg/L
Temperature	24.5	ºC
Turbidity	0	NTU
Ammonia (NH3-N)	0.11	mg/L
pH	7.21	pH unit
Dissolved oxygen	5.94	mg/L

Trash Assessment:

StationID	LUC-10	**Overall Rating (Amount and Extent)**	Optimal
Date	28-Sep-2010	Previous Assmet.Rating	Optimal
Time	9:47 am	Comments	
Station Type	MS4		
Estimated Area Length	5.00		
Estimated Area Width	5.00		

Threat to Human Health: No

Threat to Aquatic Health: No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station LUC-10

Print Date: 12/8/2010

Report for Site: LUC-3

Site Description:

				Station	MS4
Location	Normandy @ Piraeus				
		LandUse	Residential	Copermittee	EN
Latitude	33.07	LandUse_2	Commercial		
Longitude	-117.29	Convey_Type	Concrete Channel	Watershed	904.51

Field Observation:

Date	04-Aug-2010	**Atmospheric Conditions**	**Comments**
Time	12:35 pm	Weather	Sunny
		Tide	NA
Observer	MM	Last Rain	>72 hours
SampleEventType	Field Screening	Rainfall	None

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	Limited
Clarity	Clear	Biology	Insect & Algae
Floatables	None		

Conveyance Conditions

Flow Rate	7.00	gpm
Water Flow	Flowing	
Overland Flow?	No	
Does the flow reach Receiving Water?	No	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Turbidity	0.5	NTU
Ammonia (NH3-N)	0.07	mg/L
Conductivity	1.25	mS/cm
Dissolved oxygen	7.73	mg/L
MBAS	0.1	mg/L
Nitrate (NO3-N)	0.1286	mg/L
pH	8	pH unit
Temperature	24.89	ºC
Orthophosphate (PO4-P)	0.0032	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	LUC-3	**Overall Rating (Amount and Extent)**	optimal
Date	04-Aug-2010	Previous Assmet.Rating	optimal
Time	12:35 pm	Comments	
Station Type	MS4		
Estimated Area Length	100.00		
Estimated Area Width	10.00		

Threat to Human Health: No Threat to Aquatic Health: No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station LUC-3

Print Date: 12/8/2010

Report for Site: LUC-4 (Alt)

Site Description:

				Station	MS4
Location	Fox Point Detention Basin				
		LandUse	Residential	Copermittee	EN
Latitude	33.07	LandUse_2	Agricultural		
Longitude	-117.29	Convey_Type	Outlet	Watershed	904.51

Field Observation:

Date	30-Sep-2010	**Atmospheric Conditions**	**Comments**
Time	10:45 am	Weather	Partly cloudy
		Tide	NA
Observer	MM	Last Rain	<72 hours
SampleEventType	Field Screening	Rainfall	<0.1"

Runoff Characteristics

Odor	Musty	Deposits	None
Color	Yellow	Vegetation	None
Clarity	Clear	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	No
Photo Taken?	Yes

Field Measurements:

Analyte	Result	Unit
Orthophosphate (PO4-P)	<0.1	mg/L
pH	7.6	pH unit
Conductivity	3.76	mS/cm
Dissolved oxygen	3.65	mg/L
MBAS	0.7	mg/L
Temperature	23.6	ºC
Nitrate (NO3-N)	<1.13	mg/L
Turbidity	5.6	NTU
Ammonia (NH3-N)	0.82	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	LUC-4 (Alt)	**Overall Rating (Amount and Extent)**	Optimal
Date	30-Sep-2010	Previous Assmet.Rating	Optimal
Time	10:45 am	Comments	
Station Type	MS4		
Estimated Area Length	20.00		
Estimated Area Width	40.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station LUC-4 (Alt)

Print Date: 12/8/2010

Report for Site: LUC-6

Site Description:

				Station	MS4
Location	Piraeus Detention Basin				
		LandUse	Residential	Copermittee	EN
Latitude	33.08	LandUse_2	Open		
Longitude	-117.30	Convey_Type	Concrete Channel	Watershed	904.51

Field Observation:

Date	28-Sep-2010	**Atmospheric Conditions**		**Comments**
Time	1:55 pm	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	>72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

				Conveyance Conditions		
Odor	None	Deposits	Fine particulate	Flow Rate	0.00	gpm
Color	Yellow	Vegetation	None	Water Flow	Ponded	
Clarity	Slightly Cloudy	Biology	Insects	Overland Flow?	No	
Floatables	None			Does the flow reach Receiving Water?	No	
				Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Turbidity	60.5	NTU
Dissolved oxygen	12.43	mg/L
Nitrate (NO3-N)	<1.13	mg/L
pH	9.08	pH unit
Orthophosphate (PO4-P)	0.84	mg/L
Conductivity	2.63	mS/cm
Ammonia (NH3-N)	0.24	mg/L
MBAS	0.4	mg/L
Temperature	29.65	ºC

Trash Assessment:

StationID	LUC-6	**Overall Rating (Amount and Extent)**	Optimal
Date	28-Sep-2010	Previous Assmet.Rating	Optimal
Time	1:55 pm	Comments	
Station Type	MS4		
Estimated Area Length	30.00		
Estimated Area Width	20.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station LUC-6

Print Date: 12/8/2010

Report for Site: LUC-8

Site Description:

				Station	MS4
Location	Quail Hollow Dr				
		LandUse	Residential	Copermittee	EN
Latitude	33.07	LandUse_2	Parks		
Longitude	-117.28	Convey_Type	Manhole	Watershed	904.51

Field Observation:

Date	18-Aug-2010	**Atmospheric Conditions**		**Comments**
Time	2:05 pm	Weather	Sunny	
		Tide	NA	
Observer	MM	Last Rain	>72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	None
Clarity	Clear	Biology	None
Floatables	None		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	Yes
Photo Taken?	No

Field Measurements:

Analyte	Result	Unit
Ammonia (NH3-N)	0.21	mg/L
Nitrate (NO3-N)	<1.13	mg/L
MBAS	0.4	mg/L
Orthophosphate (PO4-P)	0.1304	mg/L
Temperature	25.68	ºC
Dissolved oxygen	7.82	mg/L
Conductivity	2.58	mS/cm
pH	7.84	pH unit
Turbidity	8.6	NTU

Lab Results

Cadmium, Diss	ND	mg/L
Chlorpyrifos	ND	ug/L
Copper, Diss	0.01	mg/L
Diazinon	ND	ug/L
Enterococcus	19,750.00	CFU/100 mL
Fecal Coliform	3,550.00	CFU/100 mL
Hardness, Total as CaCO3	740.00	mg/L
Lead, Diss	ND	mg/L
Oil & Grease	ND	mg/L
Total Coliform	44,000.00	CFU/100 mL
Zinc, Diss	0.03	mg/L

Print Date: 12/8/2010

Field Observation:

Date	19-Aug-2010	**Atmospheric Conditions**		**Comments**	
Time	10:43 am	Weather	Sunny		
		Tide	NA		
Observer	MM	Last Rain	>72 hours		
SampleEventType	Confirmation	Rainfall	None		

Runoff Characteristics

				Conveyance Conditions	
Odor	Musty	Deposits	Coarse particulate	Flow Rate	Unknown gpm
Color	None	Vegetation	None	Water Flow	Flowing
Clarity	Clear	Biology	Insects	Overland Flow?	No
Floatables	None			Does the flow reach Receiving Water?	Yes
				Photo Taken?	No

Field Measurements:

Analyte	Result	Unit
pH	8.07	pH unit
Conductivity	5.9	mS/cm
Turbidity	0.6	NTU
Temperature	22.77	ºC
Dissolved oxygen	7.34	mg/L

Lab Results

Enterococcus	2,800.00	CFU/100 mL

Trash Assessment:

StationID	LUC-8	**Overall Rating (Amount and Extent)**	Optimal
Date	18-Aug-2010	Previous Assmet.Rating	Optimal
Time	10:43 am	Comments	
Station Type	MS4		
Estimated Area Length	5.00		
Estimated Area Width	5.00		

Threat to Human Health: No Threat to Aquatic Health: No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station LUC-8

Print Date: 12/8/2010

Report for Site: LUX-1 (Alt)

Site Description:

				Station	MS4
Location	East Manchester @ ECR				
		LandUse	Residential	Copermittee	EN
Latitude	33.03	LandUse_2	Commercial		
Longitude	-117.26	Convey_Type	Natural Creek	Watershed	904.61

Field Observation:

Date	28-Sep-2010	**Atmospheric Conditions**		**Comments**
Time	3:21 pm	Weather	Partly cloudy	
		Tide	NA	
Observer	MM	Last Rain	>72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

				Conveyance Conditions		
Odor	Musty	Deposits	Fine particulate	Flow Rate	0.00	gpm
Color	Brown	Vegetation	None	Water Flow	Ponded	
Clarity	Clear	Biology	Algae	Overland Flow?	No	
Floatables	Other			Does the flow reach Receiving Water?	No	
				Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Conductivity	3.26	mS/cm
Ammonia (NH3-N)	0.21	mg/L
MBAS	0.15	mg/L
Orthophosphate (PO4-P)	0.38	mg/L
pH	7.6	pH unit
Temperature	25.93	ºC
Turbidity	49.7	NTU
Dissolved oxygen	4.05	mg/L
Nitrate (NO3-N)	<1.13	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	LUX-1 (Alt)	**Overall Rating (Amount and Extent)**	Optimal
Date	28-Sep-2010	Previous Assmet.Rating	Optimal
Time	3:21 pm	Comments	
Station Type	MS4		
Estimated Area Length	30.00		
Estimated Area Width	30.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station LUX-1 (Alt)

Print Date: 12/8/2010

Report for Site: RSF-1

Site Description:

				Station	MS4
Location	Peppertree Lane				
		LandUse	Commercial	Copermittee	EN
Latitude	33.04	LandUse_2	Residential		
Longitude	-117.24	Convey_Type	Outlet	Watershed	904.61

Field Observation:

Date	11-Aug-2010
Time	10:27 am
Observer	MM
SampleEventType	Field Screening

Atmospheric Conditions

Weather	Sunny
Tide	NA
Last Rain	>72 hours
Rainfall	None

Comments

Storm drain was mostly empty of water, filled primarily with decaying tree leaves. Some ponded water in the corner was sampled for a field screening analysis.

Runoff Characteristics

Odor	Musty	Deposits	Fine particulate
Color	Yellow	Vegetation	Excessive
Clarity	Clear	Biology	Insects
Floatables	None		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	No	
Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
Temperature	21.99	ºC
Nitrate (NO3-N)	1.1286	mg/L
Orthophosphate (PO4-P)	0.489	mg/L
Ammonia (NH3-N)	0.09	mg/L
Conductivity	1.16	mS/cm
MBAS	0.49	mg/L
Dissolved oxygen	4.75	mg/L
Turbidity	7.3	NTU
pH	7.08	pH unit

Print Date: 12/8/2010

Trash Assessment:

StationID	RSF-1	**Overall Rating (Amount and Extent)**	marginal
Date	11-Aug-2010	Previous Assmet.Rating	suboptimal
Time	10:27 am	Comments	
Station Type	MS4		
Estimated Area Length	50.00		
Estimated Area Width	20.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station RSF-1

Print Date: 12/8/2010

Report for Site: RSF-4

Site Description:

				Station	Receiving
Location	La Bajada Dip				
		LandUse	Residential	Copermittee	EN
Latitude	33.03	LandUse_2	Commercial		
Longitude	-117.24	Convey_Type	Natural Creek	Watershed	904.61

Field Observation:

Date	16-Aug-2010	**Atmospheric Conditions**	**Comments**
Time	11:35 am	Weather	Partly cloudy
		Tide	NA
Observer	MM	Last Rain	>72 hours
SampleEventType	Field Screening	Rainfall	None

Runoff Characteristics

Odor	Musty	Deposits	None
Color	None	Vegetation	None
Clarity	Clear	Biology	None
Floatables	None		

Conveyance Conditions

Flow Rate	Unknown gpm
Water Flow	Flowing
Overland Flow?	No
Does the flow reach Receiving Water?	Yes
Photo Taken?	Yes

Field Measurements:

Analyte	Result	Unit
Dissolved oxygen	5.76	mg/L
Temperature	20.4	ºC
Ammonia (NH3-N)	0.27	mg/L
pH	7.8	pH unit
Conductivity	2.39	mS/cm
Orthophosphate (PO4-P)	<0.1	mg/L
Turbidity	2.5	NTU
Nitrate (NO3-N)	<1.13	mg/L
MBAS	0.25	mg/L

Lab Results

Cadmium, Diss	ND	mg/L
Chlorpyrifos	ND	ug/L
Copper, Diss	ND	mg/L
Diazinon	ND	ug/L
Enterococcus	100.00	CFU/100 mL
Fecal Coliform	600.00	CFU/100 mL
Hardness, Total as CaCO3	640.00	mg/L
Lead, Diss	ND	mg/L
Oil & Grease	ND	mg/L
Total Coliform	2,500.00	CFU/100 mL
Zinc, Diss	0.02	mg/L

Trash Assessment:

StationID	RSF-4	**Overall Rating (Amount and Extent)**	Optimal
Date	16-Aug-2010	Previous Assmet.Rating	Suboptimal
Time	11:35 am	Comments	
Station Type	Receiving Water		
Estimated Area Length	20.00		
Estimated Area Width	50.00		

Threat to Human Health	No	Threat to Aquatic Health	No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station RSF-4

Print Date: 12/8/2010

Report for Site: SEL-2

Site Description:

				Station	MS4
Location	Mackinnon Ranch Rd				
		LandUse	Residential	Copermittee	EN
Latitude	33.01	LandUse_2	Residential		
Longitude	-117.27	Convey_Type	Outlet	Watershed	904.61

Field Observation:

		Atmospheric Conditions		Comments
Date	18-Aug-2010	Weather	Sunny	
Time	1:40 pm	Tide	NA	
Observer	MM	Last Rain	>72 hours	
SampleEventType	Field Screening	Rainfall	None	

Runoff Characteristics

				Conveyance Conditions		
Odor	Musty	Deposits	Fine particulate	Flow Rate	0.00	gpm
Color	Yellow	Vegetation	Excessive	Water Flow	Ponded	
Clarity	Clear	Biology	Insects	Overland Flow?	No	
Floatables	None			Does the flow reach Receiving Water?	Yes	
				Photo Taken?	No	

Field Measurements:

Analyte	Result	Unit
pH	7.14	pH unit
Nitrate (NO3-N)	<1.13	mg/L
Turbidity	37.5	NTU
Ammonia (NH3-N)	0.65	mg/L
Conductivity	6.49	mS/cm
Orthophosphate (PO4-P)	<0.1	mg/L
Dissolved oxygen	4.63	mg/L
MBAS	0.4	mg/L
Temperature	23.08	ºC

Lab Results

Cadmium, Diss	ND	mg/L
Chlorpyrifos	ND	ug/L
Copper, Diss	0.03	mg/L
Diazinon	ND	ug/L
Enterococcus	ND	CFU/100 mL
Fecal Coliform	100.00	CFU/100 mL
Hardness, Total as CaCO3	1,920.00	mg/L
Lead, Diss	ND	mg/L
Oil & Grease	ND	mg/L
Total Coliform	500.00	CFU/100 mL
Zinc, Diss	0.02	mg/L

Print Date: 12/8/2010

Trash Assessment:

StationID	SEL-2	**Overall Rating (Amount and Extent)**	optimal
Date	18-Aug-2010	Previous Assmet.Rating	optimal
Time	1:40 pm	Comments	
Station Type	MS4		
Estimated Area Length	10.00		
Estimated Area Width	10.00		

Threat to Human Health: No Threat to Aquatic Health: No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station SEL-2

Print Date: 12/8/2010

Report for Site: SEL-3

Site Description:

				Station	MS4
Location	Mira Costa College Detention Basin	LandUse	Residential	Copermittee	EN
Latitude	33.02	LandUse_2	Parks		
Longitude	-117.26	Convey_Type	Outlet	Watershed	904.61

Field Observation:

Date	11-Aug-2010
Time	11:31 am
Observer	MM
SampleEventType	Field Screening

Atmospheric Conditions

Weather	Sunny
Tide	NA
Last Rain	>72 hours
Rainfall	None

Comments

This site contained many fish, insects, and algae & also served as a duck pond.

Runoff Characteristics

Odor	Musty	Deposits	Fine particulate
Color	Yellow	Vegetation	Normal
Clarity	Slightly Cloudy	Biology	Insect & Algae &
Floatables	Algae		

Conveyance Conditions

Flow Rate	0.00	gpm
Water Flow	Ponded	
Overland Flow?	No	
Does the flow reach Receiving Water?	Yes	
Photo Taken?	Yes	

Field Measurements:

Analyte	Result	Unit
Temperature	24.4	ºC
pH	7.89	pH unit
Orthophosphate (PO4-P)	0.0358	mg/L
Nitrate (NO3-N)	1.1286	mg/L
MBAS	0.9	mg/L
Dissolved oxygen	9.13	mg/L
Conductivity	7.2	mS/cm
Ammonia (NH3-N)	0.89	mg/L
Turbidity	28.2	NTU

Lab Results

Enterococcus	200.00	CFU/100 mL
Fecal Coliform	1,900.00	CFU/100 mL
Total Coliform	2,500.00	CFU/100 mL

Print Date: 12/8/2010

Trash Assessment:

StationID	SEL-3	**Overall Rating (Amount and Extent)**	optimal
Date	11-Aug-2010	Previous Assmet.Rating	optimal
Time	11:31 am	Comments	
Station Type	MS4		
Estimated Area Length	30.00		
Estimated Area Width	30.00		

Threat to Human Health No Threat to Aquatic Health No

Trash Type	Ranking	Potential Route #1	Potential Source #1	Potential Route #2	Potential Source #2

End of Report for station SEL-3



CBS-2



CBS-4



CBS-7



CBS-8



CBS-9



ENC-1



ENC-3



ENC-4



ENC-5



ENC-6



ENC-8



ENC-9



ENC-10



ENC-11



ENC-15



ESC-1



ESC-2



LCS-4



LCS-7



LUC-1



LUC-3



LUC-4



LUC-6



LUX-1



LUX-2



LUX-3



SEL-3



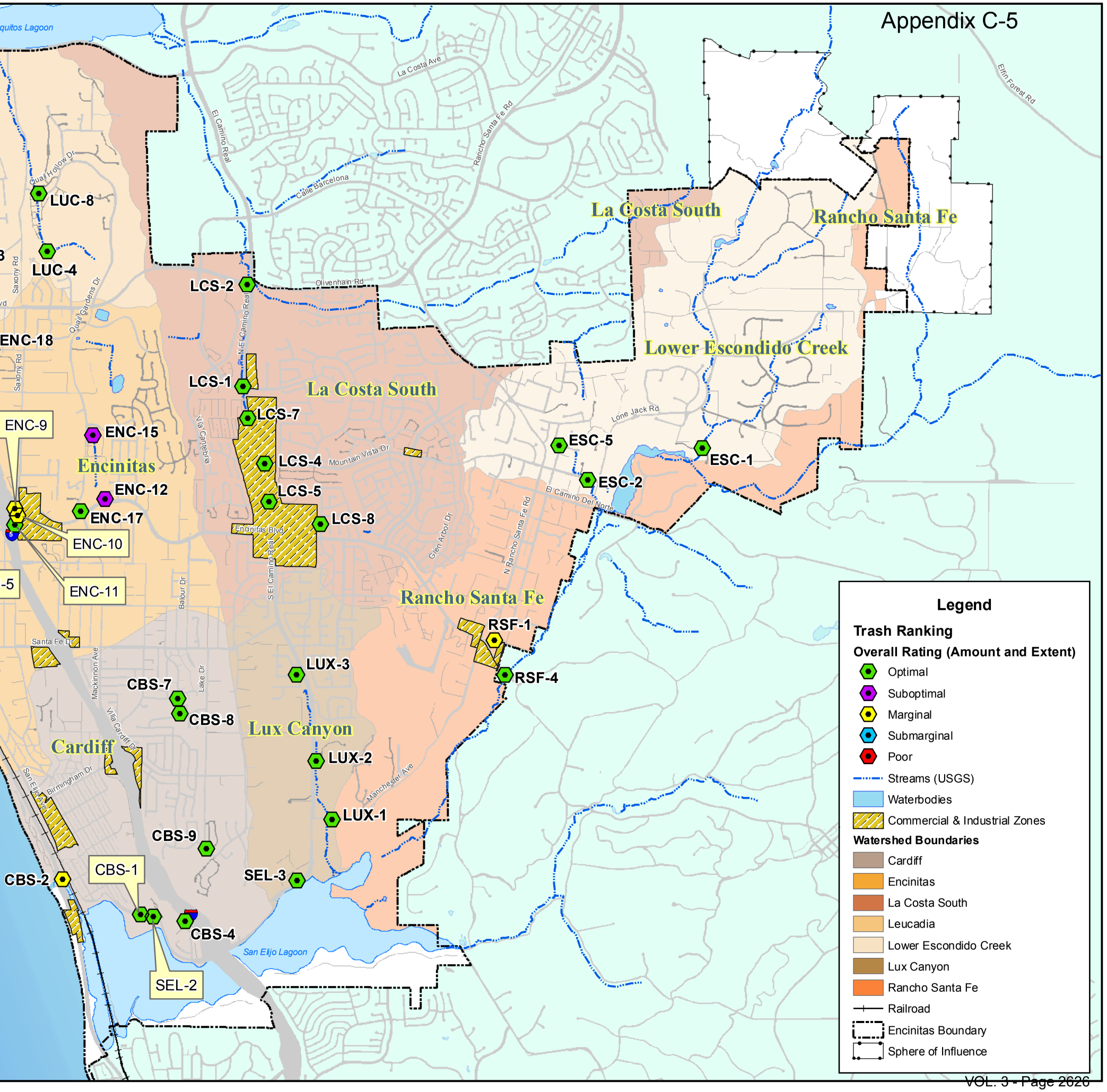
RSF-4

Appendix C-4 2010 Dry Weather Monitoring Analytical Results

Station ID	Sample Date	Ammonia (mg/L) K-1403	Conductivity (mS/cm)	MBAS (mg/L)	Nitrate (mg/L)	Orthophosphate (mg/L)	pH (pH)	Water Temperature (oC)	Turbidity (NTU)	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)	Hardness, Total (mg/L)	Oil & Grease (mg/L)	Chlorpyrifos (ng/L)	Diazinon (ng/L)	Total Coliform (cfu/100 ml)	Fecal Coliform (cfu/100 ml)	Enterococcus (cfu/100 ml)
CBS-1	8/11/2010	0.49	4.40	0.35	3.64	0.07	8.09	21.40	**8.00**	NT	NT	NT	NT	NT	NT	NT	NT	3200	2900	1400
CBS-2	7/26/2010	ND	**5.04**	0.25	1.32	0.00	7.45	22.18	**13.50**	NT	NT	NT	NT	NT	NT	NT	NT	26200	**16000**	800
CBS-2	7/28/2010	NT	**6.54**	NT	NT	NT	**9.36**	27.53	**14.70**	NT	NT	NT	NT	NT	NT	NT	NT	NT	6650	NT
CBS-2	8/9/2010	NT	**5.86**	NT	NT	NT	8.01	27.28	3.40	ND	0.024	ND	0.011	830	ND	ND	ND	NT	NT	NT
CBS-4	7/26/2010	ND	**7.29**	0.07	3.92	ND	7.88	24.42	4.35	NT	NT	NT	NT	NT	NT	NT	NT	2600	200	300
CBS-7	7/26/2010	0.21	2.01	0.40	0.11	0.15	6.81	21.10	**13.30**	NT	NT	NT	NT	NT	NT	NT	NT	1600	800	200
CBS-8	7/28/2010	0.16	2.00	0.25	0.68	0.76	8.03	21.14	**13.30**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
CBS-9	9/28/2010	0.10	2.68	0.60	**>11.3**	0.50	8.54	26.81	**6.40**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
CBS-9	9/29/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SEL-2	8/18/2010	0.65	**6.49**	0.40	0.17	0.01	7.14	23.08	**37.50**	ND	0.026	ND	0.019	1920	ND	ND	ND	500	100	<100
SEL-3	8/11/2010	0.89	**7.20**	0.90	<1.13	0.04	7.89	24.40	**28.20**	NT	NT	NT	NT	NT	NT	NT	NT	2500	1900	200
ENC-1	8/2/2010	0.15	5.00	0.60	**>11.3**	0.06	7.62	24.14	1.50	ND	ND	ND	0.021	1180	ND	ND	ND	4900	1300	200
ENC-3	8/4/2010	0.11	5.00	0.75	**>11.3**	0.02	7.19	20.63	4.80	NT	NT	NT	NT	NT	NT	NT	NT	17400	3200	400
ENC-3	8/5/2010	NT	2.82	NT	**>11.3**	NT	6.57	20.72	3.10	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-4	8/2/2010	0.02	1.46	0.40	0.93	0.22	8.04	20.90	1.90	ND	0.006	ND	0.015	410	ND	ND	ND	8300	1500	100
ENC-5	7/28/2010	0.26	1.50	0.50	3.16	0.30	8.07	22.95	**25.90**	NT	NT	NT	NT	NT	NT	NT	NT	2900	1300	600
ENC-6	7/28/2010	0.14	**7.02**	**1.00**	**>11.3**	0.08	7.34	23.26	**12.90**	NT	NT	NT	NT	NT	NT	NT	NT	800	400	400
ENC-6	7/30/2010	NT	**7.06**	**1.25**	**>11.3**	NT	**6.43**	19.56	**13.30**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-6	8/2/2010	NT	**7.01**	**1.25**	NT	NT	7.03	20.98	0.70	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-8	7/21/2010	0.11	4.94	0.04	**23.84**	0.13	7.86	21.46	2.66	NT	NT	NT	NT	NT	NT	NT	NT	1800	<100	100
ENC-8	7/22/2010	ND	**5.05**	NT	**>11.3**	0.45	6.97	21.61	1.50	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-9	9/1/2010	0.20	1.78	0.60	0.84	0.39	8.16	25.71	2.90	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-10	8/16/2010	0.27	2.73	0.65	0.96	0.46	7.43	20.31	**8.40**	ND	0.007	ND	0.023	610	ND	ND	ND	23000	5800	3900
ENC-11	8/16/2010	0.65	**7.62**	0.90	**>11.3**	0.003	7.42	20.41	0.50	NT	NT	NT	NT	NT	NT	NT	NT	3500	1500	200
ENC-11	8/18/2010	NT	**7.32**	NT	**>11.3**	NT	7.48	23.16	1.00	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-12	8/30/2010	0.19	1.56	0.40	3.00	0.76	8.39	23.29	4.30	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-15	8/9/2010	0.21	2.75	0.15	0.19	0.79	7.56	23.89	1.90	ND	0.008	ND	0.029	670	ND	ND	ND	2200	1200	600
ENC-17	8/30/2010	0.41	0.17	0.75	2.43	1.03	8.24	22.01	**62.20**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ENC-18	8/30/2010	0.96	**5.71**	0.90	4.29	1.13	7.91	22.28	**17.90**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-1	8/9/2010	0.91	3.55	0.40	0.68	0.06	7.32	20.62	**16.40**	0.002	0.005	ND	0.028	750	ND	ND	ND	5100	1200	700
LCS-2	7/19/2010	0.20	2.48	0.35	0.64	0.25	7.55	23.04	1.60	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-4	9/1/2010	0.65	2.37	0.40	0.48	0.05	7.20	22.33	**69.10**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-5	8/18/2010	0.48	4.15	0.60	1.16	0.07	7.70	25.80	**21.30**	ND	0.012	ND	0.017	750	ND	ND	ND	8900	2200	4500
LCS-7	7/19/2010	0.38	2.81	0.25	1.25	0.13	7.13	22.74	**14.60**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LCS-8	9/1/2010	0.86	3.91	0.60	0.69	0.03	7.21	22.25	**19.80**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-1	7/16/2010	0.18	2.50	0.25	**>11.3**	0.08	7.69	24.33	0.40	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-1	7/20/2010	NT	2.46	NT	11.30	NT	7.33	22.04	0.00	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-3	8/4/2010	0.07	1.25	0.10	0.13	0.003	8.00	24.89	0.50	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-4 (Alt)	9/30/2010	0.82	3.76	0.70	0.16	0.04	7.60	23.60	**5.60**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-6	9/28/2010	0.24	2.63	0.40	0.12	0.84	**9.08**	29.65	**60.50**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUC-8	8/18/2010	0.21	2.58	0.40	0.83	0.13	7.84	25.68	**8.60**	ND	0.007	ND	0.031	740	ND	ND	ND	44000	3550	**19750**
LUC-8	8/19/2010	NT	**5.90**	NT	NT	NT	8.07	22.77	0.60	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	2800
LUC-10	9/28/2010	0.11	2.52	0.60	9.20	0.10	7.21	24.50	0.00	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ESC-1	7/21/2010	0.10	3.38	0.25	0.02	0.04	8.21	19.99	2.00	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ESC-2	7/21/2010	ND	**8.23**	0.08	0.47	0.09	7.64	22.85	**45.70**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
ESC-5	9/1/2010	0.10	2.78	0.15	0.05	0.21	7.16	21.61	2.60	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUX-1 (Alt)	9/28/2010	0.21	3.26	0.15	0.23	0.38	7.60	25.93	**49.70**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
LUX-2	9/28/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
LUX-3	9/1/2010	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
RSF-1	8/11/2010	0.09	1.16	0.50	<1.13	0.49	7.08	21.99	**7.30**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
RSF-4	8/16/2010	0.27	2.39	0.25	0.12	0.10	7.80	20.40	2.50	ND	ND	ND	0.021	640	ND	ND	ND	2500	600	100

Notes :

ND	Indicates Analyte was Not Detected above the reporting limit
NS	Indicates No Sample was taken
NT	Indicates analyte was Not Tested at that site
E>	Indicates associated value is an estimate
Bold	Indicates value exceeded Action Levels


quitos Lagoon
La Costa Ave
El Camino Real
Rancho Santa Fe Rd
Calle Barcelona
Quail Hollow Dr
LUC-8
LUC-4
Saxony Rd
Quail Gardens Dr
Olivenhain Rd
LCS-2
ENC-18
N El Camino Real
LCS-1
La Costa South
LCS-7
ENC-9
ENC-15
Encinitas
LCS-4
Mountain Vista Dr
Via Cantebria
ENC-12
LCS-5
ENC-17
LCS-8
Encinitas Blvd
ENC-10
ENC-11
Balour Dr
Glen Arbor Dr
N Rancho Santa Fe Rd
La Costa South
Lower Escondido Creek
Rancho Santa Fe
Lone Jack Rd
ESC-5
ESC-1
ESC-2
El Camino Del Norte
Einn Forest Rd
RSF-1
RSF-4
Rancho Santa Fe
LUX-3
CBS-7
CBS-8
Lake Dr
Mackinnon Ave
Villa Cardiff Dr
Lux Canyon
Cardiff
LUX-2
Manchester Ave
San Elijo Ave
Birmingham Dr
LUX-1
CBS-9
CBS-1
CBS-2
SEL-3
CBS-4
San Elijo Lagoon
SEL-2
Legend
Trash Ranking
Overall Rating (Amount and Extent)
Optimal
Suboptimal
Marginal
Submarginal
Poor
Streams (USGS)
Waterbodies
Commercial & Industrial Zones
Watershed Boundaries
Cardiff
Encinitas
La Costa South
Leucadia
Lower Escondido Creek
Lux Canyon
Rancho Santa Fe
Railroad
Encinitas Boundary
Sphere of Influence

Citation #CW-

City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024
TELEPHONE NO.: (760) 633-2600
FAX NO: (760) 633-2818
www.ci.encinitas.ca.us

Administrative Citation

Date of Violation:

☐ **WARNING** ☐ 1st Citation $100 per violation ☐ 2nd Citation $200 per violation
☐ 3rd Citation $500 (per violation and each subsequent violation within a 12-month period)

Payment of $0.00 is due no later than (see reverse side for payment and appeal information)

This citation prohibits the continuation or repeated occurrence of the violation described below. Payment of the fine shall not excuse the failure to correct the violation nor shall it bar further enforcement by the City.

Violation Address	**Assessor's Parcel Number**
Person Cited	**Relationship of person being cited**
Mailing Address	**Business (if applicable)**

Code Section Violated	**Description of Violation**

As per the City of Encinitas Municipal Code Section 20.08.110 the following corrective actions must be implemented:

Failure to comply may result in the issuance of the next level citation for each code section violated and/or other enforcement actions.

Enforcing Officer	**Phone Number** (760) –	**Signature**	**Date issued**
Person Cited (Print Please)		**Acknowledgement of Receipt-Signature**	**Date**

Method of Delivery
☐ **In Person** ☐ **Posted on Property** ☐ **By Mail** ☐ **Certified Mail** ☐ **Other**

CC:

ADMINISTRATIVE CITATIONS

Encinitas Municipal Code Chapter 1.08.080 provides for the issuance of an administrative citation for violations of the Code. There are four levels of citations that may be issued progressively for a violation. The levels, as indicated on the front of the citation, are a Warning, a $100 First Citation, a $200 Second Citation, and a $500 Third and subsequent Citations. These fines are per violation and are cumulative. A warning, if issued, does not incur a fine and, therefore, cannot be appealed.

A. RIGHTS OF APPEAL

You have the right to appeal this citation within 15 calendar days from the date the citation was issued. An appeal must be made in writing, including a return address, a basis for the appeal in detail must be included, and be accompanied by the fine amount. An appeal will result in an administrative hearing.

Failure of any person to properly file a written appeal within 15 calendar days shall constitute a waiver of his or her right to an administrative hearing and adjudication of the citation or any portion thereof and the total amount of the fine.

B. HOW TO PAY FINE

The amount of the fine is indicated on the front of the administrative citation and is due within 30 calendar days of the issue date of the citation. You may pay by mail or in person. Payment should be made by credit card, personal check, cashier's check, or money order payable to the City of Encinitas. Payment should be made at the address below. Please write the citation number on your check or money order.

City of Encinitas
505 S. Vulcan Ave.
Encinitas, CA 92024
Attention: Finance Department / Administrative Citations

If the fine is not paid within 30 calendar days of the issue date of the citation, you will receive a Delinquent Notice from the Finance Department and there will be a 100% penalty fee assessed in addition to the original fine.

Payment of any fine shall not excuse the failure to correct the violation nor shall it bar further enforcement by the City.

C. CONSEQUENCES FOR FAILURE TO PAY THE FINE

The failure of any person to pay the fine assessed by a citation within 30 calendar days of the issuing date of the citation or the due date on a Delinquent Notice may result in turning the account over to a collection agency, filing a claim with Small Claims Court, a lien against your property, or any other available legal remedy to collect such money. The City has the authority to collect all costs associated with the filing of such actions.

D. CONSEQUENCES OF FAILURE TO CORRECT VIOLATIONS

There are numerous other enforcement options that may be used to encourage correction of violations. These options include, but are not limited to: criminal prosecution, civil litigation, abatement, recording the violation with the County Recorder, and forfeiture of certain benefits for substandard residential rental property.

If you need further information about the violation and/or how to comply, please call the officer designated on the front of the citation.

Appendix E
JURMP Annual Report Requirements Checklist

IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
i. Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.	7.4.2.1, Appendix C (Section 2.0), Appendix C-1
ii. Reporting of all dry weather field screening and analytical monitoring results. The data should be presented in tabular and graphical form. The reporting shall include station locations, all dry weather field screening and analytical monitoring results, identification of sites where results exceeded action levels, follow-up and elimination activities for potential illicit discharges and connections, the rationale for why follow-up investigations were not conducted at sites where action levels were exceeded, any Copermittee or consultant program recommendations/changes resulting from the monitoring, and documentation that these recommendations/changes have been implemented. Dry weather field screening and analytical monitoring reporting shall comply with all monitoring and standard reporting requirements in Attachment B of Order No. R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.	Appendix C
iii. Any dry weather field screening and analytical monitoring consultant reports generated, to be provided as an attachment to the annual report.	N/A
iv. A brief description of any other investigations and follow-up activities for illicit discharges and connections.	Appendix C
v. The number and brief description of illicit discharges and connections identified.	7.5.2
vi. The number of illicit discharges and connections eliminated.	7.5.2
vii. Identification and description of all spills to the MS4 and response to the spills.	Appendix H-1
viii. A description of activities implemented to prevent sewage and other spills from entering the MS4.	7.3.1, 7.3.4
ix. A description of the mechanism whereby notification of sewage spills from private laterals and septic systems is received.	7.2.1
x. Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	7.2.3, 7.2.4, Appendix H-1
xi. A description of efforts to publicize and facilitate public reporting of illicit discharges.	7.2.3
xii. The number of violations and enforcement actions (including types) taken for illicit discharges and connections, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	7.5.2, 7.5.3, Appendix H-1

IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	**Location in Report**
xiii. A description of notable activities conducted to manage illicit discharges and connections.	Appendix C (Section 7.0) Appendix H-1

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	**Location in Report**
Meets applicable standard monitoring and reporting requirements listed in Municipal Permit Attachment B.	Appendix C
c. (1) Determining Sampling Frequency: Dry weather field screening and analytical monitoring shall be conducted at each identified station at least once between May 1st and September 30th of each year or as often as the Copermittee determines is necessary to comply with the requirements of section D.4 of Order No. R9-2007-0001.	Appendix C
c. (2) If flow or ponded runoff is observed at a dry weather field screening or analytical monitoring station and there has been at least seventy-two (72) hours of dry weather, make observations and collect at least one (1) grab sample. Record general information such as time since last rain, quantity of last rain, site descriptions (i.e., conveyance type, dominant watershed land uses), flow estimation (i.e., width of water surface, approximate depth of water, approximate flow velocity, flow rate), and visual observations (i.e., odor, color, clarity, floatables, deposits/stains, vegetation condition, structural condition, and biology).	Appendix C (Section 3.0), Appendix C-2
c. (3) At a minimum, collect samples for analytical laboratory analysis of the following constituents for at least twenty five percent (25%) of the dry weather monitoring stations where water is present: (a) Total Hardness, (b) Oil and Grease, (c) Diazinon and Chlorpyrifos, (d) Cadmium (Dissolved), (e) Lead (Dissolved), (f) Zinc (Dissolved), (g) Copper (Dissolved), (h) Enterococcus bacteria, (i) Total Coliform bacteria, (j) Fecal Coliform bacteria	Appendix C, (Section 3.0)
c.(4) At a minimum, conduct field screening analysis of the following constituents at all dry weather monitoring stations where water is present:	Appendix C, Appendix C-2 and C-4
c. (a) Specific conductance (calculate estimated Total Dissolved Solids), (b) Turbidity, (c) pH, (d) Reactive Phosphorus, (e) Nitrate Nitrogen, (f) Ammonia Nitrogen, (g) Surfactants (MBAS)	Appendix C, Appendix C-2 and C-4
c. (5) If the station is dry (no flowing or ponded runoff), make and record all applicable observations and select another station from the list of alternate stations for monitoring.	Appendix C (Section 3.0)
c. (6) Develop and/or update criteria for dry weather field screening and analytical monitoring results whereby exceedance of the criteria will require follow-up investigations to be conducted to identify and eliminate the source causing the exceedance of the criteria.	Appendix C (Section 4.0)

IDDE—Additional Dry Weather Monitoring Program Requirements

Permit Annual Reporting Requirement—Attachment B and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001, Section II.B.3.c,d	**Location in Report**
c. (7) Assess the presence of trash in receiving waters and urban runoff at each dry weather field screening or analytical monitoring station. Assessments of trash shall provide information on the spatial extent and amount of trash present, as well as the nature of the types of trash present.	Appendix C (Section 8.0), Appendix C-2
c. (8) Dry weather field screening and analytical monitoring stations identified to exceed dry weather monitoring criteria for any constituents shall continue to be screened in subsequent years.	Appendix C, (Section 3.0)
c. (9) Develop and/or update procedures for source identification follow up investigations in the event of exceedance of dry weather field screening and analytical monitoring result criteria. These procedures shall be consistent with procedures required in section D.4.d of Order No. R9-2007-0001.	Appendix C (Section 3.0), (Section 4.0)
c. (10) Develop and/or update procedures to eliminate detected illicit discharges and connections. These procedures shall be consistent with each Copermittees Illicit Discharge and Elimination component of its Jurisdictional Urban Runoff Management Plan as discussed in section D.4 of Order No. R9-2007-0001.	7.5.2
d. The Copermittees shall commence implementation of dry weather field screening and analytical monitoring under the requirements of this Order by May 1, 2008. Each Copermittee shall conduct dry weather analytical and field screening monitoring in accordance with its storm water conveyance system map and dry weather analytical and field screening monitoring procedures as described in section II.B.3 above. If monitoring indicates an illicit connection or illegal discharge, conduct the follow-up investigation and elimination activities as described in submitted dry weather field screening and analytical monitoring procedures and sections D.4.d and D.4.e of Order No. R9-2007-0001. Until the dry weather field screening and analytical monitoring program is implemented under the requirements of this Order, each Copermittee shall continue to implement dry weather field screening and analytical monitoring as it was most recently implemented pursuant to Order No. 2001-01.	Appendix C

CITY OF ENCINITAS

Clean Water Program



ENGINEERING SERVICES

Jurisdictional Urban Runoff Management Program Annual Report

FY 2010-11

CITY OF ENCINITAS

Clean Water Program

ENGINEERING SERVICES

Jurisdictional Urban Runoff Management Program Annual Report

FY 2010-11

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EXECUTIVE SUMMARY

Section J.3 of Water Quality Order No. R9-2007-0001, adopted January 24, 2007, requires the City of Encinitas to prepare a JURMP Annual Report describing all activities conducted by the City to comply with the provisions of the Order. The following report covers the implementation period for Fiscal Year 2010-2011 with a defined reporting period from July 1, 2010 through June 30, 2011. This reporting period is defined by the ongoing implementation and refinement of program elements, and the assimilation of core components into a appropriate City functions resulting in a broadly effective and efficient set of actions. Reporting for this annual report has been prepared in compliance with standards established in Water Quality Order No. 2007-0001, and is based upon the most current information available at the time of document preparation. This report is presented in the standardized annual reporting format developed collectively by the San Diego Region Municipal Stormwater Copermittees.

On March 24, 2008, the City of Encinitas submitted, as required by Order No. 2007-0001, an updated JURMP. The JURMP was prepared as a foundational program document to detail programs, process, procedure, and implementation strategies employed by the City to improve and protect the quality of local surface and receiving waters. As part of the JURMP update process, the following list of objectives was established to set baseline guidance for overall program success:

- Develop programmatic elements to ensure compliance with regulatory standards and provisions mandated in Order No. R9-2007-001.
- Establish management processes and procedures to ensure accountability for program actions and activities.
- Establish and support a set of effective and efficient strategies to address Encinitas water quality concerns.
- Build program elements around integrated assessment approaches in order to evaluate overall performance and effectiveness of program components.

Programmatic reporting, as required and represented in this document, serves as a critical self assessment tool in consideration of the objectives outlined above. However, it should be noted that the value added outcomes, both to the program and to the community of Encinitas, of each program area are in constant review as local, regional, and discipline specific technical and scientific knowledge advances. It is important to recognize the iterative nature of stormwater and surface water quality management, as such programs are comprehensive in nature, and each individual component contributes to the overall effectiveness of program outcomes. Each reporting year provides opportunity to express refinement and acuity of programs and the City's overall progression in the field of stormwater and surface water quality management.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

9-26-11

Lawrence A. Watt
Director of Public Works

Date

1.0 INTRODUCTION

The Clean Water Act of 1972 established the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the discharge of pollutants from point sources to the waters of the United States. In 1987, the Clean Water Act was amended to include non-point source pollution such as urban runoff, and established a framework for regulating urban storm water runoff and other non-point source pollutants through establishment of various general and individual permits issued to local governments and other agencies.

In 2002, the City of Encinitas (City) developed a Jurisdictional Urban Runoff Management Program (JURMP) document as required by the San Diego Regional Water Quality Control Board (RWCQB) Order No. 2001-01 (2001 Permit). On January 24, 2007, Order No. R9-2007-0001 (Order, Permit, 2007 Permit or Municipal Stormwater Permit), was adopted by the RWQCB, regulating the discharge of urban runoff from municipal separate storm sewer systems (MS4) draining the watersheds of the County of San Diego, the San Diego Unified Port District, the San Diego County Regional Airport Authority, and the incorporated cities of San Diego County, including the City of Encinitas (Copermittees). Under the requirements of Order No. R9-2007-0001, the City prepared and submitted on March 24, 2008 an updated JURMP document describing enhancements to existing programs, as well as newly developed programmatic elements to meet the provisions of the adopted permit.

Section J.3 of Water Quality Order No. R9-2007-0001, requires the City to prepare a JURMP Annual Report describing all activities conducted by the City to comply with the provisions of the Order. The following report covers the implementation period for Fiscal Year 2010-2011 (FY 2010-11) with a defined reporting period from July 1, 2010 through June 30, 2011.

1.1 BACKGROUND

The City of Encinitas encompasses an overall area of nearly 20 square miles and is located along six miles of Pacific coastline in northern San Diego County. The City is characterized by coastal beaches, cliffs, flat-topped coastal areas, steep mesa bluffs and rolling hills. Incorporated in 1986, drawing together the communities of New Encinitas, Old Encinitas, Cardiff-by-the-Sea, Olivenhain and Leucadia, the City has an approximate population of 60,000. Encinitas is bordered by the Pacific Ocean to the west, Batiquitos Lagoon to the north, and the San Elijo Lagoon to the south.

The City of Encinitas is situated entirely within the Carlsbad Hydrologic Unit and is split between the San Marcos Watershed to the north and the Escondido Creek Watershed to the south. The City is naturally divided by eight (8) distinct drainage areas (sub-basins): Cardiff, Lower Escondido, La Orilla, La Costa South, Leucadia, Encinitas, Rancho Santa Fe, and Lux Canyon sub-basins. Encinitas receives an average annual rainfall of approximately ten (10) inches.

The City owns and maintains improved and open storm water channels, underground pipes of varying material, storm water detention basins, catch basins, and a variety of other MS4 facilities.

In general, the City drains to three blue-line creeks: Cottonwood Creek, Encinitas Creek and Escondido Creek. Cottonwood Creek drains the heart of Encinitas and discharges to the Pacific Ocean at Moonlight Beach. In 2006, Cottonwood Creek was 303(d) listed for DDT, phosphorous, and sediment toxicity stressors. Further, the Pacific Ocean is listed as a 303(d) impaired water body at Moonlight Beach for total coliform bacteria indicators due to urban runoff from Cottonwood Creek. Encinitas Creek drains the north-central portion of the City, and drains into Batiquitos Lagoon, which is designated as a Critical Coastal Area in the State of California 2002 Critical Coastal Areas Strategic Plan. In 2006, Encinitas Creek was 303(d) listed for phosphorous impairments, and in 2010 has been listed for selenium and toxicity. Escondido Creek, listed in 2006 for DDT, phosphorous, sediment toxicity, manganese, phosphate, selenium, sulfates, and total dissolved solids, and in 2010 for enterococcus, fecal coliform, and total nitrogen, drains the southern and northwest (Olivenhain) portion of the City and drains into San Elijo Lagoon. San Elijo Lagoon is 303(d) listed as an impaired water body for sediment/siltation, bacteria indicators, and eutrophic conditions.

1.2 PURPOSE AND OBJECTIVES

The purpose of the 2010-2011 JURMP Annual Report is to provide a comprehensive account of programmatic activities conducted by the City of Encinitas to meet the requirements of the Order No. 2007-0001. Additionally, the annual reporting process is used to evaluate the overall effectiveness and efficiency of program elements. Notably, a comprehensive program update occurred through the JURMP update process in 2008; therefore, only significant augmentation of program elements or planned changes will be captured in the following annual report. Any program modifications will be for the advancement of the City's program and will comply with all regulations as presented in the Municipal Permit.

2.0 DEVELOPMENT PLANNING

2.1 INTRODUCTION

Being a coastal community, environmental protection and water quality are of utmost importance to the City of Encinitas. As a result, the City has established strong water quality protection policies which are reflected in development planning documents and procedures. Through the implementation of the Development Planning Component of the City's JURMP and other related planning documents, the City aims to reduce the discharge of pollutants from development projects to the Maximum Extent Practicable (MEP) to protect receiving water bodies and manage increases in runoff and erosion from development projects.

This section describes the City's actions during FY 2010-11 which contributed to the successful implementation of the City's Development Planning Component. Included in this section is a summary of recent updates made to land use policies and procedures, a description of the update of the City's Standard Urban Stormwater Mitigation Plan (SUSMP), the development of the San Diego region Hydromodification Management Plan, a review of the development projects approved in the reporting year, and a summary of implementation of the BMP installation, verification, and inspection programs.

2.2 LAND USE PLANNING

The City's land use planning process facilitates (1) the reduction of development project discharges of pollutants from the MS4 to the MEP, (2) the prevention of development project discharges from the MS4 from causing or contributing to a violation of water quality standards, and (3) management of increases in runoff discharge volumes, rates, and durations from development projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force.

The City's land use planning process is fundamentally structured around the following planning, guidance, and enforcement documents:

- General Plan
- Jurisdictional Urban Runoff Management Plan
- Watercourse Protection, Storm Water Management and Discharge Control Ordinance (Municipal Code Chapter 20.08)
- Grading, Erosion and Sediment Control Ordinance (Municipal Code Chapter 23.24)
- Encinitas Stormwater Manual (Local SUSMP & HMP)
- Storm Water Best Management Practices Manual II

The consistent application and regular update, as required or necessary, of each of these documents enables the City to successfully conform to the requirements of section D.1 of the Municipal Permit. The following sections describe the City's land use planning process and the documents in more detail.

2.2.1 BACKGROUND

The City of Encinitas was incorporated in 1986, drawing together the communities of Cardiff-By-The-Sea, Leucadia, Olivenhain, and old and new Encinitas. The City's General Plan was adopted in 1989 and is amended on a limited, as needed basis. The City's JURMP, the Storm Water Ordinance, and the Storm Water BMP Manual II were each originally developed in 2002 as required by Order 2001-01. Each of these documents were reviewed and updated as needed in FY 2007-08 as part of the JURMP update process and as required by Order 2007-001 Municipal Stormwater Permit. Notably, in FY 2010-11 the City of Encinitas incorporated the San Diego Region Hydromodification Management Plan (HMP), as adopted by the RWQCB into the Encinitas Stormwater Manual (ESM), which serves as the City's local SUSMP and HMP implementation document.

2.2.2 SOURCE CHARACTERIZATION

The City addresses seven major land use categories in its General Plan: residential, office professional, commercial, industrial, public / semi-public, transportation, and ecological / open space / parks. Each of these land uses is associated with different combinations of pollutants and activities that have the potential to negatively affect the surrounding environment. A detailed discussion of the potential threats to water quality associated with existing residential, commercial, industrial, and municipal land uses can be found in their designated sections within this document.

Through the implementation of the land use planning policies, procedures, and requirements established in the General Plan, JURMP, Storm Water Ordinance, Grading Ordinance, BMP Manual II, and the Encinitas Stormwater Manual, the City aims to reduce the potential for pollutant discharges from all planned development and redevelopment land use sources.

2.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

During FY 2007-08, the City of Encinitas updated its land use planning BMPs as required by Order 2007-0001. As part of the 2008 JURMP update process, these BMPs were incorporated into the City's Storm Water BMP Manual II. In FY 2009-10, Clean Water Program staff completed the process of updating the City's local SUSMP to meet the minimum standards established in the updated and approved regional Model SUSMP. The City's new local SUSMP document, titled the Encinitas Stormwater Manual, was adopted in March 2010. In FY 2010-11, as required by the timeframe established in Order 2007-0001, the City incorporated the San Diego Region Hydromodification Mitigation Plan (HMP) into the City's local SUSMP, titled the Encinitas Stormwater Manual (ESM). The most current version of the City's BMP Manual II and the Encinitas Stormwater Manual can be accessed through the Clean Water Program webpage at: http://cwp.cityofencinitas.org. For more detail regarding the development and adoption of the Encinitas Stormwater Manual and the regional Model SUSMP refer to Section 2.2.4.4 and 2.4.4.1 below.

2.2.4 PROGRAM IMPLEMENTATION

2.2.4.1 GENERAL PLAN

The City of Encinitas General Plan addresses multiple water quality and watershed protection principles. Included within the General Plan are a number of proactive policies that pertain to water pollution and land use decisions. Many of the policies directly specify preservation and acquisition of riparian corridors, wetlands, and buffer zones providing important water quality benefits. The policies place limits on disturbances to natural water bodies and drainage systems caused by developments and strive to avoid developing in areas susceptible to erosion and sediment loss. The General Plan also discourages the use of large amounts of impervious surfaces in new development areas, minimizing the transport of urban runoff and pollutants. The breadth of the City's General Plan policies are such that they cross reference each other and have been determined to comprehensively comply with the Municipal Permit.

The City's General Plan document serves as the blueprint for the long-range, orderly, physical development of the City and contains stated community goals and policies designed to protect its environmental, social, cultural and economic resources as the City develops. The General Plan consists of an integrated and internally consistent set of goals, policies, and standards that address a number of issue areas which include land use, circulation, housing, noise, safety, recreation, conservation, and open space.

Portions of the General Plan also encompass the City's Local Coastal Program (LCP) Land Use Plan, which guides development in the City's Coastal Zone pursuant to the Coastal Act. As a result, the City's General Plan and LCP are a combined single document.

The City implements the policies in the General Plan using a variety of resources including: the JURMP, Municipal Code, Storm Water BMP Manual II, the Encinitas Stormwater Manual, Development Agreements, and other various land use plans and permits. Section 2.4 of this document describes how the water quality and watershed policies are implemented through the City's development planning process.

As a component of the 2008 JURMP update (prepared in FY 2007-08) an assessment of the City of Encinitas General Plan was conducted to determine the City's consistency with the watershed protection policies and principles found in the Municipal Permit. The analysis found that the City's General Plan goals and policies are consistent with the Municipal Permit, and no amendments to the General Plan were required as a part of the JURMP update.

In FY 2010-11, Clean Water Program staff remained engaged and productive in the City of Encinitas General Plan Update 2035. As the process of outlining policy statements for inclusion in the anticipated Draft release in September of 2011 continued throughout the reporting period, Clean Water Program staff worked to ensure that policy statements reflecting the priorities of the program are fully integrated across plan elements. The General Plan Update process will continue over the forthcoming permit reporting year through a combination of draft document review and community outreach, both of which the Clean Water Program will utilize to affect appropriate policy and direction in regards to surface water quality, stormwater management, and interrelated disciplines.

2.2.4.2 JURMP

In compliance with the new Municipal Permit, the City's JURMP document underwent a comprehensive update during FY 2007-08. The JURMP document serves as the City's foundational storm water program management tool, capturing the development process, procedure, and implementation strategies for described elements. The purpose of this document is to present an integrated approach to reducing the discharge of pollutants from the MS4 to the MEP, and to protect and improve the quality of water bodies in Encinitas.

2.2.4.3 STORM WATER ORDINANCE AND GRADING ORDINANCE

As required by section J.a.(3)(b)iii of the Municipal Permit, the City's Watercourse Protection, Stormwater Management and Discharge Control Ordinance *(EMC Chapter 20.08)*, also called the Storm Water Ordinance, was updated during FY 2007-08 to comply with the Municipal Permit. The Storm Water Ordinance sets up the legal framework which enables the City to enforce the water quality and watershed protection principles established in the General Plan and the JURMP. The Storm Water Ordinance also references the City's Storm Water BMP Manual II and enables the City to enforce the minimum BMPs and SUSMP requirements that are outlined in BMP Manual II and extended to the Encinitas Stormwater Manual. The ordinance is periodically reviewed and updated on an as needed basis to ensure that potential discharges of pollutants may be addressed appropriately.

The Grading, Erosion, and Sediment Control Ordinance *(EMC Chapter 23.24)* was thoroughly reviewed and updated in FY 2007-08, approved by City Council on February 25, 2009, and subsequently approved by the California Coastal Commission. The update largely addressed engineering related revisions, but also included some updates which serve to further strengthen the City's legal authority in meeting the provisions of the Municipal Permit related to both construction and post-construction activities. Specifically, the grading ordinance was updated to require that all Priority Projects acquire a grading permit, and that any project proposing 500 square feet or more of impervious surface is reviewed for conformance with City stormwater regulations.

2.2.4.4 LOCAL SUSMP (BMP MANUAL II, ESM, AND HMP)

Over the past serveral years the City's local SUSMP has undergone significant improvement. Updates included transition away from old SUSMP regulations that were housed in Storm Water BMP Manual II and development of the new comprehensive Encinitas Stormwater Manual. The Encintias Stormwater Manual (ESM) currently serves as the City's Local SUSMP and HMP implimentation document. The section below describes the updates that have occurred over the past few years.

Storm Water BMP Manual II

As part of the 2008 JURMP update, Storm Water BMP Manual II was also updated with revised SUSMP requirements and regionally adopted Interim Hydromodification Criteria required by the Municipal Permit. As a component of this update, the City also integrated the interim SUSMP provisions into local land use planning and development process and procedure as outlined in the BMP Manual II.

The City originally created Storm Water BMP Manual II in 2002 to be used by individuals involved with development projects within the City. BMP Manual II prescribes minimum stormwater BMPs for Land Development and Construction activities, and is enforceable through reference by the Stormwater Ordinance and the Grading Ordinance. With the development and adoption of the Encinitas Stormwater Manual, BMP Manual II has become more of a reference document. Refer to the following section for details about the Encinitas Stormwater Manual.

Encinitas Stormwater Manual
In FY 2009-10, the City of Encinitas developed the Encinitas Stormwater Manual as its updated local SUSMP based on the approved San Diego Regional Model SUSMP. The revised Model SUSMP was developed to address post-construction urban runoff pollution from development projects and defines the minimum required Low Impact Development (LID), source control, and treatment control BMPs. As required by Order No. 2007-001, all new updates to the San Diego Regional Model SUSMP were incorporated into the City's local SUSMP and land development process and procedures before March 24, 2010. The Encinitas Stormwater Manual and the updated BMP Manual II were adopted by City Council on March 17, 2010. More detail about the completed update can be found in Section 2.4.4.1.

Hydromodification Management Plan (HMP)
Within the defined reporting period of this report, the City of Encinitas updated its local SUSMP based on the Regional Board approved San Diego Region Hydromodification Management Plan (HMP). Subsequent to Regional Board approval of the HMP, copermittees updated the Model SUSMP to include the new HMP requirements. The City of Encinitas used the regional model to update the Encinitas Stormwater Manual (local SUSMP). The local update included integration of all of the HMP regulations including HMP applicability requirements, hydromodification sizing factors and hydromodification calculations for IMPs. The City's local update was completed by the required January 14, 2011 deadline and included City Council adoption of the updates.

2.3 ENVIRONMENTAL REVIEW PROCESS

As part of the 2008 JURMP update, the City's environmental review staff evaluated the City's environmental review process and confirmed that the current process accurately evaluates water quality and cumulative impacts and identifies appropriate measures to avoid, minimize, and mitigate those impacts for all development projects.

The California Environmental Quality Act (CEQA) requires environmental review of discretionary applications for development projects. Environmental initial studies are conducted to determine whether the project may have a significant impact on the environment. This review process evaluates a project's potential for significant impacts on water quality. In compliance with the Municipal Permit, additional questions have been provided in the initial study checklist; a tool utilized to evaluate the environmental effects of a project. To evaluate potential water quality impacts of projects requiring discretionary review, the following questions have been included as part of the initial study checklist:

Would the project:

- *Substantially conflict with city-adopted water quality standards or waste discharge requirements?*
- *Substantially alter the existing drainage pattern of the site or area, including the alteration of a stream or river course, in a manner which would result in substantial erosion or siltation on- or off-site?*
- *Result in a substantial degradation of receiving water quality during construction activities?*
- *Propose a land use or an on-site activity that would substantially degrade receiving water quality?*
- *Substantially increase any pollutant for which* a *tributary water body is listed on the Clean Water Act Section 303(d) list?*
- *Substantially degrade surface water quality within wetland, fresh, marine, or recreational waters?*
- *Substantially degrade groundwater quality?*

The environmental review process ensures that a project's impact on water quality is addressed early in the planning process. If a proposed project is determined to have a significant environmental effect, mitigation measures are required under CEQA to avoid or reduce the effect to below a level of significance. The mitigation measures will normally take the form of adopted permanent Best Management Practices to be incorporated into project plans prior to discretionary approval.

2.4 DEVELOPMENT PROJECT APPROVAL AND VERIFICATION PROCESS

2.4.1 BACKGROUND

As discussed in the previous sections, the City of Encinitas has an established multi-departmental review process for all new development and redevelopment projects. Through the application of the City's Storm Water Ordinance, Grading Ordinance, Storm Water BMP Manual II, Encinitas Stormwater Manual, and development project review process, the City aims to mitigate the negative impacts of urban runoff from development projects to the MEP.

Each proposed discretionary and ministerial project is subject to the City's Development Project Approval and Verification Process. The following sections describe this process in detail.

2.4.2 SOURCE CHARACTERIZATION

As discussed in Section 2.2.2, development projects have the potential to discharge different types and amounts of pollutants based on the project's size and intended land use. Pollutants such as trash and debris are anticipated from all developments, regardless of land use; however, pollutants like bacteria and viruses are more likely to originate from restaurants and residential developments rather than from parking lots and automotive repair shops. Since the potential for a site to discharge pollutants is unique to each development, the City's design requirements for development projects vary according to size, project characteristics, and anticipated land use.

The City's SUSMP (Encinitas Stormwater Manual), which was developed and adopted as required during FY 2009-10, describes specific categories for Priority Projects. A Priority Project must implement Low Impact Development techniques, source control components, Treatment Control Best Management Practices, and Hydromodification Management Practices to address potential pollutants.

In the City of Encinitas, all development projects, including Standard projects (projects not subject to SUSMP standards), are required to meet the minimum BMP requirements, which are discussed below in Section 2.4.3.

2.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City's minimum BMP requirements for all development projects are summarized here and are included in the new Encinitas Stormwater Manual. These minimum BMPs are based on BMPs established in the regional Model SUSMP. All development projects are required to include the following minimum BMPs:

- Implementation of source control BMPs as listed in Appendix A of the Encinitas Stormwater Manual.
- Inclusion of Low Impact Design (LID) features that conserve natural features, set back development from natural water bodies, minimize imperviousness, maximize infiltration, and retain and slow runoff. (Specific LID requirements are dependent on the type of project that is proposed.)
- Compliance with requirements for construction-phase controls on sediment and other pollutants.

SUSMP Priority Projects must submit a grading plan, which includes identification of proposed LID features, source control and treatment control BMPs, calculations for sizing the treatment control BMPs, and a maintenance agreement that will be recorded with the County. The grading plan must also address how the project will manage increases in runoff discharge rates and durations associated with the project, where such increases could cause impacts downstream of the project.

The City does not issue permits to development projects until all minimum BMP requirements are met. Any changes made to a development project's proposed storm water BMPs during project construction must be approved by the City before being implemented.

2.4.3.1 HYDROMODIFICATION MANAGEMENT PLAN (HMP) AND INTERIM HYDROMODIFICATION CRITERIA

To reduce the negative impacts to beneficial uses and stream habitats that are attributed to increased runoff rates and in compliance with Order No. 2007-0001, during the defined reporting period of this report, the City collaborated with the other Copermittees to adopt a detailed Hydromodification Management Plan (HMP) for the San Diego Region.

In FY 2007-08, the City established Interim Hydromodification Criteria, consistent with the regionally adopted interim hydromodification standards developed by the regional Technical Advisory Committee. The interim criteria were in effect until the final HMP was approved and incorporated in the Encinitas Stormwater Manual. In accordance with the Municipal Permit, the City required all Priority Projects disturbing 50 or more acres to comply with the Interim Hydromodification Criteria, except for those sites considered exempt as described in Section D.1.(g)(6) of the Municipal Permit. The details of the Interim Hydromodification Criteria were presented in the Encinitas Stormwater Manual and BMP Manual II and were replaced when the new HMP criteria were integrated.

Over the past three fiscal years, the Copermittees—in cooperation with a Technical Advisory Committee, the Southern California Coastal Water Research Project and the Regional Board—were actively involved in conducting scientific research and gathering the necessary data in order to prepare the final HMP. A time table for development of the final HMP can be found in Section 2.4.4.1 and Table 2-2. The final draft HMP was completed within the last fiscal year and was approved by the Regional Board on July 14, 2010. As required by the Municipal Permit, the City of Encinitas updated its local SUSMP (Encinitas Stormwater Manual) to include HMP requirements on January 14, 2011, within 180 days of Regional Water Quality Control Board approval. In accordance with the HMP criteria, the City now requires all Priority Projects (unless otherwise exempt) to comply with the hydromodification standards.

2.4.4 PROGRAM IMPLEMENTATION

As required by the Municipal Permit, the City of Encinitas has implemented a program to ensure that development and redevelopment projects comply with SUSMP requirements, including Low Impact Development, source control, treatment control BMPs, and Hydromodification Management. The Municipal Permit further requires that the City ensure proper installation of treatment control BMPs and their maintenance into perpetuity through such procedures as BMP verification, maintenance agreements, and annual inspections.

The following section provides an overview of the City's SUSMP implementation (including project tracking) during FY 2010-11.

2.4.4.1 MODEL AND LOCAL SUSMP UPDATES

As a part of the 2008 JURMP update process, the City updated its current SUSMP document to meet the interim requirements outlined in the new Municipal Permit. The City's update followed the recommended language developed by the regional SUSMP update group. All required interim SUSMP updates were incorporated into Storm Water BMP Manual II (see Section 2.2.4.4). In compliance with the interim SUSMP update standards established in Order No. 2007-0001, the following tasks were performed during the review and interim update of the SUSMP:

- Priority Project categories were updated.
- The document was reviewed to ensure no obsolete or ineffective BMPs were retained.

- LID requirements and additional source control requirements were added to meet or exceed Municipal Permit requirements.
- LID BMPs that can be used as treatment control BMPs were added to appropriate tables and discussions of treatment control options were updated accordingly.
- Pollution removal efficiencies of treatment control BMPs were reviewed and updated where necessary.

In addition to the changes discussed above, a comprehensive regional Model SUSMP update was completed by the copermittees during FY 2008-09 and submitted to the Regional Board for approval on January 26, 2009. After incorporation of revisions based on Regional Board comments the Model SUSMP was approved by the Regional Board on March 24, 2009. The comprehensive Model SUSMP update includes the following as required by the Municipal Permit:

- Inclusion of LID, source control, and treatment control BMPs that meet or exceed the minimum requirements of the Municipal Permit.
- Establishment of site, design, and maintenance criteria for each LID and treatment control BMP listed in the Model SUSMP.
- Addition of criteria to help determine conditions where implementation of each LID BMP included in the Model SUSMP is applicable and feasible.
- Addition of a requirement for Priority Projects with low traffic areas and appropriate soil conditions to use permeable surfaces.
- Addition of any necessary restrictions for infiltration BMPs from Priority Projects that generate high levels of pollutants.

During FY 09-10, the City completed the update of its Local SUSMP (Encinitas Stormwater Manual) to meet the requirements established in the regional Model SUSMP. The local update was completed and adopted by City Council on March 17, 2010, within one year after the adoption of the Model SUSMP. As described in section 2.2.4.4 and 2.4.3.1 the City's local SUSMP was further updated January 14, 2011 to include regionally adopted HMP requirements.

Development of the Encinitas Stormwater Manual (local SUSMP) involved extensive coordination between several City departments, including Engineering, Planning, Public Works, Parks & Recreation, and the San Dieguito Water District. Involving all appropriate departments in the development of the Encinitas Stormwater Manual provided interdepartmental ownership and awareness of applicable standard and helped to ensure that implementation of the new SUSMP requirements would go smoothly. Clean Water Program staff hosted bi-weekly Stormwater Quality Workgroup sessions from July 2009 through February 2010, providing a collaborative forum for the development of the local SUSMP (Encinitas Stormwater Manual). At these workshop meetings, staff from several departments actively participated in the development of Encinitas-specific document language, implementation tools (such as the Stormwater Checklist and Certification form), template maintenance agreements, and detailed Integrated Management Practice (IMP) design

guidelines. The workshop meetings were very successful and allowed for each department to be involved in the integration of the new SUSMP requirements into existing practices and procedures. After commencement of the workshop series, each department was well aware of the new SUSMP requirements and how these requirements would be presented in the Encinitas Stormwater Manual.

The City's updated Local SUSMP is titled the Encinitas Stormwater Manual. The Encinitas Stormwater Manual serves as an implementation guide for stormwater standards to assist the professional development community and the general public in understanding the City of Encinitas SUSMP requirements. The Encinitas Stormwater Manual establishes a regionally consistent and systematic BMP design procedure intended to meet complex and overlapping water quality requirements, including stormwater treatment controls, Low Impact Development (LID) standards, control of potential pollutant sources, and control of runoff peak and duration (hydrograph management).

The Encinitas Stormwater Manual is comprised of five interrelated document sections, each supporting and defining the background, regulatory drivers, process, and procedure necessary to guide project applicants toward compliance with defined stormwater quality requirements.

Section 1 – Policies and Procedures, summarizes all City requirements and subsequent procedural elements pertaining to proposed new development and redevelopment projects.

Section 2 – Concepts & Criteria, describes the water quality science, engineering standards, and regulatory framework that form the basis of stormwater requirements for land development.

Section 3 – Preparing Your Project Submittal, details a procedure for determining applicable project requirements, and drafting and submitting associated materials required for a proposed development project.

Section 4 – Low Impact Development Design Guide, instructs applicants on how to plan, design, and size (engineer) treatment facilities and LID features to meet stormwater requirements.

Section 5 – Operation & Maintenance of Stormwater Facilities, outlines the long-term operation and maintenance requirements for stormwater treatment facilities and establishes the process by which applicants will develop an operation and maintenance agreement for the proposed stormwater facilities.

In addition, the Encinitas Stormwater Manual contains a series of appendices specific to the material presented in each of the sections outlined above, including a stormwater quality checklist and certification, design specification sheets for various facility types, and template maintenance agreements for a variety of project types. Notably, the template maintenance agreements, designed to be used as models for legal agreements between the responsible party and the City of Encinitas for long-term operation and maintenance of the proposed stormwater facilities, have been reviewed by the City's legal counsel.

The Encinitas Stormwater Manual is intended to complement the existing BMP Manual II. While BMP Manual II establishes minimum BMP standards for development projects and construction activities, the Encinitas Stormwater Manual defines implementation policy and procedure by which to plan, select, design, construct, and ultimately maintain required

stormwater BMP facilities in the City of Encinitas. Complete versions of the updated BMP Manual II and the new Encinitas Stormwater Manual are available on the City's Clean Water Program webpage at http://cwp.cityofencinitas.org.

All necessary SUSMP updates described above and their completion dates are presented in Table 2-1.

Table 2-1
Time Schedule for Model and Local SUSMP Updates

SUSMP Update	Time Schedule	Status
Final Model SUSMP update	January 2009 (submitted) March 2009 (RB Approved)	Completed
Local SUSMP update	March 2010	Completed
HMP Progress Report	July 2008	Completed
Draft HMP	January 2009	Completed
Final HMP	December 2009	Completed
Regional Board Approval of Final HMP	Summer of 2010 (July 14, 2010)	Completed
Adoption of HMP into Local SUSMP (Encinitas Stormwater Manual)	180 days after RWQCB approval of the final HMP	Completed: January 14, 2011

2.4.4.2 DEVELOPMENT PROJECT APPROVAL PROCESS

The following section includes a summary of the City's updated development review process which has been implemented since the adoption of the Encinitas Stormwater Manual (local SUSMP).

DISCRETIONARY PROJECTS

Projects requiring a discretionary permit are subject to a three-tier review process that includes an initial predevelopment review prior to submittal to the City, a written self-certification of the BMP requirements for the project, and the application of project conditions of approval to meet storm water pollution control requirements. Those projects requiring an additional, ministerial permit are also subject to engineering plancheck review as described in the Ministerial Project section.

Predevelopment Process

The stormwater element of the predevelopment process is geared toward disseminating information on stormwater pollution control and the City's SUSMP requirements. During this preliminary design phase, engineers and applicants are guided by City staff to provide adequate post-construction BMP facilities in conceptual form and to document those facilities on the site plans upon the initial discretionary permit application submittal. This process

results in better designed and integrated post-construction BMPs, since the facilities are included in the project design even in the earliest phases of the project.

Priority Projects (defined by the City of Encinitas as those projects subject to SUSMP requirements), which require more stringent stormwater pollution control methods, are first identified during the predevelopment process. The categories of development falling under the Priority Project classification can be found in the Encinitas Stormwater Manual and are consistent with the requirements of the Municipal Permit. During the predevelopment meeting, applicants proposing Priority Projects learn that they must implement LID and source control BMPs and must install treatment control and hydromodification BMPs which meet the numeric sizing criteria required by the Municipal Permit. City staff also informs applicants at the predevelopment meeting that installed post-construction BMP facilities must be maintained in good working order into perpetuity. City staff and the applicant and/or engineer discuss options for meeting the numerical post-construction treatment requirements, including volume-based systems and flow-based systems. The applicant is also directed to follow the guidelines detailed in the Encinitas Stormwater Manual when designing post-construction BMPs and submitting plans and documents to Engineering for review. In Encinitas, mechanical treatment systems are discouraged and when accepted may only account for a maximum of 50% of the treatment requirement, with the remainder of the treatment being provided by a natural system.

Stormwater Pollution Control Checklist and Certification

All development project applicants are required to complete a written self-certification of the post-construction BMPs proposed with their project. This certification is required to accompany the initial submittal of each discretionary permit application. The checklist walks the applicant through the process of determining whether their project is a Priority Project and outlines the minimum submittal requirements for Priority Project applicants. The checklist is designed to assist applicants in:

- Classifying their projects as Priority, Standard, or Exempt from SUSMP.
- Determining whether or not the Project must meet HMP requirements.
- Certifying that their project will be designed, constructed, and maintained in conformance with the City's stormwater quality requirements detailed in the Encinitas Stormwater Manual.

The stormwater checklist must be completed by the party responsible for the development project and submitted with the project's permit applications. The stormwater checklist is an appendix of the Encinitas Stormwater Manual. In FY 10-11 a supplemental HMP checklist was developed to assist applicants in determining whether their project must meet HMP requirements. A copy of the SUSMP and supplemental HMP checklists are provided in this annual report as Appendix A-10 and Appendix-11.

The Development Review Process

The Engineering Department has established specific Conditions of Development Approval to assure compliance with the City's stormwater pollution control standards. These conditions include construction requirements as well as post-construction BMP standards for effective

stormwater pollution control facilities. Once the predevelopment meetings are conducted and the stormwater checklist has been completed, the applicant must follow the requirements established in the Encinitas Stormwater Manual when designing stormwater controls for the proposed project. Once the proposed plan is submitted, the Engineering Department reviews the adequacy of the project's proposed stormwater facilities shown on the site plan and issues Conditions of Approval to ensure implementation of satisfactory LID, source control, and treatment control BMP measures. The Conditions of Approval take into account the nature of each project site and the work proposed. The Conditions of Approval are then recorded in a covenant against the property.

Applicants not showing adequate construction or post-construction BMP measures on their initial development review submittals are asked to revise their plans and resubmit prior to approval. Stormwater pollution control facilities for Standard projects must meet the minimum requirements established in the Encinitas Stormwater Manual. Priority Projects must additionally show LID, source control, and treatment control BMPs on the project plans. In addition, Hydromodification Management requirements must also be met, unless the project is determined to be exempt from HMP. The project plans must show a feasible solution with substantiating calculations for numerically-sized treatment control BMPs. The process of designing appropriately sized treatment control BMPs is detailed in the Encinitas Stormwater Manual, which is available to all applicants through the City website.

MINISTERIAL PROJECTS

Projects requiring a ministerial permit such as a grading, improvement, or building permit are also required to include post-construction stormwater pollution control facilities in the project design. These BMP facilities must be considered adequate before the project's plans are approved by Engineering staff. Often the project has been scrutinized at the discretionary permit level and the project is already conditioned to provide specific treatment facilities. For those projects not requiring a discretionary permit, the review of the storm water pollution control treatment facilities begins at the Engineering plancheck stage.

The Plancheck Process

City plancheck engineers are trained in the design of stormwater pollution control facilities and serve as resources to the general public and to design engineers. During the plancheck process, every project is reviewed for stormwater construction and post-construction BMPs.

Every plan in plancheck is initially reviewed to determine if it meets the City's definition of a Priority Project. In addition to meeting standard BMP requirements, Priority Projects must provide LID, source control, and numerically-sized treatment control BMPs as required by the Municipal Permit and the Encinitas Stormwater Manual (City's local SUSMP). Hydromodification Management requirements must also be met, unless the project is determined to be exempt from HMP.

The Encinitas Stormwater Manual details the process which must be followed in order to design proposed stormwater treatment control facilities for Priority Projects. The manual also identifies specific design details and documents which must be submitted for review by the City's plancheck engineers. The Encinitas Stormwater Manual and City plancheck engineers

emphasize to applicants the variety of natural solutions that may be used in providing stormwater pollution control. Any areas used as post-construction BMPs must be clearly marked on the project plans along with the following associated note: "Stormwater Best Management Practice to be privately maintained and not to be modified without a permit from City". The permitted drawing will become public record; therefore documentation of the designated treatment areas is maintained. Engineers are also required to complete the Sources and Source Control BMP Checklist and incorporate all of the applicable permanent controls and operational BMPs into the project plans. Potential source control BMPs may include stormwater education, materials storage, erosion control, and waste management in order to meet the minimum SUSMP requirements.

All Priority Projects must comply with the numeric sizing criteria for treatment control BMPs in order to be approved by the City Engineer. Plancheck engineers review the project's hydrology calculations to determine the adequacy of the treatment system proposed. The project applicant is required to assume maintenance responsibility and identify the maintenance mechanism for the treatment system prior to project approval. A covenant ensuring adequate maintenance into perpetuity is recorded against the property. Those projects with the potential for substantial erosion are often required to provide an additional plan for permanent landscaping and irrigation and to place bonds with the City to guarantee successful implementation of the measures shown thereon. Such bonds are retained until all components of the project have been completed (including installation of treatment control BMPs) and the landscaping has become fully established.

During the plancheck process, erosion control plans are also carefully reviewed to ensure compliance with construction BMP measures. Gravel bags, silt fences, stabilized construction entrances, and other methods must be provided where appropriate. Inlets to drainage facilities must be protected from sediment. Additionally, all exposed slopes need to be protected by a combination of hydroseed, permanent landscaping, and other erosion control measures. For more information regarding temporary construction BMPs, refer to Section 3 of this document.

Post-Construction BMP Maintenance Agreements

All Priority Projects under review for ministerial permits must execute a stormwater maintenance agreement guaranteeing the maintenance of permanent BMPs as necessary into perpetuity. The maintenance agreement or covenant includes an attachment depicting the location of specific project BMPs and their detailed maintenance requirements. The agreement is then recorded against and runs with the property. The City of Encinitas has developed, and included as an appendix in the new Encinitas Stormwater Manual, template maintenance agreements for a variety of project ownership scenarios including single family homeowners, Home Owners Associations (HOAs), agents, or commercial entities.

CAPITAL IMPROVEMENT PROJECTS

The City's Capital Improvement Projects (CIP) are subject to the same post-construction BMP requirements as private development. Because many projects are redevelopment, linear, or repair projects, often only construction BMPs are necessary. However, qualifying Priority SUSMP projects must also install post-construction BMPs. Priority CIP Projects are designed to

incorporate LID, source control, treatment control BMPs, and hydromodification management measures as required by the Municipal Permit and detailed in the Encinitas Stormwater Manual. The City takes responsibility for long-term maintenance and regular inspection of any installed permanent BMPs. Section 4 of this document provides a description of the City's MS4 maintenance and inspection program.

2.4.4.3 SUSMP PROJECT APPROVAL

During the planning process and prior to project review, the **10** projects listed in Table 2-2 were identified as Priority SUSMP Projects and approved during FY 2010-11. All applicable SUSMP and HMP BMP requirements specified in the City's local SUSMP were applied to each of the projects in Table 2-2. As detailed in Table 2-2, all of the development projects approved in FY 2010-11 were individually reviewed and determined to be exempt from Interim Hydromodification Criteria and the new Hydromodification Criteria (which became effective on January, 14, 2011). All treatment control BMPs met the treatment control BMP sizing requirements outlined in the City's local SUSMP; therefore, the City did not initiate a waiver mitigation program and did not issue any waivers of infeasibility during FY 2010-11.

Table 2-2
SUSMP Priority Projects approved in FY 2010-11

Permit No.	Location	Approval Date	HMP Applicability
10525 G	453 Santa Fe Dr	8/17/2010	N/A – Approved prior to 1/14/2011 and less than 50 acres
10501 G	3177 Wildflower Summit	10/7/2010	N/A – Approved prior to 1/14/2011 and less than 50 acres
10375 G	1010 N El Camino Real	10/7/2010	N/A – Approved prior to 1/14/2011 and less than 50 acres
10351 G	Rancho Summit Estates	10/7/2010	N/A – Approved prior to 1/14/2011 and less than 50 acres
556 G	135 Daphne St	10/18/2010	N/A – Approved prior to 1/14/2011 and less than 50 acres
10523 G	453 Santa Fe Dr	11/10/2010	N/A – Approved prior to 1/14/2011 and less than 50 acres
10536 G	1492 Hymettus Ave	1/11/2011	N/A – Approved prior to 1/14/2011 and less than 50 acres
10548 G	1502 Encinitas Blvd	1/27/2011	N/A – No new impervious area
10474 G	1520 Caudor St	2/7/2011	N/A – Priority project due to driveway area only (local requirement)
10417 G	618 Birmingham Dr	3/8/2011	N/A – Discharges to hardened conveyance system that extends to a tidally-influenced area

The renovation of the Taco Bell restaurant at 1502 Encinitas Blvd (10548-G) provides a good example of the typical Priority SUSMP projects that are permitted by the City of Encinitas. The proposed project consisted of the complete renovation of the interior and exterior of the restaurant, and removal and replacement of approximately 14,000 square feet of parking lot area. Since the project was located on a previously developed site and plans included replacement of more than 5,000 square feet of impervious area, the project was determined to be a SUSMP Priority Project. Since the project did not create any additional impervious area, the project was exempt from HMP requirements. As a result, several Treatment Control BMPs were incorporated into the design of the project in order to meet SUSMP requirements. The Treatment Control BMPs that will be installed during construction include four bioretention areas and one bioretention swale. These Treatment Control BMPs have been situated on the site plan to collect and treat runoff from roof of the restaurant and the parking lot prior to the runoff entering the storm drain system. All Treatment Control BMPs were designed accordance with the new SUSMP requirements established in the Encinitas Stormwater Manual.

2.4.4.4 SUSMP PROJECT AND TREATMENT CONTROL BMP TRACKING

In FY 2007-08, Clean Water Program staff worked with GIS staff to implement a comprehensive watershed-based SUSMP tracking system. The GIS data management system was designed to track the SUSMP Priority Projects and the long-term maintenance of all approved treatment control BMPs installed at development sites. As required by the Municipal Permit, the database is capable of tracking the following information:

- Type of treatment control BMP
- Location of the BMP
- Watershed within which the BMP is located[1]
- Date of construction of the BMP
- The party responsible for maintenance of the BMP
- Maintenance certifications or verifications
- Inspection findings
- Any corrective actions issued

Since the initial introduction, the City has been working to continually refine The Treatment Control BMP database, and new projects with treatment control BMPs are added to the database on a routine basis. Database improvements are a result of a thorough review of plans for proposed and built projects, a quality check of the existing data, and coordination with the GIS department. A hardcopy version of the most current inventory of treatment Control BMPs in the City's SUSMP Project and Treatment Control BMP Database is available in Appendix A-1. The inventory includes all operational treatment control BMPs installed at SUSMP priority projects. For a map of all the SUSMP Priority Development Projects approved within the City of Encinitas, refer to Appendix A-2.

[1] The entire City of Encinitas is within the Carlsbad watershed.

With the aid of the City's Treatment Control BMP Inspection Priority flowchart (see Appendix A-3), all development projects with approved treatment control BMPs were prioritized as high, medium, or low Threat to Water Quality (TTWQ) during the 2008 JURMP update, as required by the Permit. In addition, prioritization of each BMP was further refined during subsequent annual Operation and Maintenance Inspections and review of Self-Verification submittals. For new projects with treatment control BMPs that are added to the inventory, prioritization of the project occurs during the first treatment control BMP inspection. When the construction of a new project with treatment control BMPs is completed, the City requires that the treatment control BMP(s) are inspected within the first year and prior to the next rainy season in order to determine prioritization for future inspection frequency. This allows the City to determine TTWQ based on a visual inspection of the project as well as the following criteria:

- Type of project
- Sensitivity of the receiving water body
- Proximity to ESAs
- Size of the BMP
- Recommended maintenance frequency
- Likelihood of operational and maintenance issues associated with the BMP(s)
- Location of the BMP(s)
- Other pertinent factors

The BMP Inspection Priority flow chart addresses basic site and treatment control BMP characteristics that can influence a site's TTWQ such as receiving water body sensitivity and the removal efficiencies of the installed treatment controls. Note that not all development projects and treatment control BMPs are the same; each may have unique water quality risks associated with it. The City considered additional relevant factors beyond those included in the flow chart as necessary.

2.4.4.5 BMP INSTALLATION VERIFICATION

Beginning in January 2008, the City of Encinitas began tracking the verification of post-construction BMPs that were installed on projects throughout the City. Upon project completion, the engineering inspector now requires that the project engineer submit a grading certification letter to the City verifying that all the Low Impact Development, Source Control, and Treatment Control Best Management Practices, as shown on the approved project plans and required by the Encinitas Stormwater Manual, were constructed and are operational, together with the required maintenance covenant(s).

A sample grading certification letter is provided as Appendix A-4. Table 2-3 provides a list of the BMP verifications conducted for priority development projects completed in FY 2010-11.

Table 2-3
BMP Verifications for Priority Development Projects
Completed in FY 2010-11

Permit No.		Location	Construction Date
94	G	1020 Calle Anacapa	7/16/2010
9561	G	303 Santa Fe Drive	7/16/2010
483	G	540 La Costa Ave	7/28/2010
9481	I	Quail Point Ln and Quail Gardens Dr	10/20/2010
947	G	1435 Bella Azul Ct	11/17/2010
10404	SG	3211 Wildflower Valley Drive	11/30/2010
1469	G	1555 Bella Vista Dr	1/14/2011
718	G	687 South Coast Highway	2/10/2011
570	G	489 Latigo Row	3/29/2011
482	G	1864 Crest Dr	3/31/2011
10305	G	354 Santa Fe Dr	5/18/2011
325	G	2620, 2622, 2624 Lone Jack Rd	6/30/2011

Subsequent to the submittal of the grading certification letter, engineering inspection staff inspect the project site to verify that LID, source control, and treatment control BMPs proposed for the project were constructed in compliance with all approved plans, City permits, and ordinances. Inspections of Priority Project sites prior to occupancy allow the City to verify that all BMPs are in place before any anticipated pollutants associated with the occupied site are generated. Engineering inspectors also check to ensure that BMPs have been built according to plans before signing off on each stage of construction. The inspectors use the project's grading plans to identify any missing or incorrectly installed BMPs and deny approval for sites with observed problems. If the engineering inspector is satisfied that the post-construction BMPs were installed as required, the inspector verifies the project engineer's letter with their signature and a date and takes photos of the completed BMP installation. Hardcopies of these signed and certified verification letters and the photos of the BMPs are retained by the Clean Water Program.

2.4.4.6 ANNUAL TREATMENT CONTROL BMP OPERATION AND MAINTENANCE SELF-VERIFICATION

As required by the new Municipal Permit, all treatment control BMPs installed at development projects must be self-verified annually and maintained in perpetuity by a responsible party. As part of the JURMP update, the City of Encinitas established a Treatment Control BMP Operation and Maintenance Self-Verification Program.

During FY 2007-08, Clean Water Program staff prepared the essential elements of the Treatment Control BMP Operation and Maintenance Self-Verification Program. First, a comprehensive list of mailing addresses for completed projects with treatment control BMPs was pulled from the newly developed SUSMP Project and Treatment Control BMP GIS Database. Then, a formal letter was developed to notify property owners of their verification responsibility. An informative Treatment Control BMP brochure was also created to help property owners identify the BMPs that were installed as a part of their development project. Finally, a self-verification form was developed for responsible parties to use to report annual verification of Operation and Maintenance of their treatment control BMPs. In FY 09-10 and FY 10-11, the BMP verification letter was updated in an effort to promote a greater inspection response rate and self-verification return rate. An example of the updated verification letter, brochure, and form can be found in Appendices A-5a, A-6, and A-7, respectively. In some cases additional notifications were required in order to get responsible parties to submit their inspection certification and documentation.

In FY 09-10, in an effort to further improve the self-verification response rate the City developed a webpage and on-line form which responsible parties may use to submit their self-verification documentation. The webpage provides responsible parties with information about the TC BMP Operation and Maintenance Program and allows them to update their ownership and mailing information, certify that their BMPs were annually inspected, maintained and are operational and upload photos and maintenance documentation. The City's Information Technology department has ensured security of personal information by creating a unique Personal Identification Number (PIN) for each responsible party, allowing secure access property specific BMP information.

In FY 2009-10, the City determined that only those projects that were not designated as requiring a City inspection of their BMPs would be required to conduct a self-verification of their BMPs and submit self-verification documentation. It was reasoned that it would be redundant to require those responsible parties who were already receiving an inspection of their BMPs by City staff to also have to conduct a self-verification. When conducting an inspection, City staff thoroughly assesses the condition of all BMPs on a site and typically the responsible party is present when the inspection is conducted, providing an opportunity to educate the property owner about the function of the facilities on site and their obligations to maintain and preserve them. If deficiencies are identified, corrective actions are noted on the inspection form, and the responsible party is required to complete corrective actions by a specified deadline. Additional detail regarding the City's Treatment Control BMP Operation and Maintenance Inspection Program can be found in Section 2.4.4.7.

All required self-verifications must include an evaluation of <u>all</u> treatment control BMPs by the party responsible for maintenance prior to the start of the rainy season. Within the defined reporting period of this report, the City mailed annual self-verification notifications to each party responsible for the maintenance of treatment control BMPs constructed within the City of Encinitas who was not scheduled to receive a City inspection. The notification package included a letter informing the responsible parties of their inspection and maintenance obligation and a brochure which explains the program and provides examples of common BMPs. Responsible parties were directed to complete the self-verification form online and

upload photos showing that all BMPs on their property have been maintained and are in good working order.

Self-Verification Results and Findings

FY 10-11 was the third year of implementation of the Treatment Control BMP inspection and maintenance program. The City mailed out a first and second notification reminding responsible parties of their inspection and maintenance obligations. 78% of the parties submitted their self-verification documentation after one or two notifications. This is a signification improvement from the results of past years. Twenty BMP owners did not submit their self-verification even after receiving two notices (see Table 2-4). In the event that self-verification documentation was not submitted, City staff made every attempt to conduct a City Inspection in lieu of a Self-Verification. A total of **13** City Inspections were completed in lieu of Self-Verification. Copies of the two BMP Operation and Maintenance verification letters issued to responsible parties in FY 10-11 may be found in Appendices A-5a and A-5b.

Table 2-4
Summary of Notifications Sent and Self-Verification Submittals Received

Action	Total
Self-Verification Notifications Issued:	96
Self-Verification Submittals Received:	75
City Inspections conducted in lieu of Self-Verification:	13
Non-Responsive Responsible Parties:	8

Upon receipt of a self-verification packet from responsible parties, City staff reviews the completed forms and the required photos and maintenance documentation (if any). Staff determines whether the information is complete or if any further maintenance is required. For a detailed summary of the results and findings of FY 2010-11 treatment control BMP inspections see Appendix A-8. Appendix A-8 includes detailed information about each project, such as project location, inspection date, inspection results, and any City action. As a result of the Self-Verification program (Section 2.4.4.7), there were **two** properties with treatment control BMPs that warranted enforcement action. For a summary of enforcement action, refer to section 2.4.4.8.

The defined reporting period of this report represents the third year of implementation of the Permanent BMP Self-Verification Program. City staff continued the use of the online submittal form that was offered to responsible parties as an option to submitting their self-verification documentation. This provided responsible parties with four submittal options—online, email, regular mail, and hand delivery to City Hall. This fiscal year the City highlighted the online form as the preferred submittal option in the notices that were issued to responsible parties. As a result, the majority of self-verification forms were submitted via the online form. Since this was the third year of implementation, the BMP and Priority Project inventories were more complete due to previous year's efforts to validate current contact information and inform

property owners of their maintenance responsibilities and submittal requirements. As detailed in Tables 2-4 and 2-5, the City's implementation process was generally successful.

Table 2-5
Summary of Self-Verification Results and City Actions

Self-Verification Results	**Frequency**
All BMPs in Good Condition	83
Maintenance Conducted or Follow-up Required	5
Non-responsive Owner	8
City Actions	**Frequency**
Submittal Information Validated	70
City Inspected	13
Other City Actions (see Appendix A-8)	13

2.4.4.7 TREATMENT CONTROL BMP OPERATION AND MAINTENANCE INSPECTIONS

During FY 2007-08, Clean Water Program staff developed the City's new Treatment Control BMP Operation and Maintenance Inspection Program. New inspection forms were created, and the Treatment Control BMP inventory database was designed and quality checked. For a detailed description of the development of the GIS-based Treatment Control BMP Inventory and Tracking system refer to Section 2.4.4.4. Notably, unique to the development dynamic of the City of Encinitas, a large number of inventoried BMPs exist on private, single-family residential lots. Therefore, the City of Encinitas Treatment Control BMP Operation and Maintenance Inspection program was developed with this condition in mind.

In FY 2009-10, as required by the Municipal Permit, 100% treatment control BMPs installed at high priority development projects, at least 50% of the medium priority development projects, a minimum of 20% of the total number of projects with approved treatment controls, and a maximum of 200% of the average number of projects with treatment control BMPs approved per year were inspected by the City's inspection staff prior to the rainy season. Implementation of the City's BMP Inspection Program was very effective. The City met, and in most cases far exceeded, all the inspection requirements outlined in Section D.1.e. of the Municipal Permit.

As of July 1, 2010, there were a total of **75** constructed Priority SUSMP projects (5 high, 40 medium, and 30 low priority) on the City's treatment control inventory (See Appendix A-1). With **15** Priority SUSMP projects approved in FY 2009-10, there was an annual average of **12** projects with treatment control BMPs completed since permanent BMPs were first required on Priority Development Projects in 2003 (see Table 2-6). A total of **44** projects (5 high, 30 medium, and 9 low priority) with approved and constructed treatment control BMPs were inspected in FY 2009-10. This amounted to **100%** of the high priority sites, **75%** of the medium priority sites, **30%** of the low priority sites, **59%** of the total number of constructed Priority SUSMP sites, and

367% of the average number of projects with treatment control BMPs approved per year that were inspected in FY 2009-10 (see Table 2-7). In addition, **80%** of the projects with drainage inserts were inspected in FY 2010-11.

Table 2-6
Average Number of Constructed Projects with Treatment Control BMPs

Fiscal Year	Completed Projects
2004-05	6
2005-06	8
2006-07	14
2007-08	15
2008-09	12
2009-10	15
Average	12

When inspections are conducted in future years, inspection frequencies will be based on the project's assigned TTWQ priority as determined by City staff in FY 2008-09 or assessed during future treatment control inspections, and the criteria outlined in Section 2.4.4.4 of this document. Table 2-7 below presents treatment control BMP TTWQ priorities and their corresponding inspection frequencies.

Table 2-7
Treatment Control BMP Inspection Frequencies

Development Project with Treatment Control BMPs TTWQ	Permit Mandated Inspection Frequency	FY 10-11 Inspection Frequency
High	Annually (prior to start of rainy season)	100%
Medium*	50% annually	75%
Low	As needed	30%

*Drainage insert controls are considered medium priority BMPs

FY 2010-11 inspections included an examination of all treatment control BMPs at the site to verify that each treatment control BMP was working, being maintained properly, and was in compliance with all applicable City ordinances and permits. Inspection findings were documented by the inspector using the Treatment Control BMP Inspection Form (Appendix A-9). If any deficiencies in operation and maintenance were noted during the inspection, the responsible party was notified and appropriate enforcement actions were taken (as described in Section 2.4.4.8 of this document) to achieve compliance.

Because the majority of the treatment control BMPs installed in the City of Encinitas are on single-family residential lots, great care was taken to educate homeowners of their maintenance, inspection, and self-verification obligations. As noted in section 2.4.4.6, packages mailed to responsible parties included information detailing the BMP operation and maintenance

program. When working with homeowners, City stormwater staff devoted personal, specialized assistance as warranted in order to improve knowledge and awareness and achieve compliance.

For a detailed summary of the results and findings of the FY 2010-11 treatment control BMP inspections see Appendix A-8. Appendix A-8 contains information about each project, such as project location, inspection date, inspection results, and additional City action. Depending on the findings during the course of initial inspections, follow-up inspections were conducted and enforcement action was taken as necessary. For a detailed summary of enforcement action taken as part of the treatment control BMP inspection program, refer to section 2.4.4.8.

Treatment control BMPs that are operated and maintained by the City are considered part of the City's MS4 and are maintained and inspected by Public Works staff on an annual basis. BMPs that are located in specialized public facilities such as parks and libraries may be inspected by City stormwater staff and maintained as necessary by City staff. For more information regarding the maintenance and inspection of the City's MS4 refer to Section 4 of this document.

2.4.4.8 ENFORCEMENT MEASURES FOR DEVELOPMENT SITES

As required by the Municipal Permit, and depending on the severity of the violation, the City enforces its storm water ordinance for all development projects and permanent BMPs as necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. A more detailed description of the different enforcement measures used by the City to enforce its storm water regulations and their legal basis can be found in Section 2 of the 2008 JURMP update document.

As a result of post-construction treatment BMP verification inspections and self-verification results, the City determined that **seven** inspected projects were partially or totally deficient in the installation and or maintenance of post-construction BMPs. By the date of writing this report and as a result of communication with the responsible persons, all **seven** projects were brought into compliance through a combination of written orders to correct and/or verbal warnings.

3.0 CONSTRUCTION

3.1 INTRODUCTION

The purpose of the City's construction component is to maintain an updated inventory of all construction projects, identify pollutant sources from construction projects, educate the construction community, implement construction site Best Management Practices (BMPs), inspect construction sites, provide proper enforcement of violations, and implement all of the requirements of the Municipal Permit as outlined in Section D.2.

3.2 SOURCE CHARACTERIZATION

3.2.1 SITE INVENTORY

Within the defined reporting period of this report, the City of Encinitas has compiled, maintained, and updated a watershed-based inventory of all construction sites within its jurisdiction. The construction inventory for FY 2010-11 included a total of **106** construction sites. During this period, there were **13** high priority sites that were inspected biweekly, **39** medium priority sites that were inspected monthly and **54** low priority sites that were inspected on a biannual basis. The City utilizes an industry standard Geographic Information System (GIS) to maintain an accurate and up-to-date inventory of all construction projects. The GIS inventory includes details on each construction site, including project name, location, sub-basin, type of construction permit, date of permit issuance, inspection prioritization, and the assigned storm water inspector. The City's Clean Water Program staff, in coordination with the City's IT department has designed a technical solution in GIS to inventory and prioritize all construction projects as permits are approved. A more detailed description of the prioritization process is provided below in Section 3.2.2. A fully prioritized construction inventory can be found in Appendix B-1 in addition to a map of all active construction sites located in Appendix B-2.

3.2.2 INVENTORY UPDATES

As required by Section D.2.b of the Municipal Permit the City's watershed-based inventory of construction sites is updated weekly by the Engineering department as new grading permits are approved. The Engineering department shares all approved permit information with the City's IT Department which also maintains an updated inventory of all active construction projects in a GIS database. As part of the 2008 Jurisdictional Urban Runoff Management Plan (JURMP) update process, and to ensure monthly construction inventory management, a construction specific GIS script was developed by the City's GIS staff in ESRI's ArcMap for prioritizing approved construction permits. This mechanism remains an efficient and effective tool in maintaining a current construction inventory, and is accessible via desktop to Clean Water Program staff to execute the GIS script and review the prioritizations on a monthly basis. Regular updates to the inventory include the addition of new construction projects, the removal

of completed construction projects, and re-assignment of inspection frequencies of active construction sites as determined by the City's Clean Water Program staff. A flow-chart that outlines the process by which the inspection frequency of construction projects is determined in GIS can be found in Appendix B-3.

3.3 ORDINANCE UPDATES

As required by Section D.2.a of the Municipal Permit, applicable City documents and ordinances were updated on March 12, 2008 by the City of Encinitas City Council to establish adequate legal authority to enforce applicable storm water requirements. As part of the comprehensive JURMP update completed in March 2008, the City also updated Municipal Code Section 20.08, the Watercourse Protection, Stormwater Management and Discharge Control Ordinance, including construction specific provisions. The City's legal authority related to construction activities was further strengthened on February 25, 2009 when the City Council adopted a revised Grading Ordinance, EMC Section 23.34. Subsequently, the California Coastal Commission approved the adopted changes and the following provisions for storm water pollution control have been incorporated into the City's grading ordinance:

- All grading permits shall comply with the provisions of the City's Best Management Practices (BMP) Manual Part II which provides design, construction, and operation requirements for minimizing storm water pollution related to construction activities (§ 23.24.071).

- Any removal of BMPs that were required for a priority project will require a grading permit for corrective or other action. A requirement may be imposed to replace the BMP with equivalent water quality protection (§ 23.24.080).

- Priority projects for storm water pollution control cannot be exempted from obtaining a grading permit (§ 23.24.090.I).

- Any project creating over 500 square feet of new impervious area has to obtain a construction permit and adhere to all standards in the City's BMP Manual Part II (§ 23.24.105).

- All grading plans shall contain the location, design, detail, and cross section of all erosion control and post construction BMPs (§ 23.24.140).

- If the approved grading plan does not show post construction BMPs in sufficient detail, a precise grading plan for development projects is required to include and accurately depict post construction BMPs for review and approval of the City Engineer (§ 23.24.126).

- Both Interim and Final Erosion and Sediment Control Plans are required (§ 23.24.150, 23.24.160).

- A waste management plan is required to be submitted with all interim erosion control plans. The management of the waste on the construction site must be graphically and verbally described on the grading plan (§ 23.24.150F).

3.4 BEST MANAGEMENT PRACTICE REQUIREMENTS

3.4.1 UPDATED BMP REQUIREMENTS

Through the JURMP update process completed in March 2008, the City reviewed and updated a set of minimum BMPs that must be implemented at all construction sites. Every construction site within the City's jurisdiction is required to implement general site management BMPs and erosion and sediment control BMPs to reduce, retain, and manage pollutant discharges to the Maximum Extent Practicable (MEP). Construction BMP requirements are presented in the Encinitas Municipal Code Chapter 20.08, the City's Storm water Best Management Practices Manual, Parts I and II, and the City of Encinitas' 2008 JURMP Update.

3.4.1.1 SEASONAL SITE MANAGEMENT REQUIREMENTS

Construction sites are required to implement minimum construction BMPs to prevent pollution discharges to the MEP regardless of the season. However, the City also maintains requirements for erosion and sediment control BMPs that are different for the wet season (October 1st – April 30th) than they are for the dry season (May 1st – September 30th). The City's Storm Water Manual Parts I and II provide a detailed list of dry and wet season requirements for all construction sites. Prior to the beginning of the wet season, in September 2010, the City sent **71** Erosion Control letters which included a copy of the City's Municipal Code Sections outlining erosion and sediment controls in wet weather conditions and an educational brochure "A Pollution Prevention Guide for the Construction Industry," to all property owners with active and inactive construction sites in the city (See Appendix B-5).

3.5 PROGRAM IMPLEMENTATION

3.5.1 CONSTRUCTION AND GRADING APPROVAL PROCESS

The City has established a thorough interdepartmental review and approval process for local construction and grading permits. When a construction project comes to the City for approval, it is required to obtain a building permit, a grading permit, or both. A grading permit is required prior to any activity where the total volume of material disturbed, stored, disposed, or used as fill exceeds 50 cubic yards, obstructs a waterway, or occurs over an area of 10,000 square feet. All other projects require a building permit. Both grading and building permits require that plans be submitted and approved by the City. The City's grading ordinance requires that all projects, whether subject to a grading plan or not, are required to minimize site runoff, erosion, and sedimentation. In addition, all

projects requiring a grading permit are required to prepare an erosion and sediment control plan. All permits that go through the City's review and approval process are tracked within a citywide data management system called "HTE".

The grading permit outlines the regulatory (Federal, State, and City) conditions for new construction. The grading permit requires that grading plans be prepared, reviewed, approved, and signed by the City Engineer. As a part of this approval process, the City's Clean Water Program staff also reviews the grading plans when necessary to ensure compliance with applicable construction specific regulations.

The grading plan approval process consists of a series of plan checks, revisions, and final approvals. Engineering staff reviews the plans for overall compliance with the grading ordinance and for specific compliance with the Storm Water Management Ordinance and Federal and State regulations. If the site falls under jurisdiction of the State's Construction General Permit (CGP) Order No. 2009-0009-DWQ, Engineering staff follows up with the developer to ensure that a Storm Water Pollution Prevention Plan (SWPPP) is properly prepared and submitted. The City also requires proof that a Notice of Intent (NOI) has been issued for sites that are subject to the CGP.

Prior to issuing construction and grading permits, the City's Engineering Department verifies that the proposed construction project plans to implement all applicable required BMPs to reduce pollutant discharges to the MEP. It should also be noted that the general notes for building plans have been amended to include erosion control, sediment control, and materials management practices.

Projects that are generated by the City's Capital Improvement Program (CIP) follow a similar process as the private development projects outlined above. City initiated projects require the use of a Qualified SWPPP Developer (QSD) for the preparation of Storm Water Pollution Prevention Plans (SWPPP) when the project falls under the jurisdiction of the CGP. The City also assures that an NOI is submitted for all sites that are subject to the CGP. During the construction phase of capital projects, contractors are also required to secure the services of a Qualified SWPPP Practitioner (QSP) to assure that CGP requirements are followed. In supplement to contractor required compliance assurance responsibilities, all CIP sites are inspected by City Engineering Inspectors as well as Clean Water Program staff to assure compliance with local standards throughout the life of the project.

3.5.2 BMP IMPLEMENTATION

Clean Water Program staff spends a significant amount of time coordinating storm water management and BMP implementation at construction sites with the help of the City Engineering Inspectors. Construction BMP requirements are presented in the Encinitas Municipal Code Chapter 20.08 and the City's Storm Water Best Management Practices Manual, Parts I and II.

Clean Water Program staff constantly monitor weather patterns and storms in the Pacific through the National Weather Service. Weather reports and forecasts are emailed to all Engineering Inspectors to inform them of the possibility of incoming rain. When the forecast exceeds 40% over the coming five-day period, inspectors inform contractors that additional BMP implementation, maintenance, or replacement should take place, and where necessary, they require responsible parties to have additional BMPs in place at the end of each work day.

Through the review and plancheck process, and supported by the Watercourse Protection, Stormwater Management and Discharge Control Ordinance, staff maintains the authority to require additional or alternative BMPs to be implemented on individual projects as determined necessary. This allows the Clean Water Program to ensure that the proper sediment control, erosion control, and materials management BMPs are shown on the plans and are to be implemented on-site.

3.5.3 CONSTRUCTION SITES REQUIRING ADVANCED TREATMENT

There were no sites in FY 2010-11 that required advanced treatment. For the majority of the construction sites within the City's jurisdiction, the minimum required BMPs, if correctly installed and maintained, adequately control sediment discharges from the site. If it is determined by the new statewide CGP that a project possesses characteristics that could result in standard construction BMPs being ineffective in the treatment of sediment, resulting in an exceptional Threat To Water Quality (TTWQ), an Active Treatment System (ATS) will be required. Standard criteria for determining projects that pose an exceptional TTWQ and a description of advanced treatment methods are fully described in the new statewide CGP.

3.5.4 INSPECTIONS & BMP VERIFICATION

The City has an established inspection program to evaluate compliance with storm water regulations at all construction sites within the City's jurisdiction. The City of Encinitas's Engineering Department employs two full time Engineering Inspectors and three full time contract Engineering Inspectors who are responsible for inspections at all construction sites in the city. Storm water issues such as compliance with the grading and storm water ordinances in the Municipal Code have become one of their main focuses, especially during the wet season.

On January 24, 2008, the RWQCB adopted the 2007 Municipal Permit. Inspection activities for the construction program were updated and implemented at that time to meet the new Municipal Permit requirements as outlined in Order No. R9-2007-0001. During Fiscal Year 2010-11, consistent with required inspection frequencies as outlined in Sections 2.d.1-3 of the Municipal Permit, City staff conducted a total of **200** storm water inspections. Appendix B-1 details the complete Construction Inventory for FY 2010-11, the construction site prioritizations, and the number of inspections conducted at each site. Notably within the defined reporting period of this report, due to widespread slowdowns in the economy and development related activity, there were fewer active construction projects and therefore fewer site inspections than reported in previous years.

The Engineering Inspectors captured all construction inspections on a form titled "Storm Water Quality Inspection for Construction Activities", included in Appendix B-4. The inspection form contains questions to ensure all the inspection components required by Section D.2.d.6 of the Municipal Permit are addressed. The form lists the minimum construction BMPs required by the City and includes check boxes and comment areas to document if BMP installation or maintenance is required or if other corrective actions are necessary. If required BMPs are missing or found to be improperly implemented, appropriate enforcement actions, as described in Section 3.5.5 below are taken.

As part of the 2008 JURMP update process, and codified through BMP Manual II, the City of Encinitas established a maximum disturbed area for grading at 50 acres. Within the defined reporting period of this report, no construction projects in the City of Encinitas were subject to maximum disturbed area or advanced treatment requirements, and therefore no required inspections related to this standard were completed.

3.5.5 COMPLIANCE AND ENFORCEMENT ACTIONS

3.5.5.1 GENERAL ENFORCEMENT

The City is responsible for enforcement of local ordinances and applicable local permits at all construction sites within its jurisdiction. Inspection and enforcement for construction projects is administered by the Engineering Inspectors and other City staff with inspection and enforcement authority.

The City typically employs a tiered, escalating enforcement system which includes verbal warnings and education, written warnings, and administrative citations. However, the City reserves the right to determine the most appropriate enforcement course for a given situation, as dictated by the specifics of each case. For example, a stricter initial enforcement measure may be applied where significant noncompliance is noted or when a potential rain event increases the potential for the violation to have a negative impact on water quality.

Verbal warnings and education will typically be the initial enforcement methods employed, assuming that a) the site or individual does not have a history of non-compliance with storm water regulations, and b) there has not been an observed illegal discharge to the MS4. The inspector will educate the violator on what actions need to be taken to prevent a violation from occurring or to correct the violation and document the violation and verbal warning in the inspection file. A time frame will be given for an identified violation to be corrected, and a follow-up inspection date will be scheduled, which will also be documented.

A written warning is typically issued to violators that are already aware of the City's storm water regulations or to those who have not corrected their actions after being given a verbal warning. Written warnings can be given using a variety of methods, including the issuance of a Notice of Violation (NOV) or Stop / Correct Work Notice. The NOV and Correct Work Notice provide a description of the violation to be corrected, the time frame for correction, and a

follow-up inspection date. All Stop Work Notices issued by the City are reported to the RWQCB per the reporting requirements of the Municipal Permit.

Civil penalties for violations of the Encinitas Municipal Code (EMC) are established in EMC Chapter 1.08, and determined violations of storm water regulations may be subject to administrative citations and associated administrative fines, including those at construction sites. Administrative citations and fines are used in addition to other legal remedies as described in the paragraphs above.

All inspection personnel have the authority to take immediate enforcement actions when necessary. This facilitates timely correction of inadequate BMP implementation, reducing the risk of pollutants discharging from the site. City inspectors conduct follow-up inspections to determine if corrective actions have been taken to comply with City ordinances and minimum BMP requirements. The time frame for a violator to correct a documented violation is determined on a case-by-case basis at the discretion of the inspector.

3.5.5.2 REPORTING AND NON COMPLIANCE

During the FY 2010-11, **42** construction related complaint calls were received through the City's Clean Water Hotline. A total of **41** complaints were investigated and **1** call was referred to another department for further action. Of the **41** complaints investigated by Clean Water Program Staff, there were **32** violations resulting in **38** instances in which educational information was disseminated, **16** instances in which Notice of Violations notices were issued, and **3** instances in which a citation was issued. A complete summary of all construction related complaints can be found in Appendix H-1.

There were an additional **67** correct work notices and **7** citations issued as a result of the routine City inspections at construction sites throughout the fiscal year. With immediate oversight from the City's Engineering Inspectors, contractors were quick to address all complaints and implement the appropriate BMPs to achieve compliance and avoid further enforcement. Appendix B-6 features a summary of all violations and enforcement actions for all routinely inspected construction sites in FY 2010-11.

4.0 MUNICIPAL

4.1 INTRODUCTION

The municipal component of the City's Clean Water Program includes proper management of facilities owned and operated by the City of Encinitas to eliminate or reduce the amount of pollutants that enter the storm drain system. The City maintains streets, the storm drain system, and municipally owned facilities, which includes 17 public parks, 11 parking lots, 6 beach access areas, 5 fire stations, 4 public works yards, 4 administration buildings, 4 open space areas, 3 viewpoints and 1 golf course. The updated municipal facilities inventory is included as Appendix C-1. The City also conducts high Threat to Water Quality (TTWQ) activities, as defined by the Municipal Stormwater Permit, such as power washing and other mobile activities including street and sidewalk repair, building cleaning, painting, graffiti cleaning, and fleet vehicle maintenance. Other prominent water quality related activities include street sweeping, inspections of municipal facilities, educational efforts geared toward municipal personnel and landscaping contractors, annual Municipal Separate Storm Sewer System (MS4) maintenance, and regular upkeep of the sanitary sewer system to prevent overflows.

Due to the large expanse of municipal areas, activities, and functions, City staff must carefully manage pollution prevention measures and Best Management Practices (BMPs) to reduce or potentially eliminate the discharge of pollutants into the MS4 from municipal areas and activities. To comply with the Municipal Stormwater Permit, the City has developed a comprehensive program designed to reduce the amount of pollutants that are transported in urban runoff from municipal areas, activities, and functions.

4.2 ROADS, STREETS, HIGHWAYS, AND PARKING FACILITIES

4.2.1 BACKGROUND

Roads, streets, highways, and parking facilities can collect a variety of pollutants due to routine vehicle use and have a tendency to collect litter and debris from neighboring areas and activities. Regular maintenance is necessary to control pollutants such as sediment, metals, litter, and debris on roads, streets, highways, and parking facilities.

4.2.2 SOURCE CHARACTERIZATION

The City of Encinitas maintains approximately 166 miles of roads, streets, and highways and 11 City owned and operated parking facilities. Roads, streets, highways, and parking facilities are included in the City's municipal inventory, which is included in Appendix C-1.

4.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

Both pollution prevention methods and BMPs are implemented for roads, streets, highways, and parking facilities throughout the City. The City utilizes both the City's BMP Manual Part I and the California Stormwater Quality Association (CASQA) Municipal Handbook to choose applicable BMPs to implement for roads, streets, highways, and parking facilities within the City. Street sweeping and cleaning is the main BMP that is implemented for road, street, highway, and parking facilities (both stand-alone and those associated with a municipal facility) maintenance. Treatment control BMPs used for all roadway projects determined to be priority projects and subject to Standard Urban Storm Water Mitigation Plan (SUSMP) standards, are described in more detail in Section 2.0. The City implements additional controls for roads, streets, highways, and parking facilities adjacent to or tributary to Environmentally Sensitive Areas (ESAs) when determined to be necessary.

4.2.4 PROGRAM IMPLEMENTATION

This section describes the steps that were taken in FY 2010-11 to require and verify the implementation of designated BMPs for all City maintained roads, streets, highways, parking areas, and related activities as outlined in the Municipal Permit Section D.3.a.(5)(a-c).

In compliance with street sweeping standards established in Order 2007-0001, the City implemented an aggressive sweeping schedule for roads, streets, highways, and parking facilities.

The frequency of street sweeping is as follows:

- All arterial roads, streets, highways, and parking facilities identified as consistently generating the highest volumes of trash and/or debris are swept weekly.
- All collector streets and parking facilities identified as consistently generating moderate volumes of trash and/or debris are swept bi-monthly.
- All residential (publicly owned) and parking facilities identified as generating low volumes of trash and/or debris are swept monthly.

The City also maintains parking facilities at six local parks, four local beaches and the Encinitas Community Center. Four parking facilities at the local parks have been identified as generating low volumes of trash, sediment, and debris and are swept monthly from March through September. The remaining parking lots have been identified as generating moderate volumes of trash, sediment, and debris, and have been assigned a sweeping prioritization of medium priority. Each of these facilities is swept on a monthly basis throughout the year. The parking facilities at the beaches are swept every week from April through September to address the increased traffic, and monthly from October through March. In FY 2010-11, a total of **89 tons** of debris was collected from all City maintained parking lots.

In FY 2010-11, a total distance of **11,330 curb miles** was swept, and a total of **1,772 tons of debris** was collected. The total amount of material collected from both street and parking lot sweeping was **1,861 tons**.

Additionally, in FY 2010-11, the City's Public Works Department through coordinated efforts with Partners with Industry (PWI) collected and removed **62** 30-gallon bags of litter from all of the City's bus stops. The City also partnered with San Diego County probation crews to collect and remove **136** 30-gallon bags of over-grown vegetation from City right-of-ways based on visual observations and citizen complaints.

4.3 FIXED FACILITIES

4.3.1 BACKGROUND

The City owns and operates a variety of municipal fixed facilities that have been grouped in this section because these facilities receive formal inspections as part of the municipal program. Therefore, the program implementation for these facilities is generally the same. Municipal fixed facilities include the following:

- Parks and Recreational Facilities
- Public Works Facilities
- Potable Water Facilities
- Fire Stations
- Other Fixed Facilities

4.3.2 SOURCE CHARACTERIZATION

The Municipal Permit requires Copermittees to inspect high priority municipal areas and activities annually according to D.3.a.(7)(a). High priority facilities include parks and recreational facilities and other municipal areas and activities that the City determines may contribute a significant pollutant load to the MS4.

As part of the (Jurisdictional Urban Runoff Management Program) JURMP Update process in March 2008, all municipal facilities were assigned an inspection priority based on the Municipal Permit requirements and an evaluation of their threat to water quality. Each site and activity has been evaluated based on a variety of site-specific factors including size, location, type of activity, waste generated, pollutant discharge potential, non-storm water discharges, proximity to receiving water bodies, and any other relevant factors deemed appropriate. Using these criteria, a complete prioritized, watershed based inventory was developed and is included in Appendix C-1.

The City of Encinitas owns, operates, and maintains 55 fixed facilities within the City. Of these facilities, 29 have been designated with a high priority inspection priority and 26 were designated a low inspection priority. All high priority facilities are formally inspected on an annual basis and described further in Section 4.3.4. Both high and low priority facilities are visually inspected on a routine basis by City staff. Any illicit discharges or illegal connections are immediately referred to the Clean Water Program. All fixed municipal facilities are

included in the City's inventory located in Appendix C-1. Figure 4.1 illustrates the various municipal fixed facilities and their associated activities within the City of Encinitas.

Parks and Recreation Facilities

The City maintains 17 public parks, 6 beach access areas, 3 viewpoints, 40 miles of trails, and 70 acres of open space. All landscape maintenance activities are performed through the use of private landscape contractors. Parks and Recreation Department Supervisors are responsible for monitoring contract activities for landscaping which includes; implementing BMPs for pesticide, herbicide, and fertilizer usage, waste removal and control, and maintenance at all municipal parks and recreation facilities.

Public Works Operations Facilities

Public Works operations facilities are important in maintaining the functionality of many publicly offered services. The City of Encinitas maintains a total of four public works facilities, which include the City of Encinitas Wastewater Collection Facility and three public works yards, "A" Tank site, Calle Magdalena and Requeza Street (Appendix C-1).

Potable Water Facilities

The means to provide residents of the City with potable water is an essential activity conducted by the City of Encinitas's San Dieguito Water District. The City maintains several underground fixed facilities which include a pump station, pressure regulating stations as well as two water reservoir/water storage facilities. The City also maintains an above ground water recycling reservoir.

Fire Stations

Fire fighting capability is an essential element of municipal activities conducted in the City. The City of Encinitas maintains five fire stations, which are included in the municipal inventory (Appendix C-1). Two fire stations within the City, stations #3 and #4, have fueling stations on site.

Other Fixed Facilities

Other fixed municipal facilities include a community center, three administrative buildings, five pump stations, and an Ultra Violet Urban Runoff Treatment Facility (UV Facility). All of these facilities are considered a low priority because many of the activities at these facilities are conducted indoors and do not correspond with activities that are considered a high threat to water quality.

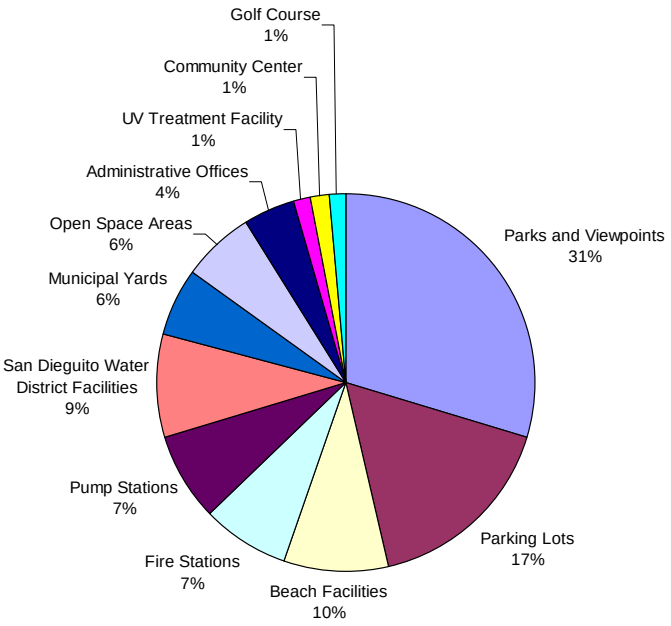


Figure 4.1 City of Encinitas Fixed Facilities

4.3.3 BEST MANAGEMENT PRACTICES

4.3.3.1 UPDATED BMPS

In FY 2007-08, the City established minimum BMPs for various municipal activities at all fixed municipal facilities. The BMPs are outlined in the City's 2008 JURMP Update and the City's BMP Manual Part I. The City also references the CASQA Municipal BMP Handbook when choosing appropriate BMPs for various fixed facility types. More detailed information about BMP implementation at specific facility types is included in the following sub-sections. The City implements additional BMPs as deemed necessary, and implements equivalent BMPs when it is determined that a specific BMP is not feasible at a particular site. In addition to implementing BMPs, the City utilizes pollution prevention measures to reduce or eliminate the amount of pollutants generated from City-owned fixed facilities.

Parks and Recreation Facilities

In FY 2010-11, the City implemented a variety of BMPs to reduce or eliminate the amount of pollutants entering the MS4 from municipal parks and recreation facilities and other open landscaped areas. City personnel implemented general waste management BMPs, and patrons of the facilities were encouraged to recycle and properly dispose of trash and pet waste. Notable activities during the fiscal year included the maintenance of 20 doggie bag dispensers at 3 public parks and along several trails. The City also posted recycling signs along with trash and recycling bag dispensers at 6 beaches during peak holiday weekends throughout the reporting period.

City staff continued operation and maintenance of post-construction BMPs at Cottonwood Creek Park. The park is a prime example of low impact development and includes the following post-construction BMPs: 90 feet of day lighting Cottonwood Creek, porous pavement for all parking areas and driveways, pervious walkways, surface drainage through earthen-bottom open channels, and drought tolerant plants in landscaping areas.

Due to their widespread outdoor use, pesticides, herbicides, and fertilizers can be common pollutants discharged to MS4s. Transport of these pollutants is often a result of the following: (1) runoff from improper irrigation after application; (2) application of chemicals during or prior to storm events; (3) use of chemicals that do not properly absorb to soil or plants; and (4) overspray from chemical applications that may eventually enter the MS4. The City of Encinitas Parks and Recreation Department has prepared and adopted a Policy and Procedures Manual for integrated pest management. Implementation of the policy includes:

- educating and training of staff and contractors on the policy,
- implementing a process of identifying pests and/or problems by site,
- monitoring and record keeping,
- establishing thresholds for pest problems,
- selecting a less toxic treatment, and
- evaluating the success of the treatment.

The Federal Pesticide, Fungicide, and Rodenticide Act and California Title 3, Division 6, Pesticides and Pest Control Operations place strict controls over pesticide application and handling. This Act also specifies training, annual refresher, and testing requirements. The regulations generally include: a list of approved pesticides and selected uses, updated regularly, general application information, equipment use and maintenance procedures, and record keeping. The California Department of Pesticide Regulations and the County Agricultural Commission coordinate and maintain the licensing and certification programs.

In FY 2010-11, the following BMPs were implemented at all municipal parks and recreation facilities, public streets, channels, and right-of-ways to reduce pollution from pesticides, herbicides, and fertilizers:

- Whenever practicable, integrated pest management techniques that rely on non-chemical solutions are implemented.
- City personnel who participate in the application of pesticides are properly trained, maintain Qualified Applicator Certifications and follow guidelines set by the California Department of Pesticide Regulations and the County Agricultural Commission.
- City staff records the applications of all chemical agents by noting the locations, types, and quantities of chemicals used. Records are reported monthly to the Department of Agriculture.
- Pesticide, fertilizer, and herbicide handling and safety refresher sessions are provided to City personnel involved with application.

- The use of fertilizers is minimized as much as possible; compost and soil amendments are used in place of fertilizer, where applicable.
- Employees are trained to handle pesticides, herbicides, and fertilizers properly.
- All federal, state, and local regulations are followed in the use of pesticides, herbicides, and fertilizers.
- Pesticides, herbicides, and fertilizers are applied only when necessary (typically during growing seasons) and not during or prior to anticipated storm events.
- Pesticides are not sprayed when there is a high possibility of the spray drifting into non-target areas or onto non-target vegetation, insects, or animals.
- The City maintains compliance with federal and state reporting law for pesticide use.
- Weeds, grass, and brush are cleared from building perimeters and fence lines to reduce the need for pesticides and herbicide use, when applicable.
- Native plants are used in landscaping, where applicable.
- Diseased plants are removed, and infected parts of plants are removed to minimize the need for pesticide and herbicide use, where applicable.
- Several evapotranspiration gauges located throughout the City are used to monitor microclimates to properly set irrigation systems for different areas of the City and reduce the potential of over-irrigation.
- Flow sensors and master valves prevent water loss in the event of a break in any of the main lines.
- One bilingual municipal storm water training session for the City's private landscaping contractors was conducted by Clean Water Program staff during the fiscal year. There were 25 participants at the training session on May 3, 2011.

Public Works Operations Facilities

City personnel implement appropriate BMPs for all activities that take place at public works facilities. Storm Water Pollution Prevention Plans (SWPPPs) have been developed for all four public works facilities, which include the City of Encinitas Wastewater Collection Facility and three public works yards, "A" Tank site, Calle Magdalena and Requeza Street. The SWPPPs include a site description, a description of potential sources of pollutants, a summary of existing BMPs, a description of BMPs to be implemented, and a monitoring and record keeping plan. The SWPPPs are maintained at each facility, and all of the facilities are inspected by City staff on an annual basis. Additionally, all Public Works employees are annually trained in storm water management. For more detail regarding municipal staff training refer to Section 8.2 of this document.

Potable Water Facilities

City personnel implement appropriate BMPs for all activities that take place at potable water facilities when deemed appropriate. San Dieguito Water District employees are trained in storm water management on an annual basis. For more detail regarding municipal staff training refer to Section 8.2 of this document.

Fire Stations

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by fire fighting activities both at fire stations in the City and locations throughout the City. In FY 2009-10, Fire Station #3 was redesigned to incorporate the following storm water BMPs: bio swales, pervious pavement and a roof cover for the fueling area. Two fire stations (#3 and #5) have permanent treatment control BMPs in place to treat any runoff which may be discharged from washing activities. The remaining stations utilize source control BMPs to minimize and control discharges related to washing activities. All fire fighting training activities which include aqueous film forming foam are conducted at a fire station outside of the City of Encinitas. In addition to implementing structural BMPs at the fire stations, all City of Encinitas Fire Department employees are trained in storm water management on an annual basis. More detailed information regarding municipal staff training and non-emergency fire fighting flows can be found in Sections 8.2 and Section 13 of this document.

Other Fixed Facilities

The City implements pollution prevention methods and BMPs to reduce or eliminate the amount of pollutants generated by the management of public buildings, other fixed facilities, and surrounding areas. The City implements BMPs to control erosion and sediment, during landscaping maintenance, and for waste management, as discussed in the City's BMP Manual Part I and the CASQA Municipal Handbook.

Additionally, the City implements and maintains several pollution prevention practices throughout the City of Encinitas. In FY 2010-11, the City adopted the Parks and Recreation Policy and Procedures Manual for integrated pest management for all departments citywide, expanded its battery collection program to offer public collection of used batteries at the Encinitas Branch Library, the Encinitas Community Center and at all Public Works facilities and fire stations. The City also partnered with the Downtown Encinitas Mainstreet Association to purchase and install 50 trash/recycling containers in downtown Encinitas to increase recycling opportunities.

Other pollution prevention practices that are maintained at City Hall, Calle Magdalena Public Works Facility and the Wastewater Collections Division Municipal Yard include the following:

- automatic lighting controls and timers that time lights in specific areas of the building based on specific needs and maximizes the time when lights are out,
- replacing large trash receptacles at each individual desk with mini size trash receptacles and providing large recycling containers for mixed paper and cans/bottles,
- maintaining recycling centers in conference rooms that include mixed paper, cans/plastic, and trash compartments,
- use of seven alternative fuel vehicles,
- use of 100% recycled paper for all copiers and printers,
- Low Impact Cleaning policy which seeks to minimize the impact of the City's cleaning products and procedures on the environment,

- Environmentally Preferable Purchasing policy,
- use of ten energy efficient Dyson hand dryers installed in all of the bathrooms at City Hall, the Encinitas Community Center and the Encinitas Branch Library and
- solar photo voltaic panels, a high efficiency air conditioning system, and day lighting the building in certain areas at City Hall.

4.3.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

Fertilizers which are used on landscaped areas in municipal parks and public right-of-way areas are considered a pollutant of concern for the San Elijo Lagoon and its larger drainage area. To mitigate potential discharges of nutrients to the lagoon from Municipal activities, the City requires that the City's landscaping contractors implement an extensive fertilizer management program as described earlier in section 4.3.3.1. The City will continue to monitor the fertilizer management program, and if the existing measures are found to be deficient, the City may adjust the BMP implementation as needed to achieve a higher level of pollutant reduction.

Similarly, if the City identifies any potential sources of other constituents for which water bodies in the City are 303(d) listed that could be the result of activities at fixed municipal facilities, additional controls will be required to be implemented where applicable. The City will implement additional controls for municipal areas and activities adjacent to or tributary to ESAs when determined to be necessary. Presently, there are no other municipal fixed facilities that have been determined to be a source of pollutants for which water bodies within the City are on the Clean Water Act (CWA) 303(d) list.

4.3.4 PROGRAM IMPLEMENTATION

The City implements the municipal program using a variety of different processes, including maintenance, training and education, inspections, and if necessary, enforcement actions. Program implementation also includes the continuous assessment of municipal programs to ensure that they are designed and executed in a manner that is most effective to reducing, and potentially eliminating, the threat of pollution from fixed municipal facilities.

4.3.4.1 MAINTENANCE

In FY 2010-11, the City continued to conduct regular maintenance activities at fixed facilities, which included landscape maintenance, building maintenance, parking lot, and sidewalk repair, when necessary. Sweeping of the parking facilities associated with the municipal facility is conducted at these facilities during regular maintenance activities.

The City maintains a regular maintenance schedule for fixed facilities in the City. As previously discussed, City personnel are trained to implement the proper BMPs when at municipal facilities and when engaging in specific activities at those facilities. City personnel are also trained to dispose of any waste properly, and to report illegal discharges/illicit connections as they may come across them during normal work activities.

4.3.4.2 TRAINING AND EDUCATION

Municipal personnel are trained in implementing appropriate BMPs and preventing non-storm water discharges. In FY 2010-11, Clean Water Program staff conducted training for the following municipal departments: Engineering, Fire and Marine Safety, Parks and Recreation, Public Works and the San Dieguito Water District. Additionally, the Streets Division of the Public Works Department discussed storm water issues at regular staff meetings throughout the reporting period. A detailed description of the municipal education program can be found in Section 8.2 of this document.

4.3.4.3 MUNICIPAL INSPECTIONS

City staff performs annual inspections at all of the high priority municipal facilities in the City of Encinitas. As part of the FY 2010-11 program City staff performed a total of **29** high priority inspections. The fixed facility inspection locations and inspection dates are summarized in Table 4-1 below.

Table 4-1
Fixed Facility Inspections

No.	Facility Name	Inspection Date
1	"A" Tank Site Public Works Yard	5/25/2011
2	Calle Magdalena Public Works Yard	5/25/2011
3	Requeza Street Public Works Yard	5/25/2011
4	Wastewater Collection Facility	5/25/2011
5	Encinitas Ranch Golf Course	5/26/2011
6	Beacon's Beach	6/30/2011
7	Cardiff Sports Park	6/20/2011
8	Cardiff Sports Park Expansion	6/20/2011
9	Cottonwood Creek Park	6/20/2011
10	Encinitas Viewpoint Park	5/23/2011
11	Glen Park	6/30/2011
12	Grandview Beach	6/30/2011
13	H Street Viewpoint	6/30/2011
14	Hawkview Park	6/22/2011
15	J Street Viewpoint	6/30/2011
16	Las Verdes Park	5/23/2011

No.	Facility Name	Inspection Date
17	Leo Mullen Sports Park	5/17/2011
18	Leucadia Oaks Park	6/20/2011
19	Leucadia Roadside Park	6/30/2011
20	Little Oaks Equestrian	6/22/2011
21	Mildred Macpherson Park	6/30/2011
22	Moonlight Beach	6/30/2011
23	Oakcrest Community Park	5/17/2011
24	Orpheus Park	6/30/2011
25	Paul Ecke Sports Park	5/23/2011
26	Scott Valley Park	5/24/2011
27	Sun Vista Park	6/21/2011
28	Swami's Beach	6/30/2011
29	Wiro Park	6/22/2011

The recommended BMPs and corrective actions are summarized in the City's Routine Inspection Summary located in Appendix C-6. Of the 29 sites inspected, **1** public park facility required a minor corrective action. As a result, the facility has implemented all appropriate BMPs, and the Parks and Recreations Department has verified that the corrective action has been completed. There were no enforcement actions for any of the Municipal fixed facilities during FY 2010-11.

Potable Water Facilities

All of these facilities are considered a low priority and do not receive formal inspections because the activities associated with these facilities are located underground and do not involve any other activities on site.

4.4 MS4

4.4.1 BACKGROUND

The primary functions of municipal separate storm sewer systems (MS4) are to collect and transport surface runoff to receiving waters during storms in order to prevent flooding. The entire MS4 system is considered a high priority due to its tendency to collect and convey pollutants to receiving waters. The City's MS4 consist of streets, curbs, catch basins, inlets, pipes of varying materials, natural creeks and streams, natural channels, concrete channels,

culverts, desilting basins, and detention basins. The City also maintains a number of treatment control BMPs such as storm drain filter inserts and a UV treatment facility, which are included in the regular maintenance of the MS4. In order to reduce the transportation of pollutants into receiving water bodies, the City of Encinitas regularly maintains its MS4 to ensure that it remains both fully functional and free of pollutants to the Maximum Extent Practicable (MEP).

4.4.2 SOURCE CHARACTERIZATION

The City maintains a variety of MS4 facilities which includes 1,757 catch basins and inlets, 63 miles of storm drain pipe, 2.43 miles of open channels, 14 desilting basins, and 1 Ultra Violet Urban Runoff Treatment Facility located throughout its jurisdiction. The MS4, as one complete entity, is included in the municipal inventory located in Appendix C-1.

The City utilizes an industry standard Geographic Information System (GIS) to maintain an accurate and up-to-date inventory of the MS4. The GIS MS4 inventory includes inlets (i.e. catch basins, curb inlets, grate/inlet combos, etc.), outlets (i.e. curb outlets, headwalls, etc.), manholes, pumps, ditches, channels, storm drain pipes, and detention basins. To ensure that the City's GIS inventory is current and accurate, the MS4 inventory continually undergoes data (feature and attribute) review, quality control and validation by City staff from multiple departments. GIS staff also maintains storm drain infrastructure data by mapping new infrastructure through a combination of field work and Engineering Plans.

In FY 2010-11, the City continued with its Channel Maintenance and Environmental Permitting project by conducting a series of interdepartmental meetings to evaluate individual facilities for such considerations as maintenance needs, equipment needs, site accessibility and any other pertinent attribute information to help define the ultimate maintenance plan for each facility. With a refined inventory and well developed maintenance plans, it is anticipated that this project will move into subsequent phases to better coordinate the appropriate permitting process.

4.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.4.3.1 UPDATED BMP REQUIREMENTS

The City has created and maintains a BMP Manual Part I which establishes the City's minimum BMP requirements for the following components: municipal, residential, industrial/commercial, construction, and new development. The City's JURMP also directs city staff to utilize the CASQA Municipal Handbook in addition to the BMP Manual to choose applicable BMPs for municipal areas and activities, including MS4 maintenance. All of these BMPs are designed to prevent waste from entering the MS4 system as well as ensuring that waste which is collected during maintenance of the City's MS4 does not re-enter the system.

The 2007 Municipal Permit requires that retrofitting flood management facilities be evaluated to determine the feasibility of providing additional pollutant removal from urban runoff and should only be conducted where determined to be effective. The City of Encinitas does not

own or operate any flood management projects or flood control devices that may be retrofitted. However, in FY 2010-11 the City did maintain 10 detention basins throughout the City that serve a pollutant removal function, particularly for sediment and associated pollutants bound to the sediment. These facilities are inspected on an annual basis and cleaned of debris and sediment as needed. A Municipal BMP map that depicts all of the City's structural BMPs, detention basins and storm drain filter locations can be found in Appendix C-3.

4.4.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS/ACTIVITIES

The City will implement additional controls for MS4 facilities adjacent to or tributary to ESAs when determined to be necessary.

4.4.4 PROGRAM IMPLEMENTATION

The City's MS4 management program includes responding to complaints received by the City's Clean Water Hotline {(760) 633-2787}; detecting and ceasing IC/IDs; inspecting and maintaining MS4s by cleaning, removing sediment, debris, and excessive vegetation, repairing and/or replacing damaged or failing MS4 structures; and by stenciling signs on storm drain inlets warning of effects of illegal dumping. The City trains field staff on implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance, emergency maintenance, and/or discharge control. The City utilizes a combination sewer and storm drain cleaner (a vactor truck) during MS4 maintenance to collect both dry and liquid debris from catch basins and inlets. Applicable BMPs are used during routine and emergency maintenance. City staff report on the maintenance of the MS4 through an industry standard asset inventory and a work management system that integrates with the City's GIS system. Maintenance is performed on the storm drain infrastructure and captured through work orders that are attached to the storm drain features represented in GIS. Any changes or updates to the MS4 inventory will be reported in future JURMP Annual Reports.

All maintenance activities this fiscal year met the Municipal Permit requirements as outlined in Order No. R9-2007-0001. The FY 2010-11 annual results for all municipal activities are summarized below and reported in detail in Appendix C-2.

4.4.4.1 MAINTENANCE

A summary of the City's MS4 operation and maintenance activities that occurred throughout the fiscal year are included below:

- Within the defined reporting period of this report, approximately **401 tons** of waste and litter were removed from the entire MS4. This included the removal of **81 tons** from the catch basins and inlets, **3 tons** from the City's storm drain filter inserts, **317 tons** from open channels and 10 desilting basins. All MS4 facilities observed to be collecting relatively high volumes of trash were cleaned between May 1 and September 30.

- Within the defined reporting period of this report, **317 tons** of litter and vegetation were removed from open channels and 10 desilting basins. Cleaning the open channels and the desilting basins is conducted annually/year round or more often when necessary. The City responds to observations or reports of anthropogenic litter in channels and desilting basins in a timely manner.

- Within the defined reporting period of this report the City inspected and cleaned **2,503** catch basins and inlets and removed a total of **81.3** tons of waste and litter. Storm drain inlets and catch basins that City personnel have identified as gathering a greater amount of trash and debris as compared to other areas of the City are inspected throughout the year and cleaned if necessary. The City's inspection and cleaning activities are sufficient in ensuring the catch basins do not reach one-third of capacity and that self-cleaning facilities remain free of trash and debris. Inspection and cleaning schedules are subject to change based on observations and records of City personnel.

- The City maintains a total of 56 storm drain filter inserts in 35 inlets (some larger inlets may contain more than 1 filter insert) located throughout its jurisdiction to remove sediment, debris, oil, and grease from the MS4. From July 1, 2010 through June 30, 2011, **3 tons** of sediment and litter were removed from all 35 inlets. These inserts are maintained on a quarterly basis by a specialty contractor. Table 4-2 below outlines the complete filter insert inventory. A Municipal BMP map that depicts all of the City's storm drain filter locations can be found in Appendix C-3.

- The City of Encinitas has a formal maintenance agreement with the San Elijo Joint Powers Authority to maintain the Ultra Violet Urban Runoff Treatment Facility. The scope of the agreement ensures daily monitoring and inspection, startup and shutdown of the facility as dictated by rain events, and preventative and regular maintenance. In FY 2010-11, over $17,250 was spent on the preventative and regular maintenance of the facility including, pump replacement, control screen and software updates, and other electronic equipment and parts. The Ultra Violet Urban Runoff Treatment Facility provides the City with a vital treatment function, and ongoing operations and maintenance activities are critical to ensure optimum performance and pollutant removal.

A complete report of all MS4 operation and maintenance activities can be found in Appendix C-2.

Table 4-2
Storm Drain Filter Inserts Inventory

Inlet ID Number	Number of Filters	Location	Inlet Type
1	1	194 El Camino Real @ Via Molena	Curb
2	1	1470 Neptune Ave. in driveway apron	Grate
3	2	337 El Camino Real, in front of Circuit City Mall	Curb
4	1	1638 Neptune in grass shoulder	Grate
5	2	1786 1/2 Highway 101	Curb
6	1	1650 Highway 101	Grate
7	1	970 Hwy 101 in alley, north of Jasper	Grate
8	1	918 N. Hwy 101 in alley	Grate
9	2	204 El Camino Real, in front of Blockbuster Video	Curb
10	1	914 Hwy 101 in alley @ Leucadia Blvd. north of the park	Grate
12	1	828 Hwy 101 in alley, behind building	Grate
13	1	802 Hwy 101 in alley, west of Europa St.	Grate
14	1	129 Cadmus at Highway 101	Grate
15	1	149 Basil St. at Highway 101	Grate
16	4	130 Basil St. at Highway 101	Curb
17	1	130 Athena at Highway 101	Grate
18	2	170 Athena at Highway 101	Curb
19	1	577 N. Vulcan north of Union	Grate
20	1	208 Cereus at Hygeia	Curb
21	3	501 El Camino Real, east side @ Garden View Rd.	Combination
22	1	321 Union at Hygeia	Grate
23	1	321 Union across from Hygeia St.	Grate
24	1	1750 Hwy 101 at Bishope Gate	Curb
25	1	750 G St. at Second St. alley	Grate
26	3	364 2nd St. at C Street	Grate
27	5	247 Hwy 101 at NE corner of Encinitas Blvd.	Curb

Inlet ID Number	Number of Filters	Location	Inlet Type
28	3	102 Encinitas Blvd.	Curb
29	2	485 Santa Fe Dr., west of I-5.	Curb
30	2	485 Santa Fe Dr., north side of street, west of I-5	Curb
31	1	2560 Manchester in alley	Grate
32	1	2582 Manchester across from alley	Grate
33	2	499 El Camino Real, SE corner @ Garden View Rd.	Curb
34	3	398 El Camino Real, SW Corner @ Garden View Rd.	Curb
35	1	398 El Camino Real, across from Circuit City mall	Curb

In FY 2010-2011, the Engineering Department was instrumental in conceptualizing and designing numerous drainage related capital improvement projects (CIP). These projects are outlined in Table 4-3 below.

Table 4-3
Storm Drain CIP Projects

Project Title	Budget	Goal	Status
Stratford Knoll Drainage Improvements	$650,000	Replace existing storm drain channel and increase capacity.	Construction complete under plant establishment
Cardiff Alley Improvements	$200,000	Build a perforated sub-drain to improve drainage in area.	Complete
Parking Lot B	$1,000,000	Implement Low Impact Designs (LIDs) including dry wells and flow through planters to treat storm water.	Complete
Encinitas Creek Drainage Channel	$1,100,000	Increase capacity and provide flood control.	In Design
Melba Road Improvements	$250,000	Installation of drainage improvements including curb and gutter and an 8 inch storm drain.	Complete

Project Title	Budget	Goal	Status
Santa Fe Drive Sidewalk and Drainage Project	$165,000	Installation of drainage improvements including curb, gutter and 330 feet of 18 inch storm drain.	In Design

4.5 SANITARY SEWER SYSTEM

4.5.1 BACKGROUND

Spills and/or leaks caused by a malfunction or failure of a component of the City's sanitary sewer system have the potential to introduce a significant volume of untreated sewage into receiving water bodies. Untreated sewage can contain high concentrations of bacteria, viruses, and parasites, all of which have the potential to negatively impact the environment and pose a significant threat to human health. Untreated sewage also has the potential to contain a variety of hazardous chemicals, which also pose threats to environmental and human health. The City of Encinitas conducts routine inspections and maintenance of the sanitary sewer system to ensure that the system is functioning properly. Routine inspections and maintenance of the sanitary sewer system reduces the potential for an overflow and helps prevent and eliminate infiltration of seepage to the MS4. The City also responds to sanitary sewer overflows to reduce or eliminate the amount of untreated sewage that reaches nearby portals to the MS4 and aids in cleaning up and disposing of overflow residue.

4.5.2 SOURCE CHARACTERIZATION

The City of Encinitas Wastewater Collection Division maintains approximately 122 miles of public sanitary sewer collection pipes.

4.5.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.5.3.1 UPDATED BMP REQUIREMENTS

The City has created and maintains a BMP Manual Part I which establishes the City's minimum BMP requirements for the following components: municipal, residential, industrial/commercial, construction and new development. In March 2008, the City prepared a JURMP Update which directs city staff to utilize the CASQA Municipal Handbook in addition to the BMP Manual to choose applicable BMPs for municipal areas and activities, including maintenance of the sanitary sewer system.

Similar to the MS4 maintenance program, the City trains field staff on implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance and emergency maintenance and/or discharge control. Structural BMPs are used during routine and emergency maintenance, where applicable.

4.5.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City implements additional controls for sanitary sewer facilities adjacent to or tributary to ESAs, if applicable and when determined to be necessary. The City has a regular sanitary sewer maintenance program that minimizes sanitary sewer overflows (SSO) and is described in more detail below.

4.5.4 PROGRAM IMPLEMENTATION

The City's sanitary sewer management program includes responding to overflows and spills as necessary, identifying spills and leaks, containing and controlling spilled materials, repairing damaged and leaking sewer lines, remediating existing sewer lines as necessary and proper disposal of hazardous waste.

4.5.4.1 MAINTENANCE

The City maintains a routine maintenance schedule for the sanitary sewer system. In FY 2010-11, the entire sewer system was cleaned, and known trouble spots were cleaned on a more frequent basis. The City seeks to reduce and eliminate the amount of seepage from the sanitary sewer system to the MS4 through routine preventative maintenance of both the sanitary sewer and the MS4 systems. Preventative maintenance of both systems allows City officials to detect and eliminate active seepage points before they become a larger problem, and also to repair areas of the system that have a high possibility of becoming a seepage point.

In FY 2010-2011, the Engineering Department was instrumental in conceptualizing and designing CIPs to prevent sewage spills by improving the wastewater collection system. Sewer and emergency repair projects initiated during FY 2010-11 are shown below in Table 4-4.

Table 4-4
Sewer CIP Projects

Project Title	Budget	Goal	Status
Olivenhain Sewer Pump Station	$ 5,300,000	Reduce sewage spills, increase capacity and capture first flush from Interstate 5.	Under Construction
2nd Street Sewer Replacement Project	$2,200,000	Relocate existing sewer line to increase maintainability and increase reliability.	Request for Proposals
Sewer Master Plan Update	$150,000	Update the existing master plan to identify and prioritize system wide rehabilitation and replacement projects	Update Completed

In FY 2010-11, the City took the following measures to reduce the seepage from the sanitary sewer system to the MS4:

- 7.06 miles of the sewer system was televised to check pipe conditions,
- 210.8 miles of sewer lines were cleaned,
- 9 storm drain and sewer pipes were repaired.

City staff report on the maintenance of the sewer system through an industry standard asset inventory and work order management system that integrates with the City's GIS system. Maintenance is performed on the sewer infrastructure and captured through work orders that are attached to the features represented in GIS. Any changes or updates to the sewer system inventory will be reported in future JURMP Annual Reports.

On August 8, 2009, the City implemented a Sewer System Management Plan (SSMP). The SSMP is a program that ensures that the sewer system is functioning properly and that the necessary maintenance is conducted. The SSMP also includes a spill response plan that establishes standard procedures for immediate response to all sanitary sewer system overflows (SSOs). In FY 2010-11 the City of Encinitas Wastewater Collection Division personnel were trained in detecting, reporting and responding to SSOs in accordance with the SSMP.

4.6 MOBILE MUNICIPAL ACTIVITIES, INCLUDING POWER WASHING

4.6.1 BACKGROUND

The City conducts a number of activities, which are not confined to any specific locations. Due to the nature of these mobile activities, temporary structural and source control BMPs are implemented as necessary.

4.6.2 SOURCE CHARACTERIZATION

The City conducts a number of activities that are not designated to a specific location. Such activities include, but are not limited to, the following:

- power washing, including graffiti removal,
- street and sidewalk repair and maintenance which includes street striping, street painting and pothole repair, and
- landscape maintenance.

4.6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.6.3.1 UPDATED BMP REQUIREMENTS

The City implements good housekeeping and general pollution prevention measures during municipal maintenance activities, including the mobile activities discussed above. In March 2008, the City established minimum BMPs which were described in the City's 2008 JURMP Update. The JURMP Update directs city staff to utilize the City's BMP Manual Part I and the

CASQA Municipal Handbook to choose applicable BMPs to implement for municipal areas and activities, including mobile activities. BMPs similar to those implemented for the management and maintenance of parks and landscaped areas are implemented for landscape maintenance in landscaped City right-of-way areas such as medians.

4.6.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City implements additional controls for municipal mobile activities adjacent to or tributary to ESAs when determined to be necessary. Presently, City related mobile activities have not been determined to be a source of pollutants for which water bodies within the City are on the CWA 303(d) list. Present BMP implementation activities have been evaluated as effectively reducing pollutant discharge to all receiving waters in the City to the maximum extent practicable (MEP).

4.6.4 PROGRAM IMPLEMENTATION

In FY 2010-11, City field crews were trained to implement BMPs during all mobile activities. The Public Works Department Streets Division received training on storm water BMPs as they relate to mobile cleaning activities throughout the reporting period. Additionally, the Public Works Wastewater Collections Division also received training from Clean Water Program staff on April 20, 2011. City field crews were trained to properly contain, control, and capture any discharge that was generated by a mobile activity. City field crews were also trained to use mobile equipment properly to ensure all wastewater is collected and that the equipment continues to function properly. For more detail regarding municipal staff training refer to Section 8.2 of this document.

4.7 SPECIAL EVENTS

4.7.1 BACKGROUND

The City of Encinitas hosts a variety of special events throughout the city. These events may include, but are not limited to, festivals, fairs, events for charitable causes, and special occasions. The City recognizes that many special events have the potential to generate significant trash and litter caused by the patrons and the associated activities that occur at the special events. The City has considered the controls that are described in the Municipal Permit and has chosen the BMPs listed in Section 4.7.3.1 below as most effective and efficient for the City's needs. These BMPs are implemented during and/or after special events, where applicable.

4.7.2 SOURCE CHARACTERIZATION

The City of Encinitas hosts a variety of special events at various locations throughout the city; including City sanctioned events and venues, as well as privately managed events. According to the Encinitas Municipal Code Chapter 6.12, any organized event coordinated for 25 people or

more requires an Operations Permit (Special Events Permit). For the purpose of Special Event source characterization, events that require an Operations Permit (as defined by Encinitas Municipal Code Section 6.12) by the City have been identified as priority events.

4.7.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.7.3.1 UPDATED BMP REQUIREMENTS

The City has considered many of the controls specific to special events listed in the Municipal Permit. Before any special event permits are approved, applicants must fill out the City's "Special Events Permit P2 Questionnaire" (Appendix C-4) to assess the most appropriate BMPs for their event, and all applications must be reviewed by Clean Water Program staff. Applications are evaluated to ensure that event organizers select an effective combination of BMPs to prevent trash or other pollutants from entering the storm drain system. The City has chosen the following BMPs as most effective and efficient for City needs. Notably, the City may require additional event specific BMPs at any time as determined necessary.

Inlet Protection:

- Identify all storm drain inlets with appropriate signage and prohibitive language to deter illegal dumping and / or discharge.
- Protect all storm drains identified on their site plans. Fabric filters, gravel bags, or other approved inlet protection device over the drain opening are recommended.
- Visually inspect and clean, if necessary, all identified storm drain inlets impacted by the special event activities.

Trash and Debris:

- Adequate trash and recycling containers must be provided throughout the event venue, including at the exit and entry points.
- Regular collection of loose trash and debris must be applied as needed.
- Temporary fencing will be required to be put into place if the event, or any portion thereof, is determined to pose a threat of wind blown debris into any water bodies.
- Post event sweeping of the entire venue area and related staging areas is required.

Temporary Portable Restrooms:

- All temporary portable restrooms will be placed away from all storm drain inlets, drainage swales, water bodies, and any other locations that have the potential to impact the storm drain system.
- All temporary portable restrooms are required to have a secondary containment pan or additional BMPs in place around the stations for possible overflows.
- The contact information for the company responsible for the restrooms will be clearly marked on or around the restrooms.

In addition to the BMPs that are implemented by the applicant, The City of Encinitas implements the following during and/or after special events, where applicable:

- proper management of trash and litter, including temporary trash receptacles for trash,
- street sweeping following the special event,
- other BMPs, as included in the Municipal Permit, when deemed necessary by City personnel, and
- other post clean-up activities, such as catch basin cleaning, when necessary.

The City may also set up storm water informational booths with educational handouts and watershed maps, which demonstrate the impacts of pollution on a watershed. The City will consider implementing additional BMPs depending on the site location, site conditions, and/or type of special event.

4.7.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City will implement additional controls for municipal special events adjacent to or tributary to ESAs when determined to be necessary. Presently, special events have not been determined to be a significant source of pollutants for which water bodies within the City are on the CWA 303(d) list. Present BMP implementation activities have been evaluated for effectiveness in reducing pollutant discharge to all receiving waters in the City to the MEP.

4.7.4 PROGRAM IMPLEMENTATION

Events which require a discretionary Special Events Permit from the City, and completion of the BMP specific Special Events Permit P2 Questionnaire (Appendix C-4), must meet minimum pollution control standards as described above, and receive permit approval from the Clean Water Program. More refined event characterization as defined in Section 4.7.2 above, and improved event tracking enhanced the overall efficiency and effectiveness of Special Event oversight. In FY 2010-11, there were **57** special event applications processed by the Clean Water Program (see Appendix C-5).

The Clean Water Hotline is advertised on all Special Events Permit Applications and can be used to report spills during normal business hours. Additionally, the City has an after hours phone number that can be used to report any large or hazardous spills during special events that may occur on weekends or when the City offices are closed. City personnel are on call to respond to any emergency situations that may arise. During City sponsored events, trained City personnel are on hand to ensure that the event remains free of illegal discharges and/or illicit connections to the MS4.

In addition, the City maintains the authority to charge the applicant a Clean-up Fee and Deposit, depending on the size, location, and type of event. Following permitted events, post-event inspections are conducted by City staff, and the location of the event must be returned to pre-event conditions in order for the applicant to receive a full refund of deposited monies. If the City determines that more clean-up is necessary, the deposit will be used as reimbursement

for City time and cleanup efforts including street and parking lot sweeping. The event sponsors or organizers may be charged any excess clean-up fees the City may encounter beyond the amount of the deposit. In FY 2010-11, the City collected $600.00 in clean-up deposits (see Appendix C-5).

5.0 INDUSTRIAL AND COMMERCIAL

5.1 INTRODUCTION

Activities associated with industrial and commercial businesses can contribute pollutants to the City's MS4 (Municipal Separate Storm Sewer System). The City of Encinitas has implemented a program that aims to reduce industrial and commercial pollution discharges from the MS4 to the MEP, prevent industrial and commercial discharges from the MS4 from causing or contributing to a violation of water quality standards, protect local receiving water bodies, and comply with the Municipal Permit.

Commercial facilities within the City of Encinitas include a wide range of service oriented businesses from restaurants to nurseries. There are five main commercial areas within the City. The largest areas are downtown Old Encinitas and the Leucadia business district, along Highway 101 from Swami's Beach to La Costa Boulevard. This area contains many different commercial businesses ranging from restaurants to automotive outlets and is the oldest portion of Encinitas. Three industrial facilities are also located in the City: the San Dieguito Union High School District Transportation Cooperative, the San Elijo JPA Water Reclamation Facility, and the inactive Encinitas Landfill.

Within the defined reporting period of this report, Clean Water staff worked diligently to fulfill the requirements of the Order 2007-0001 related to commercial and industrial sectors. The City's geographic information system (GIS)-based commercial inventory was updated and prioritized based on the new requirements of Order 2007-0001 and the guidelines established in the City's 2008 JURMP. FY 2010-11 commercial and industrial facility inspections were based on this prioritization scheme and the new inspection frequencies outlined in Order 2007-0001.

Inspections, follow-up, and enforcement actions were tracked using CityWorks, the City's existing GIS-based Work Order tracking system. In addition, the City participated in the regional industrial/commercial workgroup and subgroups, and helped to shape the mobile commercial businesses database and inspection standards. The following section demonstrates the City's successful implementation of required programmatic activities related to the Industrial and Commercial Section of Order 2007-0001 (Section D.3.b) during FY 2010-11

5.2 INDUSTRIAL AND COMMERCIAL SITES/SOURCES ELEMENT

5.2.1 BACKGROUND

Each stationary industrial and commercial facility has the potential to discharge pollutants into the MS4 and consequently degrade local water quality. Often, the most cost effective and simple solution to reducing pollution is to implement pollution prevention techniques at the source. The Clean Water Program emphasizes the use of pollution prevention methods as a primary mechanism for reducing commercial discharges of pollutants into the City's MS4. Further, the City requires minimum site and activity specific BMPs to be implemented, and inspections and enforcement procedures will be conducted where necessary, to comply with the Municipal Permit.

For the rest of Section 5.2, "commercial facilities" will be used to refer to stationary commercial facilities that are not mobile. The mobile commercial site/sources component is described in Section 5.3.

5.2.2 SOURCE CHARACTERIZATION

A watershed-based inventory of the industrial and commercial sites/sources within the City's jurisdiction was compiled as part of the 2008 JURMP update. As required by the Municipal Permit, the inventory includes the following information for each site/source: facility name; address; pollutants potentially generated by the site/source (and identification of whether the site/source is tributary to a Clean Water Act section 303(d) water body segment and generates pollutants for which the water body segment is impaired); and a narrative description including SIC codes which best reflects the principal products or services provided by each facility. Inventories of commercial and industrial facilities within the City of Encinitas are included in Appendices D-1 and D-2. Mobile commercial businesses do not have a fixed address at which they operate; they are tracked within a separate, non-spatial database (refer to Section 5.3).

The commercial inventory is continually updated as facilities go out of business and new facilities are opened. The GIS department and the Clean Water Program both receive a monthly summary of new and renewed business registrations from the City Clerk's Department. Upon receipt of the monthly summary, a GIS Analyst updates the spatial facility database, and a Clean Water Program staff member updates the storm water inspection information for each business. In addition, Clean Water staff identifies businesses that are not on the facility inventory when complaints are filed about businesses that are not registered with the City. When this occurs, these facilities are added to the inventory. Additionally, when Clean Water staff conducts annual commercial and industrial inspections, they have the opportunity to identify new or closed businesses and update the inventory with these findings.

In FY 2007-08, commercial facility inspection priorities were established in consideration of inspection frequencies and prioritization standards outlined in Order 2007-0001. As part of the JURMP update and transition to complying with the current Municipal Permit, a new process to determine high priority facilities was formalized using GIS and put into effect in FY 2008-09. Section 5.2.4.1 provides a detailed description of the City's prioritization process for commercial facilities.

Three industrial facilities are located in the City of Encinitas—the San Elijo JPA Water Reclamation Facility, San Dieguito Union High School District (SDUHSD) Transportation Cooperative, and the Encinitas Landfill. All three facilities are covered under the Industrial Storm Water General Permit Order 97-03-DWQ. The industrial inventory is included as Appendix D-2. The San Elijo JPA Water Reclamation Facility is a wastewater treatment plant located at 2695 Manchester Avenue. The plant treats approximately 5.25 million gallons of raw sewage per day. The SDUHSD Transportation Cooperative is located at 1142 Bonita Drive and functions as the maintenance shop for the SDUHSD bus fleet as well as the parking area for the buses. The Encinitas Landfill is owned and operated by the County of San Diego. This facility is located at 2099 Encinitas Boulevard and is now closed. The JPA and SDUHSD are inspected

by the City of Encinitas, and the Encinitas Landfill is inspected by the County of San Diego. Completed industrial facility inspection forms are available upon request.

As part of the 2008 JURMP update and the development of the SUSMP, the City collaborated with copermittees to identify the pollutant loading potentials of industrial and commercial sources. Table 5-1 lists the pollutants that may be generated by each category of business. The pollutants that may be generated by each individual business can be determined by matching the category of business noted for each of the businesses in the commercial inventory in Appendix D-1 with the category in Table 5-1 and its corresponding pollutants. In FY 2010-11 the pollutants that are likely generated by each facility were added to the inventory presented in Appendix D-1 and D-2 for clarity. Waste Discharge Identification Number (WDID) is also included for sites that are covered under the State of California Industrial General Permit (General Industrial Permit). The TTWQ prioritization of each facility is also included in the inventories. Prioritization was assigned via the process described in Section 5.2.4.1.

Table 5-1
Pollutant Loading Potentials of Industrial and Commercial Sources

Site/Source Type	Heavy Metals*	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash
Airplane Repair	L	L	L	PO	UL	UL	PO	UL	PO
Animal Facilities	UL	UL	UL	PO	UL	L	L	L	PO
Auto Body Repair	L	L	PO	PO	UL	UL	PO	UL	PO
Auto Repair/Maintenance	L	L	L	PO	UL	UL	PO	UL	PO
Boat Repair	L	L	L	PO	UL	UL	PO	UL	PO
Botanical Garden	UL	PO	UL	PO	L	L	PO	L	PO
Building Materials	PO	UL	PO	L	PO	PO	PO	UL	L
Mobile Cleaning	UL	PO	UL	PO	UL	UL	PO	UL	PO
Cement Mixing/Cutting	UL	UL	PO	L	UL	UL	PO	UL	PO
Cemeteries	UL	UL	UL	PO	L	L	PO	PO	PO
Eating/Drinking Establishments	UL	UL	L	PO	UL	UL	L	L	L
Equipment Repair	L	L	L	PO	UL	UL	PO	UL	PO
Fueling	L	L	L	PO	UL	UL	PO	UL	PO
Golf Courses/Parks	UL	UL	UL	PO	L	L	PO	PO	PO
Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO
Marinas	L	PO	L	PO	UL	UL	PO	PO	PO
Masonry	UL	UL	PO	L	UL	UL	PO	UL	PO
Nursery/Greenhouses	UL	PO	UL	L	L	L	PO	PO	PO
Painting/Coating	PO	PO	PO	PO	UL	UL	PO	UL	PO
Pest Control	PO	PO	UL	PO	L	UL	PO	UL	PO
Pool/Fountain Cleaning	UL	UL	UL	PO	UL	UL	UL	UL	UL
Portable Sanitation	UL	PO	PO	PO	UL	L	PO	L	PO
Power Washing	PO	PO	PO	PO	UL	UL	UL	UL	UL
Auto Parking/Storage	L	L	L	L	UL	UL	PO	UL	PO
Mobile Auto Washing	PO	L	PO	PO	UL	UL	PO	UL	PO
Contractor (Mobile)	PO	PO	PO	PO	UL	UL	PO	UL	PO
Handyman (Mobile)	UL	PO	PO	UP	UL	UL	PO	UL	PO
Landfill	PO	PO	PO	L	PO	PO	L	L	L
Wastewater Treatment	UL	UL	L	PO	UL	L	L	L	PO

Notes

L = Likely, PO = Possible, UL= Unlikely

* Heavy metals are a possible pollutant for any facility that has a parking lot.

This table is based on the field experience of D-MAX Engineering and on tables in the Copermittees' Baseline LTEA. D-MAX has conducted more than 1,000 industrial and commercial inspections during which it assessed the pollutant discharge potentials of the inspected facilities.

As required by Section D.3.b(1) of the Permit, all industrial and commercial facilities that meet at least one of the following criteria are included in the inventory:

Industrial Facilities

- Industrial Facilities, as defined at 40 CFR § 122.26(b)(14)
- Facilities subject to the statewide General Industrial Permit or other individual NPDES permit
- Operating and closed landfills
- Facilities subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)
- Hazardous waste treatment, disposal, storage, and recovery facilities

Commercial Facilities

- Automobile repair, maintenance, fueling, or cleaning
- Airplane repair, maintenance, fueling, or cleaning
- Boat repair, maintenance, fueling, or cleaning
- Equipment repair, maintenance, fueling, or cleaning
- Automobile and other vehicle body repair or painting
- Mobile automobile or other vehicle washing[1]
- Automobile (or other vehicle) parking lots and storage facilities
- Retail or wholesale fueling
- Pest control services
- Eating or drinking establishments, including food markets
- Mobile carpet, drape, or furniture cleaning[1]
- Cement mixing or cutting[1]
- Masonry[1]
- Painting and coating[1]
- Botanical or zoological gardens and exhibits
- Landscaping[1]
- Nurseries and greenhouses
- Golf courses, parks, and other recreational areas/facilities
- Cemeteries
- Pool and fountain cleaning[1]
- Marinas
- Portable sanitary services
- Building material retailers and storage
- Animal facilities
- Power washing services[1]

[1] Mobile commercial businesses are discussed in more detail in Section 5.3.

Both Industrial and Commercial facilities

- All other commercial or industrial sites/sources tributary to a CWA Section 303(d) impaired water body segment, where the site/source generates pollutants for which the water body segment is impaired
- All other commercial or industrial sites/sources within or directly adjacent to (i.e., within 200 feet of) or discharging directly to coastal lagoons or other receiving waters within an Environmentally Sensitive Area (ESA).
- All other commercial or industrial sites/sources that the City determines may contribute a significant pollutant load to the MS4.

5.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.2.3.1 UPDATED BMP REQUIREMENTS

As required by section D.3.b.(2) of the Permit, during the 2008 JURMP update, the City established a set of minimum BMPs for all industrial and commercial sites and incorporated these into the City's BMP Manual I. The list of minimum BMPs includes both structural and non-structural BMPs and is itemized specific to pollutant-generating activity. The City's set of minimum BMPs for industrial and commercial sites/sources also includes pollution prevention methods, where appropriate. A complete list of the City's minimum BMPs for industrial and commercial facilities can be found in the City's BMP Manual I. The BMP Manual I can be accessed through the Clean Water Program webpage at: http://cwp.cityofencinitas.org.

Industrial Facility Specific BMPs

Industries subject to the General Industrial Permit are required to prepare a SWPPP (Storm Water Pollution Prevention Plan) and implement the BMPs prescribed therein. At a minimum, the SWPPP should include sections which describe the significant materials present on site, areas and activities that are potential sources of pollutants, and BMPs to address the identified pollutants' sources onsite. In addition, because of the small scale of the City's industrial program, the City is able to require site-specific BMPs at its industrial sites. These BMPs are determined based upon a review of the site's SWPPP and site inspections.

5.2.3.2 ADDITIONAL CONTROLS

As required by section D.3.b.(2)(e), the City of Encinitas requires the implementation of additional controls for industrial and commercial sites and sources that are 1) tributary to CWA Section 303(d) impaired water body segments (where a site/source generates pollutants for which the water body segment is impaired) or 2) directly adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas.

Clean Water Program staff utilizes a GIS to maintain the commercial and industrial inventory and has the ability to spatially locate facilities relative to receiving waters and ESAs. Clean Water inspection staff is provided a hard copy map to use as a field reference to make appropriate determinations in consideration of these factors. Clean Water Program staff may prescribe additional controls during inspections of commercial and industrial facilities, as needed, in consideration of the proximity of the facility to the water body and the observed

potential of the site to be a significant source of pollutants that may threaten the downstream water body as necessary and appropriate.

5.2.4 PROGRAM IMPLEMENTATION

This section describes the steps employed by Clean Water Program staff to require and verify the implementation of required designated BMPs for industrial and commercial sources. During FY 2010-11, the City of Encinitas implemented the following industrial and commercial program elements:

- provided education and outreach through inspection actions so that regulated businesses were aware of the City's stormwater requirements;
- inspected inventoried businesses to evaluate compliance with established minimum BMP requirements and the local stormwater ordinance;
- conducted follow-up inspections as necessary to ensure facility compliance with minimum BMP standards;
- took enforcement action as necessary to bring violators into compliance.

5.2.4.1 INVENTORY PRIORITIZATION

As required by section D.3.b(1)(b), when evaluating threat to water quality, the City of Encinitas considered the following attributes of each industrial and commercial business to determine priority status (high or low):

i. Type of activity (SIC code);
ii. Materials used at the facility;
iii. Wastes generated;
iv. Pollutant discharge potential;
v. Non-storm water discharges;
vi. Size of facility;
vii. Proximity to receiving water bodies;
viii. Sensitivity of receiving water bodies;
ix. Whether the facility is subject to the General Industrial Permit or an individual NPDES permit;
x. Whether the facility has filed a No Exposure Certification/Notice of Non-Applicability;
xi. Facility design;
xii. Total area of the site, area of the site where industrial or commercial activities occur, and area of the site exposed to rainfall and runoff;
xiii. The facility's compliance history; and
xiv. Any other relevant factors.

Although not specifically required by the Municipal Permit, the City will continue to classify industrial facilities that have obtained coverage under the General Industrial Permit as high priority. The City's GIS data management system was used to prioritize commercial businesses based upon the following spatially referenced TTWQ criteria:

- proximity to a 303(d) listed water body
- pollutant potential of the facility type
- stormwater violation history

If a facility was identified as having a potential threat based on two or more of these criteria, the facility was determined to be a high priority commercial facility. For example, if the facility is tributary to the San Elijo Lagoon and received a Notice of Violation from the City in the past the facility would be considered high priority based upon the additional criteria that the City has established in determining TTWQ. In addition, if during the City's commercial inspection process or based on institutional knowledge, it was determined that additional sites that would otherwise have a low priority should be classified as high priority industrial or commercial facilities, then they were added to the inventory and were inspected.

The City's commercial inventory was updated and prioritized during the defined reporting period of this report and will be prioritized a least once per year prior to conducting annual inspections.

As a result of the City's threat to water quality analysis during FY-2010-11, 12% of the industrial and commercial facilities were identified as high priority. The identified high priority facilities included all three industrial facilities and many of the City's restaurants. For a complete list of prioritized facilities refer to Appendices D-1 and D-2. Notably in 2010-11, stormwater violation history was considered for three years prior to the permit year, versus five years as applied in the past. This resulted in a more refined list of high priority facilities and resulted in a more efficient overall inspection program, while meeting all permit inspection frequency and prioritization provisions.

5.2.4.2 INSPECTION FREQUENCY

FY 2010-11 commercial facility inspection priorities were established in consideration of inspection frequencies and prioritization standards outlined in Order 2007-0001. As part of the 2008 JURMP update and transition to complying with the current Municipal Permit a new process to determine high priority facilities was formalized using GIS and put into effect in FY 2008-09. The following steps were taken to determine which industrial and commercial sites were inspected:

1. Confirm that the current industrial and commercial inventories are up-to-date
2. Prioritize each facility based on the prioritization process described in section 5.2.4.1 of this document
3. Review the list of facilities that were inspected the previous year
4. Determine the facilities that will be inspected in the current year based on each site's prioritization and inspection history and other relevant factors, such as TMDLs and 303(d) listings.

In compliance with standards established in section D.3.b.(3)(b) & (c) of the Permit, in FY 2010-11, the City inspected 100% of the industrial and commercial facilities inventoried as high

TTWQ and over 25% of all inventoried sites. Consistent with the Permit, mobile businesses are not included when determining the inspection requirements based on percentages of the inventory. The City tracked completed inspections throughout the reporting period to ensure that the minimum inspection frequencies required by the Municipal Permit were met.

In FY 2010-11, the City's industrial and stationary commercial inventories included a total of **385** facilities, of which **46** facilities were identified as having a high TTWQ (**43** stationary commercial facilities and **three** industrial facilities[2]). Rounding to the nearest whole number, 25% of the stationary industrial/commercial inventory would be **96** sites, and 100% of the high TTWQ facilities would be **100** sites.

During FY 2010-11, the City completed inspections for all high priority facilities identified on the industrial/commercial facility inventory. City of Encinitas stormwater specialists conducted **two** industrial and **97** commercial site inspections; of which **two** were high priority industrial facilities and **43** were high priority commercial facilities. Therefore, the City of Encinitas met the minimum inspection requirements established in Order 2007-0001 and inspected 100% of all the high TTWQ facilities and 26% of all facilities in the industrial and commercial stationary facility inventories.

[2] The Encinitas Landfill is regulated and inspected by the County of San Diego.

Table 5-2
Summary of Facility Prioritization and Inspections Conducted in FY 2010-11

TTWQ Prioritization	Number of Facilities	Order 2007-0001 Inspection Requirements	Inspections Completed	
			Total	Percent
High priority	46	100% (46)	46	100%
Low priority	339	as needed	54	16%
Total	385	25% (96)	100*	26%

*Total includes one industrial inspection conducted by the County of San Diego.

5.2.4.3 ROUTINE FACILITY INSPECTIONS

As required by section D.3.b.(3) of the Permit, commercial and industrial facilities in Encinitas are routinely inspected by the City's Clean Water Program staff. Inspections are intended to:

- identify facilities that are not in compliance with the City's Storm Water Management Ordinance and the Municipal Permit;
- provide facilities with information regarding the City's Clean Water Program;
- provide guidance in complying with stormwater regulations (City's Storm Water Management Ordinance, Municipal Permit, etc.); and
- validate and manage the inventory.

During FY 2010-11, City of Encinitas stormwater specialists conducted **two** industrial and **97** commercial site inspections for compliance with its ordinances, permits, manuals, and this Order. All inspections included, as applicable:

i. Review of BMP implementation plans, if the site uses or is required to use such a plan;
ii. Review of facility monitoring data, if the site monitors its runoff;
iii. Check for coverage under the General Industrial Permit (Notice of Intent (NOI) and/or Waste Discharge Identification No.), if applicable;
iv. Assessment of compliance with Copermittee ordinances and permits related to urban runoff;
v. Assessment of BMP implementation, maintenance and effectiveness;
vi. Visual observations for non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff; and
vii. Education and training on stormwater pollution prevention, as conditions warrant.

Specialists use a Storm Water Quality Inspection Form to document inspection activities (see Appendix D-3). The specialized form allows staff to document the above listed inspection steps, as applicable, to determine full compliance for each type of facility. In FY 2008-09, staff designed a new triplicate form called Commercial and Industrial Stormwater Quality Inspection Summary form, which is used in addition to the detailed industrial and commercial inspection form. The form summarizes the corrective actions that are required as a result of the detailed

inspection and acts as the responsible party's record of receipt upon completion of the inspection. This customer friendly form more effectively summarizes the inspection results, making corrective action requirements very clear to the business operation owner/manager. The form lists the most common corrective actions and requires a completion date to be met via the signature of the manager/owner. Further, the form effectively aids in the owner's understanding of stormwater regulations and compliance with current and future inspection actions. A copy of this form is included in Appendix D-4. When conducting inspections, specialists worked with site contacts to provide examples of BMP solutions that could be implemented when corrective actions were necessary to minimize threat to water quality. Effective, low-cost solutions were sought whenever possible, although in some cases more expensive BMPs were needed to reduce pollutant discharges to the MEP. For example a restaurant may be required to provide overhead coverage and secondary containment for outdoor grease storage. Each business was also evaluated for staff training procedures and the stormwater quality awareness of the contact person; educational information was provided as appropriate. Whenever possible, the findings of the inspection and related corrective actions were discussed with the responsible party while the specialist was at the site. The responsible party was always provided a copy of the inspection summary form, and a complete copy of the detailed inspection report is always available upon request.

For a complete summary and confirmation that the designated BMPs were implemented (or required to be implemented) for industrial and commercial sites inspected in FY 2010-11, see the routine inspections summary in Appendix D-5. This Appendix describes, in detail, actions taken by specialists to confirm or require that BMPs were implemented at each industrial and commercial site inspected. Appendix D-5 and the associated inspection forms completed for each routine inspection confirm that all inspections conducted in FY 2010-11 addressed all the required inspection steps. Completed forms are available upon request.

Inspection Tracking

Complaint and inspection documentation is filed in the City's GIS database and is kept up-to-date on a daily basis. The GIS database is also used to track the number of inspections conducted for the inventoried industrial and commercial sites/sources throughout the reporting period to verify that sites/sources are inspected at the minimum frequencies listed in section D.3.b.(3)(b)& (c) of the Municipal Permit. Clean Water Program staff reference the inspection data in the GIS to assist in preparing for annual inspections, follow-up inspections, or IDDE investigations.

Third Party Inspections

All commercial inspections conducted in FY 2010-11 were completed by City of Encinitas Clean Water Program staff. The City has one full-time stormwater specialist (and three backup specialists) dedicated to conducting routine commercial and industrial inspections and following up on stormwater complaint calls. A third party was not employed to conduct commercial and industrial inspections during this fiscal year. Therefore, verification of third party inspection effectiveness was not necessary.

City staff responsible for conducting stormwater compliance inspections and enforcement of industrial and commercial facilities are trained regularly on inspection and enforcement

procedures, BMP implementation, and assessment of monitoring data. Clean Water specialists attend available workshops and regularly receive training through staff meetings and direction from the Clean Water Program Manager. Further, Clean Water staff actively collaborates with inspection staff throughout the San Diego region to share methodologies and approaches that may be beneficial to each jurisdiction. Refer to Section 8.2 for a complete list of workshops, trainings, and conferences attended by Clean Water Program staff in FY 2010-11.

Inspection Follow-up and Enforcement

Clean Water Program staff conducted follow-up inspections at all facilities where deficiencies were identified and corrective actions were required. Follow-up investigations are conducted to ensure that the required BMPs were implemented and confirm full compliance of the facility. A total of **34** follow-up investigations were conducted as part of the FY 2010-11 routine inspection program. Depending on the severity of the infraction requiring corrective action, inspectors may elect to issue a Notice of Violation and/or monetary citation. In FY 2010-11, all inspected facilities complied with the corrective actions; therefore, **zero** Notices of Violation (NOVs) were required to obtain compliance. Appendix D-5 demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the appendix, Clean Water staff aims to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

5.2.4.4 NOTIFICATION

As required by section D.3.b.(2)(c) of the Permit, and initiated in FY 2009-2010, the City of Encinitas notified all inventoried industrial and commercial business of the City's minimum BMP requirements that are applicable to the site and/or activity. Copies of the notification letters (stationary and mobile) are included in Appendices D-7 and D-8 respectively. In addition, during FY 2010-11, the City continued notification efforts as part of routine facility inspections. All industrial and commercial facilities inspected in FY 2010-11 were notified of minimum BMP requirements applicable to their site/source. City of Encinitas stormwater specialists conduct thorough inspections with the owner/operator of each facility. During each inspection the stormwater specialist discusses the applicable BMP requirements in detail with the owner/operators.

5.2.4.5 COMPLAINT INVESTIGATIONS (VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE)

When a complaint is registered with the Clean Water Hotline, NPDES email, or when staff directly observes an illicit discharge involving a commercial facility, a complaint investigation is conducted. All complaints are investigated by City personnel with enforcement authority within a reasonable timeframe. Investigations typically include stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

As required by the Municipal Permit, and depending on the severity of the violation, the City enforces its stormwater ordinance for all commercial and industrial facilities as necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's GIS work order database (CityWorks).

In FY 2010-11, there were **97** stationary commercial ICID complaint investigations. Of those investigations, **42** required follow-up assessments, **21** NOVs and **one** citation were issued in order to achieve compliance. A summary of the commercial complaints, violations, and enforcement actions occurring in FY 2010-11 is available for review in Appendix H-1. As a component of complaint investigations, educational information is commonly provided to the owner/operator of commercial facilities to improve knowledge and awareness of stormwater regulations. Materials typically distributed included general stormwater education, BMP requirements, pollution prevention tips, as well as specific municipal code and clean water regulations. During **75** investigations, educational information was provided to the business owner/operator by the Clean Water specialist.

Appendix H-1 demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the appendix, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

Complaint investigation procedures will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report that will be completed and submitted the RWQCB as required by December 15, 2011.

Reporting of Industrial Non-Filers

The City of Encinitas did not identify any industrial sites that may require coverage under the General Industrial Permit but which, to the City's knowledge, did not file NOIs.

5.3 MOBILE SOURCES

5.3.1 BACKGROUND

Illegal discharges tend to be the major area of concern with mobile businesses. Mobile businesses can be difficult to inventory because they may not be based in the City of Encinitas and do not maintain a permanent address. Additionally, new mobile businesses are started, and previously existing mobile businesses go out of business on a relatively regular basis. For the reasons listed, and also simply because they are not consistently present at a fixed location, regular inspections of mobile businesses are not a feasible option.

5.3.2 SOURCE CHARACTERIZATION OF MOBILE SOURCES

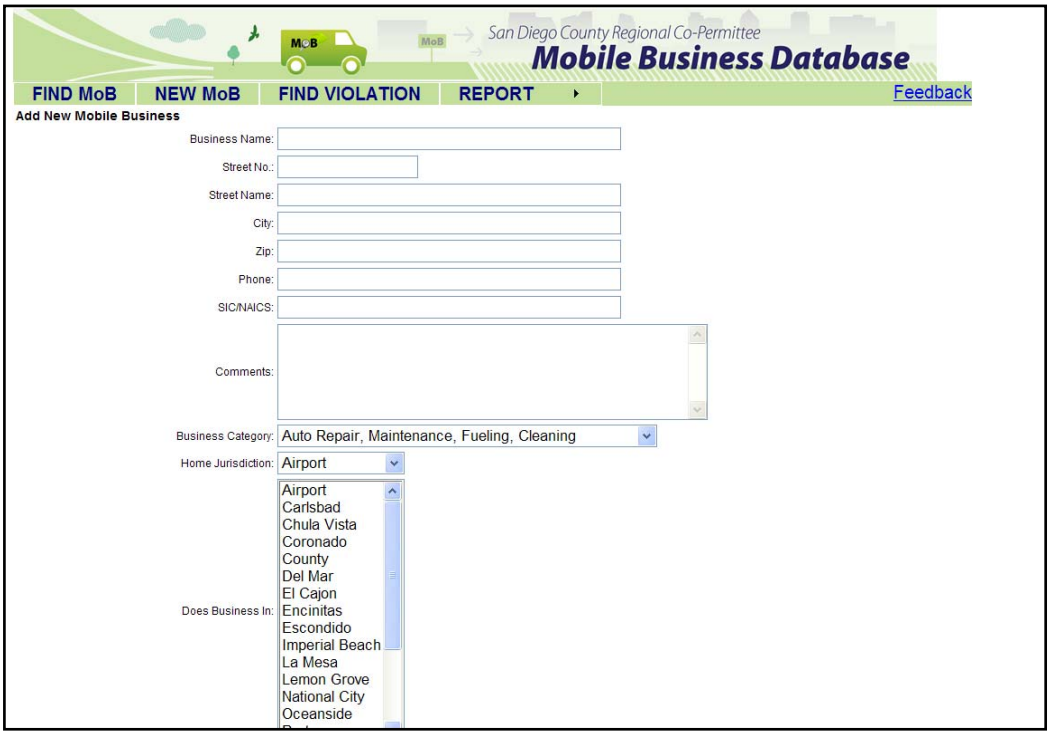
The mobile businesses known to operate within the City's jurisdiction are listed on an inventory separate from the stationary commercial inventory in Appendix D-6. This inventory was comprehensively reviewed and updated during FY 2010-11. The following business types are addressed by the mobile sources element of the City's industrial and commercial program:

- Mobile automobile or other vehicle washing
- Mobile carpet, drape, or furniture cleaning
- Mobile construction trades
  - Cement mixing or cutting
  - Masonry
  - Painting and coating
- Landscaping
- Pool and fountain cleaning
- Power washing services

In addition to the types of businesses listed above, any other mobile business that the City determines to have a significant threat to water quality will be added to the inventory. Because not all mobile businesses have obtained a City of Encinitas business registration certificate or have a base of operations outside the City of Encinitas, Clean Water Program staff is continually refining and updating the mobile commercial inventory. Sources for such inventory updates include reported incidents, general observations by City staff, and available business registration certificates.

In FY 2008-09, the City participated in the development of a regional inventory and tracking system for mobile businesses. The industrial/commercial workgroup worked with a consultant who specializes in database design to create and maintain a mobile businesses database for the region. Figure 5-1 depicts the online form used by copermittees to enter a new business into the regional mobile business database. It is anticipated that this regionally updated and shared database will aid in collaborative enforcement of stormwater violations caused by mobile businesses.

Figure 5-1
Mobile Business Database New Business Entry Form



5.3.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.3.3.1 UPDATED BMP REQUIREMENTS FOR MOBILE SOURCES

All BMPs required for stationary sources, described in Section 5.2.3.1 of this document and listed in detail in the City's BMP Manual, are also required for mobile businesses, where applicable. The most important BMPs for most mobile businesses are typically those that address non-stormwater discharge control and spill prevention, control, and cleanup.

5.3.3.2 ADDITIONAL CONTROLS FOR MOBILE SOURCES

Regardless of where the activity occurs, the City categorically prohibits illegal discharges from mobile businesses. If the City finds that the activities of a mobile business are contributing pollutants of concern to a CWA section 303(d) impaired water body segment or are negatively impacting ESAs, additional controls will be required for those activities as applicable. Further, if the City has reason to believe that any mobile business is generating significant illegal discharges in a given area of the City that is tributary to a 303(d) listed water body (and the discharges contain pollutants causing the impairment) or is within, directly adjacent to, or directly discharges to a water body within an ESA, City staff may more frequently visit those areas and/or take other actions to address the illegal discharges.

5.3.4 PROGRAM IMPLEMENTATION

5.3.4.1 EDUCATION/OUTREACH AND NOTIFICATION OF MOBILE SOURCES

In FY 2010-11, the City of Encinitas provided information and outreach regarding stormwater quality to mobile business owners and operators that were contacted as a result of a complaint call *(See Section 5.3.4.4 below for a summary of complaint calls related to mobile business activities)*. Contacted businesses were given educational materials with detailed pollution prevention methods and other related BMPs to aid in their compliance with the City's stormwater ordinance and the Municipal Permit.

In 2009-2010, the City completed a comprehensive mail out to all inventoried mobile businesses known to operate in the City of Encinitas, disseminating minimum BMP requirements to identified proprietors. This effort leveraged upon regional and jurisdictional efforts to develop an exhaustive inventory of mobile businesses conducting a variety of activities. Based upon this well developed effort, the City of Encinitas assuredly met Municipal Permit (Section D.3.b.(2)(c)) requirement to notify inventoried businesses of minimum BMP requirements.

5.3.4.2 INTER-JURISDICTIONAL COORDINATION

During FY 2007-08, the City of Encinitas participated with other Copermittees in a Mobile Business Subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the Copermittees have chosen to collaborate on a regional mobile business outreach and education strategy, which addresses the following elements:

- Inventory Development and Maintenance;
- Establishment of Minimum BMP Requirements; and
- Outreach and Education (Including Business Notifications).

As described above, in FY 2008-09, a consultant was obtained to develop and launch a mobile business database to assist with the implementation of this Mobile Business Program. Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this strategy. See Appendix F-1 for the complete Regional Mobile Business Strategy.

5.3.4.3 INSPECTIONS

The inspections for mobile businesses generally follow the same procedure described in Section 5.2.4.3 of this document. The main focus of most mobile business inspections is on discharge control BMPs. After thorough investigation, enforcement, and follow-up as needed, none of the mobile businesses investigated warranted a formal inspection. Notably, as part of standard response actions, Clean Water staff work directly with mobile business owners and employees to ensure that their business practices meet the City's minimum BMP standards.

5.3.4.4 COMPLAINT INVESTIGATIONS, VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE

Complaint response, follow-up investigation, and compliance of mobile commercial businesses are handled in the same fashion as stationary commercial facilities. For a general description of the City's complaint response procedures, refer to section 5.2.4.5.

In FY 2010-11, there were **33** mobile complaint investigations conducted. **32** resulted in dissemination of educational information to the business owner/operator; **14** Notices of Violation and **four** citations were issued. Refer to Table 5-3 for a summary of the mobile commercial complaints and associated enforcement actions. This table includes complaint response to discharges from mobile businesses and discusses each violation and the follow-up actions taken. The table demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the table, Clean Water staff aims to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance. Appendix H-1 also includes a summary of violations and enforcement actions resulting from complaints about mobile businesses occurring in FY 2010-11.

Complaint investigation procedures, including those related to mobile business operations, will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report, which will be completed and submitted to the RWQCB as required by December 15, 2011.

Table 5-3
FY 2010-11 Mobile Commercial Complaints and Enforcement Actions

Complaint Location	Mobile Business Type	Enforcement Action(s)
605 WEST BLUFF CT	Landscaper	Education
200 W D STREET	Painting	Education, NOV
1952 CIRCLE PARK LANE	Carpet Cleaning	Education, NOV
835 STRATFORD KNOLL	N/A	No Violation
1404 CALLE CHRISTOPER	Carpet Cleaning	Education
850 HYGEIA AVE	Street Sweeping	Education
2355 LAGOON VIEW DRIVE	Power Washing	Education
2347 LAGOON VIEW DRIVE	Power Washing	Education
2343 LAGOON VIEW DRIVE	Power Washing	Education
262 N. EL CAMINO REAL	Recycler	Education, NOV
1142 WOODLAKE DR	Utility provider	Education
287 CHAPALITA DR	Landscaper	Education, NOV
233 N EL CAMINO REAL	Utility provider	Education
804 NOLBEY	Contractor	Education
249 MANGANO CIRCLE	Contractor	Education
1669 SAN ELIJO AVE	Contractor	Education, NOV
745 S. COAST HWY 101	Roof Contractor	Education
721 N VULCAN AVE	Contractor	Education, NOV, Citation
804 NOLBEY DR	Contractor	Education
2005 MACKINNON	Contractor	Education, NOV, Citation
1409 AVENIDA DE LAS ADELSAS	Contractor	Education
1120 ISLAND VIEW LANE	Utility provider	Education
1090 ALEXANDRA LN	Landscaper	Education
396 N COAST HWY 101	Contractor	Education, NOV
422 REQUEZA ST	Contractor	Education, NOV, Citation
415 SANTA FE DR	Contractor	Education
1661 VILLA CARDIFF DR	Contractor	Education
617 BRAE MAR CT	Contractor	Education, NOV
1620 BELLA VISTA DRIVE	Contractor	Education, NOV
606 BRAE MAR CT	Painting	Education, NOV
602 ARDEN DRIVE	Contractor	Education
160 CALLE MAGDELENA	Contractor	Education
609 S VULCAN AVE	Contractor	Education, NOV, Citation

6.0 RESIDENTIAL

6.1 INTRODUCTION

Approximately 80 percent of the City's 19.4 square mile area is designated as residential in the City's General Plan map. Residential land use comprises a large area of the City, and residential activities can have a considerable effect on the water quality of receiving waters. The City's residential component of the Clean Water Program aims to reduce pollutant runoff from residential areas and activities to the MEP (Maximum Extent Practicable) and prevent residential discharges from the MS4 (Municipal Separate Storm Sewer System) from causing or contributing to a violation of water quality standards.

The overall goal of the program is to minimize the impact of discharges from residential areas on receiving waters in Encinitas and, where possible, to enhance the quality of these resources. The following sections will describe the program activities conducted during FY 2010-11 that contributed to the successful implementation of the City's Residential Component.

6.2 SOURCE CHARACTERIZATION

Residential high threat to water quality areas and activities within the City of Encinitas were identified during the 2008 JURMP update process and are described in detail in City's 2008 JURMP. The following section identifies the high threat to water quality residential areas and activities that were focused on during FY 2010-11. The Municipal Permit (Order R9-2007-0001) requires each Copermittee to identify and provide a list of the residential areas and activities within its jurisdiction that have been identified as having a high threat to water quality. The following section briefly summarizes this process.

6.2.1 HIGH THREAT TO WATER QUALITY ACTIVITIES

In consideration of the minimum required *high threat to water quality* residential activities listed in section D.3.c.(1) of Order No 2007-0001, the following residential activities were identified as residential activities that hold the greatest threat potential to local receiving water quality:

- Automobile Repair and Maintenance
- Automobile Washing
- Automobile Parking
- Home Improvement, Garden Care Activities, and Product Use
- Disposal of Trash, Pet Waste, Green Waste, and Household Hazardous Waste

6.2.2 HIGH THREAT TO WATER QUALITY AREAS

Section D.3.c. (1) of Order No 2007-001, requires that Copermittees identify all *high threat to water quality* residential areas. During the 2008 JURMP update, the City identified *high threat to water quality* residential areas using the following criteria (as defined in the Municipal Permit):

- Any residential areas tributary to a CWA section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired; and
- Any residential areas within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an environmentally sensitive area (as defined in Attachment C of the Municipal Permit).

The City of Encinitas has several Section 303(d) impaired water bodies and coastal lagoons within or directly adjacent to the City's jurisdictional boundary. The 303(d) impaired water bodies within the City of Encinitas include Cottonwood Creek, Encinitas Creek, Escondido Creek, San Elijo Lagoon, and the Pacific Ocean at Moonlight State Beach and the San Elijo Lagoon Outlet.

Based on the definition in Attachment C of the Order No 2007-0001, Environmentally Sensitive Areas within the City of Encinitas include those areas identified as Natural Resource Sensitive areas in the City's General Plan and the City's Wetland buffer layer. The City does not contain any Areas of Special Biological Significance, water bodies designated with the RARE beneficial use, or areas designated as preserves in the Multiple Species Conservation Program.

In the process of drafting the Regional Residential Education Program, the Regional Outreach Workgroup identified the major pollutants of concern from residential sources for the San Diego region. The major pollutants of concern for residential areas include: bacteria, nutrients, sediment, pesticides, and trash.

In consideration of identified 303(d) listed water bodies, the City's ESAs (Environmentally Sensitive Areas), and the primary pollutants of concern, Clean Water Program staff employed GIS analysis to determine the location of *high threat to water quality* residential areas. Based on this analysis the following residential areas within the City of Encinitas were identified as *high threat to water quality* residential areas:

- All residential areas within 500 feet of any 303(d) listed water body or lagoon
- All residential areas within, directly adjacent to, or discharging directly to a coastal lagoon or other receiving waters within an ESA
- The residential area to the west of Interstate 5 within the Cardiff sub-basin (drains to San Elijo Lagoon)
- The residential area south of Sylvia St, west of Second Street, and north of K Street (drains to Cottonwood Creek and Moonlight Beach)

Appendix E-1 includes a map of residential areas. The map was developed for Clean Water Program staff to utilize in the office and in the field to help identify residential discharges or

activities which could pose a threat to water quality due to their proximity to receiving water bodies and ESAs.

6.2.3 EVALUATION OF OVERSIGHT OF RESIDENTIAL AREAS AND ACTIVITIES

Through an evaluation of effectiveness assessment measures as part of this report (See Section 11.0), it has been reasoned that the City has achieved overall success as it relates to the oversight of residential areas. Hotline complaint calls received, compliance achievement, and dry weather monitoring exceedances as they relate to residential sources all support this assessment. Continual evaluation in subsequent reporting years will be vital to assessing the overall efficacy of oversight related to residential activities.

6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

6.3.1 POLLUTION PREVENTION

Pollution prevention is the act of reducing or eliminating waste at the source by modifying production processes, promoting the use of non-toxic or less-toxic substances, implementing conservation techniques, and re-using materials rather than putting them into the waste stream. Pollution prevention methods have been integrated into the minimum BMPs established for *high threat to water quality* areas and activities.

6.3.2 LIST OF MINIMUM BMPS

As part of the City's 2008 JURMP update, the City designated the following minimum BMPs for *high threat to water quality* residential activities. The minimum BMPs are primarily nonstructural and are targeted at activities specified in Section 6.2 as having a *high threat to water quality*. Pollution prevention methods were incorporated into this set of BMPs, where appropriate. The list of minimum BMPs can also be found in the City's Storm Water BMP Manual I. The manual can be accessed through the City's Clean Water Program webpage at: http://cwp.cityofencinitas.org.

(a) Automobile Repair and Maintenance

Pollution Prevention

(1) Employ routine preventative maintenance practices
(2) Reduce vehicle use, whenever possible
- Change driving habits
- Carpool
- Increase the use of public transportation
- Bike or walk for short trips

(3) Make timely vehicle repairs

Leaks and Spills

(1) Prevent leaks and spills from contacting stormwater
- Use drip pans, plastic sheeting, or other materials to contain spills
- Work indoors or under shelter
- If working outdoors, don't work in the rain
- Immediately contain and clean up leaks and spills when they occur
- Use absorbent materials to clean up spills
- Establish cleanup standards
- Require that tools and parts be cleaned only in contained areas

Materials and Waste Management

(1) Properly manage and dispose of automotive wastes and materials
- Properly drain fluids from automobiles
- Dispose of wastes properly and lawfully and recycle used oil and antifreeze
- Store materials and wastes indoors or under cover
- Use secure and watertight containers when storing materials and wastes

(b) Automobile Washing

Management / Reduction* of *Wash Water

(1) Whenever possible, use commercial self-serve or full-serve car washes that properly dispose or recycle their wash water
(2) When washing a vehicle at a residence:
- Wash vehicles over porous surfaces (grass, dirt, etc.) whenever possible
- Use dry cleaning methods to avoid the generation of wash and rinse water
- Turn off the water when not in use or use a controllable spray nozzle
- Encourage the establishment of neighborhood wash areas where wash water and contaminants can be properly managed

Materials and Waste Management

(1) Properly dispose of soapy water or bucket rinse water to the sanitary sewer or soak into a landscaped area
(2) Use dry methods to degrease or clean especially dirty parts prior to wet washing and rinsing (e.g., remove grease or brake dust using towels, etc.)
(3) Refrain from degreasing or cleaning of engine parts in areas other than those designated for such purposes

(c) Automobile Parking

(1) Use routine preventative maintenance practices and make timely vehicle repairs to prevent leaks of automotive fluids
(2) Design and construct parking areas to minimize storm water impacts; covered garages should be plumbed to the sewer system

(d) Home and Garden Care Activities and Product Use

GARDEN AND YARD CARE

Pollution Prevention

(1) Use safe substitutes and alternative methods when gardening:
- Use integrated pest management techniques and biological controls
- Use native plants and drought tolerant species to reduce water use and green waste produced
- Implement planting techniques that attract beneficial insects
- Consider composting, vermiculture and yard waste recycling
- Recommend and encourage practical purchasing practices for pesticides and fertilizers
- Identify "pests" before attempting to eliminate them

(2) Always read label instructions and follow the instructions for garden care products
(3) Implement water conservation practices, whenever possible
(4) Consider xeriscape gardening, including: drip irrigation, soaker hoses, and micro-spray systems
(5) Repair and maintain irrigation systems to reduce excessive runoff
(6) Recycle lawn clippings and green waste through local programs
(7) Plant or mulch hillsides and slopes to prevent erosion

Leaks and Spills

(1) Immediately cleanup spills of gardening chemicals, fertilizers, and soils
(2) Return spilled materials to the container for future use or proper disposal

Materials and Waste Management

(1) Store lawn care products in closed labeled containers and in covered areas
(2) Refrain from using hazardous materials during windy or rainy days
(3) Cover stockpiles of soil, compost, or fertilizers with plastic tarps to prevent dispersal by wind or rain
(4) Dispose of household chemicals to the household hazardous waste collection facility or scheduled drop-off events
(5) Utilize dry sweeping techniques for clean up

Restrictions on Activities

(1) Do not hose off paved surfaces to the street or gutter
(2) Do not dispose of hazardous waste to the trash, landfill, or storm drain

HOME CARE AND MAINTENANCE

Pollution Prevention

(1) Utilize purchasing practices that reduce waste
(2) Use safe substitutes for home cleaning and maintenance

(3) Read and follow product labels
(4) Recycle unused or unwanted products
(5) Use water based paints when possible
(6) Recycle unwanted appliances and household equipment

Leaks and Spills

(1) Clean up hazardous materials spills immediately
(2) Properly dispose of waste from spill cleanup materials

Materials and Waste Management

(1) Store household hazardous materials in closed labeled containers and in a covered area
(2) Recycle latex paint through community programs
(3) Dispose of unwanted household hazardous waste through household hazardous waste collection facilities
(4) Dispose of trash in provided trash cans or shared dumpsters and keep dumpster and trash can lids closed when not in use

Restrictions

(1) Do not dispose of wash waters (carpet cleaning, mop water, paint wash-up, etc.) to the street, gutter, or storm drain

(e) **Disposal of Pet Waste**

Pollution Prevention

(1) Spay or neuter pets to reduce feral populations

Waste Management / Disposal

(1) Clean up after pets when walking them in public places
(2) If pets are allowed to defecate outside, clean up feces from yards
(3) Properly dispose of pet feces in the toilet or trash

Pet Management (Dogs and Cats)

(1) Whenever possible, do not allow pets to run free in residential neighborhoods

Manure Management (Horses and Other Large Animals)

(1) Properly manage manure (including the preparation of manure management plans when appropriate)
(2) Compost or properly dispose of manure
(3) Cover manure stockpiles with plastic tarp to prevent contact with rain

6.4 PROGRAM IMPLEMENTATION

This section describes the steps that were taken in FY 2010-11 to require and verify the implementation of designated BMPs for residential areas and activities.

6.4.1 OUTREACH AND TRAINING

The City has a comprehensive set of Education and Public Participation Programs, which are a component of the City's jurisdictional program. A significant element of these programs consists of educating and engaging residents about ways in which they can minimize their impact on local waterways. Education of the citizens who reside in the City of Encinitas contributes to the implementation of the Residential Component of the City's Clean Water Program. Outreach messages that are relayed to the public include, but are not limited to:

- Impacts of urban runoff on receiving waters
- Distinction between MS4s and sanitary sewers
- Pollution prevention and safe alternatives
- Household hazardous waste collection and recycling
- BMP implementation and BMP maintenance
- Pet and animal waste disposal
- Equipment and vehicle maintenance and repair
- Spill response, containment, and recovery
- Water conservation

During FY 2010-11, Clean Water program staff conveyed these messages to the public through a variety of mechanisms, including:

- Clean Water Program website
- Production and distribution of brochures and promotional items
- Public participation in community events, workshops, and trainings
- Presentations at local schools
- Media coverage
- Response to residential complaints (Clean Water Hotline or email)

Implementation of these mechanisms by the Clean Water Program helps to make the public aware of the types of activities that have the potential to impact water quality and the BMPs that can be implemented to reduce this impact. Awareness is the first step in the process towards behavioral change. A detailed description of the educational activities implemented by the Clean Water Program can be found in the Section 8.

6.4.2 USED OIL AND HHW COLLECTION SERVICES

The City of Encinitas facilitates the proper management and disposal of used oil, toxic chemicals, and other household hazardous wastes (HHW) through various mechanisms. The City offers its residents door-to-door home collection, two permanent collection facilities, and periodic, temporary collection events for all HHW. In addition, the City requires weekly curbside garbage, recycling, and yard waste pick-up for all residents. The various components

of the solid waste and hazardous waste collection services provided by the City are described in detail below.

HHW Home Collection Program - Door-to-door home collection service is available to all residents of the City of Encinitas. Qualifying homebound, elderly, and disabled citizens may request pickup at no charge. Residents not qualifying for free pickup service are charged a nominal fee of $10 for home collection. Materials accepted via the HHW Home Collection Program include:

- **Household Cleaners:** Drain openers, oven cleaners, wood and metal polish / cleaners, toilet bowl cleaners, and disinfectants
- **Automotive Products:** Oil and fuel additives, grease and rust solvents, carburetor and fuel injector cleaners, air conditioning refrigerants, starter fluid, lubricating fluids, radiator fluids and additives, waxes, polishes, cleaners, and transmission additives
- **Home Maintenance and Improvement Products:** Paint thinners, paint strippers, adhesives, paints, stains, varnishes, sealants, and wood preservatives
- **Lawn and Garden Products:** Pesticides, herbicides, and fungicides (poisons)
- **Miscellaneous:** Batteries, fingernail polish removers, pool and photo chemicals

Poway and Vista Permanent HHW Collection Facilities - In an agreement with the Cities of Vista and Poway, residents of the City of Encinitas may also drop off household hazardous waste at the Vista or Poway collection centers. The Vista collection center is located at 1145 East Taylor Street, at Laguna Lane. The Poway collection center is located in the South Poway Business Park, at 12325 Crosthwaite Circle off of Stowe Drive. These regional, permanent collection centers are open every Saturday (except holiday weekends) from 9:00am to 3:00pm. No fee is charged to Encinitas residents and no appointments are necessary. Waste collected is separated, packaged, secured, and temporarily stored at the permanent facilities. It is then removed on a regular basis for proper recycling or disposal. Material accepted at the Poway and Vista facilities are the same as those accepted through the Home Collection Program.

Used Oil Recycling Program - The City's used oil recycling program consists of a network of certified automotive waste recycling centers throughout the city. These facilities accept a range of used automobile products including used oil, oil filters, batteries, and antifreeze. A significant part of this program is the dissemination of educational information regarding the benefits of, and opportunities for, pollution prevention. This program is specifically for the residents of Encinitas and is funded through grants from the California Integrated Waste Management Board (CIWMB). A list of the participating oil recycling sites is provided in all oil recycling printed material and on the City's website. Residents may also opt to use the City's door-to-door HHW collection service to recycle their used oil and oil filters. However, most residents are accustomed to taking their used oil and oil filters to the certified centers and the permanent HHW facilities.

Trash and Recycling Services - For public health purposes, the City of Encinitas requires that all residents participate in the City's solid waste collection service. All residents and businesses are

liable for payment of fees for the mandatory service (see Municipal Code section 11.20.010, paragraph A). Residential service includes curbside green waste collection and recyclable materials collection in addition to regular garbage collection. The City of Encinitas has an exclusive franchise agreement with EDCO Waste Recycling Services to provide solid waste collection services in Encinitas for both residential and commercial customers.

Detailed information regarding used oil, HHW, and solid waste disposal is made available to residents through the City's website, ECDO's website, and other various environmental websites. In addition, brochures about household hazardous waste disposal options are available at outreach events staffed by the Clean Water Program, the Solana Center, and EDCO Waste Recycling Services. Brochures and information regarding HHW disposal are also available upon request at the City's main office.

Table 6-1 provides a summary of the used oil collected via the City's used oil recycling program. Table 6-2 identifies types and amounts of household hazardous waste collected from residents in Encinitas during this reporting period.

Table 6-1
Used Oil Collected in FY 2010-11

Collection Type	Quantity of Oil (Gallons)	Quantity of Filters (# of Filters)
Certified Centers	6,676	26
Permanent HHW Centers	480	136
Total	**7,156**	**162**

Table 6-2
Household Hazardous Waste Collected in FY 2010-11

Material Type	Description	HHW Collection Facilities*
Flammable	Flammable solid/liquid	2,740
& Poison	Bulked flammable liquids	0
	Oil-base paint	16,119
	Poison (excl. aerosols)	5,318
	Reactive and explosive	0
	Subtotal	**24,177**
Acid	Inorganic & Organic acid	987
Base	Inorganic & Organic base	1,773
Oxidizer	Neutral oxidizers, Organic peroxides	158
	Subtotal	**2,918**
PCB-containing	PCB-containing paint	0
	Other PCB waste	0
	Subtotal	**0**
Reclaimable	Antifreeze	1,018
	Car batteries	1,089
	Latex paint	19,457
	Motor oil/oil products	4,078
	Oil filters	204
	Subtotal	**25,846**
Asbestos		**37**
Universal Waste (UW)	Mercury containing waste	0
	Thermostats/switches/thermometers	5
	Fluorescent Lamps	571
	Rechargeable batteries	171
	Household batteries	2,217
	Subtotal	*2,964*
Electronic Waste (UW)	SB20/50 covered electronic devices	12,593
	Universal waste electronic devices	21,858
	Subtotal	*34,451*
Aerosols (UW)	Non-empty aerosol containers	0
	Other	49
	All UW Subtotal	**36,501**
Other HHW	Home-generated sharps	443
	Pharmaceutical waste	0
	Compressed gas cylinder	553
	Non-UW aerosol containers	1,943
	Treated Wood	55
	Other	1,139
	Subtotal	**4,133**
Grand Total		**93,575**

*Waste measured in pounds.

6.4.3 COMPLAINT INVESTIGATIONS, VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE

When a complaint is registered with the Clean Water Hotline, NPDES email, or when staff directly observes an illicit discharge, a complaint investigation is conducted. All complaints are investigated by City personnel with enforcement authority within a reasonable timeframe. Investigation typically includes stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

As required by section D.3.c.(3) of Order No 2007-0001, and depending on the severity of the violation, the City enforces its storm water ordinance for all residential areas and activities as necessary to maintain compliance. Enforcement may include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's GIS work order database (CityWorks).

In FY 2010-11, there were **52** residential ICID complaint calls. Of these calls, **3** were either issues that were referred to other departments/agencies or requests for information only (requests for information may include car washing regulations, power washing requirements, etc). Of the **49** residential complaint investigations conducted, **44** resulted in dissemination of educational information to the homeowner or resident. Materials typically distributed included general storm water education, BMP requirements, pollution prevention tips, as well as specific municipal code and clean water regulations. In addition to education, FY 2010-11 complaint investigations resulted in **five** Notices of Violation and **two** citations.

A summary of the residential violations and enforcement actions occurring in FY 2010-11 is available for review in Appendix H-1. The tabular summary includes a brief discussion, which includes the follow-up actions taken, for each violation. The table demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the table, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

Complaint investigation procedures will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report that will be completed and submitted the RWQCB as required by December 15, 2011.

6.4.4 REGIONAL RESIDENTIAL EDUCATION PROGRAM

In prior reporting years, the City of Encinitas collaborated with other jurisdictions in the Education and Residential Sources Workgroup to develop the Regional Residential Education Plan. This Plan contains recommended strategies for the development and implementation of

the Regional Residential Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale. The complete Regional Residential Education Plan can be found in Appendix F-6. Details of the implementation of this Plan can be found in Section 8.3.4(d) of this annual report and in the Regional Urban Runoff Management Plan (RURMP) annual report to be submitted under separate cover by the County of San Diego on behalf of the San Diego County Stormwater Copermittees.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

In accordance with the September 10, 2008 Regional Water Quality Control Board adoption of Addendum No. 2 to Order No. R9-2007-0001, the City of Encinitas will submit the entire FY 2010-11 Illicit Discharge Detection and Elimination Component and attachments no later than December 15, 2011.

8.0 EDUCATION

8.1 INTRODUCTION

The City's outreach program includes an education component and a public participation component. The education component is focused on disseminating educational information to increase public knowledge of stormwater issues, while the public participation component, discussed in Section 9, provides opportunities for the public to become involved in the process of reducing pollutants of concern in stormwater and urban runoff. The education component is primarily implemented by the Engineering Services Department, Clean Water Program.

The Municipal Permit establishes the following five target communities which must be addressed by the education program:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The overall goal of the education element is to provide an education program that will:

(1) Measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience.

(2) Measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment.

The City conducted or participated in a wide variety of stormwater education activities during the FY 2010-11 reporting period. Education and outreach activities and opportunities are organized and implemented on three levels—Jurisdictional, Watershed, and Regional. For ease of reporting, activities occurring on all levels have been captured below.

8.2 MUNICIPAL STAFF TRAINING

As required by Municipal Permit section 5.b.1 (d), activity specific training opportunities were provided to City staff. The summary below outlines departmental training activities conducted during the defined reporting period of this report.

Notably, in FY 2007-08, the Clean Water Program developed the "Clean Water Challenge" stormwater training game. This training element was created to address topics specifically identified in the Municipal Stormwater Permit, as well as activity and department specific topics. In FY 2010-11, the Clean Water Challenge stormwater training game continued to be utilized for all municipal training activities as described below. The Clean Water Challenge has been well received by City staff and provides a competitive and informative format for training various departments on a wide range of topics including low impact development, SUSMP standards, activity specific BMPs, impaired water bodies, stormwater code violations, potential sources of pollutants, and other department specific concepts.

Public Works, Streets Division. FY 2010-11 stormwater training was provided to the Streets Division during regular weekly staff meetings on the following dates:

- July 8, 2010; Municipal Program-Best Management Practices; 12 attendees
- July 8, 2010; Building & Grounds Maintenance, SC-41; 12 attendees
- September 02, 2010; Road & Street Maintenance, SC-70; 13 attendees
- September 02, 2010; Landscape Maintenance, SC-73; 13 attendees
- September 9, 2010; Water & Sewer Utility Maintenance, SC-76; 13 attendees
- September 24, 2010; Spill Prevention, Control, and Clean Up, SC-11; 13 attendees
- October 7, 2010; Plaza & Sidewalk Cleaning, SC-71; 13 attendees

Public Works, Wastewater Division. The Clean Water Program works closely with the Wastewater division to prevent illegal discharges from entering the City's waterways. Seven staff members from the Wastewater division were trained by Clean Water Program staff on April 20, 2011.

San Dieguito Water District. Sixteen staff members from the San Dieguito Water District were trained on April 27, 2011. Topics included a refresher on stormwater regulations, activity specific BMPs, and the relationship between irrigation runoff and stormwater pollution.

City of Encinitas Fire Department. Within the defined reporting period of this report, stormwater training workshops were given to the Fire Department on three separate dates. On May 19, 2011, thirteen fire personnel were in attendance; ten fire personnel attended the training on May 20, 2011; and five fire personnel were at the June 3rd, 2011 training.

City of Encinitas Landscape Contractors. The City contracts with multiple landscaping companies to maintain our parks, beaches, and other public landscaped areas. In collaboration with the City's Parks and Recreation Department, training was given in Spanish to 25 staff from the City's landscape contractors on May 3rd, 2011. Topics of this training included activity specific BMPs, City stormwater regulations, and proper materials management.

Engineering Department. Staff from the Clean Water Program and other divisions of the Engineering Department attended the following trainings:

- Stormwater Training: Understanding the New Construction Permit - July 29, 2010
- APWA HMP/BMP Sizing Calculator Training I - December 14, 2010
- Foley New General Construction Permit - February 24, 2011
- APWA HMP/BMP Sizing Calculator Training II - March 8, 2011
- Qualified SWPPP Practitioner/Qualified SWPPP Developer Training - May 9-11, 2011

Clean Water Program, Engineering Department. Clean Water Program staff regularly attends trainings, workshops, and conferences related to stormwater management. This fiscal year staff attended the following:

- Rainwater Harvesting Symposium - October 12, 2010
- Permanent BMP Inspection and Maintenance Workshop - April 6, 2011

- Dog Bite Prevention Training - April 19, 2011
- H20/Headwaters to Oceans Conference - May 24-26, 2011
- Confined Space Training - June 15, 2011

In addition to formal training, Clean Water Program staff is regularly informed of new and emerging water quality regulations, science, and technology through regional meetings, subscription to relevant scientific journals, and individual research.

Multiple City Departments.

Staff from various City Departments attended trainings within the reporting period of this report that support the efforts of the City's Clean Water Program.

- APWA Gray Water Reuse and Rainwater Harvesting Rebroadcast - February 15, 2011
- Re:Streets - Streets Reconsidered Workshop - June 7, 2011

8.3 EDUCATIONAL OUTREACH

The following section describes education efforts conducted for each target community, as identified in the Permit and summarized above, during FY 2010-11.

8.3.1 UNDERSERVED TARGET AUDIENCES, HIGH-RISK BEHAVIORS, AND "ALLOWABLE" BEHAVIORS AND DISCHARGES

Underserved Target Audiences - Bilingual Education

For those that work in the City, and for segments of the community that do not speak English as their first language, the City provided bilingual (English/Spanish) brochures at all outreach events. The Clean Water Program utilized the bilingual brochures produced by the City that are targeted at specific trade groups/activities. These brochures include information about Best Management Practices for Yard and Garden Care, Restaurants, Home Improvement, Pesticides, Developers, and Automotive Care. Further, a bilingual Clean Water Program staff resource provided training and responded to complaint calls as needed in various community sectors.

High Risk Behaviors - Regional Mobile Business Outreach and Education Plan

During FY 2010-11, the City of Encinitas participated with other copermittees in a Mobile Business Subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. The Industrial/Commercial Workgroup will be overseeing the implementation of that Strategy throughout the permit cycle. A complete description of the education and outreach of mobile businesses and inter-jurisdictional coordination of notifications can be found in section 5.3. See Appendix F-1 for the complete Regional Mobile Business Outreach and Education Strategy.

8.3.2 NEW DEVELOPMENT AND CONSTRUCTION COMMUNITIES

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to the new development and construction communities.

- "A Pollution Prevention Guide for the Construction Industry" was distributed at public events, to engineering construction inspectors and the building department, and displayed at the City of Encinitas Engineering counter for the public. One hundred and twenty-two were disseminated during the 2010-11 fiscal year. This brochure was developed as part of the Carlsbad Watershed Urban Runoff Management Plan workgroup (Appendix F-2).
- Announcements at pre-construction meetings. Pre-construction meetings are attended by Engineering Department inspectors and Clean Water staff as determined appropriate. For all projects, stormwater topics including required construction site BMPs, general site management, post-development BMP construction, and other relevant SUSMP requirements are discussed.
- Construction inspector stormwater coordination. Staff from the Clean Water Program attended inspector staff meetings to provide support and information to the City's construction inspectors.
- Printed materials were provided to contractors and developers in the form of the City's brochure, "Developers – Simple and Cost Effective Ways to Comply with Stormwater Regulations" (Appendix F-3). The brochure is available in Spanish and English.
- Special mailings of information (i.e., wet season erosion control letter). In September 2010 the City mailed 71 letters to local developers and contractors regarding BMP requirements for the upcoming rainy season (Appendix B-5). "A Pollution Prevention Guide for the Construction Industry" brochure was inserted into the annual Erosion Control Letter that went to contractors, developers, and job superintendents.

8.3.3 COMMERCIAL/INDUSTRIAL OWNERS AND OPERATORS

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to commercial and industrial sectors of the community:

- The San Dieguito Water District (SDWD), in coordination with the Olivenhain Municipal Water District (OMWD) and the Santa Fe Irrigation District (SFID), hosted a Professional Landscape Series every Tuesday from February 22 through March 15, 2011. The series was taught in English with a bilingual interpreter and topics included irrigation principles, irrigation troubleshooting, controller programming, and irrigation scheduling. Approximately 20 people attended the class series.

- Stormwater quality inspections were performed at **97** commercial facilities and two industrial facilities during the FY 2010-11 reporting period. During these inspections individual one-on-one education was presented to each facility manager/owner. Information presented included general stormwater quality information and minimum BMP requirements.

8.3.4 RESIDENTIAL COMMUNITY, GENERAL PUBLIC, AND SCHOOL CHILDREN

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to various residential, community, and school audiences:

a. Residential Community and General Public

- During the defined reporting period of this report, San Dieguito Water District (SDWD) hosted eight Water Conservation Classes and held Project WET teacher training. Several of the classes listed below were cosponsored or co-hosted by other local agencies and non-governmental organizations as noted.

Table 8-1
SDWD Water Conservation Classes held in FY 2010-11

Date	Event Title	Event Details	Material Provided	Number of Participants
Aug 24, 2010	Ocean Friendly Gardens Course, part 1: Classroom Instruction Location: City of Encinitas Community Center	Presenters: G-3, Surfrider, and SDWD (Information Table). Cosponsored by City of Encinitas and OMWD. Topic: Conservation, Permeability & Retention for residential landscapes	Ocean Friendly Gardens book, SDWD drought information and resources.	54 people
Sep 11, 2010	California Friendly Landscape Training Location: Rancho Santa Fe Garden Club	Presenter; Megan Fairleigh (Mira Costa College) Topic: design, irrigation, scheduling controllers, soils, fertilizers, drought friendly plants Cosponsors: CMWD, OMWD, SFID & SDWD	Drought information, drought tolerant resources, "how to read your meter" handout, pens, seeds and plant material on display from 3 nurseries.	95 people
Sep 26, 2010	Ocean Friendly Gardens Course, part 2: Site Evaluation	Presenters: G-3, Surfrider, and SDWD (Information Table). Cosponsored by City of Encinitas and OMWD. Topic: Evaluation of landscape area,		30 people

Date	Event Title	Event Details	Material Provided	Number of Participants
		irrigation, runoff issues, and approximation of rain capture.		
Oct 24, 2010	Ocean Friendly Gardens Class part 3: Hands on Workshop. Location: Residential Home in Encinitas	Presenters: G-3, Surfrider, and SDWD (Information Table). Cosponsored by City of Encinitas and OMWD. Topic: Hands-on removal of turf, turn and treat soil and install plants		20 people
Mar 15, 2011	Fix a Leak Week Workshop (2 1-hour workshops) Location: Encinitas Community Center	Presenters: Peter Sternberger and SDWD staff Topic: Basic faucet and toilet tank leak repair. Checking meter for read and leak dial movement.	Materials: Practical Plumbing Handbook, dye tablets, shower flow meter, seeds, FALW flyers	15 people
Mar 17, 2011	Project WET (Water Education for Teachers) Teacher Training Location: San Diego Botanic Garden (SDBG)	Pilot workshop for Encinitas Union School District teachers (K-6) Presenter: Brian Brown from Project WET Topic: Teachers learn about Project WET though hands-on training and tour of Children's Garden at SDBG.	Curriculum Guide	20 teachers
Apr 16, 2011	Residential Water Efficient Landscaping Workshop Location: Encinitas Community Center	Presenters: Don Schultz, Horticulturist and Cuyamaca College Professor Topics: design, plant material, soils, and irrigation.		83 people
May 10, 2011	Rainwater Capture Workshop Location: Encinitas Community Center	Event Organizer: Grangetto's Farm and Garden Supply Cosponsors: SDWD, OMWD, Rainbird, and Bushman. Topic: Displays of irrigation equipment & efficient watering.		20 people

- The City of Encinitas Parks and Recreation Department offers a very popular Junior Lifeguard program offered to Encinitas residents as well as young adults and children from throughout the County. An estimated 1,000+ children participate in the Junior Lifeguard Program every summer. In June of 2011, a new field manual was created by

the Encinitas Marine Safety Department and through collaboration with Clean Water Staff included a City of Encinitas Clean Water Program page. This printed page explains in detail what the Clean Water Program does, how to protect our waterways, and also includes the Program's hotline phone number, email and website address. Over 1,000 of these official Junior Lifeguard Field Manuals were printed and distributed to the participants and their parents (Appendix I-2) within the defined reporting period of this report.

- A City of Encinitas Environmental Services Guide was created in FY 2006-07. It continues to be handed out at all public events throughout the City. It is a compilation of information regarding trash and recycling, HHW, electronics disposal and recycling, stormwater management, home composting, and general environmental contacts. The brochure is printed on 100% post-consumer recycled paper (Appendix F-4).
- The Solana Center for Environmental Innovation continued to sell compost bins and worm bins to residents of Encinitas throughout FY 2010-11. All of the bins were subsidized by the City and sold to residents at discounted rates. Bins could be purchased at the Solana Center or at composting events and workshops throughout the City. A total of **474** bins were sold in FY 2010-11.
- Individual Communication. There were 52 residential ICID complaint calls in FY 2010-11. Three of those calls were either issues that were referred to other departments/agencies or requests for information only (requests for information may include car washing regulations, power washing requirements, etc). Of the 49 residential complaint investigations conducted, 44 resulted in education provided to parties involved. Materials distributed included general stormwater education, activity specific BMP requirements, pollution prevention education, as well as specific municipal code and clean water regulations.
- Media Coverage (newspaper articles, press releases, etc.): See Table 8-2 below.

Table 8-2
Summary of Media Coverage in FY 2010-11

No.	Title	Date	Source
1	Encinitas: Surfrider Foundation hosts gardening classes	August 15, 2010	The North County Times
2	City's Clean Water Program Achieves Clear Results	Fall 2010	Encinitas NOW!
3	Experts discuss 'rain harvesting' in San Diego	October 12, 2010	SIGN ON San Diego
4	Countywide program seeks to 'bag' environmentalism	December 8, 2010	The Coast News
5	Encinitas played pivotal role in Thursday's Day Without a Bag	December 11, 2010	SIGN ON San Diego
6	ENCINITAS: Plastic bag-free day goes countywide	December 13, 2010	The North County Times
7	Swami's One of the New Marine Protected Areas	December 16, 2010	Encinitas Patch
8	REGION: Creek to Bay Cleanup aims to keep trash out of ocean	April 25, 2011	The North County Times

No.	Title	Date	Source
9	ENCINITAS: Sewage spills into Batiquitos Lagoon	April 27, 2011	The North County Times
10	Encinitas Growing Trend-Annual Environmental Fair becoming more popular	June 6, 2011	The North County Times

Workshops and events attended/hosted by the City of Encinitas, San Dieguito Water District and/or the Solana Center in FY 2010-11:

- OMWD Water Conservation Expo - August 12, 2010
- Surfrider Ocean Friendly Gardens Basics Course – August 24, 2010
- Coastal Cleanup Day – September 25, 2010
- Stars in the Park Movie Nights-September 25, 2010
- School District Liaison Committee (provided water education resources)- September 27, 2010
- Surfrider Ocean Friendly Gardens Site Evaluation – September 26, 2010
- Cardiff Surf Classic & Green Beach fair – October 1-2, 2010
- Stars in the Park Movie Nights-October 16, 2011
- Stars in the Park Movie Nights-October 23, 2011
- Ocean Friendly Gardens GAP Workday – October 24, 2010
- Mission Estancia Elementary School Presentation – January 31, 2011
- Girl Scout Cookie Drive (Water Conservation fliers handed out)- February 2011
- San Diego High Tech Fair – February 9, 2011
- Kid's Day at the Flower Fields, March 26, 2011
- La Costa Canyon High School Earth Day - April 22, 2011
- Creek to Bay Cleanup – April 30, 2011
- Encinitas Garden Festival - 4/30/11
- Public Works Day – May 20, 2011
- Encinitas Environment Day – June 5, 2011
- San Diego County Fair - Enviro Fair – June 18, 2011

b. School Children

- During the defined reporting period of this report, the San Dieguito Water District hosted the following outreach events geared towards school-aged children:

Table 8-3
SDWD School Presentations held in FY 2010-11

Date	Presentation/Location/Details	Number of Participants
Aug 3, 2010	City of Encinitas Day Camp at Glen Park Hands on activities: water cycle activity, California Delta information sheet, puzzle/water sheets, and globe toss	Approx. 60 students, 1st - 6th grade

Date	Presentation/Location/Details	Number of Participants
Sep 19, 2010	Splash Mobile Science Lab at Ocean Knoll School	110 students, 4th and 5th grade
Nov 19, 2010	Splash Mobile Science Lab at Paul Ecke School	60 students, 5th grade
Feb 7, 2011	H2O Where Did You GO Theater Group at St. John's School	218 students, K-3rd grade; 124 students, 4th – 6th grade
Feb 15, 2011	H2O Where Did You GO Theater Group at Ocean Knoll School	225 students, K-3rd grade; 243 students, 4th – 6th grade
Mar 23, 2011	4th grade poster contest classroom visit to St. John's School. Hands on activities: California water supply map, water cycle activity, Project WET: Blue Planet & Thunderstorm activity	58 students
Mar 31, 2011	4th grade poster contest classroom visit at Ecke Central School Hands on activities: California water supply map, water cycle activity, Project WET: Blue Planet & Thunderstorm activity	90 students
May 6, 2011	3rd Grade Conservation Visit to Ada Harris School Hands on activities: Water Cycle Poster, California Water Supply Poster, Incredible Journey (ProjectWET).	20 students
April 14, 2011	Splash Mobile Science Lab at St. John School	115 students, 4th and 5th grade
April 22, 2011	Earth Day at La Costa Canyon High School	Approx 2500 students attended
May 20, 2011	Public Works Week, City of Encinitas Public Works Yard	115 students

Date	Presentation/Location/Details	Number of Participants
Jun 9, 2011	Splash Lab at Ada Harris School	87 students, 4th grade
March 2011	Water History, Supply & Conservation Slide Show given to Ada Harris School	100 students, 4th grade

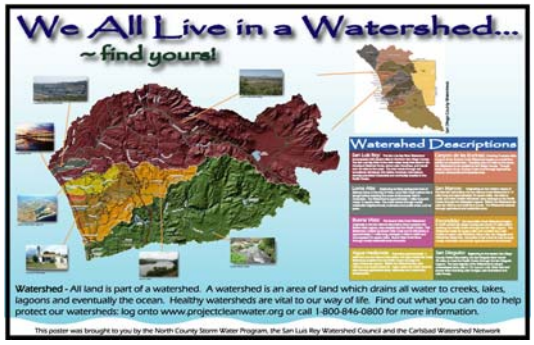
- The City of Encinitas Parks and Recreation Department hosted three movie nights for families in the Fall of 2010. These free entertainment events were held in the City's Parks and one movie was at Moonlight Beach. The "Stars in the Park" movie nights were sponsored by Noodles & Company and the City of Encinitas Clean Water Program. Before each movie began, an announcement was made about the Clean Water Program services and the Clean Water logo was used for all advertisements. Over 700 people attended this Clean Water Program sponsored event.
- In the Fall of 2009, the Encinitas Union School District created a Green Team consisting of teachers, principals, parent volunteers, and environmental organizations in the community. The Green Team met once a month during the school year to discuss how to improve efficiency, reduce economic costs, and increase environmental awareness throughout the District. Topics discussed include waste management, composting, water conservation, energy use, environmental health, and stormwater pollution prevention. In FY 2010-11, Clean Water Program staff attended nine Green Team meetings.
- The Solana Center monitors large worm bins at Capri Elementary, Paul Ecke Elementary, Ocean Knoll Elementary, Encinitas County Day, Olivenhain Pioneer Elementary, San Dieguito Academy, Flora Vista, and a small worm bin at Mission Estancia Elementary. Solana Center has trained volunteer master composters to give composting/vermicomposting presentations at schools throughout Encinitas. School presentations are conducted both on and off site and scheduled as requested.
- The Solana Center for Environmental Innovation also participated in school based educational programs where stormwater awareness was taught. See Table 8-4 for details.

Table 8-4
Watershed Presentations FY 2010-11

School/Group Name	Date of Presentation	Number of Presentations	# of Students in Attendance
Kids Kore Camp- Solana Beach	7/6/10	1	29
Kids Kore Camp- Solana Beach	7/23/10	1	30
Flora Vista Elementary	2/23/11	3	60
Cardiff Ocean Night	4/5/11	1	28
	Total	**6**	**147**

c. **Watershed Educational Activities-** Important components of the City's education program include materials and activities that were generated on a watershed basis to address the high priority water quality problems in the watershed. These materials and activities are then implemented or disseminated on a jurisdictional basis. Below is a description of the educational materials and activities that were created or performed on a watershed basis and implemented on a jurisdictional basis. A more detailed description of watershed activities will be provided in the FY 2010-11 Carlsbad WURMP Annual Report.

- **Watershed Map**- A 36"x 24" "We all Live in a Watershed" poster was developed giving information about the San Luis Rey, Carlsbad, and San Dieguito Watersheds. This educational poster includes a topographic map of the watershed, information on individual watersheds and sub-watersheds, photos of various land-uses, as well as general information about water quality. The City of Encinitas used the poster in presentations and public displays throughout the reporting year.



- **Watershed Collaboration**- The City of Encinitas collaborated with other outside organizations, including the Carlsbad Watershed Network, Solana Center, and Escondido Creek Watershed Alliance to enhance public educational efforts and understand watershed issues. The Escondido Creek Watershed Alliance participated in the following watershed events in FY 2010-11:
    - La Costa Canyon High School Earth Day-April 22, 2011
    - Earth Day, clean up and tree planting-April 23, 2011
    - Encinitas Garden Festival-April 30, 2011
    - Creek to Bay clean up -April 30, 2011
    - Lake Dixon clean up-April 30, 2011
    - City of Escondido Street Fair-May 15, 2011
    - Encinitas Environment Day-June 5, 2011
    - City of Escondido Enviro Fair-June 18, 2011

  The City of Encinitas participated in public outreach events throughout the watershed in an effort to provide watershed support and extend the watershed message beyond jurisdictional boundaries. In FY 2010-11, the City participated in the following watershed outreach events:

    - Coastal Cleanup Day – Sep 25, 2010
    - Creek to Bay Beach Cleanup – Apr 30, 2011

- **Watershed Educational Materials**- The City continues to distribute materials developed by the North County Stormwater Program in previous reporting periods, including the restaurant posters, automotive posters, "Storm Drains Lead to the Ocean" posters, general stormwater brochures, and the door hangers.

d. Regional Residential Education Plan

The City of Encinitas collaborated with other jurisdictions in the Education and Residential Sources (ERS) Workgroup to develop the Regional Residential Education Plan in FY 07-08. This plan contains recommended strategies for the development and implementation of the Regional Residential Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale. The complete Regional Residential Education Plan can be found in Appendix F-6.

The ERS Workgroup participated in Enviro Fair Day at the San Diego County Fair on June 18, 2011 Six Copermittees were represented at the event, with staff members throughout the day. Copermittees were able to supply their own giveaways and literature during their individual shifts, but the main Regional giveaways were coloring books and crayons, reusable Chico bags, pencils, IPM Tip Card Packets, and pet waste bag dispensers. Fair attendance for the day was more than 70,000, and record attendance for 2011 was recorded again, exceeding the previous year's record.

Program Identity. Through Citywide environmental efforts and initiatives, stormwater pollution prevention and water quality have been identified as priorities for residents and businesses in the Encinitas community. As a result, the City of Encinitas Clean Water Program staff felt that updating the program identity through a new logo would enhance awareness within the community and help identify the diverse City functions that help to protect local surface water quality in creeks, lagoons, and the ocean. A new Clean Water Program logo was developed in FY 2009-10 and is currently being used on new educational outreach materials, event giveaways, program correspondence, and staff apparel and will be used on an anticipated web site update.

Educational Outreach Materials Distributed. In FY 2010-11, a total of **2,783** outreach materials were distributed by the Clean Water Program. This includes BMP brochures for Automotive Facilities (English and Spanish), Developers (English and Spanish), Diazinon (English and Spanish), "Hiring A Handyman" (English and Spanish), Restaurants (English and Spanish), and Yard & Garden (English and Spanish). The Program also distributed pencils, Clean Water Program Hotline magnets, key chains, reusable shop towels, "Bags on Board" dispensers, construction brochures, posters, door hangers, eating establishment guides ("What's Cooking"), automotive guides ("Green Wrench"), flyers printed from the Project Clean Water Toolbox, Think Blue Regional Calendars, Minimum Required BMP mailers, and other informational guides. These guides included information on Integrated Pest Management (UCSD Cooperative Extension), water conservation from local water districts and the County Water Authority, invasive species ("Don't Plant A Pest" and

"NIMBY-No Invasives In My Back Yard"), "How to Hire A Landscaper"-UCSD Cooperative Extension/Scott Parker, County of San Diego Household Hazardous Waste, miscellaneous stormwater educational for children, "10 Simple Ways You Can Help Protect the Ocean" from the Encina Wastewater Authority, and our newest and most colorful addition is the reusable and recycled Clean Water Program bag, made from 85% post industrial recycled paper. The bag has handles for grocery shopping and the exterior is paper so that it can be colored or painted. This multifunctional bag displays the Clean Water Program hotline phone number and appeals to both children and adults (Appendix F-5). The use and re-use of collectable recycle bags also replaces the formerly and commonly used disposable plastic bags. Discouraging the use of plastic bags is the most current and prolific movement to protect the watershed, the ocean and its marine life.

9.0 PUBLIC PARTICIPATION

9.1 INTRODUCTION

Public participation is one of the components of the City's outreach program. The goal of the education component, discussed in Section 8, is geared primarily towards disseminating educational material to increase public knowledge of storm water issues. The goal of the public participation component is to provide opportunities for the public to become involved in the process of education and reducing pollutants in storm water and urban runoff.

Public participation activities provide opportunities for the public to interact and become involved with water pollution issues. When the public has the opportunity to become involved there are several positive outcomes. First, those involved become more knowledgeable about storm water issues. Second, they become educators and stewards for the Clean Water Program and the Watershed. Finally, they provide important feedback to the Clean Water Program regarding the concerns of the public and issues that may be overlooked. Ultimately, public participation help makes the education process more effective.

The constituency of Encinitas has a generally high level of awareness of water pollution issues and is actively involved in protecting the quality of our waterways. This is evident by the attendance and participation at community events and workshops and the number of complaints reported to the storm water hotline (discussed in more detail in Section 9.3.5 below and also in Section 8.3.4(a)). Following is a description of the City's public participation approach and the opportunities that were made available in Encinitas in the FY 2010-11 reporting period.

9.2 PUBLIC PARTICIPATION APPROACH

The City's approach for the outreach program is to develop an understanding among its residents and businesses of fundamental storm water and pollution prevention concepts. These include:

- The difference between the sanitary sewer and the storm drain system (sanitary waste gets treated, but discharges into the storm drain system flow directly to our waterways and beaches, untreated).
- The economic value of our beaches and the importance of protecting them.
- An understanding of illegal discharges, i.e. sidewalk and street wash water runoff, vehicle fluid (antifreeze and oil), landscape debris, sediment, etc.
- How to report a storm water violation (Clean Water Hotline, email or website).
- The fact that we all live in a watershed and that the watershed is integral to wildlife, public health, and to the water quality of the rivers, streams, and ocean.
- Reducing pollutants of concern.

- Responsibility of citizens to participate in the cleaning and maintaining of the community (i.e. beaches and parks) and not be part of the pollution problem (littering, illegal dumping of toxic chemicals, etc.).

Within the defined reporting period of this report, the tools that have been used by the City to implement the public participation activities include:

- Workshops/Training Sessions
- City of Encinitas Environmental Advisory Commission
- Public Outreach Events
- Public Opinion Survey
- Public Reporting Methods
- Pet Waste Dispensers
- Household Hazardous Waste Collection and Used Oil Recycling
- Permanent Best Management Practices (BMP) Self Verification & Inspection Programs
- Reusable Recycled Shopping Bags

9.3 PROGRAM IMPLEMENTATION

This section describes the specific public participation tools used during the FY 2010-11 reporting period.

9.3.1 WORKSHOPS/TRAINING SESSIONS

Workshops and training sessions are effective tools for providing specific information to targeted audiences and obtaining direct feedback. These workshops/training sessions consisted of stormwater education and/or water conservation and provided an opportunity for the Clean Water Program to explain the complex issues of each target audience related to compliance with the stormwater regulations. Table 9-1 provides a summary of the FY 2010-11 workshops/training sessions conducted.

Table 9-1
City of Encinitas Workshops/Training Sessions FY 2010-11

Workshop/Training Session	Target Audience	Date	Attendance
Public Works- Streets Division	City Staff	7/8/10, 9/2/10, 9/9/10, 9/24/10, 10/7/2010	89
Stormwater Training	San Dieguito High School District Transportation	8/24/2010	55
Ocean Friendly Gardens Program	Public	8/24/2010	54
Ocean Friendly Gardens Program	Public	9/26/2010	30
Ocean Friendly Gardens Program	Public	10/24/2010	35

Workshop/Training Session	Target Audience	Date	Attendance
City-wide Goal Setting Workshop for General Plan	Residents	11/16/2010	250+
Stormwater Presentation	4th Graders @ Mission Estancia Elementary School	1/31/2011	90
City-wide Goal Setting Workshop for General Plan	Residents	3/28/2011	200+
Public Works-Wastewater Division	City Staff	4/20/2011	7
Spanish-speaking Landscapers	City Staff and Landscape Contractors	5/3/2011	25
Marine Safety Stormwater Training	City Staff	5/18/2011	7
Fire Department	City Staff	5/19/11, 5/20/11, 6/3/2011	28
San Dieguito Water District	City Staff	4/27/2011	16
		Total	**886**

9.3.2 CITY OF ENCINITAS ENVIRONMENTAL ADVISORY COMMISSION

The Environmental Advisory Commission (EAC) provides policy advice and recommendations to the City Council on issues related to environmental stewardship and sustainability. The Commission assesses the City's current environmental efforts in relation to specified areas of interest and creates and recommends strategies to enhance City activities that promote conservation and sustainable practices. The mission of the Encinitas Environmental Advisory Commission (EAC) is to make recommendations to the Encinitas City Council, raise public awareness, and build community partnerships in order to promote a shared vision of environmental sustainability throughout city government and the community. The Clean Water Program staff provides technical expertise to the Commission on matters related to water quality, pollution prevention, and stormwater regulations.

During the defined reporting period, the EAC presented its third annual series of community outreach activities in partnership with other Encinitas Environment Day activities. The series, entitled "Green Spring", included twenty-one activities and presentations (Appendix I-1); well as nature walks & lagoon clean-ups on Saturdays at the San Elijo Lagoon Conservancy, and Cottonwood Creek Clean-ups – 3rd Saturday each month hosted by the Cottonwood Creek Conservancy . Additionally the Environmental Commission had been asked by the City Council to provide ongoing advice on the phase-out or ban of single-use plastic and paper bags. In support if this initiative, each December the City coordinates "A Day Without a Bag," a

community-wide promotion of reusable bags which includes a Mayor's press event, broad media coverage, school presentations, and the giveaway of over 4,000 reusable bags which have been donated by all local grocers and several businesses.

9.3.3 PUBLIC OUTREACH EVENTS

The Clean Water Program participated in the following outreach events during FY 2010-11:

1. OMWD Water Conservation Expo in Village Park, Encinitas-August 12, 2010; 300 attendees
2. Ocean Friendly Gardens Basics Course @ Encinitas Community Center-August 24, 2010; 54 attendees
3. Coastal Cleanup Day @ Swami's – September 25, 2010; 125 volunteers
4. Ocean Friendly Gardens Site Evaluation– September 26 2010; 30 attendees
5. Cardiff Surf Classic/Green Beach Fair @ Seaside Beach, Cardiff –October 1st & 2nd, 2010; 160 visitors
6. Ocean Friendly Gardens GAP Workday-October 24, 2010; 35 attendees
7. Stormwater Presentation @ Mission Estancia Elementary, Encinitas-January 31, 2011; 90 students
8. La Costa Canyon High School Earth Day in Encinitas-April 22, 2011; 2500 students
9. Creek to Bay Cleanup @ Moonlight Beach – April 30, 2011; 68 volunteers
10. Public Works Day – May 20, 2011; 100+ students and 25 school staff (125 total)
11. Encinitas Environment Day @ Cottonwood Creek Park– June 5, 2011; 4,000 attendees
12. Encinitas Junior Lifeguard Program @ Moonlight Beach-June-July 2011; 1,166 participants

Solana Center for Environmental Innovation. Outreach to the general public and school children is also provided through the Solana Center for Environmental Innovation via workshops and presentations involving stormwater, household hazardous waste, composting, and recycling. The Solana Center works closely with the City for many of these workshops and presentations. See the tables below for a description of Solana Center's attended events and workshops.

Table 9-2
Solana Center Composting Workshops/Presentations FY 2010-11

Workshop schedule	Location	Attendance
7/17/2010	San Diego Botanic Gardens	42
Master Composter Training Course-Mondays; September 27- October 25	San Dieguito Academy	32
8/28/10	San Diego Botanic Gardens	38
11/6/11	San Diego Botanic Gardens	31
1/22/11	San Diego Botanic Gardens	34
3/12/11	Solana Center for Environmental Innovation	29

Workshop schedule	Location	Attendance
4/2/11	San Diego Botanic Gardens	14
4/30/11	San Diego Botanic Gardens	22
	Total	**242**

Table 9-3
Solana Center Used Oil Collection Events FY 2010-11

Encinitas Used Oil Events	Date	Total Attendance
O'Reilly Auto Parts #4191	4/23/11	44
	Total	**44**

Table 9-4
Solana Center Watershed Presentations FY 2010-11

School/Group Name	Date of Presentation	Number of Presentations	# of Students in Attendance
Kids Kore Camp- Solana Beach	7/6/10	1	29
Kids Kore Camp- Solana Beach	7/23/10	1	30
Flora Vista Elementary	2/23/11	3	60
Cardiff Ocean Night	4/5/11	1	28
	Total	**6**	**147**

Table 9-5
Other Solana Center Outreach Events FY 2010-11

Event	Date	Booth Visitors/Attendees
Solana Beach Blanket Movie Night	8/28/10	200+
Encinitas Fall Fest Event	11/21/10	75+
Solana Beach Green Fair	3/26/11	Unknown
Encinitas Street Fair	4/10/11	50,000
	Total	**50,275+**

Table 9-6
Solana Center Automotive Presentations FY 2010-11

School/Group Name	Date of Presentation	Number of Presentations	# of Students in Attendance
San Dieguito Academy	11/19/10	1	20
	Total		**20**

9.3.4 PUBLIC OPINION SURVEY

The City of Encinitas joined the Think Blue San Diego Region workgroup in distributing public opinion surveys at regional events held throughout the County. In FY 2009-10, automotive surveys were given out at Enviro Fair at the San Diego County Fair. In addition, residents were asked to complete a pre-assessment survey in order to receive a Regional 2010 Stormwater Pollution Prevention Calendar. Post-assessment survey cards were included with the calendars to test whether stormwater knowledge had increased after viewing the calendar. The post-assessment survey was also available on the Think Blue San Diego Region website. Results from all regional surveys will be included in the FY 2010-11 Regional URMP.

9.3.5 PUBLIC REPORTING METHODS

The City has a local Clean Water Hotline that connects the caller directly to the staff in the Clean Water Program. The number is (760) 633-2787. An after-hours number (760) 633-2922 is available for after-hours emergencies and connects the caller with the City's external answering service which takes in calls and contacts the appropriate City staff to determine appropriate response actions. In 2010-11, an updated Clean Water Hotline email was established (cleanwater@cityofencinitas.org) and is being promoted and disseminated through the numerous outlets and venues described in this report. There are also currently two regional storm water hotline numbers widely advertised within San Diego County: a toll-free Regional Storm Water Hotline, 1-888-846-0800, and the Think Blue Hotline, 1-888-THINK BLUE (1-888-844-6525). Both of these hotlines are staffed by the County of San Diego Monday through Friday, 8:00 a.m. - 5:00 p.m. In addition to personal service at these hotlines during regular business hours, the hotlines provide a voicemail message for 24-hour public access.

The Encinitas Clean Water Hotline has been in service for over 10 years. In FY 2010-11, the Clean Water Program received 180 calls and emails. The hotline phone number and email address is advertised in newsletters and on the City's website, in brochures, on product giveaways, and at all Clean Water Program presentations. A summary of the types of calls, follow-ups, and enforcement actions related to the hotline are presented in Appendix H-1.

The Clean Water Program has a specific website URL (http://cwp.cityofencinitas.org) that provides information, as well as the general NPDES email address which can also be used to report stormwater violations. Each method of contact can also be used for general questions relating to stormwater.

9.3.6 PET WASTE DISPENSERS

Residents are encouraged to protect our creeks, lagoons, and ocean by cleaning up after their pets. To make this easier, 20 doggie bag dispensers are located at parks and trails throughout the City. Trash cans are also available in these areas. Both the trash cans and bag dispensers are maintained by the City's Parks and Recreation Department. In addition, individual Bags on Board pet waste bag dispensers were developed in FY 2007-08 and continued to be distributed at jurisdictional events during FY 2009-10 (Appendix F-5).

9.3.7 HOUSEHOLD HAZARDOUS WASTE COLLECTION AND USED OIL RECYCLING

City of Encinitas residents can bring their HHW and Electronic Waste to drop off facilities in Vista and Poway, free of charge. There is also a home pick up available for a small fee; however, the fee is waived for elderly and disabled residents. Used oil collection events were organized through the Solana Center at local automotive supply stores, and free used oil containers were available for pick up from the Center to encourage oil recycling. Please refer to Section 6.4.2 and Table 9-3 in Section 9.3.3 for a detailed description of Used Oil events and collection totals.

9.3.8 PERMANENT BEST MANAGEMENT PRACTICE (BMP) SELF-VERIFICATION AND INSPECTION PROGRAMS

FY 2010-11 marked continued implementation of the Permanent BMP Self-Verification and Inspection Programs. This successful program provides a valuable opportunity for residents and business owners to be actively involved in protecting stormwater quality. Residents and business owners with treatment control BMPs on their private property are responsible for the successful operation and routine maintenance of these facilities. The City's Self-Verification and Inspection Programs aim to make residents and owners aware of their operation and maintenance obligations through formal notification campaigns and one-on-one communication. Notification campaigns generally consist of two rounds of notices mailed to the residents and business owners responsible for BMP maintenance. The initial notification packages consist of a combination of the following materials: notification/program introduction letter, Treatment Control BMP brochure, grading plan identifying the location of BMPs, and forms and self addressed stamped envelopes necessary to complete self-verifications. As part of the self-verification and inspection processes, City staff also offer one-on-one assistance with identifying BMPs, conducting BMP inspections, and determining maintenance needs. City staff is available to answer questions regarding the self-verification and inspection programs both over the phone and on-site as requested by the responsible party. As these programs have matured since 2008, the public knowledge and awareness of permanent BMPs and required operation and maintenance activities has continually improved. For more information regarding the Permanent BMP Self-Verification and Inspection Programs refer to Section 2 of this report.

10.0 FISCAL ANALYSIS

10.1 INTRODUCTION

On January 29, 2009, the San Diego Region Stormwater Copermittees submitted the *Standardized Fiscal Analysis Method and Format* as required by municipal permit Sections G, J.1.a(3)(k), and J.1.c(1)(d). The defined reporting period of this report marks the second full application of the fiscal analysis methodologies developed in the document, and the information provided in this section has been prepared consistent with the standardized approach, using the best information available at the time of report preparation. The *Standardized Fiscal Analysis Method and Format* supports a greater scope of fiscal tracking, yielding a much more complete analysis of program related expenditures across a variety of City functions and departments and/or divisions that may not have been captured in previous reporting years. For consideration, using the standardized format to capture programmatic expenditures across multiple City departments that provide an array of interrelated stormwater management services has necessitated a considerable margin of approximation for various functional areas, particularly related to staff resources (labor costs). In compliment to approximated figures, actual programmatic expenditures have been used as much as possible to present a refined fiscal analysis overview specific to the City of Encinitas.

10.2 GENERAL BUDGET INFORMATION

The Clean Water Program and associated functions and activities in the City of Encinitas are organizationally shared by two primary departments: Engineering Services and Public Works. Engineering Services is responsible for the overall administration of the Clean Water Program and develops and implements core program components including water quality monitoring; development oversight (SUSMP & HMP implementation) inspection and enforcement; and education, outreach, and training related to stormwater and water quality. Public Works performs the operations and maintenance of the municipal separate storm sewer system (MS4) including channel maintenance, sewer maintenance, street sweeping, municipal facility inventories, and municipal facility inspections. Other City departments additionally support core program functions and needs including the Planning, Finance, Fire, and Parks & Recreation departments.

The 2011-2012 Clean Water Program and supporting Department Budgets have been prepared in consideration of Water Quality Order No. 2007-0001 as well as other regulatory mandates placed upon the City of Encinitas. Despite significant budget constraints due to widespread economic downturns, the 2011-2012 budgets support the historic level of service provided by the Clean Water Program in addressing water quality concerns specific to Encinitas through response to citizen complaints, education, inspection, enforcement, monitoring, and development oversight. 2011-2012 budgeting

represents the City's ongoing commitment to this program and the community that it serves.

10.3 FISCAL ANALYSIS METHODS

As introduced above, the information presented in this section has been prepared based upon the *Standardized Fiscal Analysis Method and Format* document that was collaboratively developed by the San Diego County Stormwater Copermittees. This document provides the Copermittees, including the City of Encinitas, with guidance and standards to analyze and report on their respective urban runoff management program expenditures, and to identify the funding sources for their programs in a uniform format. While the regionally developed methodologies greatly support reporting consistencies such as expenditure categories and reporting metrics, the *Standardized Fiscal Analysis Method and Format* does not set up stringent or prescribed accounting practices.

In order to elucidate the information presented below, it is important to identify any assumptions used to calculate expenditures related to various program elements. The following points of consideration should be noted:

- Staff Resources have been calculated as a percentage of time and associated costs applied to a specific program area.
- Staff Resources have been captured for both Engineering Services and Public Works Operations personnel.
- In order to avoid cost "overlaps" in those areas implemented across multiple departments, supporting department staff costs have not been included in the accounting below.

10.4 FISCAL ANALYSIS RESULTS

10.4.1 EXPENDITURES

The City of Encinitas Clean Water Program FY 2010-2011 Jurisdictional expenditure summary is presented below in Table 10-1. In FY 201--2011, the City's Coastal Storm Drain Monitoring; Dry Weather Monitoring; IDDE; Construction, Education, Residential, and Commercial program elements; and overall program administration were accomplished through the use of five full time Clean Water Program staff. Land Development and Construction components utilized Engineering Services staff resources from various divisions, and Municipal activities utilized Public Works personnel. Labor related costs have been captured in the summary below based upon percentages of applicable staff resources. In addition, non-labor costs including materials, supplies, and equipment have also been included.

Table 10-2 below presents the Watershed expenditure summary specific to Encinitas, and Table 10-3 presents the Regional expenditure summary capturing the City of Encinitas share of regionally distributed costs.

10.4.2 FUNDING SOURCES

In FY 2003-2004, the City Council attempted to pass a Clean Water Fee, which charged $5.00 per month per water meter to the residents and businesses in the City of Encinitas. The Howard Jarvis Taxpayers Associated challenged the fee based upon Proposition 218 requirements. The City was required to add this item to the ballot in March 2006 which was defeated. As a result, the City of Encinitas must and continues to completely subsidize the Clean Water Program through the General Fund.

Table 10-1 – Jurisdictional Expenditure Summary

JURISDICTIONAL EXPENDITURES		
ADMINISTRATION	$	132,003
DEVELOPMENT PLANNING	$	466,967
CONSTRUCTION	$	192,332
MUNICIPAL	$	1,721,789
INDUSTRIAL AND COMMERCIAL	$	101,961
RESIDENTIAL	$	25,490
IDDE	$	141,101
EDUCATION	$	26,662
PUBLIC PARTICIPATION	$	12,745
SPECIAL INVESTIGATIONS	$	1,365
NON-EMERGENCY FIREFIGHTING	$	12,745
Jurisdictional Total	**$**	**2,835,159**

Table 10-2 – Watershed Expenditure Summary

WATERSHED EXPENDITURES		
CARLSBAD WATERSHED	$	3,249
Watershed Total	$	**3,249**

Table 10-3 – Regional Expenditure Summary

REGIONAL EXPENDITURES		
CITY OF ENCINITAS SHARE OF REGIONAL COSTS	$	58,944
Regional Total	$	**58,944**

TOTAL EXPENDITURES	***$ 2,897,352***

11.0 EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

The City of Encinitas began applying baseline program effectiveness assessment methodologies soon after they were developed by the San Diego region stormwater Copermittees during the last permit cycle as described in the document titled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" dated October 16, 2003. The City has also actively participated in regional efforts to develop a standardized assessment approach and associated metrics from summer 2007 through winter 2008. The original goal of that group was to produce assessment work products that all Copermittees could use in their JURMPs to evaluate program effectiveness. Due to a variety of complications on a regional level, that standardization process could not be completed prior to the submittal of the City's JURMP, so the City prepared its own effectiveness assessment approach and measures modeled after conventionalized strategies and calibrated to evaluate "significant" program activities as required in Order No. 2007-0001.

Since the submittal of the JURMP in March 2008, little additional progress has been made on regionally standardized approaches to program effectiveness assessment. In FY 2009-2010, the Copermittees' Fiscal, Reporting, and Assessment Workgroup initiated renewed efforts to undertake the issue of standardized assessment metrics and procedures. The City of Encinitas is committed to engaging in the process of developing such regional standards and incorporating resulting work products into its own local program effectiveness assessment system. It is in consideration of the evolving and ongoing regional standardization process that the City has endeavored upon fine tuning its local effectiveness assessment approach as presented in the subsequent paragraphs and tables. Further, it is recognized that these methodologies and strategies must be adaptable as regionally developed procedures are solidified in the future.

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The core structure of the City's stormwater program is composed of three primary drivers:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The programmatic process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next the program elements developed during the planning step are implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

As part of the JURMP update process, the City has identified a variety of significant activities unique to each program element and metrics (numeric and/or narrative) to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP. The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The new Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the stormwater program as a whole. Level 1, Level 5, and Level 6 outcomes are discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the recently released CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 OUTCOME LEVEL ASSESSMENTS

Level 1

A requirements checklist, which includes a directory of permit compliance elements and where each is described within the JURMP Annual Report, can be found in Appendix G-1.

Levels 2 and 3

Tables 11-3 through 11-10 at the end of this section include discussions of Level 2 and Level 3 outcomes for activities identified as significant by the City of Encinitas within each program component. Note that only a Level 1 assessment applies to fiscal analysis, so a table for fiscal analysis is not included.

Level 4

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs, reliable load reduction estimation methods have not yet been or cannot be developed.

Level 5

On September 10, 2008, the San Diego Regional Water Quality Control Board adopted Addendum 2 to Order No. 2007-0001, effectively extending the annual due date of the Illicit Discharge Detection and Elimination reporting requirements to December 15. It is anticipated, consistent with previous Dry Weather Monitoring reports prepared by the City of Encinitas that baseline trend analysis will be provided for a number of constituents evaluated through the Dry Weather Monitoring Program. This information is further spatially correlated with sub-basins or drainage areas within the City of Encinitas and evaluated against land-use areas and potential source areas.

Level 6

It has been determined, through ongoing development and discourse over long-term effectiveness assessment methodologies that relationships between programmatic activities and changes in receiving water quality are difficult to establish on an annual basis or a jurisdictional scale. As such, the City will point to future regionally coordinated efforts including Report of Waste Discharge (ROWD) and Long Term Effectiveness Assessment (LTEA) development to more holistically evaluate changes in receiving water quality. It is anticipated that such efforts will be further refined and supported by ongoing data gathering efforts both locally and regionally.

11.2.2 OVERALL COMPONENT ASSESSMENTS

Development Planning

The City's review process for development projects is effectively requiring higher removal efficiency treatment control BMPs. The Encinitas Stormwater Manual was in use during all of FY 10-11 and has been well received by the public. Further, two new significant program elements were in the third year of full implementation within the defined reporting period of this report (treatment control BMP self-verification and inspection); in the third year of implementation responsible parties were more responsive than ever. 78% of responsible parties submitted self-verification documentation upon request—this is a significant increase from past years. Continued refinement of this program area will support long term effectiveness assessment measures for development planning. *(See Table 11-3)*

Construction

The City's review and approval process for construction related plans and documents is effectively verifying proposed construction specific BMPs. BMP implementation and maintenance is being effectively managed through construction site inspection activities, and validated through associated assessment measures *(See Table 11-4).* It is anticipated that in response to increased inspection frequencies and refined data gathering practices that this trend will continue. Additionally, stormwater construction permitting dynamics have changed with the adoption of the new statewide Construction General Permit Order No. 2009-0009-DWQ (CGP) in which project applicants are responsible for determining permit applicability and project specific requirements per the CGP.

Municipal

Enhanced stormwater conveyance, drainage facility, channel maintenance, and inspection and street sweeping activities were developed and implemented, equating to the removal of salient volumes of debris in FY 2010-11. Effective operations and maintenance activities are demonstrated in the Table 11-5 below, and it is anticipated that this continued level of service as well as enhancements in data gathering methods will support the efficacy of municipal program activities.

Industrial and Commercial

Similar to prior reporting years, Clean Water Program activities and actions related to industrial and commercial entities have exhibited positive trends within the defined reporting period. The City of Encinitas has identified inspection activities coupled with complaint response and enforcement as the significant activities by which to evaluate program effectiveness. During the defined reporting period, the City has been able to evaluate effectiveness on a number of levels (*See Table 11-6)* through the gathering of critical statistics, including a knowledge and BMP assessment scoring system presented in Figures 11-1 and 11-2. Data gathered and evaluated during the defined reporting period indicate that identified significant program activities targeting industrial and commercial sources have been effective.

Residential

Residential BMP implementation has been identified as the significant activity by which effectiveness has been assessed. Residential complaint response and enforcement constitute the core of residential BMP implementation assurance actions. Based upon an evaluation of data associated with these elements, including the number of incidents responded to and the ultimate resolution of these events, the City has demonstrated a notably effective program and level of service to the community of Encinitas.

Education

Education effectiveness is assessed for a variety of program elements as presented in the Table 11-9 below. In terms of education opportunities provided to the various community sectors and City staff and contractors, identified as the significant metric by which to evaluate education activities, the City has achieved a high level of success. These measurable successes will also be enhanced by supporting items such as the Clean Water Program logo, developed in 2009-2010, which will increase program notoriety and promote consistency of educational programs and activities.

Public Participation

The City of Encinitas provides a variety of venues and outlets in support of public participation. The City has identified a number of measures to evaluate the effective implementation of this program element. As with education, public participation translates across a number of program areas; however, the assessment measures identified in Table 11-10 are focused on success of the venues and outlets supported by the City. From the measures identified and quantified, community partnerships, event attendance, Clean Water Hotline calls, and volumes

of debris and hazardous materials collected through public participation, the City has established exceptional trends.

11.3 PROGRAM REVIEW AND MODIFICATION

While no significant changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document, Clean Water Staff continued to meet periodically throughout the reporting period of this report to evaluate effectiveness assessment measures as they relate to specific program elements. The purpose of this effort has been to keep the issue of effectiveness assessment in the forefront of program implementation strategies, and to conduct ongoing effectiveness assessment, and augment program areas as deemed necessary. While effectiveness assessments conducted on an annual basis are helpful, a critical first step in the process is to identify significant activities and to evaluate value added benefits both to the program and to the community of Encinitas throughout the implementation period.

Table 11-3
Development Planning Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Verify High Efficiency Treatment BMPs are Approved	Internal The City's Engineering Department staff is well versed in treatment BMPs and pollutant removal efficiencies.	Percent of approved projects implementing BMPs with high or medium removal efficiencies for key pollutants of concern	100%	N/A, addressed through other significant activities for this component
Verify Proposed BMPs are Implemented	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal The City contracts with a qualified consultant to perform treatment control BMP inspections.	Percent of projects installing / implementing proposed BMPs	100%	BMP implementation is likely to have reduced pollutant loads.
		Resolution status of enforcement actions	N/A	
Verify BMPs are Properly Maintained	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal N/A, see Municipal section.	Percent of responsible parties submitting verification documentation	78%	Additional load reduction could be achieved through improved BMP maintenance.
		Number of responsible parties that did not submit self-verification documentation	20	
		Number of sites with BMPs requiring repair or maintenance	7	
		Resolution status of repair/maintenance	All Complete	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-4
Construction Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Verify Planned BMP Implementation - Review Proposed Plans and BMPs	External Projects submit plans for construction BMP implementation for their projects; the level of awareness of construction BMP requirements is fairly high. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs.	BMPs proposed for construction projects must meet minimum requirements; no significant problems have been noted.		Proper pre-project planning is likely to have reduced pollutant loading.
Verify Proposed BMPs are Implemented	External Grading projects implement BMPs as required by their permits, and contractors are familiar with the City's requirements. Internal Training for City staff is described in Section 8. City inspectors are familiar with relevant construction BMPs.	Percent of projects implementing required BMPs.	100%	Proper BMP implementation is likely to have reduced pollutant loading.
		Percent of inspection actions resulting in Corrective Action.	33%	
		Percent of inspection actions resulting in a Notice of Violation (NOV).	0%	
		Percent of inspections actions resulting in a Citation.	<1%	
		Number of dry weather monitoring exceedances traced to construction sources.	0	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-5
Municipal Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Verify Proposed BMPs are Implemented at Facilities	City staff is regularly trained on BMP implementation; see sections 4 and 8.	Percent of inspected facilities/activities in compliance with BMP requirements	100%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of sites requiring follow-up inspections	See Section 4		
		Number of dry weather monitoring exceedances traced to municipal sites	0		
Sweep Streets and Parking Facilities		N/A, streets and parking facilities are swept as determined necessary and in compliance with Municipal Stormwater Permit standards.		Amount of sediment and debris removed per length of street swept (weight or volume per curb mile).	1,861 tons/ 11,330 curb miles (0.16 tons/curb miles)
Maintain and Clean the MS4 (catch basins, inlets and open channels).		N/A, MS4 structures are maintained as often as directed by management.		Amount of sediment and debris removed (weight or volume).	401 tons
Maintain Sanitary Sewer System		N/A, the sanitary sewer system is maintained as often as directed by management.		Total volume of SSO discharge to MS4 (gallons).	Data will be included in Section 7.0 for the 12/15/11 submittal.
Maintain Municipal Treatment Control BMPs		N/A, treatment control BMPs are maintained as often as directed by management.		Amount of sediment and debris removed from storm drain filter inserts.	3 tons
				BMP effectiveness studies	N/A
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-6
Industrial and Commercial Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Require BMP Implementation	External Knowledge assessment scores indicated a slightly low level of understanding of relevant storm water concepts. See Figure 11-1 on the following page for a score distribution. See Section 8 for more detail on educational materials and other outreach efforts. Internal City inspectors are well versed in Stormwater compliance and minimum BMP standards.	Percent of inspected sites in compliance with BMP requirements (inspections that did NOT require follow-up actions)	65%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of inspection related enforcement actions	100%		
		Number of dry weather monitoring exceedances traced to industrial or commercial sources	Data will be included in Section 7.0 for the 12/15/11 submittal.	Number of IC/IDs eliminated through enforcement actions taken as a result of routine inspection OR complaint investigations. (NOVs & Citations)	22
		Based on the results of individual facility assessment surveys, most facilities inspected have a good general understanding of BMPs and implement BMPs as required. See Figure 11-1 and 11-2 below.			
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-1
Knowledge Assessment Scores; FY 2010-11 Inspections

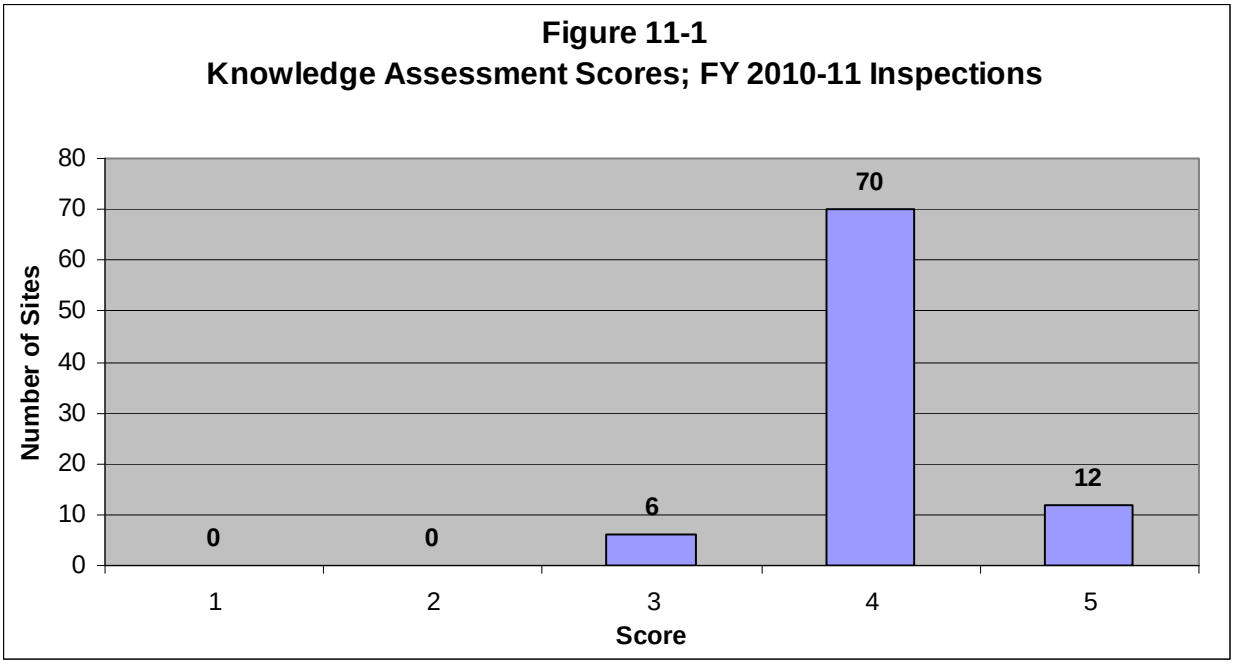


Figure 11-2
BMP Assessment Scores; FY 2010-11 Inspections

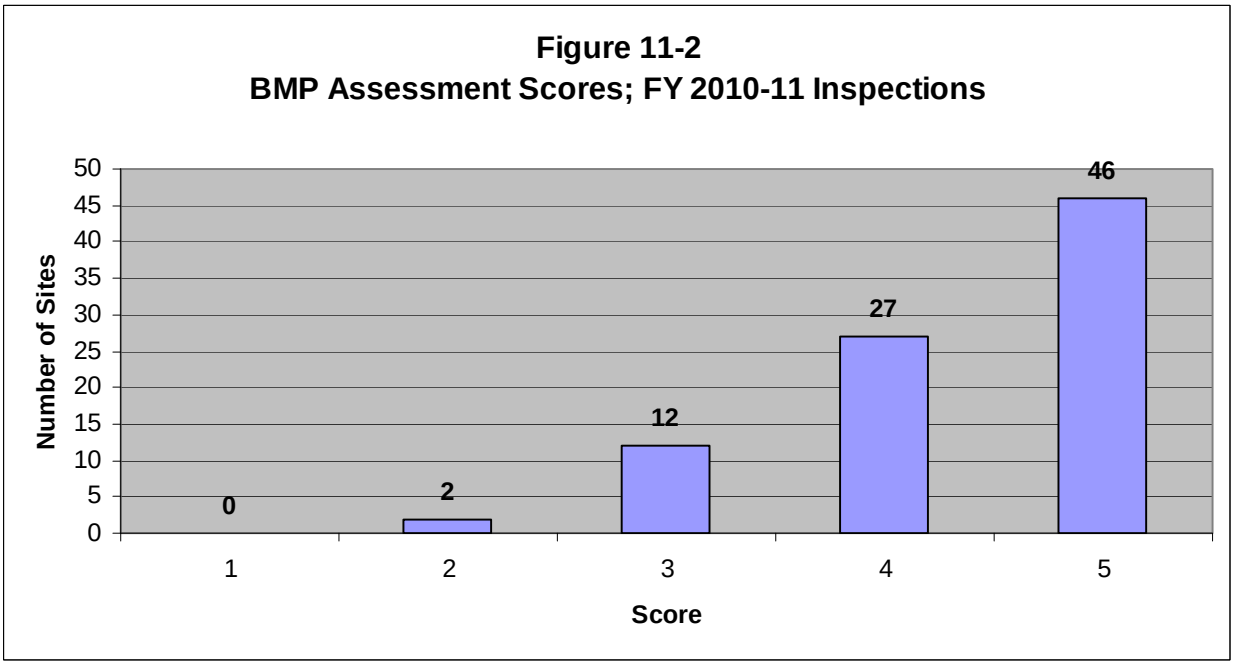


Table 11-7
Residential Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Require BMP Implementation	External Residents were educated in variety of ways in 2010/2011; see sections 6 and 8 for details. Internal City inspectors are well versed in Stormwater compliance and minimum BMP standards.	Number of residential incidents reported to storm water hotline	53	Resolution of residential incidents reported to the hotline likely resulted in a decrease in pollutant loading through improved BMP implementation.
		Resolution status of residential related enforcement actions	100%	
		Number of dry weather monitoring exceedances traced to residential sources	0	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-8
Illicit Discharge Detection and Elimination Component Assessment Measures

Significant Activity	Level 2	Level 3	Level 4
Conduct Dry Weather Monitoring Program	Clean Water Program staff executes the City's Dry Weather Monitoring Program.	N/A, personnel conduct monitoring as directed by management.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2011.
Respond to Incidents Reported to Clean Water Hotline	Dedicated Engineering and Public Works staffs are trained to respond to reported incidents.	N/A, personnel respond to incidents as directed by management.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2011.
Respond To and Clean up SSOs	Dedicated Public Works staffs are trained to respond to reported SSO incidents.	The City conducts additional preventative inspections and maintenance in areas with a higher history of problems.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2011.

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-9
Education Component Assessment Measures

Significant Activity	Level 2		Level 3	Level 4
Provide storm water education to the public	External The City actively educates the various audiences in its jurisdiction. See Sections 8 and 9 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for FY 2010-11.
	Estimated number of impressions made*	10,000		
	Estimated number of educational materials distributed to various community sectors	2,783		
Provide storm water education to City staff & contractors	Internal The City provides staff and contractors w/ regular stormwater training. See Sections 8 and 9 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for FY 2010--11.
	Number of Staff and Contractors trained	165		

Notes:
Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
*Impressions are based upon the number of interactions with public at education events, workshops, and presentations.

Table 11-10
Public Participation Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Involve the public in activities that relate to storm water protection	External The City and City partners put on a number of opportunities for the public to participate. See section 9 for details.	Estimated number of attendees at events, workshops, and presentations	4826	Amount of trash, recycling, and debris collected at cleanup events	526
		Number of calls and or emails received to the Clean Water Hotline*	180	Amount of HHW collected	**93,575**

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
* The sum total of calls to the Clean Water Hotline related to all Community Sectors.

12.0 SPECIAL INVESTIGATIONS

As determined necessary and appropriate, the City of Encinitas is engaged in a variety of ongoing and long-term investigations to support reasoned and informed management actions to address local water quality concerns and threats.

12.1 STORM DRAINS AS SOURCES OF ENTEROCOCCUS TO SAN DIEGO BEACHES

In FY 2010-11, in collaboration with the Regional Monitoring Workgroup and Southern California Coastal Water Research Project (SCCRWP), the City of Encinitas continued its participation in a special study identified as *Storm Drains as Sources of Enterococcus to San Diego Beaches.* This study was developed to assess storm drains as a potential source of *Enterococcus* bacteria to San Diego's marine coastal waters during dry weather. The goals of the study include: 1) to determine if biofilms and algae that form on the surfaces of storm drains support the growth of enterococci; 2) to determine if enterococci growing on storm drain surfaces are a source of bacteria to sand and beach water; and 3) to determine if enterococci growing on storm drain surfaces may be differentiated from those of fecal origin. Enterococcal growth will be assessed using small concrete blocks (coupons) tethered to the bottom surfaces of storm drain pipes. The hypothesis is that enterococci in urban runoff will attach to the coupons located inside the storm drain pipes, form biofilm, and multiply, leading to increased densities of enterococci over time. This raises the possibility that bacterial growth within storm drains may be at least partly responsible for elevated concentrations of enterococci observed in urban runoff impacting beach water quality.

Based on historical bacterial monitoring data, the presence of continuous dry weather flow, and accessibility, both Moonlight Beach in Encinitas and a City of San Diego beach in the community of La Jolla were chosen to participate in this regional study. The site at Moonlight Beach was of particular interest because it has an ultra violet urban runoff treatment facility (UV Facility) located approximately 230 yards upstream of Moonlight Beach. The UV Facility diverts 85% of the dry weather flows in Cottonwood Creek into an ultra violet treatment system designed to inactivate bacteria and viruses in the creek water. Bacteria removal efficiencies through the UV Facility have been calculated at >99%. In February 2006, the City of Encinitas published the Moonlight Beach Urban Runoff Treatment Facility Final Report which indicated that additional sources of bacteria are contributing to the degradation of water quality downstream of the UV Facility. While nearly 100% of the bacteria were removed from the treated water at the UV Facility, removal efficiencies from the effluent to the Moonlight Beach outfall were not as dramatic, indicating significant regeneration of bacteria between the UV Facility and the beach. Despite the presence of the UV Facility, samples from Moonlight Beach

occasionally exceed the *Enterococci* AB411 single sample standard of 104 MPN/100 ml. Hypotheses offered in the City's Moonlight Beach Urban Runoff Treatment Facility Final Report indicated that increases in bacteria downstream of the UV Facility could be primarily due to animals in the creek and on the beach, sediments and debris in the creek and storm drains, and the wrack line on the beach.

The *Storm Drains as Sources of Enterococcus to San Diego Beaches* study consists of a detailed study plan, field sampling, data analysis, and preparation of a final report. Sampling for this study commenced on May 19, 2010, and within the defined reporting period of this report was completed on October 5, 2010. All study samples were collected by City of Encinitas Clean Water Program staff in collaboration with an independent researcher from SCCWRP. SCCWRP is responsible for managing and analyzing all of the data from this study. At Moonlight Beach, sampling for the study consisted of collecting water samples from the following five locations: an area of the creek that bypasses the UV Facility, the UV Facility treated water, upstream of the storm drain coupons, at the outfall which is downstream of the coupons, and in the receiving water along the shoreline. The water samples upstream from the coupons and the beach water are analyzed for the following parameters: conductivity, dissolved oxygen, pH, temperature, and turbidity. Additionally, the water samples upstream from the coupons are also analyzed for the following nutrient parameters: TOC, Nitrate as N, Nitrite as N, TKN as N, Ammonia as N, Orthophosphate as P, Total Phosphate as P, and Total Nitrogen (calculated). Two coupons are collected each week and analyzed for densities of enterococci. In addition to the water and coupon samples, natural samples of plants upstream of the coupons, algae, and sea wrack located downstream of the coupons and beach sand are also being collected at Moonlight Beach and are being analyzed to determine the densities of enterococci present on each sample. It is anticipated that a final report on the *Storm Drains as Sources of Enterococcus to San Diego Beaches* study will be made available in FY 2011-12.

12.2 SAN ELIJO LAGOON RESTORATION PROJECT

For a number of years, the City of Encinitas along with numerous agencies including the Army Corps of Engineers, San Elijo Lagoon Conservancy, Caltrans, SANDAG, SDRWQCB, California Coastal Commission, Department of Fish & Game, and NCTD have been analyzing possible enhancement opportunities for the San Elijo Lagoon. Artificial constrictions have hindered the natural ability of the estuary to open to the ocean. The Interstate 5 (I-5) North Coast Freeway widening project will further impact the lagoon. A study was completed by the Army Corps of Engineers to investigate potential mitigation opportunities for the I-5 North Coast project.

The goal of the study and ultimate project is to optimize the openings at the three major transportation passageways across the San Elijo Lagoon. Related studies have looked specifically into the effects of varying channel widths at each opening: inlet and PCH

Bridge, the SDNR system, and the I-5 freeway. Various alternatives have been identified based upon complex system simulations and evaluated on effects to reduce tidal muting, increase circulation, improve water quality in the lagoon, and ultimately on whether or not any improvements to the habitat distribution in the lagoon would be likely to occur.

Work on this project continued throughout the defined reporting period of this report, most significantly with efforts to conduct a variety of modeling and engineering studies including water quality and hydraulic modeling, sea level rise, sediment characterization, and shoaling studies to evaluate the various alternatives that are being considered for the restoration project.

Notably, the San Elijo Lagoon Restoration Project is a multi-agency effort, and far-reaching coordination has been critical and remains key to the long-term success of this project. In consideration of future Lagoon specific TMDL development and the emerging lagoon restoration scenarios, on May 24, 2010, staff from the City of Encinitas, San Diego Regional Water Quality Control Board (SDRWQCB), San Elijo Lagoon Conservancy (SELC), and Moffat & Nichol (Restoration Project Consultant) convened to discuss how these efforts may meet the mutual needs of the stakeholders involved. This meeting provided a good venue to connect the collective benefits of restoration efforts with water quality improvements in the San Elijo Lagoon and to better define priorities for all parties involved.

13.0 NON-EMERGENCY FIRE FIGHTING

13.1 INTRODUCTION

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by fire fighting activities both at fire stations in the City and locations throughout the City. Two fire stations (No. 3 and No. 5) have treatment control BMPs in place to treat any runoff which may be discharged from washing activities. The remaining stations utilize source control BMPs to minimize and control discharges related to washing activities. All fire fighting training activities which include aqueous film forming foam are conducted at a fire station outside of the City of Encinitas. In addition to implementing structural BMPs at the fire stations, all City of Encinitas Fire Department employees are trained in storm water management on an annual basis by Clean Water Staff. Following is a detailed description of the program developed by the City to reduce pollutants from non-emergency fire fighting flows.

13.2 PROGRAM FOR NON-EMERGENCY FIRE FIGHTING FLOWS

The City of Encinitas has identified a number of potential discharge sources including maintenance of fire and emergency vehicles and equipment, training exercises, and facility maintenance. It is important to recognize and make provision for the post-emergency rehabilitation of response equipment including tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency, as this equipment must be restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for subsequent response actions. As such, the use of water that could contribute to storm water discharges may be used unless another practical and immediately available method is identified and will be performed in a manner that minimizes discharges to the MEP. In consideration of the non-emergency activities identified above, the City's fire personnel utilized the following BMPs to address discharge generated from such activities during FY 2010-11:

- Whenever possible, practice drills were performed in areas where runoff was contained. When practice drills were performed in an area where runoff could potentially leave the site, the site was surveyed by the officer-in-charge prior to training activities to ensure that debris would not enter the storm drain system as a result of the drill.
- As determined feasible, runoff from training drills or other non-emergency activities, was directed to landscaped areas.
- Areas that have debris that could potentially enter the storm drain system as a result of the drill activities were not used for training until the debris had been removed.
- Live fire training activities were pre-planned to allow integration of structural BMP barriers to control runoff as deemed necessary.
- Runoff from live fire training activities was contained and recovered with the City's Vac-con truck so that runoff did not discharge to the storm drain system or receiving waters.
- Good housekeeping and dry cleanup practices were utilized as part of standard facility maintenance procedures.

13.2.1 EDUCATIONAL METHODS

Details of the City's educational programs, including fire fighting personnel education, are provided in Section 8 of this document.

14.0 JURMP REVISIONS

The City's JURMP was rewritten in the spring of 2008 as required by Water Quality Order No. 2007-0001. Section 14 of the updated JURMP document includes a list of the changes made to the JURMP at that time. Any other changes made to the JURMP since the comprehensive JURMP update in the spring of 2008 would be detailed in the preceding sections of this JURMP Annual Report. Revisions may include, but would not be limited to, required inventory updates, necessary process and procedure changes, or programmatic modifications to improve efficiency and effectiveness.

15.0 CONCLUSIONS & RECOMMENDATIONS

During the 2007-2008 reporting period, the City of Encinitas updated its JURMP, which was finalized and submitted to the RWQCB on March 24, 2008. As captured in the preceding 2010-2011 JURMP Annual Report, the City of Encinitas has continued to implement and refine various program elements, standardize core program components, and stay current with emerging trends and technology. Further, the City has and will continue to actively participate and collaborate with other Copermittees in the development and collective implementation of regional programs. As compliance standards evolve based upon defined timeframes in Order No. 2007-0001, the City of Encinitas will continue to augment and update programs as necessary to comply with regulatory requirements, and evaluate the overall efficacy of program elements against value added outcomes to assure focused and refined implementation protocols.

Appendix A

Development Planning

A-1 **Treatment Control BMP Inventory**

A-2 **SUSMP Priority Project Map**

A-3 **Treatment Control BMP Inspection Priority Flowchart**

A-4 **Sample Grading Certification / BMP Installation Verification Letter**

A-5 **Treatment Control BMP Operation and Maintenance Self-Verification Letter**

A-6 **Treatment Control BMP Operation and Maintenance Brochure**

A-7 **Treatment Control BMP Operation and Maintenance Self-Verification Online Form**

A-8 **Treatment Control BMP Operation and Maintenance City Inspection and Self-Verification Results and Findings**

A-9 **Treatment Control BMP Operation and Maintenance Inspection Form**

A-10 **Stormwater Pollution Control Checklist and Certification**

A-11 **Hydromodification Management Plan Checklist and Certification**

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
55	I	540 Cornish Dr	Vegetated Swale	vegetated swale	9/27/2005	3/17/2008	Encinitas Other		Low
55	I	540 Cornish Dr	Vegetated Swale	vegetated swale	9/27/2005	3/17/2008	Encinitas Other		Low
60	G	3275 Poppy Hills Ln	Extended Detention Basin	detention basin	1/1/2003	1/15/2008	Private		Medium
60	G	3275 Poppy Hills Ln	Rock Swale	rock-lined swale	1/1/2003	1/15/2008	Private		Medium
60	G	3275 Poppy Hills Ln	Landscaped Area	landscaped area for BMP	1/1/2003	1/15/2008	Private		Medium
60	G	3275 Poppy Hills Ln	Landscaped Area	landscaped area for BMP	1/1/2003	1/15/2008	Private		Medium
61	CN	801 Orpheus Ave	Flow-Through Planter	flow-through planter "bio-swale"	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Flow-Through Planter	flow-through planter "bio-swale"	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Pervious Pavement	gravel parking area	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Other	fuel slab reservoir	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Other	roof cover for fueling area	10/15/2007	6/7/2010	Encinitas Other		Low
87	G	354 Santa Fe Dr	Extended Detention Basin	detention basin	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
106	G	3358 Wildflower Valley Dr	Vegetated Swale	min. 100' long priority stormwater BMP grass swale	6/19/2006	11/18/2008	Private	2008-0582295	Medium
106	G	3358 Wildflower Valley Dr	Vegetated Swale	treatment swale	6/19/2006	11/18/2008	Private	2008-0582295	Medium
153	I	111 Chesterfield Dr	Interceptor (Sewer)	traffic rated oil seperator	8/31/2006	2/13/2007	Private		Medium
153	I	111 Chesterfield Dr	Mechanical Filter	Flo-Gard FF-RF24D	8/31/2006	2/13/2007	Private		Medium
169	G	510 S El Camino Real	Mechanical Filter	Kristar flogard	9/23/2008	7/15/2009	Private	2007-0310771	Medium
169	G	510 S El Camino Real	Vegetated Swale	grass-lined swale	9/23/2008	7/15/2009	Private	2007-0310771	Medium
169	G	510 s el camino real	Vegetated Swale	vegetated swale	9/23/2008	7/15/2009	Private		Medium
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
183	G	3234 Olivenhain Farms Rd	Vegetated Swale	bio-swale for post BMP treatment	11/1/2006	5/13/2008	Private	2006-0764616	Low
183	G	3234 Olivenhain Farms Rd	Rock Swale	rock-lined swale	11/1/2006	5/13/2008	Private	2006-0764616	Low
183	G	3234 Olivenhain Farms Rd	Rock Swale	rock-lined swale	11/1/2006	5/13/2008	Private	2006-0764616	Low
183	G	3234 Olivenhain Farms Rd	Rock Swale	5' wide x 10' long x 1' thick rip rap	11/1/2006	5/13/2008	Private	2006-0764616	Low
276	G	Phoebe St & Hwy 101	Vortex Separator	StormFilter chamber by Contech	4/19/2007	6/19/2008	Private		High
276	G	Phoebe St & Hwy 101	Retention/Infiltration Vault	stormwater collection vault	4/19/2007	6/19/2008	Private		High
385	G	1555 Crest Dr	Vegetated Swale	BMP landscape swale	8/31/2007	7/13/2009	Private	2007-0611836	Low
385	G	1555 Crest Dr	Rock Swale	gravel/sand filter	8/31/2007	7/13/2009	Private	2007-0611836	Low
386	G	3535 Manchester Ave	Mechanical Filter	Biofilter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Mechanical Filter	biofilter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Mechanical Filter	biofilter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Mechanical Filter	Katchall curb outlet filter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Retention/Infiltration Vault	detention system	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Mechanical Filter	Bio-Clean continuous basket	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Vegetated Swale	flow-based system for BMP	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 manchester Ave	Mechanical Filter	Bio-Clean continuous basket	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Retention/Infiltration Vault	detention system	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Retention/Infiltration Vault	stormtech detention	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
414	G	4455 Manchester Ave	Vegetated Swale	grassy swale	5/10/2007	2/20/2008	Private	2007-0317169	Medium
414	G	4455 Manchester Ave	Mechanical Filter	flogard FB-24 storm drain filter by Kristar	5/10/2007	2/20/2008	Private	2007-0317169	Medium
414	G	4455 Manchester Ave	Vortex Separator	StormFliter per Contech stormwater solutions	5/10/2007	2/20/2008	Private	2007-0317169	Medium
414	G	4455 Manchester Ave	Mechanical Filter	flogard FB-24 storm drain filter by Kristar	5/10/2007	2/20/2008	Private	2007-0317169	Medium
437	G	222 El Camino Real	Vortex Separator	StormScreen unit	8/31/2007	5/22/2008	Private	2007-0571994	Medium
462	G	90 N Coast Hwy 101	Mechanical Filter	kristar inlet filter	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Landscaped Area	bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	90 N Coast Hwy 101	Turf Block Swale	3' wide grass crete bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium

Note: All TC BMPs are located in the Carlsbad Watershed

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
462	G	90 N Coast Hwy 101	Interceptor (sewer)	Jensen sand and oil trap model JP50050	7/6/2007	4/6/2009	Private - HOA		Medium
462	G	215 Second St	Landscaped Area	bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Landscaped Area	bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Dry Well	flow well stormwater leaching system	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Dry Well	flow well stormwater leaching system	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	90 N Coast Hwy 101	Mechanical Filter	kristar inlet filter	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Turf Block Swale	grasscrete	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
482	G	1864 Crest Dr	Rock Swale	4' wide rock lined treatment swale w/ rip-rap entrance	3/28/2008	3/31/2011	Private	2007-0495449	Low
482	G	1864 Crest Dr	Extended Detention Basin	detention basin	3/28/2008	3/31/2011	Private	2007-0495449	Low
482	G	1864 Crest Dr	Rock Swale	4' wide rock lined treatment swale w/ rip-rap entrance	3/28/2008	3/31/2011	Private	2007-0495449	Low
483	G	540 La Costa Ave	Mechanical Filter	filter insert	9/10/2007	7/28/2010	Private	2007-0637421	Medium
483	G	540 La Costa Ave	Vegetated Swale	bio-swale	9/10/2007	7/28/2010	Private	2007-0637421	Medium
483	G	540 La Costa Ave	Mechanical Filter	filter insert	9/10/2007	7/28/2010	Private	2007-0637421	Medium
483	G	540 La Costa Ave	Interceptor (Sewer)	wastewater sump	9/10/2007	7/28/2010	Private	2007-0637421	Medium
562	G	1302 Encinitas Blvd	Vegetated Swale	4' wide landscaped swale	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	Infiltration Basin	infiltration basin	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	Vegetated Swale	8' wide treatment swale with 6' wide bottom	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	Mechanical Filter	flogard lopro hydrocarbon absorbant filter	8/21/2007	8/4/2008	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	65 l.f. gravel detention / dispersion pit	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Rock Swale	rock swale	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	3/29/2011	Private		Medium
704	G	230 Quail Gardens Dr	Pervious Pavement	pavers	4/17/2008	11/25/2009	San Diego County		Low
704	G	230 Quail Gardens Dr	Vegetated Swale	vegetated BMP swale and 2 energy dissipators	4/17/2008	10/19/2009	Private	2008-0162733	Low
705	G	3354 Wildflower Valley Dr	Vegetated Swale	vegetated swale	1/14/2008	7/16/2009	Private		Low
705	G	3354 Wildflower Valley Dr	Vegetated Swale	vegetated swale	1/14/2008	7/16/2009	Private		Low
705	G	3354 Wildflower Valley Dr	Vegetated Swale	vegetated swale	1/14/2008	7/16/2009	Private		Low
705	G	3354 Wildflower Valley Dr	Rock Swale	rock-lined swale	1/14/2008	7/16/2009	Private	2008-0106026	Low
713	G	3003 Wildflower Dr	Infiltration Basin	dispersion trench	4/25/2008	4/29/2010	Private	2008-0192767	Low
713	G	3003 Wildflower Dr	Landscaped Area	landscaped area	4/25/2008	4/29/2010	Private	2008-0192767	Low
713	G	3003 Wildflower Dr	Infiltration Basin	dispersion trench	4/25/2008	4/29/2010	Private	2008-0192767	Low
713	G	3003 Wildflower Dr	Infiltration Basin	dispersion trench	4/25/2008	4/29/2010	Private	2008-0192767	Low
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Advanced Mechanical Filter	6' X 12' precast StormFilter by Contech	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Interceptor (Sewer)	320 gal. sand-oil interceptor	8/28/2008	2/10/2011	Private	2008-0440635	High
789	G	2005 San Elijo Ave	Interceptor (Sewer)	grease interceptor	1/9/2008	3/23/2009	Private	2008-0609543	Low
789	G	2005 San Elijo Ave	Pervious Pavement	porous concrete	1/9/2008	3/23/2009	Private	2008-0609543	Low
912	G	416 N Rancho Santa Fe Rd	Rock Swale	gravel swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Media Filter	2' diameter, 6' deep gravel pit with open bottom for BMP use	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Infiltration Basin	2.5' wide of 6" cobbles over 12" thick pea gravel	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Infiltration Basin	10' X 25' gravel	1/16/2009	9/24/2009	Private	2008-0609456	Medium
912	G	416 N Rancho Santa Fe Rd	Infiltration Basin	gravel	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Rock Swale	gravel swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Rock Swale	gravel swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Vegetated Swale	2' wide grass swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
943	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	1/14/2009	1/2/2010	Private	2009-0016310	Medium
943	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	1/14/2009	1/2/2010	Private	2009-0016310	Medium
943	G	211 Saxony Rd	Vegetated Swale	vegetated swale	1/14/2009	1/2/2010	Private	2009-0016310	Medium
943	G	211 Saxony Rd	Flow-Through Planter	6' X 12' Filterra unit	1/14/2009	1/2/2010	Private	2009-0016310	Medium
947	G	1447 Bella Vista Ct	Landscaped Area	planter area	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1447 Bella Vista Ct	Mechanical Filter	Kristar Lo-pro drain filter	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1447 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale w/ some rock-lined portions	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1459 Bella Vista Ct	Mechanical Filter	Kristar Lo-pro drain filter	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1459 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale w/ some rock-lined portions	5/26/2009	11/17/2010	Private	2009-0134165	Medium

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Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
947	G	1423 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1423 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1423 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1435 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1435 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	11/17/2010	Private	2009-0134165	Medium
983	G	1320 Encinitas Blvd	Vortex Separator	Contech Stormfilter	10/28/2008	2/4/2010	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	2/4/2010	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	2/4/2010	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	2/4/2010	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	2/4/2010	Private	2008-0522122	Medium
1092	EBP	820 Birmingham Dr	Mechanical Filter	12" trench with hydro carbon filter and steel grate	unknown	6/26/2009	Private	2008-0075668	Medium
1092	EBP	820 Birmingham Dr	Mechanical Filter	12" trench with hydro carbon filter and steel grate	unknown	6/26/2009	Private	2008-0075668	Medium
1365	G	315 and 311 Hana Ct	Rock Swale	rock swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1365	G	311, 315, 319, 323, and 327 Hana Ct	Vegetated Swale	vegetated swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1365	G	311, 310, 314 and 318 Hana Ct	Rock Swale	gravel swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1365	G	311, 310, 314 and 318 Hana Ct	Rock Swale	gravel swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1389	G	302 Requeza St	Extended Detention Basin	stormwater detention treatment basin	1/5/2004	8/2/2005	Private	2003-1503915	High
1457	G	200 Saxony Rd	Vegetated Swale	grass-lined swale	5/6/2004	4/6/2006	Private		Low
1469	G	1414 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1414 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1428 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1428 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1442 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1401 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1519	G	200 Saxony Rd	Mechanical Filter	flogard+plus model 'FGP-36CI' catch basin filter insert	3/1/2004	7/12/2005	Private		Medium
1519	G	200 Saxony Rd	Mechanical Filter	flogard+plus model 'FGP-36CI' catch basin filter insert	3/1/2004	7/12/2005	Private		Medium
1519	G	200 Saxony Rd	Landscaped Area	turf catch basin approach basin	3/1/2004	7/12/2005	Private		Medium
1519	G	200 Saxony Rd	Landscaped Area	turf catch basin approach apron	3/1/2004	7/12/2005	Private		Medium
1532	G	1316, 1318 Summit Ave	Vegetated Swale	grass swale and storm water "cleansing area" (detention basin)	4/28/2004	11/14/2007	Private		Low
1532	G	1320 Summit Ave	Vegetated Swale	landscape swale	4/28/2004	11/14/2007	Private		Low
1532	G	1320 Summit Ave	Vegetated Swale	landscape swale	4/28/2004	11/14/2007	Private		Low
1563	G	3701 Fortuna Ranch Rd	Vegetated Swale	grass swale	10/11/2004	6/11/2008	Private		Low
1563	G	3701 Fortuna Ranch Rd	Vegetated Swale	grass swale	10/11/2004	6/11/2008	Private		Low
1600	G	1588-1590 Leucadia Blvd	Interceptor (Sewer)	grease trap	6/14/2004	7/6/2005	Private		Medium
1600	G	1588 Leucadia Blvd	Extended Detention Basin	Detention Basin	6/14/2004	7/6/2005	Encinitas Street Maintenance		Medium
5814	G	2112 Oxford Ave	Vegetated Swale	grass swale	12/4/2002	4/1/2004	Private		Low
5814	G	2108 Oxford Ave	Vegetated Swale	grass swale	12/4/2002	4/1/2004	Private		Low
5814	G	2112 Oxford Ave	Landscaped Area	landscaped area	12/4/2002	4/1/2004	Private		Low
5814	G	2108 Oxford Ave	Landscaped Area	landscaped area	12/4/2002	4/1/2004	Private		Low
6402	G	311 Princehouse Ln	Vegetated Swale	grass swale (275 ft by 4 ft)	7/18/2005	12/8/2006	Private	2004-0576710	Medium
6442	G	3616 Manchester Ave	Extended Detention Basin	ballfield detention basin w/ subterranean filtration sytem	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Sand/Oil Separator (stormwater)	2000-gal Jenson Sand-Oil Interceptor	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchaster Ave	Mechanical Filter	Fossil Filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchaster Ave	Mechanical Filter	Fossil Filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchaster Ave	Mechanical Filter	Fossil Filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchaster Ave	Mechanical Filter	fossil filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Sand/Oil Separator (stormwater)	2000-gal Jenson Sand-Oil Interceptor	9/17/2004	10/17/2006	Private		High
6813	G	155 Saxony Rd	Vegetated Swale	grass swale/infiltration basin	9/5/2003	7/23/2009	Private		Low
6813	G	155 Saxony Rd	Vegetated Swale	grass swale	9/5/2003	7/23/2009	Private		Low
6813	G	155 Saxony Rd	Other	drain inlet with seepage pit	9/5/2003	7/23/2009	Private		Low
6816	G	Piraeus St & Sparta Drive	Extended Detention Basin	water quality basin	5/3/2001	4/21/2004	Encinitas Street Maintenance		Medium
6816	G	Piraeus St & Sparta Dr	Extended Detention Basin	water quality basin	5/3/2001	4/21/2004	Encinitas Street Maintenance		Medium
7005	G	510 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	507 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	513 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	517 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	521 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	558 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	532 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	526 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	509 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	525 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	518 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	503 Ocean Bluff Wy	Vegetated Swale	vegetated swale around the home	9/4/2002	4/30/2007	Private		Medium

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7054	G	645 Via Cantebria	Mechanical Filter	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Mechanical Filter	fossil filter insert	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Mechanical Filter	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Mechanical Filter	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscaped area	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscaped area	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscaped area	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscaped area	4/24/2003	5/18/2005	Private - HOA		Medium
7300	G	760 Garden View Ct	Landscaped Area	planter area	2/22/2002	12/22/2008	Private		Low
7300	G	760 Garden View Ct	Vegetated Swale	grass swale for stormwater treatment	2/22/2002	12/22/2008	Private		Low
7300	G	740 Garden View Ct	Vegetated Swale	grass swale for stormwater treatment	2/22/2002	12/22/2008	Private		Low
7300	G	740 Garden View Ct	Landscaped Area	planter area	2/22/2002	12/22/2008	Private		Low
7305	G	131 Princehouse Ln	Rock Swale	3-ft wide gravel swale	1/10/2003	4/7/2004	Private		Low
7305	G	131 Princehouse Ln	Infiltration Basin	3-ft diameter absorption pit, 4-ft deep w/ 3/4" rock	1/10/2003	4/7/2004	Private		Low
7374	I	95 N Vulcan Ave	Pervious Pavement	grass pavers	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Pervious Pavement	pervious pavement parking lot	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Pervious Pavement	pervious pavement walkway	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Rock Swale	rock lined swale	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Extended Detention Basin	detention basin	1/30/2003	10/16/2006	Encinitas Street Maintenance		Medium
7374	I	95 N Vulcan Ave	Pervious Pavement	pervious pavement walkway	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Extended Detention Basin	35'x35' facing class rip rap	1/30/2003	10/16/2006	Encinitas Wastewater		Medium
7374	I	95 N Vulcan Ave	Mechanical Filter	storm drain filter insert	1/30/2003	10/16/2006	Encinitas Wastewater		Medium
7425	G	195 La Mesa Ave	Landscaped Area	landscaped area	12/16/2002	3/9/2004	Private		Low
7425	G	195 La Mesa	Landscaped Area	runoff to street and enclosed rock trench across the back	12/16/2002	3/9/2004	Private		Low
7425	G	195 La Mesa Ave	Landscaped Area	landscaped area	12/16/2002	3/9/2004	Private		Low
7588	G	1200 Garden View Rd	Vegetated Swale	grassy swale	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4120-M Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-M Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Vegetated Swale	grass lined swale	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Vegetated Swale	grassy swale	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Vegetated Swale	vegetated swale	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7628	G	221 La Costa Ave	Vegetated Swale	landscaped area for filtration	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	199 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	199 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	207 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	207 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	207 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	235 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7702	G	Rubenstein Ave and Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	315 Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	329 Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	322, 336 Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	Rubenstein Ave and Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	301 Chopin Way	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	Rubenstein Ave and Chopin Wy	Retention/Infiltration Vault	stormwater detention vault	8/6/2003	1/23/2006	Private		Medium
7729	I	Vulcan Ave and E St	Flow-Through Planter		1/15/2010	11/23/2010	Encinitas Parks		Medium
7729	I	Vulcan Ave and E St	Flow-Through Planter		1/15/2010	11/23/2010	Encinitas Parks		Medium
7729	I	Vulcan Ave and E St	Flow-Through Planter		1/15/2010	11/23/2010	Encinitas Parks		Medium
7729	I	Vulcan Ave and E St	Flow-Through Planter		1/15/2010	11/23/2010	Encinitas Parks		Medium
7729	I	Vulcan Ave and E St	Flow-Through Planter		1/15/2010	11/23/2010	Encinitas Parks		Medium
7729	I	Vulcan Ave and E St	Dry Well		1/15/2010	11/23/2010	Encinitas Wastewater		Medium
7729	I	Vulcan Ave and E St	Dry Well		1/15/2010	11/23/2010	Encinitas Wastewater		Medium
7729	I	Vulcan Ave and E St	Dry Well		1/15/2010	11/23/2010	Encinitas Wastewater		Medium
7732	G	175 La Costa Ave	Other	DG-lined swale	12/30/2003	5/15/2006	Private		Medium
7732	G	175 La Costa Ave	Extended Detention Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	183 La Costa Ave	Infiltration Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	191 La Costa Ave	Infiltration Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	191 La Costa Ave	Infiltration Basin	detention basin	12/30/2003	5/15/2006	Private		Medium

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7771	G	1550 S El Camino Real	Extended Detention Basin	desiltation basin	10/28/2003	2/4/2008	Private		Low
7771	G	1550 S El Camino Real	Pervious Pavement	pervious pavemnet "gravel pave" manufactured by Invisible Structures	10/28/2003	2/4/2008	Private		Low
7780	G	133 Rosebay Dr	Infiltration Basin	rock-lined infiltration trench	8/4/2003	4/29/2005	Private		Low
7780	G	133 Rosebay Dr	Bioretention Basin	terraced stormwater drainage area	8/4/2003	4/29/2005	Private		Low
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Vegetated Swale	vegetated swale	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Infiltration Basin	vegetated detention basin	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Vegetated Swale	vegetated swale	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Infiltration Basin	vegetated detention basin	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Interceptor (Sewer)	grease interceptor	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Sand/Oil Separator (stormwater)	sand/oil interceptor	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Mechanical Filter	fossil filter insert	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Mechanical Filter	fossil filter insert	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7800	G	3542 Jasmine Crest	Vegetated Swale	vegetated swale (drains to bioretention)	3/13/2003	11/19/2009	Private		Low
7800	G	3542 Jasmine Crest	Vegetated Swale	vegetated swale (drains to bioretention)	3/13/2003	11/19/2009	Private		Low
7800	G	3542 Jasmine Crest	Bioretention Basin	bioretention area	3/13/2003	11/19/2009	Private		Low
7800	G	3542 Jasmine Crest	Bioretention Basin	bioretention area	3/13/2003	11/19/2009	Private		Low
7828	G	1200 Crestview Dr	Mechanical Filter	catch basin filter insert	11/13/2003	12/21/2006	Private		Medium
7828	G	1207 Crestview Dr	Mechanical Filter	catch basin filter insert	11/13/2003	12/21/2006	Private		Medium
7828	G	1216 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1208 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1200 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1223 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1219 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1207 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1945 Lake Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1223 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7847	G	2300 Eighth St	Infiltration Basin	filtration/desiltation pond	8/12/2003	7/23/2009	Private		Low
7852	G	3445 Via Monte Verde	Vegetated Swale	landscape area for BMP	1/1/2003	10/24/2005	Private		Medium
7852	G	3445 Via Monte Verde	Vegetated Swale	grass lined vegetation area	1/1/2003	10/24/2005	Private		Medium
7852	G	3411 Via Monte Verde	Vegetated Swale	grass lined vegation cleansing area	1/1/2003	10/24/2005	Private		Medium
7852	G	3411 Via Monte Verde	Vegetated Swale	grass lined vegetation area	1/1/2003	10/24/2005	Private		Medium
7852	G	3411 Via Monte Verde	Vegetated Swale	landscaped area for BMP	1/1/2003	10/24/2005	Private		Medium
7852	G	3430 Via Monte verde	Infiltration Basin	rip rap lined infiltration basin (does not conform to plan)	1/1/2003	10/24/2005	Private		Medium
7893	G	Christine Pl	Retention/Infiltration Vault	'Stormchamber' infiltration units (4)	unknown	6/7/2010	Private	2003-1457627	Medium
7893	G	Christine Pl	Mechanical Filter	Flogard Plus filter insert	unknown	6/7/2010	Private	2003-1457627	Medium
7893	G	Christine Pl	Mechanical Filter	Fflogard Plus filter insert	unknown	6/7/2010	Private	2003-1457627	Medium
9023	G	427 Bristol Ave	Pervious Pavement	pathway filtration	10/20/2004	10/5/2006	Private		Low
9034	G	1470 Summit Ave	Other	DG swale	12/21/2004	12/3/2007	Private		Medium
9034	G	1464 Summit Ave	Infiltration Basin	detention filtration basin	12/21/2004	12/3/2007	Private		Medium
9057	G	192 Pacific View Ln	Vegetated Swale	7.8 ft wide terraced treatment swale	1/26/2005	1/22/2007	Private		Medium
9071	G	3317 Poppy Hills Ln	Vegetated Swale	vegetated swale	11/9/2004	7/3/2006	Private	2004-0955312	Low
9071	G	3317 Poppy Hills Ln	Rock Swale	rock swale	11/9/2004	7/3/2006	Private	2004-0955312	Low
9134	G	2153 Whisper Wind Ln	Vegetated Swale	grass swale	11/23/2004	4/6/2006	Private		Low
9134	G	2153 Whisper Wind Ln	Infiltration Basin	rip-rap infiltration	11/23/2004	4/6/2006	Private		Low
9150	G	3113 Camino Del Rancho	Bioretention Basin	flat area for stormwater treatment covered with grass	3/24/2005	9/11/2007	Private		Medium
9150	G	3113 Camino Del Rancho	Rock Swale	Rock lined swale	3/24/2005	9/11/2007	Private		Medium
9150	G	3113 Camino Del Rancho	Rock Swale	rock lined swale	3/24/2005	9/11/2007	Private		Medium
9180	G	1610 Neptune Ave	Landscaped Area	landscaped area and planters	7/20/2006	5/21/2009	Private		Low
9253	G	701 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	703 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	719 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	721 N Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	717 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	715 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9262	G	904 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	904 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	904 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	904 Bracero Rd	Mechanical Filter	trench drain with skimmer box	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	890 Bracero Rd	Mechanical Filter	trench drain with skimmer box	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	890 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium

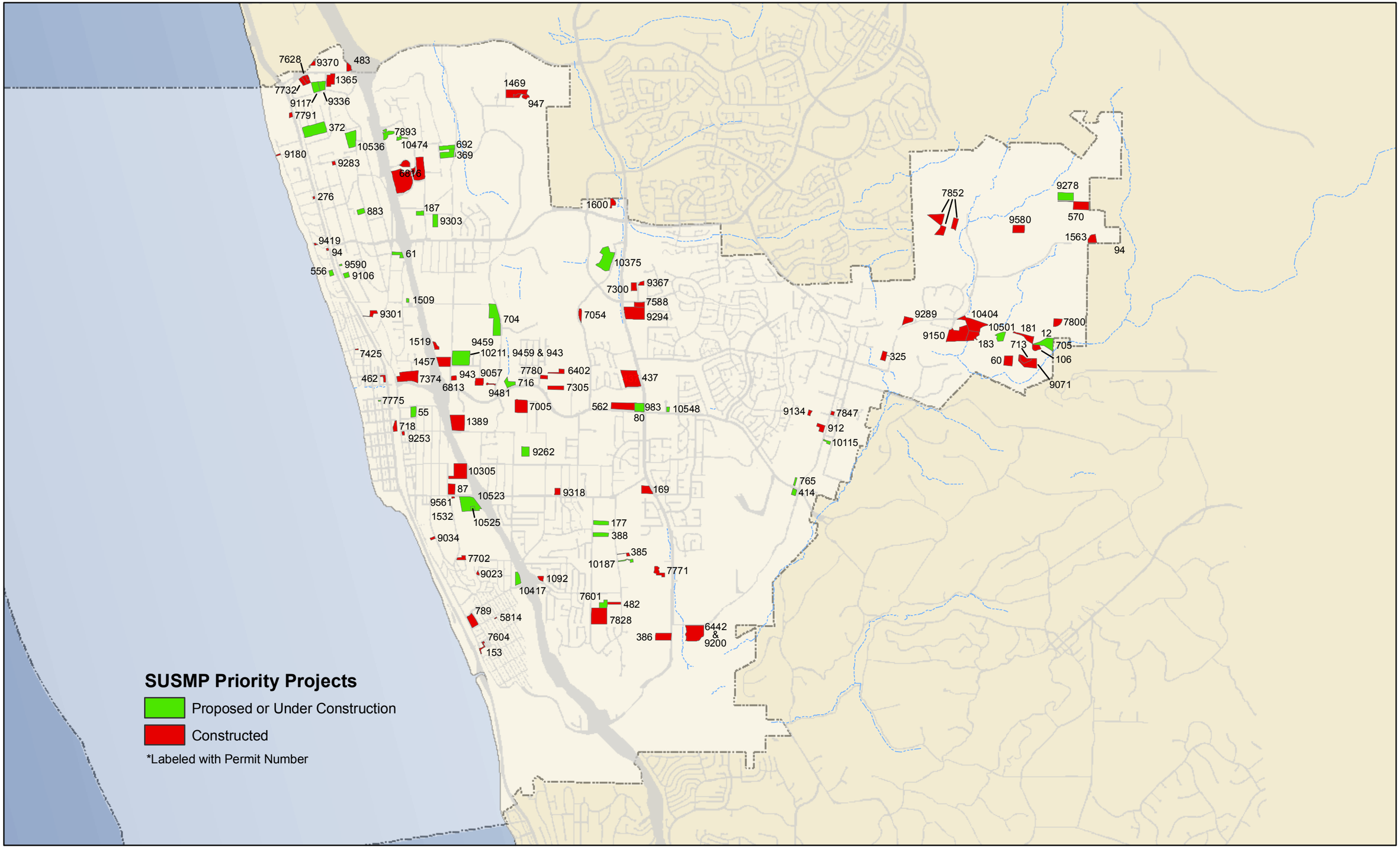
Note: All TC BMPs are located in the Carlsbad Watershed

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
9278	G	494 Latigo Row	Extended Detention Basin	detention area	12/27/2005	6/17/2010	Private		Medium
9278	G	490 Latigo Row	Extended Detention Basin	detention area	12/27/2005	6/17/2010	Private		Medium
9278	G	490, 494 Latigo Row	Turf Block Swale	turf block swale with gravel (no turf)	12/27/2005	6/17/2010	Private		Medium
9283	G	267 Sanford St & 1440 Hygeia Ave	Rock Swale	rock swale	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9283	G	267 Sanford St	Infiltration Basin	infiltration basin	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9283	G	1440 Hygeia Ave	Infiltration Basin	infiltration basin	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9283	G	265 Sanford St	Infiltration Basin	infiltration basin	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9289	G	2934 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2944 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2944 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2944 Lone Jack Rd	Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Rd	Vegetated Swale	turf reinforced mat drainage swale	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Rd	Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Rd	Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914, 2934 Lone Jack Rd	Vegetated Swale	turf reinforced mat drainage swale	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9294	G	477 N El Camino Real	Advanced Mechanical Filter	ADS water quality unit	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Vegetated Swale	grass-lined channel for BMP	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Advanced Mechanical Filter	ADS water quality unit	12/7/2005	12/3/2007	Private	2007-0114120	High
9301	G	187 Halcyon Rd	Landscaped Area	landscaped area for BMP	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9301	G	189 Halcyon Rd	Turf Block Swale	Grasscrete	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9301	G	187 Halcyon Rd	Vegetated Swale	grass lined ditch	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9301	G	187 Halcyon Rd	Vegetated Swale	grass lined ditch	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9301	G	189 Halcyon Rd	Landscaped Area	landscaped area for BMP	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9301	G	189 Halcyon Rd	Landscaped Area	landscaped area for BMP	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9303	G	869 Brittany Rd	Landscaped Area	landscaped area	6/7/2005	6/7/2010	Private	2005-0496885	Low
9303	G	869 Brittany Rd	Extended Detention Basin	40' +/- detention area	6/7/2005	6/7/2010	Private	2005-0496885	Low
9303	G	869, 875, 881, 887 Brittany Rd	Vegetated Swale	landscape filtration strip	6/7/2005	6/7/2010	Private	2005-0496885	Low
9318	G	1154 Evergreen Dr	Landscaped Area	landscape area BMP	8/16/2005	2/16/2007	Private		Medium
9318	G	1154 Evergreen Dr	Landscaped Area	2' wide grass pavement strip	8/16/2005	2/16/2007	Private		Medium
9318	G	1154, 1158 Evergreen Dr	Rock Swale	gravel swale (GravePave)	8/16/2005	2/16/2007	Private		Medium
9318	G	1158 Evergreen Dr	Vegetated Swale	2' wide grass pavement strip	8/16/2005	2/16/2007	Private		Medium
9318	G	1158 Evergreen Dr	Vegetated Swale	2' wide grass pavement swale	8/16/2005	2/16/2007	Private		Medium
9318	G	1160, 1164, 1168, 1172, 1169, 1165 Kava Ct	Vegetated Swale	vegetated swale	8/16/2005	2/16/2007	Private		Medium
9318	G	1176 & 1173 Kava Ct	Rock Swale	6.5 ft wide gravel swale w/ 3" river rock	8/16/2005	2/16/2007	Private		Medium
9318	G	1169 & 1165 Kava Ct	Rock Swale	gravel swale	8/16/2005	2/16/2007	Private		Medium
9318	G	1154 Evergreen Dr	Landscaped Area	2' wide grass pavement strip	8/16/2005	2/16/2007	Private		Medium
9367	G	781 Garden View Ct	Vegetated Swale	grass lined swale	7/10/2006	1/14/2009	Private		Medium
9367	G	781 Garden View Ct	Landscaped Area	landscape area for BMP	7/10/2006	1/14/2009	Private		Medium
9367	G	781 Garden View Ct	Landscaped Area	landscape area for BMP	7/10/2006	1/14/2009	Private		Medium
9370	G	406 La Costa Ave	Pervious Pavement	Orco block pavers	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	Other	4 ft diameter dual pump lift station	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	Vegetated Swale	4-ft wide grass swale	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	Other	4 ft X 4ft X 2.5 ft Jenson precast sump station	1/30/2006	8/14/2007	Private	2006-0071959	High
9419	G	871 Neptune Ave	Landscaped Area	landscaped area	8/30/2005	2/6/2008	Private		Low
9419	G	871 Neptune Ave	Turf Block Swale	Grasscrete grass block	8/30/2005	2/6/2008	Private		Low
9419	G	871 Neptune Ave	Landscaped Area	landscaped area	8/30/2005	2/6/2008	Private		Low
9419	G	871 Neptune Ave	Landscaped Area	landscaped area	8/30/2005	2/6/2008	Private		Low
9459	G	211 Saxony Rd	Infiltration Basin	landscaped area (detention basin)	6/12/2006	9/10/2007	Private - HOA		Medium
9459	G	211 Saxony Rd	Pervious Pavement	Grass Pave	6/12/2006	9/10/2007	Private - HOA		Medium
9481	I	545 Quail Point Ln	Advanced Mechanical Filter	StormFilter by Stormwater Management Inc.	5/17/2009	10/20/2010	Private	2007-0353916	Medium
9481	I	545 Quail Point Ln	Other	Stormgate	5/17/2009	10/20/2010	Private	2007-0353916	Medium
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	7/16/2010	Private	2007-0598500	Low

Note: All TC BMPs are located in the Carlsbad Watershed

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	7/16/2010	Private	2007-0598500	Low
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	7/16/2010	Private	2007-0598500	Low
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	7/16/2010	Private	2007-0598500	Low
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	7/16/2010	Private	2007-0598500	Low
9580	G	3451 Dove Hollow Ln	Dry Well	Dry Well Storm Water Retention	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
10187	G	1603 Crest Dr	Landscaped Area	turf area BMP	5/27/2009	4/13/2010	Private	2009-0280381	Low
10187	G	1603 Crest Dr	Rock Swale	2' wide BMP gravel/sand filter	5/27/2009	4/13/2010	Private	2009-0280381	Low
10305	G	354 Santa Fe Dr	Mechanical Filter	Fossil filter	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Vegetated Swale	Bioswale	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Extended Detention Basin	water quality basin	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Advanced Mechanical Filter	StormFilter	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Advanced Mechanical Filter	StormFilter	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Advanced Mechanical Filter	StormFilter	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Advanced Mechanical Filter	StormFilter	2/3/2010	5/18/2011	Private	2010-0516652	High
10404	SG	3211 Wildflower Valley Drive	Pervious Pavement	pervious pavers	6/23/2010	11/30/2010	Private	2010-0313801	Medium
10404	SG	3211 Wildflower Valley Drive	Media Filter	sand pit	6/23/2010	11/30/2010	Private	2010-0313801	Medium
10404	SG	3211 Wildflower Valley Drive	Rock Swale	gravel swale	6/23/2010	11/30/2010	Private	2010-0313801	Medium
10404	SG	3211 Wildflower Valley Drive	Media Filter	sand and gravel pit	6/23/2010	11/30/2010	Private	2010-0313801	Medium
10404	SG	3211 Wildflower Valley Drive	Media Filter	gravel pit	6/23/2010	11/30/2010	Private	2010-0313801	Medium

Note: All TC BMPs are located in the Carlsbad Watershed



Appendix A-2

SUSMP Priority Projects with Treatment Control BMPs

DISCLAIMER: This map should not be used for Engineering, Survey, or Site-Specific Analysis.
Every reasonable effort has been made to assure the accuracy of the data provided; nevertheless, some information may not be accurate. The City of Encinitas assumes no liability or responsibility arising from the use of or reliance upon this information.

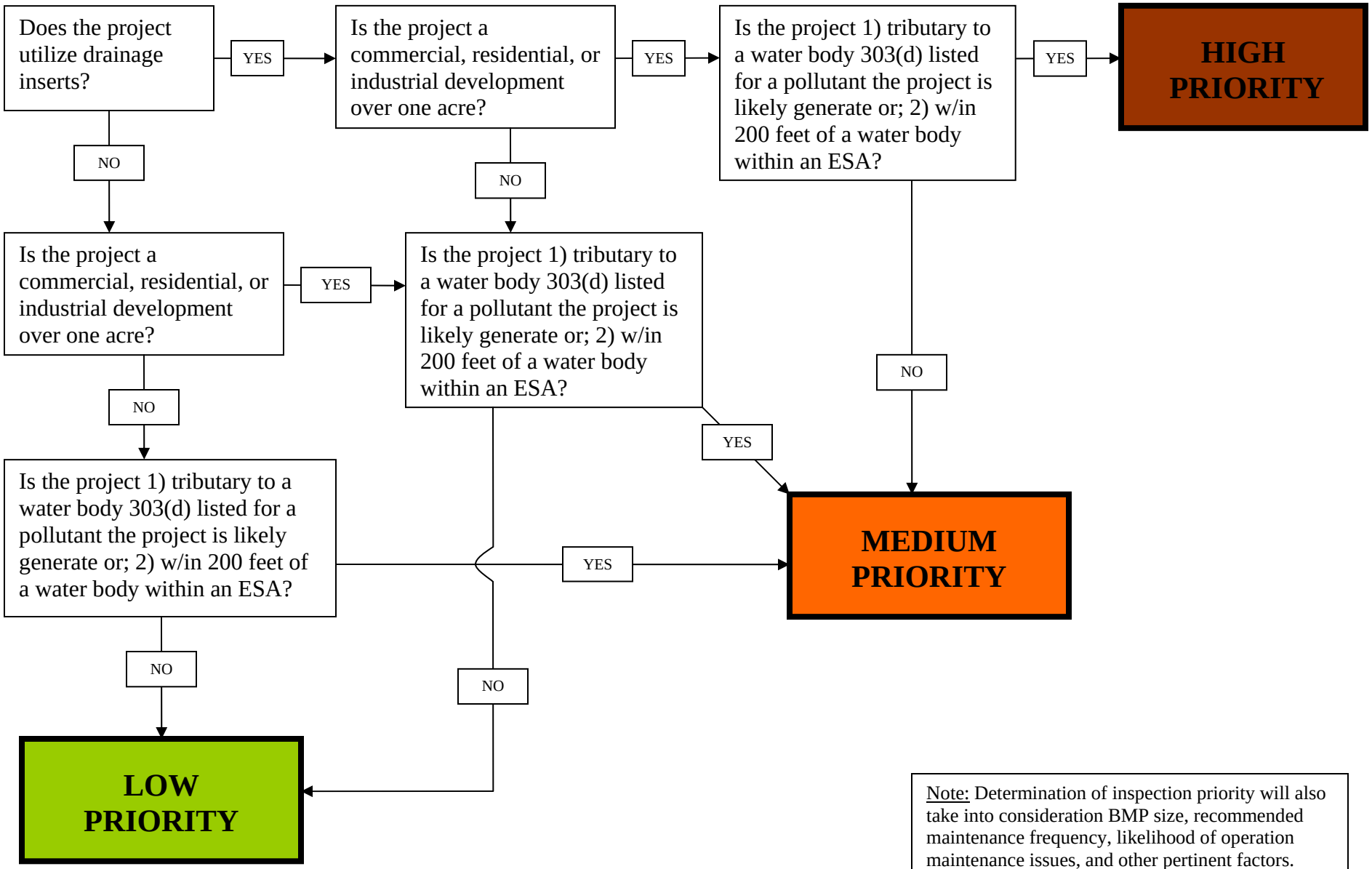
- Map Coordinates: Stateplane NAD83 Feet, CA Zone 6

N

0 6,300 Feet

1 inch = 3,700 feet

Treatment Control BMP Inspection Priority



Note: Determination of inspection priority will also take into consideration BMP size, recommended maintenance frequency, likelihood of operation maintenance issues, and other pertinent factors.

SAMPLE

Date: _____

City of Encinitas
Engineering Services Permits
505 South Vulcan Ave.
Encinitas, CA 92024

Re: **Engineer's Final Grading Certification for Project No. 99-001 TM and Grading Permit Number XXXX - G.**

The grading under permit number XXXX has been performed in substantial conformance with the approved grading plan or as shown on the attached 'As Graded' plan.

Final grading inspection has demonstrated that lot drainage conforms with the approved grading plan and that swales drain at a minimum of 1% to the street and/or an appropriate drainage system.

All the Low Impact Development, Source Control and Treatment Control Best Management Practices as shown on the drawing and required by the Best Management Practice Manual Part II were constructed and are operational, together with the required maintenance covenant(s).

Engineer of Record _____ (signed & sealed)

Dated _____

Verification by the Engineering Inspector of this fact is done by the Inspector's signature hereon and will take place only after the above is signed and stamped and will not relieve the Engineer of Record of the ultimate responsibility:

Engineering Inspector: _____

Dated:_____

The above information shall be on the Engineer of Record's letterhead and shall be signed and sealed by the Engineer of Record.

City of Encinitas

OFFICIAL CITY BUSINESS

Response Required By: 8/20/10

July 26, 2010

TO: *Owner Name*
Contact Person
Street Address
City, State, ZIP

RE: Treatment Control Best Management Practices (BMP) Operation & Maintenance Verification

Please find included with this letter property specific information and detailed instructions on how to fulfill your annual treatment control BMP operation and maintenance verification obligations.

As you may be aware, in an effort to improve the quality of runoff flowing into our storm drain system and out to the ocean and coastal lagoons, priority development projects within the City of Encinitas are required to construct treatment control BMP facilities to control and treat water runoff.

To ensure the long term effectiveness and efficiency of these facilities, the City of Encinitas, as required by the State Water Resources Control Board, must annually verify that these features are being properly managed and maintained by responsible property owners.

For more information regarding the Treatment Control BMP Operation and Maintenance Program, please refer to the enclosed brochure or call the City of Encinitas Clean Water Hotline at (760) 633-2787 for assistance. Your cooperation in this effort is greatly appreciated.

Sincerely,

Erik Steenblock
Clean Water Program Manager

CITY OF ENCINITAS Clean Water Program

Enclosures: BMP Operation and Maintenance Verification Instructions
Program Brochure

CITY OF ENCINITAS

Treatment Control BMP Operation & Maintenance Verification Instructions

REMINDER: Annual inspection and maintenance verification of Treatment Control BMP(s) located on your property is due no later than **August 20, 2010**

City of Encinitas records indicate that the treatment control BMP(s) on your property at **Insert Property Location here** include:

List BMPs here

To fulfill inspection and maintenance obligations, please complete the following steps:

1) **Visually inspect all Treatment Control BMPs** for signs of malfunction or disrepair (i.e. excessive sediment or debris, overgrown vegetation, restricted water flow).
2) **Maintain/repair any damage to the BMP(s)**. Necessary maintenance may include removing accumulated sediment, trash, or other debris; stabilizing eroded areas; replanting vegetation; trimming / mowing overgrown vegetation; or cleaning out closed or blocked inlets and outlets, etc.
4) **Take current photos of all BMPs on the property**.
5) **Complete the Operation and Maintenance Self-Verification Online Form** and submit photos and related maintenance documentation as necessary. The online form can be found at the following website: **http://cleanwaterBMP.cityofencinitas.org**. To access the form, enter your property identification number (PIN) in the field provided on the main webpage.

Your PIN is:	*Insert PIN here*

Annual inspection, routine maintenance, and effective operation of permanent treatment control BMPs are required per City of Encinitas Municipal Code (EMC) Section 20.08, the San Diego Municipal Stormwater Permit, as well as property related legal agreements and/or covenants. Please be advised that failure to complete annual inspection and maintenance activities and provide adequate verification information may constitute a violation of City ordinance (EMC Section 20.08) or breach of property related agreements or covenants.

If hardcopy submittal is preferred, a paper copy of the O & M Verification From may be picked up at City Hall (505 S Vulcan Ave), or please email npdesmail@cityofencinitas.org and an electronic copy of the O & M Verification Form will be emailed to you.

CITY OF ENCINITAS
Clean Water Program

City of Encinitas

OFFICIAL CITY BUSINESS

FINAL NOTICE

Response Required By: 9/30/10

September 2, 2010

TO: *Owner Name*
Contact Person
Street Address
City, State, ZIP

RE: Treatment Control Best Management Practices (BMP) Operation & Maintenance Verification

The intent of this letter is to inform you that your annual treatment control BMP operation and maintenance verification is **PAST DUE** as of August 20, 2010. In a letter dated July 26, 2010, the City of Encinitas requested submittal of documentation showing that you have completed your BMP evaluation and maintenance activities.

The City of Encinitas is extending you an additional opportunity to complete your BMP evaluation, conduct necessary maintenance activities, and submit the required self-verification information no later than September 30, 2010.

Please find included with this letter property specific information and detailed instructions on how to fulfill your annual treatment control BMP operation and maintenance verification obligations.

If you do not complete your self-verification obligations, City staff will be required to pursue formal inspection actions to assess the BMPs on your property. Inspections will consist of a site visit by City staff and documentation of BMP features consistent with the original grading permit or other approved property specific permits or plans. Formal inspection actions will take place beginning October 1, 2010.

Please be advised that failure to complete annual inspection and maintenance activities and provide adequate verification information constitutes a violation of City ordinance (EMC Section 20.08) or breach of property related agreements or covenants for which the City may opt to pursue further enforcement action.

For more information regarding the Treatment Control BMP Operation and Maintenance Program, please call the City of Encinitas Clean Water Hotline at (760) 633-2787 for assistance. Your cooperation in this effort is greatly appreciated.

Sincerely,

Erik Steenblock
Clean Water Program Manager

CITY OF ENCINITAS
Clean Water Program
ENGINEERING SERVICES

Enclosures: BMP Operation and Maintenance Verification Instructions

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

CITY OF ENCINITAS

Treatment Control BMP Operation & Maintenance Verification Instructions

PAST DUE NOTICE: If annual evaluation and maintenance verification of your Treatment Control BMPs is not completed by **Sept 30, 2010**, as required by State mandates, City staff will conduct an inspection of the BMPs on your property on or after October 1, 2010. Additionally, the City may opt to pursue further enforcement action in accordance with EMC Section 20.08.

City of Encinitas records indicate that the treatment control BMP(s) on your property at **Insert Property Location here** include:

List BMPs here

To fulfill inspection and maintenance obligations, please complete the following steps:

1) **Visually inspect all Treatment Control BMPs** for signs of malfunction or disrepair (i.e. excessive sediment or debris, overgrown vegetation, restricted water flow).
2) **Maintain/repair any damage to the BMP(s)**. Necessary maintenance may include removing accumulated sediment, trash, or other debris; stabilizing eroded areas; replanting vegetation; trimming / mowing overgrown vegetation; or cleaning out closed or blocked inlets and outlets, etc.
4) **Take current photos of all BMPs on the property**.
5) **Complete the Operation and Maintenance Self-Verification Online Form** and submit photos and related maintenance documentation as necessary. The online form can be found at the following website: **http://cleanwaterBMP.cityofencinitas.org**. To access the form, enter your property identification number (PIN) in the field provided on the main webpage.

Your PIN is:	*Insert PIN here*

Annual inspection, routine maintenance, and effective operation of permanent treatment control BMPs are required per City of Encinitas Municipal Code (EMC) Section 20.08, the San Diego Municipal Stormwater Permit, as well as property related legal agreements and/or covenants. Please be advised that failure to complete annual inspection and maintenance activities and provide adequate verification information may constitute a violation of City ordinance (EMC Section 20.08) or breach of property related agreements or covenants.

If hardcopy submittal is preferred, a paper copy of the O & M Verification From may be picked up at City Hall (505 S Vulcan Ave), or please email npdesmail@cityofencinitas.org and an electronic copy of the O & M Verification Form will be emailed to you.

CITY OF ENCINITAS
Clean Water Program
ENGINEERING SERVICES

Appendix A-6

Frequently Asked Questions

1. Why does the City of Encinitas require that Treatment Control BMPs be maintained?

Proper operation and regular maintenance of permanent stormwater treatment control BMPs ensures that the facility reduces the amount of pollutants that end up in our creeks, lagoons, and beaches. These BMPs help to improve water quality and minimize human and environmental health risks. The San Diego Region Municipal Stormwater Permit (issued by the San Diego Regional Water Quality Control (RWQCB)) requires that the City annually verify that treatment control BMPs installed on private property are adequately maintained.

2. What should I do if I am unsure how to complete my self-inspection form or cannot locate the treatment control BMPs on my property?

Contact Clean Water Program staff as soon as possible. We can provide assistance in understanding the self-verification form, identifying the location of BMP(s) on your property, and determining operation and maintenance needs of your BMP(s). Staff can be reached via phone: 760-633-2787, or email: cleanwater@cityofencinitas.org

3. What happens during the City's inspection of Treatment Control BMPs on my property?

If requested or as required due to repudiation, a City inspector will visit the property to validate the existence, proper maintenance, and function of treatment control BMPs. Inspection actions will be documented with an inspection report form and photos of specific BMPs. If access is limited or located on private property, the City inspector will call the responsible party to schedule an inspection.

FAQs continued…

4. What happens if I don't certify that my Treatment Control BMP(s) have been maintained?

The City is responsible for ensuring the proper maintenance and function of treatment facilities. Failure of a responsible party to provide adequate inspection and maintenance information, upon request, may constitute a violation of the City ordinance as well as property related agreements or covenants. The RWQCB requires the City to verify the proper function of treatment control BMPs through the Municipal Stormwater Permit. It is the goal of the City to minimize the burden on property owners to fulfill these requirements. The Treatment Control BMP Self Verification online form has been developed to provide property owners with a simple mechanism to validate the proper maintenance and function of these facilities, and to help the City meet State mandated requirements.

City of Encinitas
Clean Water Program
505 S. Vulcan Avenue
Encinitas, CA 92024

For questions relating to
Treatment Control BMPs,
please call: 760-633-2787
or e-mail: cleanwater@cityofencinitas.org

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CITY OF ENCINITAS
Clean Water Program
ENGINEERING SERVICES

Operation and Maintenance Guide

for your

Treatment Control Best Management Practices (BMPs)



Thanks for helping us keep our creeks, lagoons, and ocean clean!

Appendix A-6

What is a Treatment Control BMP?

Treatment Control BMPs are drainage devices, structures, or areas designed to remove pollutants from storm water runoff, or minimize the quantity of runoff ultimately discharged from a development site. These facilities are required to be incorporated into permitted development or redevelopment projects and serve a functional purpose to improve the quality of water that flows to our local creeks, lagoons, and beaches. They are also frequently referred to as Stormwater Best Management Practices or BMPs.

The following BMPs are commonly incorporated into development projects throughout the City of Encinitas:

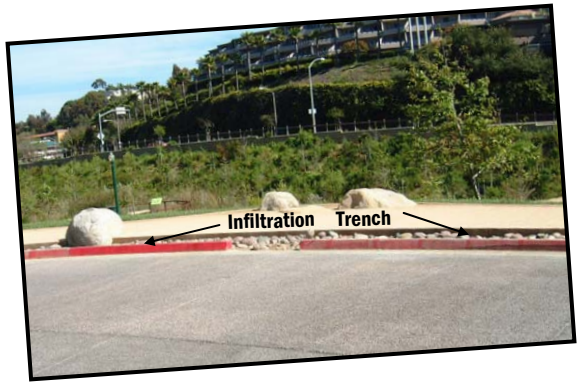
Vegetated Swales / Grassy Swales are open, shallow channels or depressions with vegetation or grass covering the side slopes and bottom that collect, infiltrate, and slowly convey runoff water. Rock lined swales are also commonly used.



Bioretention Areas consist of a planted or vegetated depression area designed to pond during a rain event. It is common to find multiple bioretention areas located throughout a development area.



Infiltration Trenches or **Basins** temporarily store runoff in shallow basins or linear depressions lined with sandy soil or gravel to enhance infiltration of water into the ground.



Storm Drain Filter Inserts are manufactured filters or fabric placed in a storm drain inlet to remove sediment, debris, oil, or other pollutants.



Other BMPs include Rock-Lined Swales, Terraced Swales, Detention Basins, Subsurface Infiltration Systems, Constructed Wetlands, Media Filters, Storm Water Storage Systems, and Vortex Separators.

Please note that each of the BMPs may vary in design size, shape, or materials from the descriptions above. City staff is available to help you determine the location of BMPs located on your property.

For more information on Treatment Control BMPs, refer to the City's Storm Water Best Management Practices Manual, Part II which can be accessed via the Clean Water Program webpage:

http://cwp.ci.encinitas.ca.us

How to locate Treatment Control BMPs on your property:

1. Refer to your approved grading or improvement plans. The plans will show the location of Treatment Control BMPs.
2. Walk your property to look for defined drainage areas such as channels, depressions, or basins.
3. Typical treatment control BMPs may look similar to traditional landscaped areas. Look for areas that have been graded in a concave, swale, or linear shape to capture and infiltrate storm water.
4. Structural treatment control devices such as an inlet filter may be located within a curb inlet or underground. *Please contact the City of Encinitas if you have a structural control located on your property with limited access.

Minimum Operation and Maintenance Requirements:

As stated on approved grading or improvement plans and in the City's Stormwater Management and Discharge Control Ordinance (Municipal Code Chapter 20.08), stormwater treatment control BMPs are required to be maintained in perpetuity by a designated responsible party. The responsible party is most commonly the property owner or a Home Owners' Association (HOA).

Minimum Operation and Maintenance tasks:

- ☑ On an annual basis, or as needed, visually inspect all Treatment Controls for signs of malfunction or disrepair.
- ☑ Maintain/repair any damage to the BMP. Necessary maintenance may include removing accumulated sediment, stabilizing eroded areas, replanting dead vegetation, trimming / mowing overgrown vegetation, cleaning out closed or blocked inlets and outlets, etc.
- ☑ Remove any accumulated trash and debris.
- ☑ Take photos of all BMPs on the property.
- ☑ Complete the online Operation and Maintenance Self-Verification Form, if requested, or provide access to Clean Water Program staff to conduct a BMP inspection.

City of Encinitas

CITY OF ENCINITAS
Clean Water Program

Welcome to the City of Encinitas Stormwater Treatment Control BMP Annual Operation and Maintenance Verification Website

This web portal will allow you to:

- Review treatment control BMP information associated with your property.
- Document your required annual BMP evaluation and Maintenance activities.

Login below to complete the **Operation and Maintenance Self-Verification Form** or to view your BMP and property related information:







PIN #:

Login

Background:

Development projects constructed within the City of Encinitas are commonly required to construct stormwater treatment BMPs (Best Management Practices). The treatment control BMPs provide a critical function for downstream creek and ocean water quality. Proper operation and routine maintenance of these BMPs is necessary to achieve maximum water quality benefits.

Annual evaluation, maintenance, and operation of permanent treatment control BMPs are required per City of Encinitas Municipal Code (EMC) Section 20.08, the San Diego Municipal Stormwater Permit, as well as property related legal agreements.

To fulfill evaluation and maintenance obligations, please complete the following steps:

- Visually inspect all Treatment Control BMP(s).
- Maintain/repair any damage to the BMP(s).
- Take photos of all BMP(s) and document any third-party maintenance.
- Complete the **Operation and Maintenance Self-Verification Form** by entering your "PIN" in the box above. Your PIN can be found on the notification letter you received in the mail.

For more detailed instructions review the Operation & Maintenance Brochure.

ALL EVALUATIONS, MAINTENANCE ACTVITIES, AND ONLINE VERIFICATION MUST BE COMPLETED NO LATER THAN:
AUGUST 31, 2011

Have Questions? Visit our Frequently Asked Questions Page.

If you have any additional questions regarding the Treatment Control BMP Operation and Maintenance Program, please call the Clean Water Hotline at 760-633-2787 or email cleanwater@cityofencinitas.org for assistance.

If you are having trouble using this website to submit your Self-Verification documentation, please contact the City of Encinitas webmaster at: 760-633-2668 or via email at: webmaster@cityofencinitas.org for assistance.

Please be advised that failure to complete annual evaluation and maintenance activities and provide adequate verification information may constitute a violation of EMC Section 20.08 or breach of property related covenants.

Reference Tools

View the Operation & Maintenance Brochure

Surfrider's Ocean Friendly Gardens Program

City's Municipal Stormwater Code

San Diego Stormwater Permit

Phone: (760) 633-2600 | TDD: (760) 633-2700 | Fax: (760) 633-2627 | 505 S. Vulcan Avenue, Encinitas, CA 92024-3633
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City of Encinitas

CITY OF ENCINITAS Clean Water Program

Stormwater Treatment Control Best Management Practices Operation and Maintenance Self Verification

This online form will allow you to **review** the property and contact information related to the Treatment Control BMPs located on your property and **verify** that all BMP evaluation and maintenance activities have been completed as necessary.

REMINDER: Annual evaluation and maintenance verification of Treatment Control BMP(s) located on your property is due no later than August 31, 2011.

Property Information

[redacted]
Encinitas, CA 92024
Permit 1563-G

Treatment Control BMPs on Your Property

2 Grassy / Vegetated Swale

Step 1 — Review / Update Contact Information

[redacted]
Encinitas, CA 92024
[redacted]
No Email on file

If the above information is incorrect or needs to be updated, please provide current information in the boxes below:

Name:

Street:

City:

State:

ZIP: *Email:

Phone:

* If you would like email confirmation that y our submittal has been received, a valid email address must be provided.

Step 2 Self-Verification of BMPs

The following section should be completed based on the results of your evaluation of the treatment control BMP(s) on your property. If any maintenance or repair of the BMP(s) was conducted as a result of the evaluation, describe the work completed in the comment box provided below.

Date Evaluated: (mm/dd/yyyy)

Self Evaluation Results (check the box that applies):

- (●) A. All BMP(s) were evaluated and are in good working order. No maintenance required.
- ( ) B. All BMP(s) were evaluated. All or some BMP(s) required maintenance. Describe below.
- ( ) C. Other results, describe below

If you checked B or C please describe maintenance conducted or other results below

If you checked B or C, please indicate the date maintenance was completed below.

Maintenance Date: (mm/dd/yyyy)

Step 3 Upload Photos

Supporting photographic documentation of each BMP is required to be submitted along with your Self-Verification. Photos should be taken during your evaluation of the BMPs or after completion of any maintenance activities. Upload current photos of each of the BMPs on your property using the boxes provided below. If you have more than five photos, submit any additional photos to the Clean Water Program via email: cleanwater@cityofencinitas.org Please note that email attachments cannot be larger than 5 MB.

Step 4 Upload Maintenance Documentation

If a third-party was hired to complete your annual BMP evaluation and maintenance activities, provide documentation showing that the work was completed. Documentation may include receipt for services or invoices which detail the work completed. Documentation must be in PDF or JPG format. If you have more than three documents to upload, or documents that are not in PDF or JPG format, provide them to the Clean Water Program via email: cleanwater@cityofencinitas.org Please note that email attachments cannot be larger than 5 MB.

Step 5 **Certification**

By checking the box below, you are certifying that all the information you have entered in Steps 1 – 3 above is true and correct to the best of your knowledge, that all annually required treatment control BMP evaluation and maintenance activities have been satisfactorily completed, and that all treatment control BMPs are in good working order.

☐ "I hereby certify that all treatment control BMPs on my property were evaluated, maintained, and repaired as necessary and are in good working order."

Submit

For questions relating to Treatment Control BMPs, please call: 760-633-2787 or e-mail: cleanwater@cityofencinitas.org

If you are having trouble using this website to submit your Self-Verification documentation, please contact the City of Encinitas webmaster at 760-633-2668 or via email at webmaster@cityofencinitas.org

Phone: (760) 633-2600 | TDD: (760) 633-2700 | Fax: (760) 633-2627 | 505 S. Vulcan Avenue, Encinitas, CA 92024-3633
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Permit No.	Permit Type	Location	Inspection Type	Inspection Date	Inspection Results and Findings	Maintenance Conducted	City Action
55	G	540 Cornish Dr	City Inspection	7/30/2010	grass on south swale is dead	landscape crews regraded, placed erosion control blanket and reseed swales	required maintenance
60	G	3275 Poppy Hills Ln	Self-Verification	9/25/2010	all BMPs in good condition	none necessary	information validated
61	CN	801 Orpheus Ave	City Inspection	10/27/2010	all BMPs in good condition	none necessary	inspection
87	G	354 Santa Fe Dr	City Inspection	6/16/2010	filter inserts need maintenance	filter inserts cleaned	required maintenance
106	G	3358 Wildflower Valley Dr	Self-Verification	8/10/2010	all BMPs in good condition	none necessary	information validated
153	I	111 Chesterfield Dr	Self-Verification	9/8/2010	all BMPs in good condition		information validated
169	G	510 S El Camino Real	Self-Verification	8/6/2010	all BMPs in good condition	none necessary	information validated
181	G	3342 Wildflower Valley Dr	Both	none	non-responsive owner		no response to self-verification request; City inspection attempted, no response; placed on inspection list for FY 11-12
183	G	3234 Olivenhain Farms Rd	Self-Verification	9/15/2010	all BMPs in good condition	none necessary	information validated
276	G	1222 N Coast Highway 101	City Inspection	10/29/2010	all BMPs in good condition	none necessary	inspection
385	G	1555 Crest Dr	Both	4/25/2011	all BMPs in good condition	none necessary	self-verification not received, City inspection conducted
386	G	3535 Manchester Ave	City Inspection	10/14/2010	all BMPs in good condition	none necessary	inspection
414	G	4455 Manchester Ave	City Inspection	10/27/2010	all BMPs in good condition	none necessary	inspection
437	G	235 La Costa Ave	Both	6/21/2011	all BMPs in good condition	none necessary	self-verification not received, City inspection conducted
462	G	70 N Coast Hwy 101	City Inspection	7/30/2010	maintenance records required for interceptor, dry wells, mechanical filter	3rd party inspected, cleaned facilities' as needed	directed to inspect and maintain underground facilities as needed
462	G	90 N Coast Highway 101	City Inspection	10/11/2010	all BMPs in good condition	none necessary	inspection
473	G	204 N El Camino Real	Self-Verification	4/14/2010	1 vortex separator required cleaning	vortex separator cleaned	information validated
482	G	1864 Crest Dr	Self-Verification	8/10/2010	all BMPs in good condition	none necessary	information validated
483	G	540 La Costa Ave	City Inspection	7/22/2010	all BMPs in good condition	none necessary	inspection
562	G	1302 Encinitas Blvd	City Inspection	6/29/2010	Revegetate swale and irrigate to 70% coverage; clean and replace filter medium	Revegetated and cleaned/replaced filter medium	required maintenance
570	G	489 Latigo Row	City Inspection	6/30/2010	all BMPs in good condition	none necessary	inspection

Permit No.	Permit Type	Location	Inspection Type	Inspection Date	Inspection Results and Findings	Maintenance Conducted	City Action
704	G	300 Quail Gardens Dr	Self-Verification	8/9/2010	all BMPs in good condition	none necessary	information validated
705	G	3354 Wildflower Valley Dr	Self-Verification	7/28/2010	all BMPs in good condition	none necessary	information validated
713	G	3003 Wildflower Dr	Self-Verification	8/20/2010	all BMPs in good condition	none necessary	information validated
789	G	2005 San Elijo Ave	Self-Verification	12/1/2010	pervious pavement steam cleaned		Self-verification not received, contacted on several occasions requesting maintenance verification and/or access for City Inspection; placed on inspection list for FY 11-12
912	G	416 Rancho Santa Fe Rd	City Inspection	7/30/2010	all BMPs in good condition	none necessary	inspection
943	G	211 Saxony Rd	City Inspection	7/22/2010	all BMPs in good condition	none necessary	inspection
983	G	1320 Encinitas Blvd	City Inspection	10/26/2010	all BMPs in good condition	none necessary	inspection
1092	EBP	820 Birmingham Dr	Self-Verification	8/19/2010	all BMPs in good condition	none necessary	information validated
1365	G	310 Hana Ct	Self-Verification	7/29/2010	all BMPs in good condition	none necessary	information validated
1365	G	311 Hana Ct	Self-Verification	9/12/2010	all BMPs in good condition	none necessary	information validated
1365	G	314 Hana Ct	Self-Verification	8/12/2010	all BMPs in good condition	none necessary	information validated
1365	G	315 Hana Ct	City Inspection	1/31/2011	all BMPs in good condition	none necessary	inspection
1365	G	318 Hana Ct	Self-Verification	8/1/2010	all BMPs in good condition	none necessary	information validated
1365	G	319 Hana Ct	Self-Verification	9/2/2010	all BMPs in good condition	none necessary	information validated
1365	G	323 Hana Ct	Self-Verification	7/27/2010	all BMPs in good condition	none necessary	information validated
1365	G	327 Hana Ct	Self-Verification	9/15/2010	all BMPs in good condition	none necessary	information validated
1389	G	302 Requeza St	City Inspection	10/27/2010	all BMPs in good condition	none necessary	inspection
1469	G	1414 Bella Azul Ct	Self-Verification	7/27/2010	all BMPs in good condition	none necessary	information validated
1469	G	1428 Bella Azul Ct	Self-Verification	8/20/2010	all BMPs in good condition	none necessary	information validated
1519	G	200 Saxony Rd	City Inspection	7/30/2010	all BMPs in good condition	none necessary	inspection
1532	G	1316 Summit Ave	Self-Verification		non-responsive owner		property vacant. no address forwarding available. no further action possible.
1532	G	1318 Summit Ave	Self-Verification	8/17/2010	all BMPs in good condition	none necessary	information validated
1532	G	1320 Summit Ave	Self-Verification	9/16/2010	all BMPs in good condition	none necessary	information validated
1563	G	3701 Fortuna Ranch Rd	Self-Verification	7/27/2010	all BMPs in good condition	vegetated swale converted to rock swale	referred to engineer for review
5814	G	2112 Oxford Ave	Self-Verification	8/20/2010	all BMPs in good condition	none necessary	information validated

Permit No.	Permit Type	Location	Inspection Type	Inspection Date	Inspection Results and Findings	Maintenance Conducted	City Action
6402	G	311 Princehouse Ln	Self-Verification	9/6/2010	all BMPs in good condition		information validated
6442	G	3616 Manchester Ave	Both	4/11/2011	sand/oil interceptors require sediment removal	Maintenance Plan developed; maintenance conducted by on-site staff.	Maintenance plan reviewed and approved, site inspected
6813	G	155 Saxony Rd	City Inspection	6/14/2010	all BMPs in good condition	none necessary	inspection
7005	G	509 Ocean Bluff Way	Self-Verification	8/24/2010	all BMPs in good condition	none necessary	information validated
7005	G	510 Camino De Orchidia	Self-Verification	9/1/2010	yard being re-landscaped		review building/grading permits
7005	G	517 Ocean Bluff Way	Self-Verification	9/20/2010	all BMPS in good condition	none necessary	information validated
7005	G	518 Camino De Orchidia	Self-Verification	8/14/2010	all BMPs in good condition	none necessary	information validated
7005	G	521 Ocean Bluff Way	Self-Verification	9/22/2010	all BMPs in good condition	none necessary	information validated
7005	G	525 Ocean Bluff Way	Self-Verification	9/11/2010	all BMPs in good condition	none necessary	information validated
7005	G	526 Camino De Orchidia	Self-Verification	9/8/2010	all BMPs in good condition	none necessary	information validated
7005	G	532 Camino De Orchidia	Both	none	unable to conduct inspection		Self-verification not received, contacted on several occasions requesting maintenance verification and/or access for City Inspection; placed on inspection list for FY 11-12
7005	G	558 Camino De Orchidia	Self-Verification	8/18/2010	all BMPs in good condition	none necessary	information validated
7054	G	645 Via Cantebria	City Inspection	3/30/2011	all BMPs in good condition	none necessary	inspection
7300	G	760 Garden View Ct	Self-Verification	10/2/2010	all BMPs in good condition	none necessary	information validated
7305	G	131 Princehouse Ln	Self-Verification	10/5/2010	all BMPs in good condition	none necessary	information validated
7374	I	N Vulcan Ave and Encinitas Blvd	City Inspection	7/30/2010	all BMPs in good condition	none necessary	inspection
7588	G	1200 Garden View Rd	Both	3/23/2011	sand/oil interceptor and filter inserts require maintenance	maintenance required in FY 11-12 prior to rainy season	Self Verification not received, City inspection conducted
7628	G	199 La Costa Ave	Both	6/21/2011	all BMPs in good condition	none necessary	Self Verification not received, City inspection conducted
7628	G	207 La Costa Ave	Both	6/21/2011	all BMPs in good condition	none necessary	Self Verification not received, City inspection conducted
7628	G	215 La Costa Ave	Both	6/21/2011	all BMPs in good condition	none necessary	Self Verification not received, City inspection conducted
7628	G	223 La Costa Ave	Self-Verification	7/28/2010	all BMPs in good condition	none necessary	information validated

Permit No.	Permit Type	Location	Inspection Type	Inspection Date	Inspection Results and Findings	Maintenance Conducted	City Action
7702	G	301 Chopin Way	Both	none	unable to conduct inspection		Self-verification not received, contacted on several occasions requesting maintenance verification and/or access for City Inspection; placed on inspection list for FY 11-12
7702	G	301 Chopin Way	Self-Verification	8/21/2010	all BMPs in good condition	none necessary	information validated
7702	G	315 Chopin Way	Both	none	unable to conduct inspection		Self-verification not received, contacted on several occasions requesting maintenance verification and/or access for City Inspection; placed on inspection list for FY 11-12
7702	G	322 Chopin Way	Both	none	unable to conduct inspection		Self-verification not received, contacted on several occasions requesting maintenance verification and/or access for City Inspection; placed on inspection list for FY 11-12
7702	G	329 Chopin Way	Self-Verification	8/18/2010	all BMPs in good condition	none necessary	information validated
7702	G	336 Chopin Way	Self-Verification	8/15/2010	all BMPs in good condition	none necessary	information validated
7732	G	175 La Costa Ave	City Inspection	7/30/2010	all BMPs in good condition	none necessary	inspection
7732	G	183 La Costa Ave	City Inspection	none	unable to conduct inspection		several attempts, gated home
7732	G	191 La Costa Ave	City Inspection	none	unable to conduct inspection		several attempts, gated home
7771	G	1550 S El Camino Real	Self-Verification	8/19/2010	all BMPs in good condition	none necessary	information validated
7780	G	121 Rosebay Dr	Self-Verification	8/5/2010	all BMPs in good condition	none necessary	information validated
7791	G	1766 N Coast Highway 101	City Inspection	10/28/2010	Interceptor needs inspection	3rd party inspected 11/1/2010	inspection
7800	G	3542 Jasmine Crest	Both	8/3/2010	all BMPs in good condition	none necessary	Self Verification not received, City inspection conducted
7828	G	1200 Crestview Dr	City Inspection	10/11/2010	all BMPs in good condition	none necessary	inspection
7828	G	1207 Crestview Dr	City Inspection	10/11/2010	all BMPs in good condition	none necessary	inspection
7828	G	1208 Crestview Dr	City Inspection	10/11/2010	all BMPs in good condition	none necessary	inspection
7828	G	1216 Crestview Dr	City Inspection	10/11/2010	all BMPs in good condition	none necessary	inspection
7828	G	1219 Crestview Dr	City Inspection	10/11/2010	all BMPs in good condition	none necessary	inspection

Permit No.	Permit Type	Location	Inspection Type	Inspection Date	Inspection Results and Findings	Maintenance Conducted	City Action
7828	G	1223 Crestview Dr	City Inspection	none	unable to conduct inspection		Made several attempts to contact. For sale sign in front. Possible foreclosure.
7828	G	1945 Lake Dr	City Inspection	10/11/2010	all BMPs in good condition	none necessary	inspection
7847	G	2300 8th St	Self-Verification	9/6/2010	all BMPs in good condition	none necessary	information validated
7852	G	3411 Via Monte Verde	Self-Verification	9/13/2010	all BMPs in good condition	none necessary	information validated
7852	G	3430 Via Monte Verde	Self-Verification	8/15/2010	all BMPs in good condition	none necessary	information validated
7852	G	3445 Via Monte Verde	Both	none	unable to conduct inspection		Self-verification not received, contacted on several occasions requesting maintenance verification and/or access for City Inspection; placed on inspection list for FY 11-12
7893	G	1502 Christine Place	City Inspection	10/13/2010	all BMPs in good condition		Maintenance records requested
9023	G	427 Bristol Ave	Self-Verification	9/3/2010	all BMPs in good condition		Photo shows BMP in construction. Need to see finished BMP in FY 11-12.
9034	G	1462 Summit Ave	Self-Verification	9/17/2010	all BMPs in good condition	none necessary	information validated
9034	G	1464 Summit Ave	Self-Verification	9/7/2010	all BMPs in good condition	none necessary	information validated
9034	G	1470 Summit Ave	Both	4/25/2011	all BMPs in good condition	none necessary	Self-verification not received, City inspection conducted
9057	G	192 Pacific View Ln	City Inspection	12/20/2010	all BMPs in good condition	none necessary	inspection
9071	G	3317 Poppy Hills Ln	Both	none	non-responsive owner		place on inspection list for FY 11-12
9134	G	2153 Whisper Wind Ln	Self-Verification	8/7/2010	all BMPs in good condition	none necessary	information validated
9150	G	3113 Camino Del Rancho	Self-Verification	8/5/2010	all BMPs in good condition	none necessary	information validated
9180	G	1610 Neptune Ave	Self-Verification	8/20/2010	all BMPs in good condition	none necessary	information validated
9253	G	701 S Vulcan Ave	Self-Verification	8/17/2010	all BMPs in good condition	none necessary	information validated
9253	G	703 S Vulcan Ave	Self-Verification	8/31/2010	all BMPs in good condition	none necessary	information validated
9253	G	715 S Vulcan Ave	City Inspection	1/31/2011	all BMPs in good condition	none necessary	inspection
9253	G	717 S Vulcan Ave	City Inspection	1/31/2011	all BMPs in good condition	none necessary	inspection
9253	G	719 S Vulcan Ave	City Inspection	1/31/2011	all BMPs in good condition	none necessary	inspection
9253	G	721 S Vulcan Ave	Self-Verification	9/22/2010	all BMPs in good condition	none necessary	information validated
9278	G	490 Latigo Row	Self-Verification	8/2/2010	all BMPs in good condition	none necessary	information validated

Permit No.	Permit Type	Location	Inspection Type	Inspection Date	Inspection Results and Findings	Maintenance Conducted	City Action
9283	G	1440 Hygeia Avenue	Self-Verification	12/31/2010	all BMPs in good condition	none necessary	information validated
9283	G	265 Sanford St	Both	4/25/2011	all BMPs in good condition	none necessary	Self-verification not received, City inspection conducted, changed mailing address to property address
9283	G	267 Sanford Street	Self-Verification	8/6/2010	all BMPs in good condition	none necessary	information validated
9289	G	2914 Lone Jack Rd	Both	4/26/2011	all BMPs in good condition	none necessary	Self Verification not received, City inspection conducted
9289	G	2932 Lone Jack Rd	Self-Verification	9/24/2010	all BMPs in good condition	none necessary	information validated
9289	G	2934 Lone Jack Rd	Self-Verification	9/7/2010	all BMPs in good condition	none necessary	information validated
9289	G	2944 Lone Jack Rd	Self-Verification	8/7/2010	all BMPs in good condition	none necessary	information validated
9294	G	477 N El Camino Real	City Inspection	10/13/2010	all BMPs in good condition	none necessary	inspection
9301	G	187 Halcyon Rd	Self-Verification	8/10/2010	all BMPs in good condition	none necessary	information validated
9301	G	189 Halcyon Rd	Self-Verification	9/1/2010	all BMPs in good condition	none necessary	information validated
9303	G	869 Brittany Ave	Self-Verification	9/10/2010	all BMPs in good condition	none necessary	information validated
9303	G	887 Brittany Ave	Self-Verification	10/8/2010	all BMPs in good condition	none necessary	BMP in place but appears to be modified w/ palm trees. OK for 2010, needs city inspection in 2011.
9318	G	1154 Evergreen Dr	Self-Verification	8/19/2010	all BMPs in good condition	none necessary	information validated
9318	G	1158 Evergreen Dr	Self-Verification	8/17/2010	all BMPs in good condition	none necessary	information validated
9318	G	1160 Kava Ct	Self-Verification	8/1/2010	all BMPs in good condition	none necessary	information validated
9318	G	1164 Kava Ct	Self-Verification	8/5/2010	all BMPs in good condition	none necessary	information validated
9318	G	1165 Kava Ct	Self-Verification	8/11/2010	all BMPs in good condition	none necessary	information validated
9318	G	1168 Kava Ct	City Inspection	1/31/2011	all BMPs in good condition	none necessary	inspection
9318	G	1169 Kava Ct	City Inspection	1/31/2011	all BMPs in good condition	none necessary	inspection
9318	G	1172 Kava Ct	Self-Verification	9/23/2010	all BMPs in good condition	none necessary	information validated
9318	G	1173 Kava Ct	Self-Verification	8/18/2010	all BMPs in good condition	none necessary	information validated
9318	G	1176 Kava Ct	Self-Verification	8/18/2010	all BMPs in good condition	none necessary	information validated
9367	G	781 Garden View Ct	Both	3/30/2011	all BMPs in good condition	none necessary	Self Verification not received, City inspection conducted
9370	G	406 La Costa Ave	City Inspection	8/2/2010	all BMPs in good condition	none necessary	inspection
9419	G	871 Neptune Ave	Self-Verification	8/10/2010	all BMPs in good condition	none necessary	information validated
9561	G	303 Santa Fe Dr	Self-Verification	10/6/2010	all BMPs in good condition	none necessary	information validated

Permit No.	Permit Type	Location	Inspection Type	Inspection Date	Inspection Results and Findings	Maintenance Conducted	City Action
9580	G	3451 Dove Hollow Road	Both	8/9/2010	all BMPs in good condition	none necessary	resident requested city inspection. City inspection conducted.
10187	G	1603 Crest Dr	Self-Verification	9/20/2010	all BMPs in good condition	none necessary	information validated

CITY OF ENCINITAS

INSPECTION REPORT

Storm Water Quality Inspection for Treatment Control BMPs

505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2787 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

GENERAL INFORMATION

Permit No/Type _____ Property Address _____ Gate Code _____

Inspection Type: ☐ Annual ☐ Complaint Ownership: ☐ HOA ☐ Homeowner ☐ Commercial

Project Type: ☐ Private ☐ City of Encinitas SUSMP Status: ☐ Priority ☐ Standard

Inspection Priority: ☐ High ☐ Medium ☐ Low ☐ Unk Property Access: ☐ Open ☐ Limited ☐ None

TREATMENT CONTROL BMP EVALUATION

BMP Type	Location	Observations	Comments / Corrective Actions
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	

Photo(s) Taken: ☐ Yes ☐ No

Additional Comments:

CORRECTIVE ACTIONS ☐ None ☐ Maintenance/Repair ☐ Other _____

_____

_____

_____ Completion Due Date _____

The corrective actions listed above are required pursuant to Encinitas Municipal Code Section 20.08.140. Failure to comply with minimum Best Management Practices (BMP) Standards may result in further enforcement action by the City of Encinitas.

_____

Inspector (Print) **Signature** **Date**

_____

Responsible Party (Print) **Signature** **Date** **Contact Number**

☐ Responsible Party not present. Copy of inspection report provided to Responsible Party on _____

FOLLOW UP INSPECTION

☐ All Corrective Actions completed ☐ Corrective Actions not complete—Enforcement Action required

_____

Inspector Sign-Off **Date**

COPY DISTRIBUTION White – Responsible Party Yellow – City Inspector Pink – File REVISED 9/1/09

CITY OF ENCINITAS
CLEAN WATER PROGRAM
505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2787 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

STORMWATER TREATMENT CONTROL BMP MAINTENANCE AND INSPECTION PROGRAM

Stormwater Treatment Control BMPs are required to be incorporated into permitted development or redevelopment projects and serve a functional purpose to improve the quality of water that flows to our local creeks, lagoons, and beaches. Common Treatment Control BMPs include Vegetated Swales, Bioinfiltration Areas, Infiltration Basins or Trenches, and Storm Drain Filter Inserts.

As stated on approved grading or improvement plans and in the City's Stormwater Management and Discharge Control Ordinance (Municipal Code Chapter 20.08), stormwater treatment control BMPs are required to be maintained in perpetuity by a designated responsible party. The responsible party is most commonly the property owner, business owner or a Home Owners' Association (HOA).

Minimum Operation and Maintenance tasks:

☑ **On an annual basis prior to the wet season, or more frequently as needed, visually inspect all Treatment Controls for signs of malfunction or disrepair (i.e. overgrown vegetation, restricted water flow, excessive sediment and debris).**

☑ **Maintain/repair any damage to the BMP. Necessary maintenance may include removing accumulated sediment, stabilizing eroded areas, replanting dead vegetation, trimming / mowing overgrown vegetation, cleaning out closed or blocked inlets and outlets, removing trash or other debris, etc.**

DEFINITIONS

Treatment Control Best Management Practice (BMP) means any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media absorption or any other physical, biological, or chemical process. Also frequently referred to as Stormwater Best Management Practices or BMPs.

Storm Water Conveyance System means private and public drainage facilities within the City of Encinitas by which Storm Water may be conveyed to waters of the United States, including but not limited to, streets, roads, catch basins, natural and artificial channels, natural and artificial drainage features, aqueducts, canyons, stream beds, gullies, curbs, gutters, ditches, and storm drains.

Wet Season means October 1 thru April 30 of each year.

EMC 20.08.140.F. • INSPECTION, MAINTENANCE, REPAIR AND UPGRADING OF BMPS

Treatment Control BMPs must be inspected by the Discharger or responsible party before the start of the wet season and following actual rain events. These BMPs must be maintained so that they continue to function as designed. Treatment BMPs which fail must be repaired as soon as it is safe to do so. If the failure of a structural or nonstructural BMP indicates that the BMPs in use are inappropriate or inadequate to the circumstances, the BMPs must be modified or upgraded to prevent any further failure in the same or similar circumstances. All sediment and debris in catch basins must be removed prior to the wet season and disposed of in a manner which prevents it from entering the Storm Water Conveyance System or the Receiving Waters.

EMC 20.08.080 • COMPLIANCE WITH BEST MANAGEMENT PRACTICES

No Discharger shall fail to implement, install, use, or maintain Best Management Practices established by the City Engineer pursuant to this Chapter.

EMC 20.08.160.A. • REGULATORY INSPECTIONS

The City Engineer or his designee may inspect the premises of any Discharger at reasonable times and in a reasonable manner to carry out the purposes of this Chapter. If a Discharger refuses to allow entry for an inspection, an inspection warrant shall be obtained prior to inspection.

EMC 20.08.040 • ILLEGAL DISCHARGES

A. Discharge of Storm Water. No person shall discharge Storm Water directly or indirectly into the Storm Water Conveyance System or Receiving Waters, unless discharged in compliance with this Chapter.

B. Discharge of Non-storm water Prohibited. No person shall discharge non-storm water directly or indirectly into the Storm Water Conveyance System or Receiving Waters.

Case / Permit No.:_____

CITY OF ENCINITAS
STORMWATER QUALITY CHECKLIST AND CERTIFICATION

SW

All development projects proposed within the City of Encinitas are required to implement stormwater quality measures in accordance with the *Encinitas Stormwater Manual*. The intent of these requirements is to promote practices and project designs that improve the quality of runoff and protect our local ocean, creeks, and lagoons from the harmful effects of polluted runoff. The *Encinitas Stormwater Manual* meets State-mandated requirements established by Regional Water Quality Control Board Order No. R9-2007-0001 (San Diego Region Municipal Stormwater Permit). For a more detailed description of the City's stormwater requirements, refer to the *Encinitas Stormwater Manual* on the City website (www.CityofEncinitas.org). The manual provides detailed, step-by-step guidelines on how to plan for, design, construct, and maintain stormwater treatment features. Other City stormwater-related resources available on the City's website include:

1. Municipal Code Chapter 20.08: Stormwater Management
2. Municipal Code Chapter 23.24: Grading, Erosion, and Sediment Control

This checklist is designed to guide applicants in the determination of the stormwater quality designation of the project and the design of appropriate stormwater quality features. Projects may be designated as 1) **Priority**, 2) **Standard**, or 3) **Exempt** projects. At a minimum, all projects are required to provide designs and employ practices that minimize the potential for discharge of pollutants into the City's storm drainage system or local receiving waters, as outlined in the *Requirements for All Development Projects* below.

Requirements for ALL Development Projects

All development projects (including Exempt Projects) must include a minimum set of control measures to reduce the discharge of stormwater pollutants to the maximum extent practicable. All projects must include:

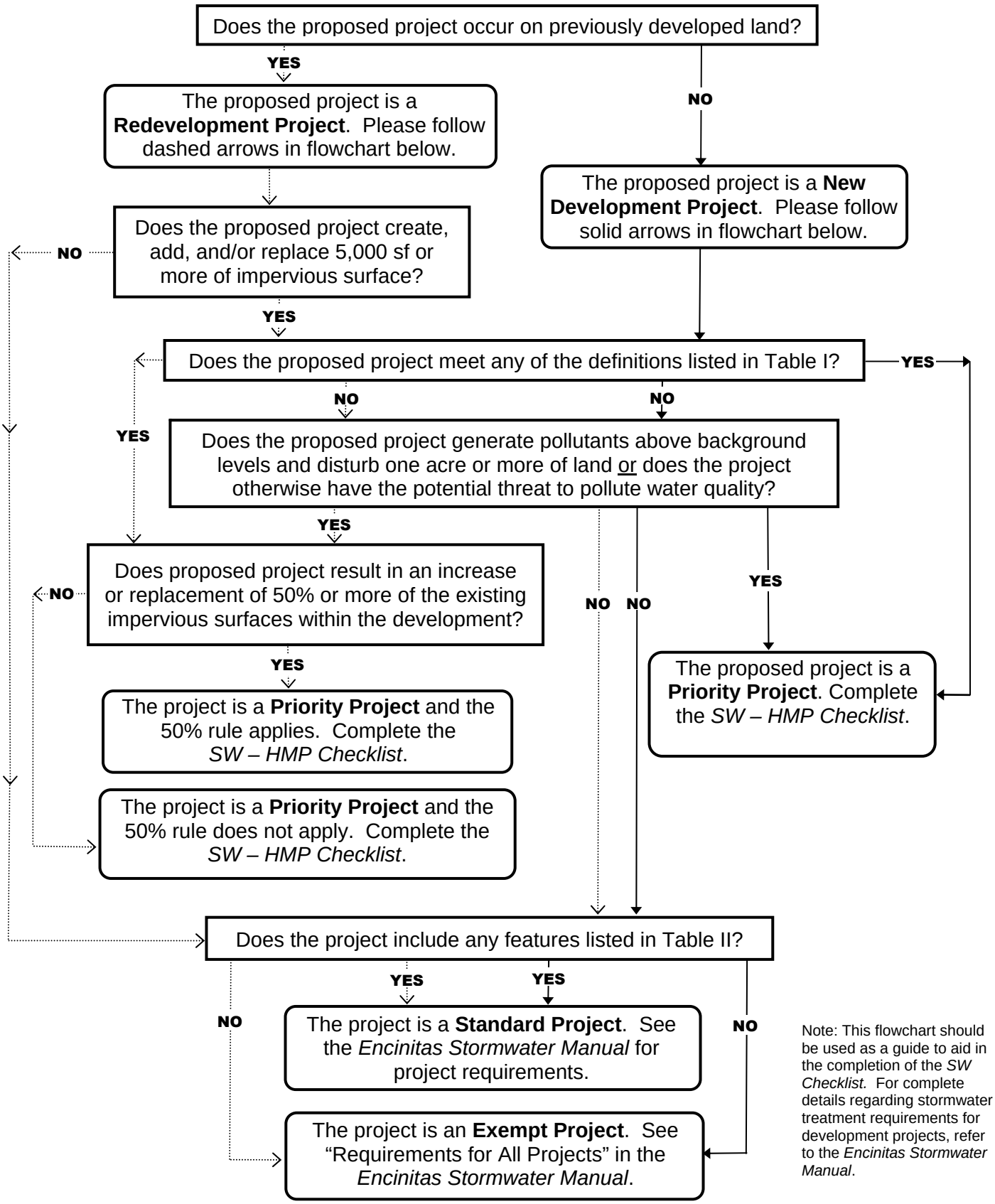
- ☑ Implementation of Best Management Practices (BMPs) to control potential pollutant sources.
- ☑ Inclusion of Low Impact Development (LID) features that minimize the water quality impacts of the project.
- ☑ Compliance with requirements for construction-phase controls on sediment and other pollutants.

In addition, all projects must design and install drainage features so that runoff from impervious areas (such as rooftops, parking lots, and driveways) drains through pervious or vegetated areas for treatment before draining to public or private streets or storm drainage systems. No Directly Connected Impervious Area (DCIA) will be allowed on any development project (Encinitas Municipal Code Section 23.24.120). For more information about prohibited DCIA practices and the stormwater runoff requirements for all projects, refer to the *Encinitas Stormwater Manual*.

Beyond the minimum *Requirements for All Development Projects* listed above, the stormwater quality measures required for a particular project differ based upon the nature of the proposed development. Step 1 (Tables I and II below) is designed to assist you in determining the appropriate stormwater quality designation for your project. An overview of the method for determining the designation is included in the flowchart on the next page.

Case / Permit No.:_____

FLOWCHART: DETERMINATION OF THE APPROPRIATE STORMWATER QUALITY DESIGNATION FOR DEVELOPMENT PROJECTS



Note: This flowchart should be used as a guide to aid in the completion of the *SW Checklist.* For complete details regarding stormwater treatment requirements for development projects, refer to the *Encinitas Stormwater Manual*.

STEP 1: DETERMINE STORMWATER QUALITY DESIGNATION

Step 1 is designed to assist you in determining the appropriate stormwater quality designation for your project.

Step 1A: Determine Development Type and Priority Project Category Applicability

The first step in assessing the appropriate stormwater designation for your project is to determine whether it is a New Development Project or a Significant Redevelopment Project according to the definitions below.

New Development Projects are defined as projects proposing new impervious area on a previously undeveloped parcel.

Significant Redevelopment Projects are projects on previously developed land that create, add, and/or replace 5,000 square feet (s.f.) or more of impervious surface. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Redevelopment does not include interior remodels, roof or exterior surface replacement; trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bike lane on existing roads; or routine replacement of damaged pavement, such as pothole repair. However, other requirements, including incorporation of appropriate source controls, still apply. If your redevelopment project is exempt, the project is still obligated to meet the *Requirements for All Development Projects*, to the extent practicable. The City of Encinitas will make the final determination as to whether a proposed project is exempt from the requirements detailed in the *Encinitas Stormwater Manual*.

If your project meets one of the two definitions of development listed above, use Table I to determine if your project is a Priority Development Project.

Table I: Determine if Project is a Priority Development Project

Review each category A through J to determine whether the project meets the definition of one or more of the Priority Project categories. If any response in Table I is "Yes", the project is a **Priority Development Project**; *please continue to Step 2.* If all responses are "No", *please continue to Step 1B*.

Does the project meet the definition of one or more of the following categories?			
A	**Housing subdivisions of 10 or more dwelling units**. Examples: single-family homes, multi-family homes, condominiums, and apartments.	Yes ❑	No ❑
B	**Commercial—greater than one acre of development**. Any development other than heavy industry or residential. Examples: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; airfields; and other light industrial facilities.	Yes ❑	No ❑
C	**Heavy industry—greater than one acre of development**. Examples: manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, etc.).	Yes ❑	No ❑
D	**Restaurants**. Any facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirements and hydromodification requirements.	Yes ❑	No ❑

Table I (cont.): Does the project meet the definition of one or more of the following categories?			
E	**Hillside development greater than 5,000 square feet.** Any development that creates 5,000 square feet of impervious surface and is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.	Yes ❑	No ❑
F	**Environmentally Sensitive Areas (ESAs).** All development located within or directly adjacent to or discharging directly to an ESA (where discharges from the development or redevelopment will enter receiving waters within the ESA), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition. "Directly adjacent" means situated within 200 feet of the ESA. "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.	Yes ❑	No ❑
G	**Parking lots** 5,000 square feet or more or with 15 or more parking spaces and potentially exposed to urban runoff.	Yes ❑	No ❑
H	**Streets, roads, driveways, highways, and freeways**. Any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles. If a project is determined to be a Priority Project based solely on the driveway surface area, the project will only be subject to stormwater treatment requirements and will not be required to meet Hydromodification Mitigation Plan (HMP) regulations. Refer to the *SW-HMP Checklist* for more details.	Yes ❑	No ❑
I	**Retail Gasoline Outlets (RGOs)** that are: (a) 5,000 square feet or more of development or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.	Yes ❑	No ❑
J	**Automotive repair shops**. A facility categorized in any one of Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532-7534, or 7536-7539.	Yes ❑	No ❑

If the answer to one or more of the categories in Table I is "Yes", the project is a considered **Priority Development Project** for stormwater quality. The project will be required to install Source Control measures, Low-Impact Design (LID) features, and Stormwater Treatment Facilities that meet specific criteria. Proceed to Step 2 and refer to the *SW—HMP Checklist* to determine whether your project is required to meet hydromodification regulations. If all answers in Table I are "No", proceed to Step 1B.

Step 1B: Determine Project's Water Quality Sensitivity

Development projects have the potential to contribute pollutants that could threaten local and downstream water quality. Review the following project categories and determine whether your project meets either one of these definitions.

Pollutant Generating Project Which Disturbs One Acre or More of Land. Projects that generate pollutants at levels greater than background levels and disturb one acre or more of land are considered Priority Development Projects. In most cases linear pathway projects that are for infrequent vehicle use (such as emergency or maintenance access) or for pedestrian or bicycle use are not considered pollutant generating above background levels if they are built with pervious surfaces or if they allow runoff to sheet flow to surrounding pervious surfaces.

All Development Projects with Potential Threat to Pollute. Some projects not meeting the definitions listed in Table I may still be designated as Priority Projects if they are found to cause a threat to water quality through excess pollution potential. The City of Encinitas has the discretion to designate a project not listed within Table I as being a Priority Project based on the project's potential impacts to stormwater quality.

If your project meets either of the categories described above, the project is a **Priority Development Project** for stormwater quality and the project will be required to install Source Control measures, LID features, and Stormwater Treatment Facilities. The City Engineer will make the final determination as to whether your project meets one of the definitions. Proceed to Step 2 and refer to the *SW—HMP Checklist* to determine whether your project is required to meet hydromodification regulations.

If your project does not meet one of the two categories listed above, proceed to Step 1C to determine whether your project includes any features that are consistent with the Standard Project classification.

Step 1C: Determine Standard Project Feature Applicability

Table II: Determine if Project is a Standard Project

To use Table II, review A through J to determine whether the proposed project includes any feature that would qualify the project as a Standard Project. If the response to any feature in A through J below is "Yes", the project is designated as a **Standard Project**. If all responses are "No", the project is an **Exempt Project**. After completion of Table II, *please proceed to Step 2.*

Does the project include any features qualifying it as a Standard Project?			
A	**New Impervious Surface Areas totaling 500 square feet or more** combined, and including any cumulative development over the five-year period preceding the time of application. Impervious areas include improvements such as rooftops, roads, parking lots, driveways, patios, pool decks, paths, etc.	Yes ❑	No ❑
B	**Reconstruction of any Existing Impervious Surface Areas** such as rooftops, roads, parking lots, driveways, paths, and sidewalks in excess of 500 square feet, including any cumulative development over the five-year period preceding the time of application.	Yes ❑	No ❑
C	**Permanent Structures** within 100 feet of any natural water body.	Yes ❑	No ❑
D	**Trash Storage Areas**.	Yes ❑	No ❑
E	**Loading and/ or Unloading Areas** for liquids and/or solid materials.	Yes ❑	No ❑
F	**Vehicle or Equipment Fueling, Washing, and/or Maintenance Areas**.	Yes ❑	No ❑
G	**General NPDES Permit Required** for storm water discharges associated with industrial activities (except for construction permits)	Yes ❑	No ❑
H	**Commercial and/ or Industrial Waste** handling or storage, excluding typical office or household waste.	Yes ❑	No ❑
I	**Grading** or ground disturbance proposed during construction.	Yes ❑	No ❑
J	**Storm Drains** including new storm drains as well as alteration to existing storm drains that reduce natural storm water treatment.	Yes ❑	No ❑

If the answer to one or more of the features in Table II is "Yes", the project is a **Standard Project** for stormwater quality. The project will be required to install Source Control measures, Low-Impact Design Features, and some Stormwater Treatment Facilities. Proceed to Step 2 and use Chapter 4 of the *Encinitas Stormwater Manual* as a general guide when designing stormwater treatment facilities that will meet Standard Development Project requirements.

The City of Encinitas will make the final determination as to whether a proposed project is exempt from the requirements detailed in the *Encinitas Stormwater Manual*. If the answers to all categories in Tables I and II are "No", and the project has been determined by the City of Encinitas not to be a pollutant generating project or have the potential to pollute, the project is an **Exempt Project** for stormwater quality but is still required to meet the *Requirements for All Development Projects*. Please proceed to Step 2.

STEP 2: DETERMINE PROJECT SUBMITTAL REQUIREMENTS

Requirements for Exempt, Standard, and Priority Projects are discussed in turn below. Engineering Services Department staff are available to answer any specific questions regarding the stormwater quality requirements.

Please check the box adjacent to the project type determined in Step 1.

- ❑ **Exempt Project:** See Step 2A below.
- ❑ **Standard Project**: See Step 2B below.
- ❑ **Priority Project**: See Step 2C below.

Step 2A: Determining Stormwater Quality Measures for an Exempt Project.

Exempt projects are not required to install new Stormwater Treatment Facilities but shall utilize existing on-site landscape and pervious areas to avoid Directly Connected Impervious Areas (DCIA) as outlined in the *Requirements for All Development Projects* section above and in the *Encinitas Stormwater Manual.* In addition, Exempt Projects, like all other projects, are required to comply with requirements for construction-phase controls on sediment and other pollutants. *Please proceed to Step 3.*

Step 2B: Determining Stormwater Quality Measures for a Standard Project.

Standard Projects are obligated to conform to the *Requirements for All Development Projects* outlined in the previous section as well to as integrate some BMP or LID features into the project proposal. BMP and LID features should be designed using Chapter 4 of the *Encinitas Stormwater Manual* as a general guide and then depicted on the plans for the permit. In addition, based on the types of BMPs or LIDs proposed, the City may require that a maintenance agreement be developed. *Please proceed to Step 3.*

Step 2C: Determine Stormwater Quality Measures for a Priority Project.

Priority Projects will be required to install Source Control measures, Low-Impact Design (LID) features, and Stormwater Treatment Facilities that meet specific criteria and may be required to meet HMP regulations. To determine whether your project needs to meet hydromodification regulations please complete the *SW—HMP Checklist*. The ***Encinitas Stormwater Manual*** includes detailed guidance for the planning and design of acceptable storm water quality features and for developing your project submittal package.

The 50% Rule for Significant Redevelopment Projects Only: The requirements for Priority Redevelopment Projects differ depending upon the amount of redevelopment proposed. If the proposed project results in an increase and/or replacement of 50% or more of the previously existing impervious surfaces onsite, then the entire development must be included in the stormwater treatment design. If less than 50% of the previously existing impervious surfaces will be affected by the proposed project, then only the affected previously existing areas and the newly proposed project must be included in the stormwater treatment design.

After completing the steps outlined in the *Encinitas Stormwater Manual*, Priority Projects shall provide required documentation to the City detailing the project's compliance with Priority Project standards. All documentation shall be reviewed and approved by the City of Encinitas prior to issuance of a grading or improvement permit or prior to the issuance of any discretionary permit, at the direction of the City Engineer. At a minimum, the items below are required for stormwater facility documentation of Priority Projects. The City Engineer may pose additional requirements for certain projects. Upon review of the submittal requirements in Step 2C, *please proceed to Step 3.*

Case / Permit No.:_____

PRIORITY PROJECT SUBMITTAL MINIMUM REQUIREMENTS

Priority Projects shall provide to the City all of the following documentation detailing the project's compliance.

I) STORMWATER QUALITY SECTION OF DRAINAGE STUDY: A Stormwater Quality discussion shall be included as a separate section within the project drainage study and shall include a **narrative** as well as an **exhibit**. Minimum requirements for the narrative and exhibit are discussed in items (a) and (b) below.

a) STORMWATER QUALITY NARRATIVE: The stormwater quality narrative in the drainage study shall discuss, at a minimum, the items listed below.

1) Tabulation of the square footage of proposed pervious areas, impervious areas, and areas draining to an IMP. Also, a tabulation of the square footage of self-treating areas, self retaining areas, and areas draining to self-retaining areas, as applicable. (Step 3)

2) Calculations of the required sizing for self-retaining and Integrated Management Practice (IMP) areas and calculations documenting the sufficiency of the facilities provided. (Step 3)

3) A table of pollutant sources identified and the source control measure(s) used to reduce pollutants to the maximum extent practicable. See worksheet in Appendix A of the *Encinitas Stormwater Manual*. (Step 4)

b) STORMWATER QUALITY EXHIBIT: The Stormwater Quality Section of the drainage study shall contain one exhibit including all of the items listed below. The Stormwater Quality Exhibit must be in conformance with the Site Plan. The Stormwater Quality Exhibit shall include the Site Plan features screened into the background for ease of confirming agreement between the Exhibit and the Site Plan.

1) Division of entire site into distinct drainage management areas (DMAs), with each drainage management area assigned a unique identifier (e.g., 1, 2, 3 or A, B, C). (Step 1)

2) Square footage and types of surfacing (e.g., roof, landscape, pavement) included in each DMA and the total DMA square footage. (Step 1)

3) Hydrologic soil group and depth to groundwater (as applicable) for each DMA. (Step 1)

4) Each DMA labeled as self-treating, self-retaining, draining to a self-retaining area, or draining to an IMP. (Step 2)

5) Potential pollutant source areas, including refuse areas, outdoor work and storage areas, etc. listed in Appendix A and corresponding required source controls. (Step 4)

II) SITE PLAN: At a minimum, the Site Plan shall include the items listed below. A copy of the Site Plan shall be included in the Stormwater Quality Section of the drainage study.

1) Existing and proposed drainage network and connections to drainage off-site. (Step 3)

2) Depiction of site design characteristics that minimize disturbance as well as building features and pavement selections that minimize the proposed imperviousness of the site. (Step 3)

3) Proposed design of each IMP feature and any Permanent Source Control features. (Step 3)

4) Title sheet standard notes for each of pollutant sources identified specifying the source control measure(s) to be used to reduce pollutants to the maximum extent practicable. See worksheet in Appendix. (Step 4)

5) Existing natural hydrologic features such as depressions, watercourses, floodplains, and relatively undisturbed areas, as well as significant natural resources. (Step 1)

6) The City of Encinitas Standard Storm Water Quality Notes shall be added to the site plan.

7) Certification by a civil engineer, architect, or landscape architect on the title sheet. (Step 6)

III) MAINTENANCE AGREEMENT: In order to provide for the perpetual maintenance of the stormwater treatment facilities, the City will prepare for the property owner a Maintenance Agreement that shall record against the property. The items listed below shall be provided to the City for inclusion in the Maintenance Agreement.

1) Discussion of general maintenance needs for infiltration, treatment, and flow-control facilities. (Step 5)

2) The means by which facility maintenance will be financed and maintained into perpetuity. (Step 5)

3) Statement accepting responsibility for interim operation and maintenance of facilities. (Step 5)

4) Plat and legal description of the property.

STEP 3: STORMWATER PROJECT CERTIFICATION

The property owner of any project (Priority, Standard, or Exempt) shall complete the following Owner's Certification. In addition, any agent completing this form on behalf of a client shall complete the Agent's Certification below.

Owner's Certification:

I hereby acknowledge that my project is subject to the stormwater quality regulations of the City of Encinitas and certify that my project will provide satisfactory stormwater quality measures both during the construction process and afterwards.

If my project is designated as a Priority or a Standard Project, I further acknowledge my understanding that the permanent stormwater treatment features must remain in place, be inspected at least once annually, and be maintained in good working order. Removal or modification of these features without prior City authorization is prohibited.

I certify that I have reviewed the information contained in this form and verified that it is both complete and correct.

_____ _____

Owner 1 Signature Date Owner 2 Signature Date

_____ _____

Printed Name of Owner 1 Printed Name of Owner 2

Agent's Certification:

I hereby certify that this project will be designed in conformance with the stormwater quality regulations of the City of Encinitas.

I certify that I have reviewed the information contained in this form and verified that it is both complete and correct.

_____

Agent Signature Date

_____

Printed Name of Agent

_____

Working Capacity of Agent (architect, engineer)

_____

Company Name Place Professional Seal Above

Case / Permit No.:_____

CITY OF ENCINITAS
HYDROMODIFICATION MANAGEMENT PLAN (HMP)
CHECKLIST AND CERTIFICATION

SW-HMP

All development projects proposed within the City of Encinitas are required to implement stormwater quality measures in accordance with the *Encinitas Stormwater Manual*. If your project is a Priority Project, as determined by the *SW Checklist*, you may also be required to mitigate for potential hydromodification impacts to downstream water bodies. Hydromodification refers to changes in the magnitude and frequency of stream flows as a result of urbanization and the resulting impacts on receiving channels. Potential impacts to receiving channels include erosion, sedimentation, and degradation of in-stream habitat.

If you have completed the *SW Checklist* and determined that your project is a Priority Project, use the following HMP Decision Matrix to determine whether your project must also comply with the San Diego region hydromodification requirements. If your project is subject to HMP requirements, the HMP Decision Matrix will also assist you in determining the flow range which the project must adhere to.

For a detailed description of each step of the HMP Decision Matrix, refer to **Section 1** of the ***Encinitas Stormwater Manual*** and the ***County of San Diego Hydromodification Management Plan***.

As identified in Figure 1-1, projects may be exempt from HMP criteria if they meet one of the following conditions:

- If the project is not a Priority Development Project (i.e. if the project is determined to be a Standard Project or an Exempt Project after completing the *SW Checklist*.)
- If the proposed project does not increase the impervious area or peak flows to any discharge location.
- If the proposed project discharges runoff directly to an exempt receiving water such as the Pacific Ocean or a lagoon.
- If the proposed project discharges to a stabilized conveyance system that extends to the Pacific Ocean, San Diego Bay, a tidally-influenced area, an exempt river reach or reservoir.
- If the contributing watershed area to which the project discharges has an impervious area percentage greater than 70 percent
- If an urban infill project discharges to an existing hardened or rehabilitated conveyance system that extends beyond the "domain of analysis," the potential for cumulative impacts in the watershed are low, and the ultimate receiving channel has a Low susceptibility to erosion as defined in the SCCWRP[1] channel assessment tool.
- If the project includes the construction of a new impervious private driveway and the project has been determined to be a Priority Project solely due to the surface area of that driveway being greater than 5,000 square feet.

[1] Southern California Coastal Water Research Project

Figure 1-1 HMP Applicability Determination is the first component of the HMP Decision Matrix and can be used for all projects. For redevelopment projects, flow controls are required only if the redevelopment project increases impervious area or peak flow rates above pre-project conditions.

If your project is determined to be exempt from HMP applicability, proceed to Page 7 of this checklist. If your project is determined to require hydromodification controls, complete the remainder of the HMP Decision Matrix (Figures 1-2 through 1-5) to determine the flow range your project must adhere to.

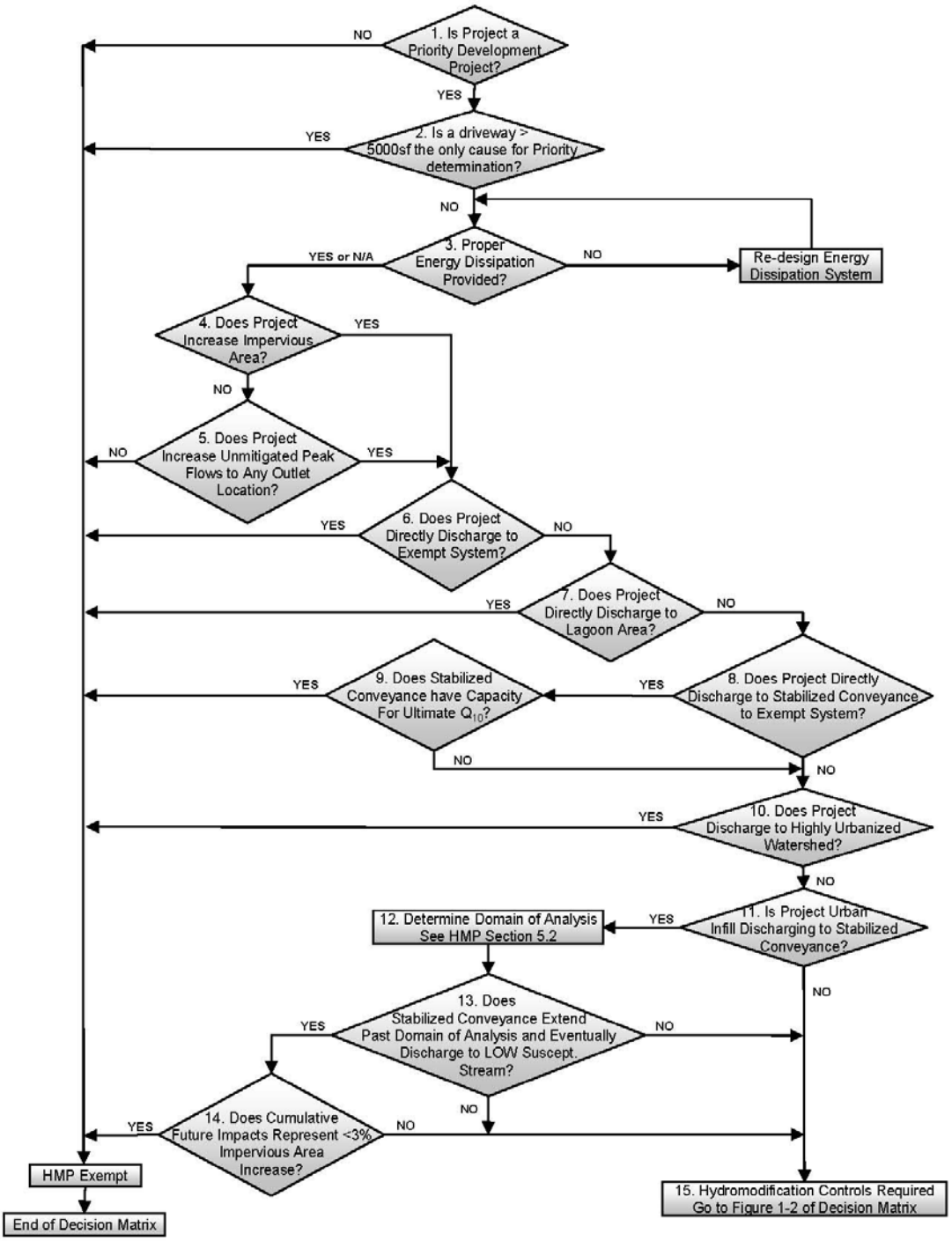


FIGURE 1-1. HMP Applicability Determination

*For a detailed description of each step of the HMP Decision Matrix, refer to **Section 1** of the **Encinitas Stormwater Manual** and the **County of San Diego Hydromodification Management Plan**.*

Case / Permit No.:_____

Please check the box adjacent to the HMP applicability determined by Figure 1-1.

- ❑ **HMP Exempt**. List the Exemption below and proceed to Page 7.

  Exemption: _____

- ❑ **Hydromodification Controls Required**. Continue with the HMP Decision Matrix (Figures 1-2 through 1-5).

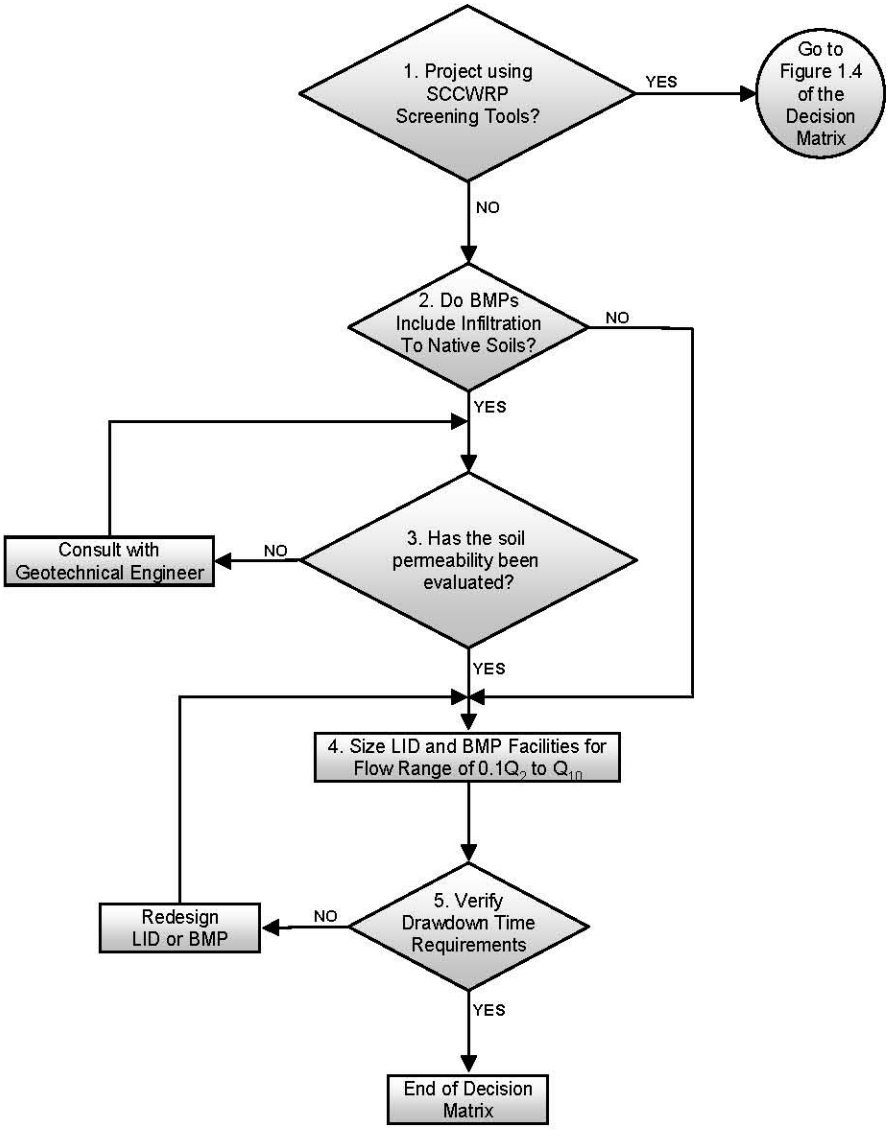


FIGURE 1-2. Mitigation Criteria and Implementation

*For a detailed description of each step of the HMP Decision Matrix, refer to **Section 1** of the **Encinitas Stormwater Manual** and the **County of San Diego Hydromodification Management Plan**.*

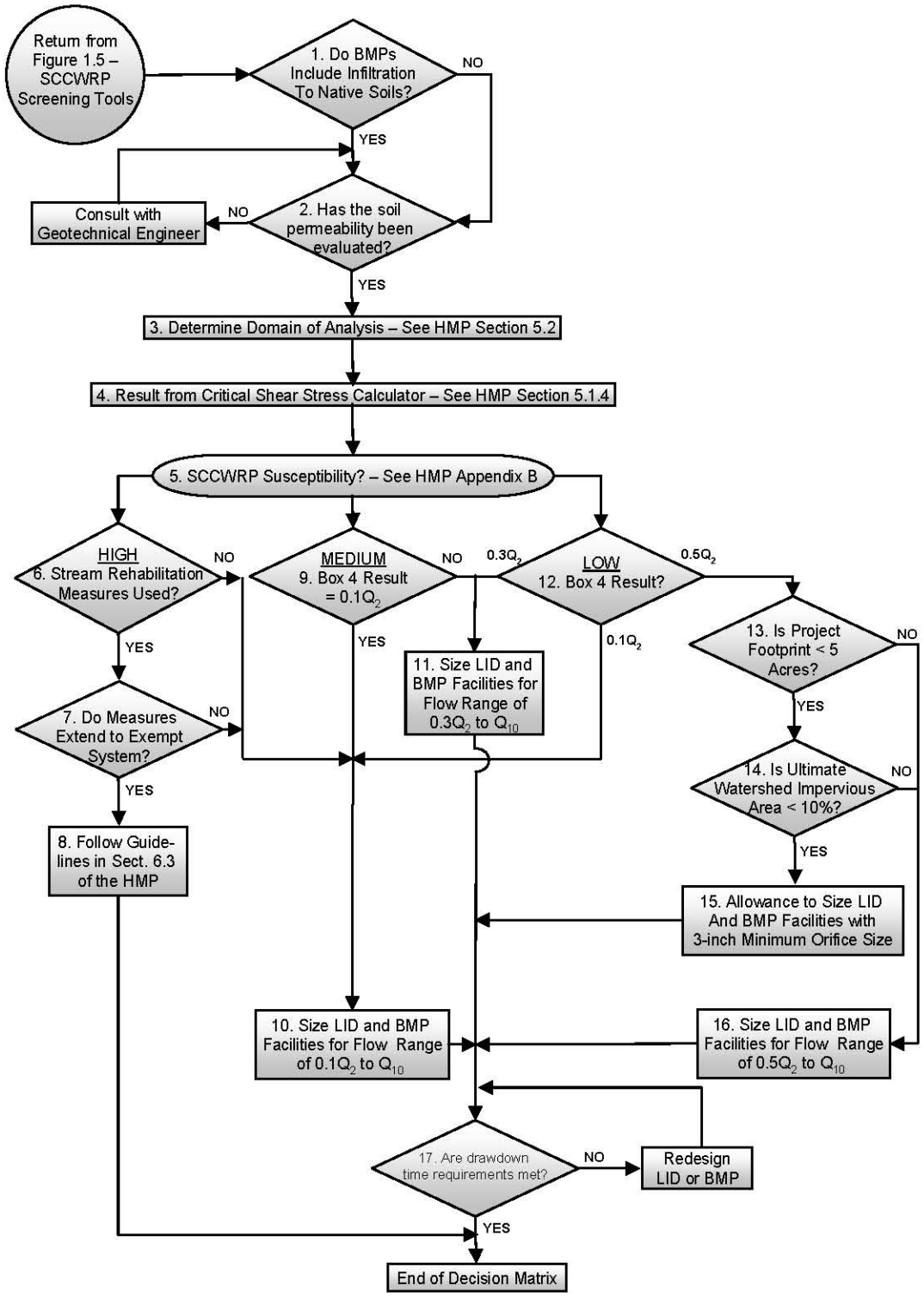


FIGURE 1-3. Mitigation Criteria and Implementation

*For a detailed description of each step of the HMP Decision Matrix, refer to **Section 1** of the **Encinitas Stormwater Manual** and the **County of San Diego Hydromodification Management Plan**.*

Case / Permit No.:_____

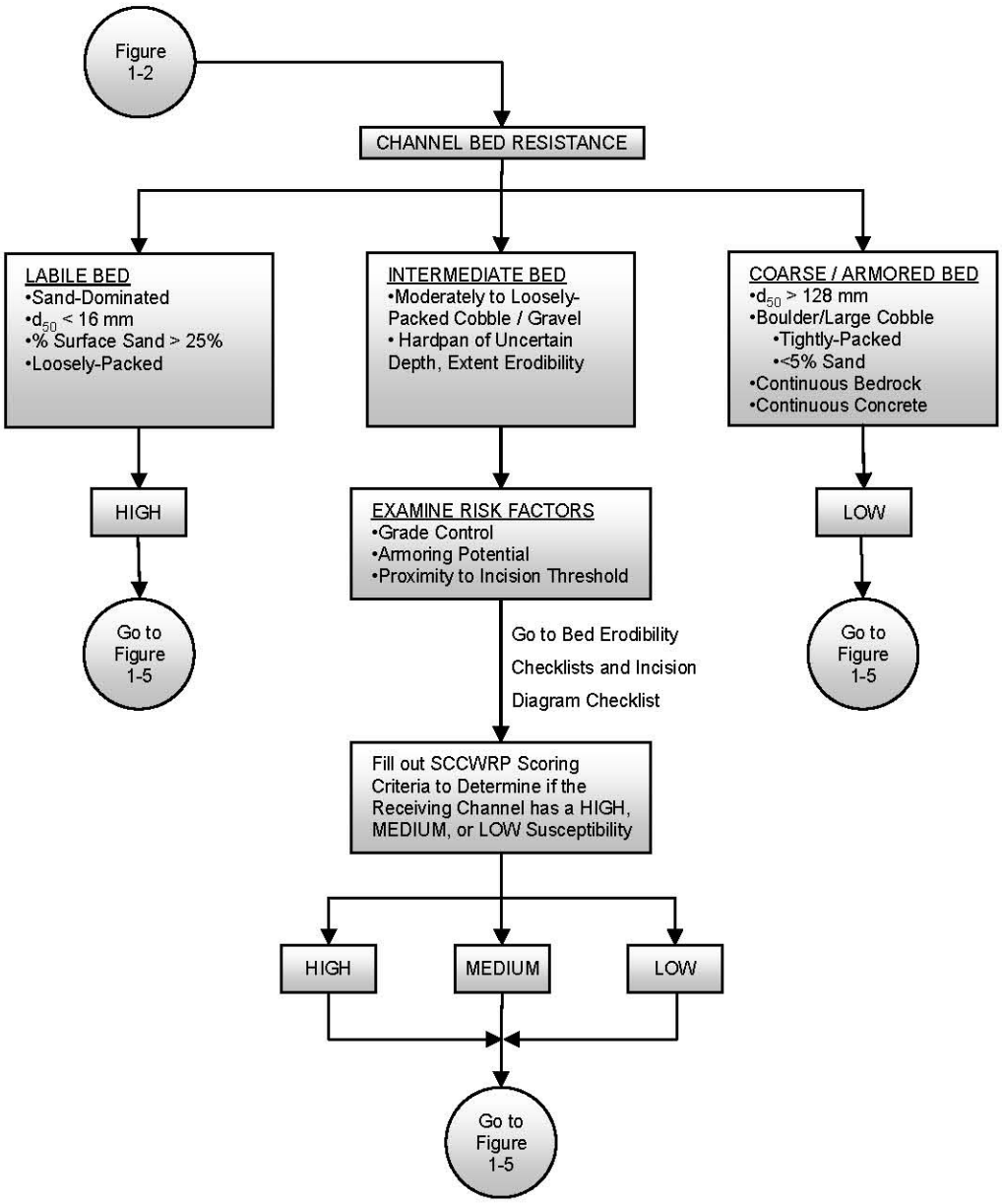


FIGURE 1-4. SCCWRP Vertical Susceptibility. *For a description of how to complete this decision matrix refer to Appendix B of the County of San Diego Hydromodification Management Plan.*

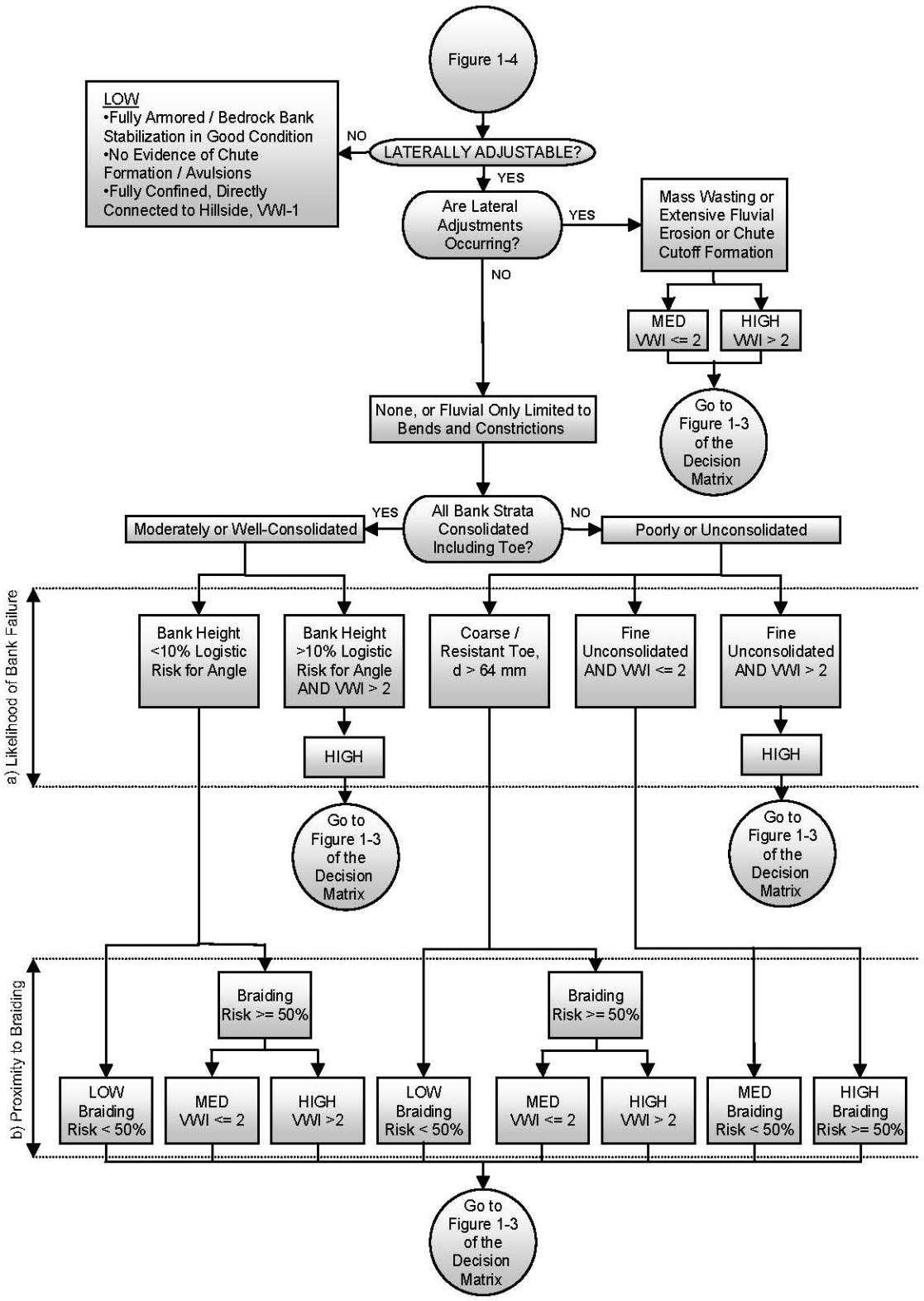


FIGURE 1-5. SCCWRP Lateral Channel Susceptibility. *For a description of how to complete this decision matrix refer to Appendix B of the County of San Diego Hydromodification Management Plan.*

Appendix A-11

Case / Permit No.:_____

HYDROMODIFICATION DETERMINATION AND CERTIFICATION

Please check the box adjacent to the Flow Range in which your stormwater treatment facilities must be sized to control, as determined through Figures 1-2 to 1-5.

- ❑ **Flow Range: $0.1Q_2 – Q_{10}$**
- ❑ **Flow Range: $0.3Q_2 – Q_{10}$**
- ❑ **Flow Range: $0.5Q_2 – Q_{10}$**
- ❑ **HMP Exempt, Not Applicable** (List Exemption Below)
  Exemption: _____

The project engineer and property owner shall complete the following certification.

Engineer's Certification:

I hereby certify that the project, Case/Permit No.:_____, ***IS / IS NOT (circle one)*** subject to the hydromodification regulations of the City of Encinitas. If the project is subject to hydromodification regulations, I certify that the project will provide satisfactory permanent flow control measures.

I hereby certify that this project will be designed in conformance with the stormwater quality regulations of the City of Encinitas.

I certify that I have reviewed the information contained in this form and verified that it is both complete and correct.

_____
Engineer's Signature Date

_____
Printed Name of Engineer

_____
Company Name Place Professional Seal Above

Owner's Certification:

I hereby acknowledge that the project, Case/Permit No.:_____, ***IS / IS NOT (circle one)*** subject to the hydromodification regulations of the City of Encinitas. If the project is subject to hydromodification regulations, I certify that the project will provide satisfactory permanent flow control measures.

I further acknowledge my understanding that permanent flow control features must remain in place, be inspected at least once annually, and be maintained in good working order. Removal or modification of these features without prior City authorization is prohibited.

_____ _____
Owner 1 Signature Date Owner 2 Signature Date

_____ _____
Printed Name of Owner 1 Printed Name of Owner 2

Case / Permit No.:_____

SUPPLEMENTAL SUBMITTAL REQUIREMENTS FOR PROJECTS SUBJECT TO HMP

Priority Projects required to meet hydromodification mitigation standards shall provide to the City all of the following documentation detailing the project's compliance. This documentation is **in addition to** the minimum submittal requirements for Priority Projects.

A **narrative** presenting the following information:

1) If the project is exempt from HMP requirements, a discussion demonstrating which exemption is being claimed and why the project qualifies must be included.

2) If the project is not exempt from HMP requirements, provide the input parameters for the BMP Sizing Calculator or detail the calculations that were used to determine the size of the treatment facility(ies).

3) If the project is not exempt from HMP requirements, document the stormwater facility(ies) dimensions as determined by the BMP Sizing Calculator or the calculations completed above.

A **map** showing the following details:

1) Location of the project.

2) Delineation of the watershed within which the project is located.

3) Location of the discharge point(s) of stormwater from the project.

4) The Domain of Analysis (as defined in Chapter 1 of the ESM).

5) The downstream hydrologic system (both the engineered stormwater system and the natural system--channels, lagoons, etc).

Note: The City Engineer may pose additional submittal requirements for certain projects.

Appendix B

Construction

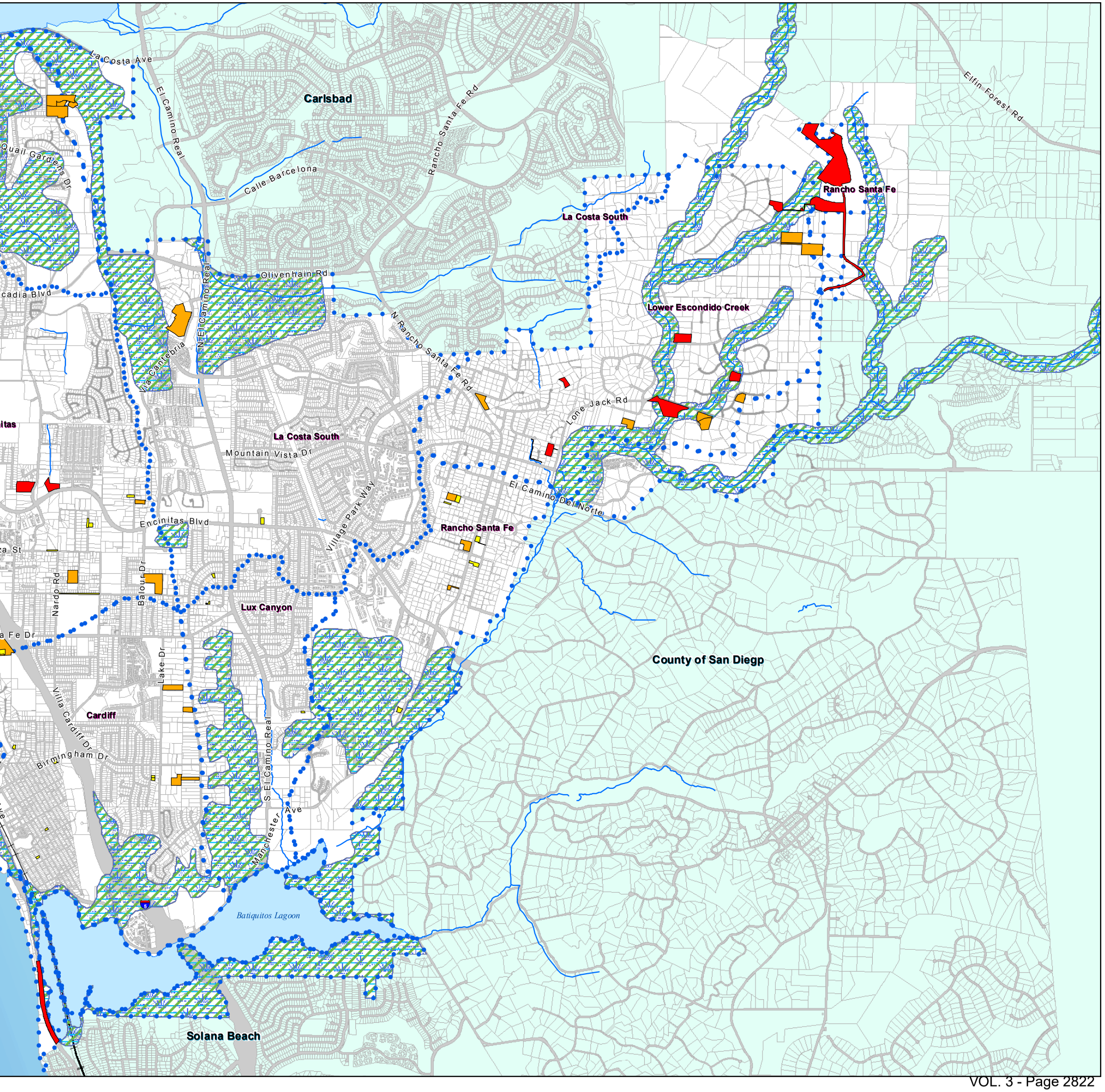
B-1	**Construction Inventory**
B-2	**Prioritized Construction Sites Map**
B-3	**Flow Chart for Inspection Frequencies**
B-4	**Construction Inspection Form**
B-5	**Erosion Control Letter**
B-6	**Construction Enforcement Actions**

Appendix B-1 Construction Inventory

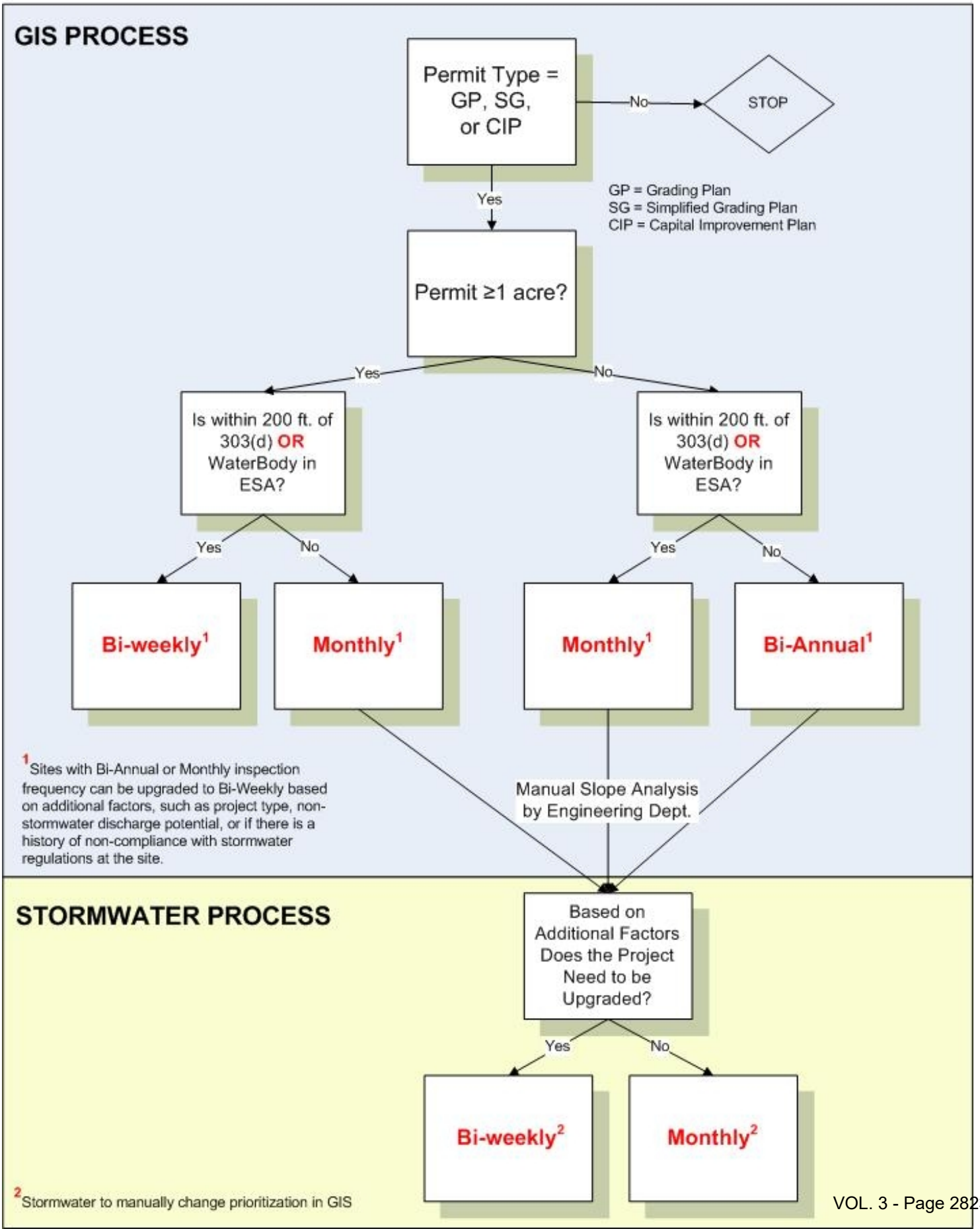
Permit #	Permit Type	Site Address	Site Street Name	Inspection priority	Total Number of Weeks Active During the Wet Season	Total Number of Inspections Conducted During the Wet Season	Total Number of Inspections Conducted During the Dry Season	Total Number of Inspections from July 1, 2010-June 30, 2011
54	GI		BIRMINGHAM & MACKINNON	Biannual	28	2	0	2
80	SI		MELBA SAFE ROUTE TO SCHOOL	Biannual	14	2	0	2
185	GI	1423	RAINBOW RIDGE	Biannual	0	1	0	1
215	GI	424	BRIGHTON AVE	Biannual	30	2	0	2
366	GI	742-744	DEWITT	Biannual	15	1	0	1
528	GI	402	SECOND ST aka 207 C Street	Biannual	30	2	0	2
556	GI	135	DAPHNE ST	Biannual	28	2	0	2
578	GI	1531	SAN ELIJO AVE	Biannual	30	2	0	2
675	GI	1719	SAN ELIJO	Biannual	5	2	0	2
776	II	585	CAMINO EL DORADO	Biannual	1	0	0	0
859	GI	721	Dewitt Ave	Biannual	21	2	0	2
944	GI	1501	NEPTUNE AVE	Biannual	30	2	0	2
1000	GI	272	SEEMAN DR	Biannual	28	2	0	2
1001	GI	342	HILLCREST DRIVE	Biannual	17	2	0	2
1010	GI	1865	N. Vulcan Ave	Biannual	15	1	0	1
9482	GI	1635	GASCONY	Biannual	0	1	0	1
9590	GI	721	N VULCAN AVE	Biannual	30	3	0	3
10045	GI	1660	Brahms	Biannual	30	2	0	2
10068	GI	119/133	Mozart	Biannual	30	1	0	1
10068	GI	129	Mozart	Biannual	28	0	0	0
10071	GI	975	EOLUS	Biannual	0	0	0	0
10115	GI	350	COLE RANCH RD	Biannual	13	1	0	1
10116	GI	2209	SERENO VIEW LANE	Biannual	9	1	0	1
10117	GI	1060	HYGEIA AVE	Biannual	30	2	0	2
10150	II	684	Requeza Street	Biannual	0	0	0	0
10153	GI	1521	NEPTUNE AVE	Biannual	30	2	0	2
10172	GI	221	FLORITA STREET	Biannual	6	1	0	1
10252	SG	1516	Calle Pensamientos	Biannual	10	1	0	1
10309	GI	2358	NEWCASTLE AVE	Biannual	30	2	0	2
10315	GI	794	NEPTUNE AVE	Biannual	2	1	0	1
10332	GI		PHOEBE ST @ HWY 101	Biannual	30	2	0	2
10352	GI	1463	SUMMIT AVE	Biannual	13	1	0	1
10360	GI	1729	SAN ELIJO AVE	Biannual	30	2	0	2
10413	GI	747	DORIS DR	Biannual	28	2	0	2
10430	SG	1022	SAXONY RD	Biannual	21	2	0	2
10437	GI	1491	NEPTUNE AVE	Biannual	0	1	0	1
10467	SG	4149	MANCHESTER AVE	Biannual	12	1	0	1
10489	SG	200	SAXONY RD	Biannual	30	2	0	2
10498	CN		PARKING LOT B	Biannual	8	0	0	0
10515	GI	1557-63	CALLE RYAN	Biannual	25	1	0	1
10518	II	586	RANCHO SANTA FE RD	Biannual	12	1	0	1
10525	GI	416-461	SANTA FE DR	Biannual	30	3	0	3
10526	GI	1361	AHLRICH AVE	Biannual	12	2	0	2
10548	GI	1502	ENCINITAS BLVD	Biannual	13	3	0	3
10576	SG	1845	LAHOUD DR	Biannual	25	1	0	1
10578	SG	599	CAMINO EL DORADO	Biannual	25	1	0	1
10640	GI	1761	HAYDN DR	Biannual	15	1	0	1
10642	GI	441	RANCHO SANTA FE RD	Biannual	4	1	0	1
10653	SG	1835	LAHOUD DR	Biannual	21	3	0	3
10654	GI	1525	SUMMIT AVE	Biannual	0	0	0	0

Appendix B-1 Construction Inventory

Permit #	Permit Type	Site Address	Site Street Name	Inspection priority	Total Number of Weeks Active During the Wet Season	Total Number of Inspections Conducted During the Wet Season	Total Number of Inspections Conducted During the Dry Season	Total Number of Inspections from July 1, 2010-June 30, 2011
10658	GI		JASON ST AT N COAST HWY 101	Biannual	4	1	0	1
10757	SG	610	OCEAN VIEW AVE	Biannual	11	2	0	2
278	GI	3403	BUMANN RD.	Biweekly	2	0	0	0
325	GI		LONE JACK RD	Biweekly	2	0	0	0
369	GI	1415	RAINBOW RIDGE	Biweekly	2	0	0	0
583	SG	2898	LONE JACK ROAD	Biweekly	2	0	0	0
692	GI	1435	RAINBOW RIDGE	Biweekly	2	0	0	0
716	GI	662	ENCINITAS BLVD. @ QUAIL GARDENS	Biweekly	2	0	0	0
718	GI	687	S. COAST HIGHWAY 101	Biweekly	10	0	0	0
9481	GI	500	QUAIL GARDENS	Biweekly	2	0	0	0
10351	GI		RANCHO SUMMIT DR	Biweekly	4	0	0	0
10404	SG	3211	Wildflower Valley Dr	Biweekly	4	0	0	0
10425	SG	409	BRIDOON TERRACE	Biweekly	22	0	0	0
10470	CN		S COAST HWY BY SAN ELIJO LAGOON	Biweekly	2	0	0	0
10584	GI	3214	FORTUNA RANCH RD	Biweekly	14	0	0	0
187	GI	1060	URANIA AVE	Monthly	25	5	0	5
245	GI	3351	LILAC SUMMIT	Monthly	0	1	0	1
372	GI	1657	N. VULCAN AVE.	Monthly	0	1	0	1
388	GI	1435	LAKE DR.	Monthly	0	2	0	2
482	GI	1864	CREST DRIVE	Monthly	26	6	0	6
570	GI	489	LATIGO ROW (formerly 3557 Lone Hill Lane)	Monthly	26	8	0	8
883	GI	1058/1076	HYMETTUS	Monthly	18	6	0	6
886	GI	1084 & 1086	NEPTUNE AVE	Monthly	0	1	0	1
912	GI	416	Rancho Santa Fe Rd	Monthly	0	0	0	0
926	SG	234	RANCHO SANTA FE RD.	Monthly	0	1	0	1
947	GI	1555	BELLA VISTA	Monthly	0	0	0	0
949	GI	1007-1021	HERMES AVE	Monthly	8	1	0	1
963	GI	1150	MELBA RD	Monthly	19	5	0	5
1469	GI	1555	BELLA VISTA	Monthly	0	0	0	0
7601	GI	1255	BIRMINGHAM	Monthly	0	1	0	1
7893	GI	600	Christine Place (PIRAEUS & PLATO)	Monthly	0	1	0	1
8091	GI	2145	13TH STREET	Monthly	9	1	0	1
9106	GI	Vulcan Townhomes	NORTH VULCAN AVE	Monthly	0	1	0	1
9117	GI	236/268	ANDREW	Monthly	0	1	0	1
9262	GI	840	BRACERO RD	Monthly	0	1	0	1
9278	GI		OFF LONE HILL LN	Monthly	18	6	0	6
9303	GI	875/887	BRITTANY	Monthly	0	1	0	1
9336	GI	290	ANDREW	Monthly	4	2	0	2
10042	GI	1450	BLUE HERON DR	Monthly	23	5	0	5
10087	GI	237	Seeman Dr	Monthly	0	1	0	1
10090	GI	3183	Wildflower/Narcissus Summit	Monthly	21	6	0	6
10205	GI	3055	BROOKSIDE LANE	Monthly	25	5	0	5
10211	GI	211	SAXONY RD	Monthly	30	8	0	8
10225	SG	2207	SERENO VIEW LN	Monthly	0	0	0	0
10305	GI	354	SANTA FE DR	Monthly	23	5	0	5
10323	GI	950	SAXONY RD	Monthly	26	7	0	7
10375	GI	1010	N EL CAMINO REAL	Monthly	16	5	0	5
10501	GI	3177	WILDFLOWER SUMMIT	Monthly	24	6	0	6
10523	GI	453	SANTA FE DR	Monthly	18	5	0	5
10528	GI	422	Requeza Street	Monthly	16	4	0	4
10536	GI	1492	HYMETTUS	Monthly	16	3	0	3
10672	SG	1534	CREST DRIVE	Monthly	5	2	0	2
CMD06E			LONE JACK STRATFORD KNOLL	Monthly	22	5	0	5
CMS09F			CARDIFF SAFE ROUTE TO SCHOOL	Monthly	17	5	0	5
			FY 2010-11 Total Inspections		**NA**	**200**	**0**	**200**


Carlsbad
La Costa Ave
El Camino Real
Quail Gardens Dr
Calle Barcelona
Rancho Santa Fe Rd
Elfin Forest Rd
Rancho Santa Fe
La Costa South
Olivenhain Rd
N El Camino Real
cadia Blvd
Via Cantebria
N Rancho Santa Fe Rd
Lower Escondido Creek
Lone Jack Rd
itas
La Costa South
Mountain Vista Dr
El Camino Del Norte
Encinitas Blvd
Village Park Way
Rancho Santa Fe
Nardo Rd
Balour Dr
Lux Canyon
a Fe Dr
Lake Dr
County of San Diegp
Villa Cardiff Dr
Cardiff
Birmingham Dr
S El Camino Real
Manchester Ave
Batiquitos Lagoon
Solana Beach

GIS Script Process for Determining Construction Project Inspection Frequencies



CITY OF ENCINITAS

INSPECTION REPORT

Storm Water Quality Inspection for Construction Activities

505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2770 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

Property Address: _____ Inspection Date: _____

Contact Person: _____ Permit No: _____

Phone Number: _____ Project Size: _____

Site Status: ❒ Active ❒ Inactive ❒ First Inspection ❒ Final Sign-Off Date__/__/__

Inspection Frequency: ❒ Bi-Weekly ❒ Monthly ❒ Bi-Annual ❒ Post Rain Event ❒ Complaint Assessment

State General Construction Permit? ❒ Yes ❒ No WDID # _____

Is Project SWPPP on Site? ❒ Yes ❒ No

Qualified SWPPP Practitioner (QSP) Name: _____ Phone Number: _____

MINIMUM BEST MANAGEMENT PRACTICE (BMP) REQUIREMENTS		BMP INSTALLATION REQUIRED	BMP REQUIRES MAINTENANCE	OTHER CORRECTIVE ACTIONS REQUIRED
A. Erosion Control BMPs				
1	**Slope / Soil Stabilization**			
2	**Silt Fencing**			
3	**Check Dams / Rip Rap**			
4	**Fiber Rolls**			
5	**Permanent Landscaping**			
6	**Preserving Existing Vegetation**			
7	**Diversion Channel for Run-On**			
8	**Other:**			
B. Sediment Control BMPs				
1	**Storm Drain Inlet Protection**			
2	**Detention Basin / Desilting Basin**			
3	**Perimeter Protection**			
4	**Stabilized Construction Entrance / Exit**			
5	**Other:**			
C. Materials Management BMPs				
1	**Stockpile Management**			
2	**Material Washout Area**			
3	**Equipment Storage**			
4	**Trash, Litter, Debris Management**			
5	**Designated Washout Area(s)**			
6	**Sanitary Waste Area Management**			
7	**Fuel / Chemical Storage**			
8	**Other:**			

Corrective Actions: ❒ Correct Work (*See Comments*) ❒ No Corrective Actions Required

❒ Referred to the Clean Water Program ❒ Stop Work/NOV

Comments:_____

_____

_____

_____

Corrective Actions identified above must be addressed, to the satisfaction of the City Inspector, within _____ days from the date above OR prior to the next predicted rain event. Failure to comply by this date may result in further enforcement action by the City of Encinitas.

Inspector (Signature) _____ Date ___/___/___

Received By (Signature) _____ Date ___/___/___

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CITY OF ENCINITAS

CLEAN WATER PROGRAM

505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2770 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

CONSTRUCTION SITE STORMWATER MANAGEMENT AND DISCHARGE CONTROL

All construction projects in the City of Encinitas are required to implement minimum Best Management Practices (BMPs) as necessary to comply with the current State General Municipal Stormwater Permit, State General Construction Permit, the City's Watercourse Protection, Stormwater Management and Discharge Control Ordinance (EMC 20.08), and the Grading Ordinance (EMC 23.24). Construction is a dynamic operation where changes are expected. Stormwater BMPs for construction sites are usually temporary measures that require frequent maintenance to maintain effectiveness and may require relocation, revision, and re-installation, particularly as project grading progresses. If minimum BMPs are infeasible or deemed inadequate at any specific site, the City will require the implementation of equivalent or alternative BMPs in order to minimize and/or eliminate non-stormwater discharge.

DEFINITIONS

Best Management Practices or "BMPs" means schedules of activities, pollution treatment practices or devices, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, operation and maintenance procedures, and other management practices or devices to prevent or reduce the discharge of pollutants directly or indirectly to Storm Water, Receiving Waters, or the Storm Water Conveyance System.

Illegal Discharge is any discharge to the Storm Water Conveyance System that is not composed entirely of Storm Water.

Inactive Construction Site means that construction activities have ceased for a period of 7 or more consecutive calendar days. At any time of the year, an inactive site must be fully protected from erosions and discharges of sediment.

State General Construction Storm Water Permit means State Water Resources Control Board Water Quality Order No. 2009-0009-DWQ, Waste Discharge Requirements for Discharges of Storm Water Associated with Construction Activities, and any amendments thereto.

Storm Water Conveyance System means private and public drainage facilities within the City of Encinitas by which Storm Water may be conveyed to waters of the United States, including but not limited to, streets, roads, catch basins, natural and artificial channels, natural and artificial drainage features, aqueducts, canyons, stream beds, gullies, curbs, gutters, ditches, and storm drains.

Wet Season means October 1 thru April 30 of each year.

EMC 20.08.040 • ILLEGAL DISCHARGES

A. Discharge of Storm Water. No person shall discharge Storm Water directly or indirectly into the Storm Water Conveyance System or Receiving Waters, unless discharged in compliance with this Chapter.

B. Discharge of Non-storm water Prohibited. No person shall discharge non-storm water directly or indirectly into the Storm Water Conveyance System or Receiving Waters.

EMC 20.08.050 • NOTIFICATION AND MITIGATION OF ILLEGAL DISCHARGES

A Discharger shall immediately notify the City Engineer of an Illegal Discharge and take immediate action to control and contain the Illegal Discharge. The Discharger shall also mitigate any damage caused by the Illegal Discharge.

EMC 20.08.070 • LITTERING & SWEEPING

No person shall throw, deposit, leave, maintain, keep or permit to be thrown, deposited, placed, left or maintained, any refuse, pet waste, rubbish, garbage, or other discarded or abandoned objects, in or upon any street, alley, parking lot, sidewalk, curb, gutter, storm drain, catch basin, conduit, or other drainage structure or lot except in receptacles maintained for the regular disposal of garbage. Impervious surfaces which drain directly or indirectly into the Storm Water Conveyance System shall be kept free of dirt and debris by regular sweeping. The sweepings shall be placed in garbage receptacles and shall not be allowed to enter the Storm Water Conveyance System.

EMC 20.08.080 • COMPLIANCE WITH BEST MANAGEMENT PRACTICES

No Discharger shall fail to implement, install, use, or maintain Best Management Practices established by the City Engineer pursuant to this Chapter.

City of Encinitas

September 20, 2010

RE: **SEDIMENT AND EROSION CONTROL**

City of Encinitas Permit Holder:

Please be advised that starting October 1, 2010 and continuing through April 30, 2011, the City will enter into the official wet season as defined by the State Water Resources Control Board. As such, all construction projects (active or inactive) are required to implement sediment and erosion control Best Management Practices (BMPs) to prevent the discharge of sediment and non-stormwater into the stormwater conveyance system and local water bodies.

Ultimately, for permit holders within the City of Encinitas, the wet season brings with it a responsibility for erosion and sediment control as outlined in sections 23.24.370, 23.24.380 and 23.24.390 of the City of Encinitas' Municipal Code. For your reference, a copy of these Municipal Code sections has been enclosed with this letter. The full text of the Municipal Code can also be accessed on the City's website at http://www.ci.encinitas.ca.us/Government/PublicD/MunicipalCode/

Please feel free to address any questions regarding this work to your City of Encinitas Engineering Inspector.

Sincerely,

Greg Shields, P.E.
Sr. Civil Engineer
Field Operations

Cc: City of Encinitas Engineering Inspectors

Encl: North County Storm Water Program Construction Brochure
City of Encinitas Municipal Code Sections 23.24.370, 23.24.380, and 23.24.390

505 South Vulcan Avenue, Encinitas, CA 92024, TEL: 760/633-2600 FAX: 760/633-2627 TDD: 760/633-2700

23.24.360 - Transfer of Responsibility for Approval. If the civil engineer, the soil engineer, the engineering geologist, the testing agency or the grading contractor of record are changed during the course of the work, the work shall be stopped unless and until: (1) the owner submits a letter of notification verifying the change of the responsible professional; and (2) the new responsible professional submits in writing that all prior reports and/or plans (specified by date and title) and work performed by the prior responsible professional have been properly reviewed and all findings, conclusions, and recommendations are appropriate, and the work performed is consistent with standard engineering practices. The new responsible professional may modify or revise recommendations, specifications or work performed if accompanied by supporting data and approved by the City Engineer. The new responsible professional must state that all responsibility within the purview of the area of professional responsibility is assumed as of a specified date. All exceptions must be justified in writing to the satisfaction of the City Engineer. (Ord. 2008-03)

23.24.370 - Wet Season Work.

A. Grading shall be minimized during the wet season to the extent feasible. Grading operations shall be phased as necessary to allow minimal exposure of disturbed soils during the grading operation. If grading does occur during the wet season, the City Engineer may require the applicant to implement additional best management practices for any rain events that may occur. No grading permit shall be issued for work occurring from October 1 to April 30 unless the plans include details of protective measures, including de-silting basins or other temporary drainage control measures, or both, as may be deemed necessary by the City Engineer to protect adjoining public and private property or the Waters of the State from damage by erosion, flooding, or the deposit of mud or debris which may originate from the site or result from grading operations. (Ord. 2008-03)

B. If grading is begun prior to October 1st, all protective measures shall be installed prior to October 1st. If grading is begun on or after October 1st, all protective measures shall be installed before grading is begun. All protective measures shall be maintained in good working order until April 30th of the succeeding year, where grading is done between October 1st and December 31st, or until April 30th of the same year where grading is done between January 1st and April 30th, unless their removal at an earlier date is approved by the City Engineer. (Ord. 2008-03)

C. Where a grading permit is issued and the work is commenced after April 15th and before September 15th of any year, and the permit was issued without an Interim Erosion and Sediment Control Plan, and it appears that the grading and installation of the permanent drainage devices as authorized by the permit will not be completed prior to October 1, then on or before September 15th, the owner of the site on which the grading is being performed shall file or cause to be filed with the City Engineer an Interim Erosion and Sediment Control Plan as provided for in this Chapter and shall implement the measures contained in the approved plan by October 1.

The plan check fee for the Interim Erosion and Sediment Control Plan shall be paid at the time of plan submittal and shall be in the amount provided for in this Chapter.

D. For continuation of grading activities, other than installation, maintenance, or repair of measures on the Erosion Control Plans, during the wet season, Permittee must apply for and receive, every seven days, special permission to proceed.

E. The City Engineer shall grant permission under this section on the basis of weather forecasts, site conditions, experience and other pertinent factors which indicate the activity may commence or continue without excessive erosion occurring.

F. Should the Permittee fail to submit the plans, fail to provide the protective measures or fail to obtain permission for wet season activities as required by this Chapter by the dates specified therein, it shall be deemed that a default has occurred under the conditions of the grading permit security. Thereupon the City Engineer may enter the property for the purpose of installing, by City forces or by other means, the drainage and erosion control devices shown on the approved plans, or if there are not approved plans, as may be deemed necessary to protect adjoining property from storm damage, or the City Engineer may cause the owner of the site to be prosecuted as a violator of this code, or both actions may be taken. (Ord. 2008-03)

G. The City Engineer shall have the authority to require implementation of all erosion control systems and requirements at any time of the year.

23.24.380 - Erosion Control System.

A. Erosion prevention shall be considered the most important erosion control measure, with sediment controls as a necessary backup. The faces of cut and fill slopes and the project site shall be prepared and maintained to control against erosion and runoff in accordance with this Chapter. Where cut slopes are not subject to erosion due to the erosion-resistant character of the materials, such protection may be omitted only upon approval of the City Engineer. (Ord. 2008-03)

B. Paved streets, sidewalks, and other improvements shall be maintained in a neat and clean condition free of loose soil, construction debris and trash. Street sweeping or other equally effective means shall be used on a regular basis to prevent storm flows from carrying sediment and debris outside the project boundaries. Watering shall not be used to clean streets except for fine material not otherwise removed by sweeping or other mechanical means.

C. The registered civil engineer who prepared the grading plan and designed the erosion control devices shall be responsible for modification of the design of devices, as necessary, during the rainy season.

D. Desilting facilities shall be provided at drainage outlets from the graded site.

E. Desilting basins shall be designed in accordance with City standards. Permanent desilting facilities shall be designed and constructed as to be aesthetically compatible with the surrounding development and terrain.

F. Desilting basins constructed of compacted earth shall be compacted to a relative compaction of ninety (90) percent of maximum density. A soil engineering report, prepared by the soil engineer, which includes the type of field testing performed, location and results of testing shall be submitted to the City Engineer for approval upon completion of the desilting basins.

G. Equipment and workers for emergency work shall be made available at all times during the rainy season. Necessary materials shall be available onsite and stockpiled at convenient locations to facilitate rapid construction of temporary device when rain is imminent.

H. Erosion protection shall consist of effective planting of all cut slopes in excess of three (3) feet high and fill slopes more than three (3) feet high unless otherwise approved by the City Engineer. Slopes exceeding five (5) feet high will require an approved sprinkler system, as determined by the City Engineer. (Ord. 2008-03)

I. Protection for the slopes shall be installed as soon as practicable which may be prior to rough grade approval. Effective planting shall be installed, fully germinated and effectively cover the required slopes prior to final approval unless otherwise approved by the City Engineer.

J. The erosion control provisions shall take into account drainage patterns during the current and future phases of grading throughout the rainy season.

K. All removable protective devices shown shall be in place at the end of each working day when the five (5) day rain probability forecast exceeds forty (40) percent.

L. Unvegetated slopes shall be protected in accordance with the guidelines set forth by the Erosion and Sediment Control Manual or in accordance with other requirements set forth by the City Engineer.

23.24.390 - Erosion Control Maintenance.

A. After each rainstorm exceeding 1/4-inch in a 12 hour period, silt and debris shall be removed from all temporary check berms and desilting basins and the basins pumped dry. The requirement to clean and pump permanent desilting basins will be addressed on a case by case basis. No person shall allow the removed silt and debris to enter the Storm Water Conveyance System. (Ord. 2008-03)

B. After each rainstorm, the performance of the erosion control system shall be evaluated and revised and repaired as necessary.

C. Devices shall not be moved or modified without the approval of the City Engineer.

D. The contractor shall be responsible and shall take necessary precautions to prevent public trespass onto areas where impounded water creates a threat to public health, safety and welfare.

E. The contractor, the Permittee, and project owner shall be jointly and severally responsible for the continued maintenance of the devices during the wet season. In the event of failure or refusal by the contractor, permittee or project owner to maintain the devices, the City Engineer may cause emergency maintenance work to be done to protect adjacent private property, public property or the Waters of the State. The cost shall be charged to the owner and shall include an initial mobilization cost plus the cost of doing the work as provided for in this Chapter. (Ord. 2008-03)

F. In the event the City Engineer must cause emergency maintenance work to be done, the grading permit may be revoked in writing. The permit shall not be renewed until an erosion control system approved by the City Engineer is installed and a fee of one-half the amount required for the original permit is paid by the owner. The City Engineer may waive installation of an erosion control system after April 15. (Ord. 2008-03)

G. If any grading subject to the provisions of this Chapter has commenced on private property without a valid grading permit, the property owner shall be required to prepare and implement an erosion control plan which has been approved by the City Engineer. In the event of failure by the property owner to install an approved erosion control system, the City Engineer may cause emergency work to be done to protect adjacent private property, public property or the Waters of the State. (Ord. 2008-03)

23.24.400 - Dry Season Work. The Permittee conducting any earth moving operations under this Ordinance shall be responsible for controlling dust at all times. Provisions for dry season dust control shall be included in the grading plan. (Ord. 2008-03)

23.24.410 - Import and Export of Materials. Where transport of earth is proposed on public roadways from or to the site of an earth grading operation, the following requirements in A through D shall apply. In those instances where an excess of two thousand (2,000) cubic yards of earth per project site is transported on public roadways, in addition to requirements A through D, requirements E through G shall also apply. (Ord. 2008-03)

A. Either water or dust palliative, or both, must be applied for the alleviation or prevention of excessive dust resulting from the loading or transportation of earth from or to the project site on public roadways. The Permittee shall be responsible for maintaining public rights-of-way used for handling purposes in a condition free of dust, earth, or debris attributed to the grading operation.

Appendix B-6 Construction Enforcement Actions

Date	Site Address	Violation	Correct Work	Stop Work/NOV	Citation-Warning	Citation-Fine	Citation Number	Cost Recovery	Routine Inspection	Complaint Inspection
11/1/10	Mackinnon & Birmingham	BMP Installation and Maintenance Required	1						1	
10/20/10	1450 Blue Heron Dr	BMP Installation Required	1						1	
11/23/10	424 Brighton	BMP Installation Required	1						1	
10/19/10	3055 Brookside Ln	BMP Installation and Maintenance Required	1						1	
11/18/10	3055 Brookside Ln	BMP Installation Required	1						1	
1/25/11	3055 Brookside Ln	BMP Maintenance Required	1						1	
11/3/10	207 C Street	BMP Installation Required	1						1	
11/1/10	599 Camino El Dorado	BMP Maintenance Required	1						1	
10/22/10	Cardiff Safe Route to School	BMP Installation Required	1						1	
10/27/10	600 Christine Place	BMP Installation and Maintenance Required	1						1	
10/12/10	687 S Coast Hwy 101	BMP Installation Required	1						1	
10/28/10	687 S Coast Hwy 101	BMP Installation Required	1						1	
11/2/10	350 Cole Ranch Rd	BMP Installation Required	1						1	
11/2/10	747 Doris Dr	BMP Installation Required	1						1	
2/14/11	1502 Encinitas Blvd	BMP Maintenance Required	1						1	
3/30/11	1502 Encinitas Blvd	BMP Maintenance Required	1						1	
4/4/11	1502 Encinitas Blvd	BMP Installation and Maintenance Required	1							1
11/2/10	221 Florita	BMP Installation Required	1						1	
2/3/11	3214 Fortuna Ranch Rd	BMP Installation and Maintenance Required	1						1	
2/17/11	3214 Fortuna Ranch Rd	BMP Maintenance Required	1						1	
3/3/11	3214 Fortuna Ranch Rd	BMP Maintenance Required	1						1	
10/26/10	1635 Gascony Rd	BMP Maintenance Required	1						1	
4/29/11	1007-1021 Hermes Ave	BMP Installation Required	1						1	
12/3/10	1060 Hygeia Ave	BMP Maintenance Required	1						1	
10/22/10	1058-1076 Hymettus Ave	BMP Installation Required	1						1	
1/3/11	1076 Hymettus Ave	BMP Installation and Maintenance Required	1			$200	CW010311A			1
3/24/11	1058-1076 Hymettus Ave	BMP Maintenance Required	1							1
2/23/11	1492 Hymettus Ave	BMP Maintenance Required	1						1	
3/23/11	1492 Hymettus Ave	BMP Installation and Maintenance Required	1							1
12/21/10	1835 Lahoud Dr	BMP Installation Required	1						1	
3/15/11	1835 Lahoud Dr	BMP Installation and Maintenance Required	1						1	
3/24/11	1835 Lahoud Dr	BMP Maintenance Required	1			$200	CW032411D			1
10/22/10	1845 Lahoud Dr	BMP Installation Required	1						1	
10/19/10	3351 Lilac Summit	BMP Installation and Maintenance Required	1						1	
10/22/10	Lone Jack Stratford Knoll	BMP Maintenance Required	1						1	
11/22/10	Lone Jack Stratford Knoll	BMP Installation Required	1						1	
12/17/10	Lone Jack Stratford Knoll	BMP Maintenance Required	1						1	
2/8/11	1150 Melba Dr	BMP Installation and Maintenance Required	1						1	
3/21/11	1150 Melba Dr	BMP Maintenance Required	1						1	
3/24/11	1150 Melba Dr	BMP Installation and Maintenance Required	1							1
4/26/11	1150 Melba Dr	BMP Maintenance Required	1						1	
10/26/10	234 Rancho Santa Fe Rd	BMP Maintenance Required	1						1	
3/21/11	422 Requeza	BMP Installation Required	1						1	
3/24/11	422 Requeza	BMP Maintenance Required	1			$200	CW032411			1
1/4/11	1531 San Elijo Ave	BMP Installation and Maintenance Required	1			$200	CW010411			1
3/21/11	1531 San Elijo Ave	BMP Maintenance Required	1			$400	CW032411A			1
3/24/11	1719 San Elijo Ave	BMP Maintenance Required	1			$200	CW032411B			1
12/21/10	1729 San Elijo Ave	BMP Installation Required	1						1	
10/20/10	354 Santa Fe Dr	BMP Installation and Maintenance Required	1						1	
11/16/10	354 Santa Fe Dr	BMP Installation Required	1						1	
2/8/11	354 Santa Fe Dr	BMP Installation Required	1						1	
10/26/10	200 Saxony Rd	BMP Installation Required	1						1	
10/26/10	950 Saxony Rd	BMP Installation Required	1						1	
11/16/10	950 Saxony Rd	BMP Maintenance Required	1						1	
1/18/11	950 Saxony Rd	BMP Installation and Maintenance Required	1						1	
11/4/10	272 Seeman Dr	BMP Installation and Maintenance Required	1						1	
11/3/10	1463 Summit Ave	BMP Maintenance Required	1						1	
4/27/11	2145 Thirteenth St	BMP Installation Required	1						1	
10/22/10	1060 Urania	BMP Installation Required	1						1	
11/22/10	1060 Urania	BMP Installation and Maintenance Required	1						1	
12/23/10	721 N Vulcan Ave	Illegal Dewatering of Site	1			$200	CW122310C			1
10/26/10	1657 N Vulcan Ave	BMP Maintenance Required	1						1	
11/17/10	3177 Wildflower Summit	BMP Installation Required	1						1	
12/9/10	3177 Wildflower Summit	BMP Installation Required	1						1	
2/23/11	3177 Wildflower Summit	BMP Installation and Maintenance Required	1						1	
10/13/10	3183 Wildflower Summit	BMP Installation Required	1						1	
10/28/10	3183 Wildflower Summit	BMP Installation Required	1						1	
		Totals	**67**	**0**	**0**	**$1,600**	**NA**	**0**	**56**	**11**

Appendix C

Municipal

C-1 **Municipal Inventory**

C-2 **Municipal Activities Report**

C-3 **Municipal BMP Map**

C-4 **Special Events Permit P2 Questionnaire**

C-5 **Approved Special Events**

C-6 **Routine Inspections Summary**

	Facility Name	Address	Land Use/Activities	Tributary to a 303(d) Impaired Water Body	Inspection Priority	Sub-basin
1	"A" TANK SITE	601 SANTA FE DR	Tank storage site/municipal yard	NOT TRIBUTARY	High Priority	Encinitas
2	BEACON'S BEACH	948 NEPTUNE AVE	Beach access/parking lot	NOT TRIBUTARY	High Priority	Leucadia
3	CALLE MAGDALENA PUBLIC WORKS FACILITY	160 CALLE MAGDALENA	Administrative offices/municipal yard/vehicle maintenance/materials storage	NOT TRIBUTARY	High Priority	Encinitas
4	CARDIFF SPORTS PARK	1661 LAKE DR	Recreational facilities/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Cardiff
5	CARDIFF SPORTS PARK EXPANSION	1623 LAKE DR	Recreational facilities/landscaped areas	NOT TRIBUTARY	High Priority	Cardiff
6	COTTONWOOD CREEK PARK	95 N. VULCAN AVE	Park/landscaped areas/parking lot	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
7	ENCINITAS RANCH GOLF COURSE	1275 QUAIL GARDENS DR	Golf course	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
8	ENCINITAS VIEWPOINT PARK	56 E D STREET	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
9	GLEN PARK	2149 ORINDA DR	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Cardiff
10	GRANDVIEW BEACH	1700 NEPTUNE AVE.	Beach access/parking lot	NOT TRIBUTARY	High Priority	Leucadia
11	H STREET VIEWPOINT	498 H STREET	Vista point	NOT TRIBUTARY	High Priority	Encinitas
12	HAWK VIEW PARK	1309 BLUE HERON DRIVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
13	J STREET VIEWPOINT	398 J STREET	Vista point/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
14	LAS VERDES PARK	1390 PASEO DE LAS VERDES	Park/landscaped areas	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
15	LEO MULLEN SPORTS PARK	951 VIA CANTEBRIA	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	La Costa South
16	LEUCADIA OAKS PARK	1511 N. VULCAN AVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
17	LEUCADIA ROADSIDE PARK	860 N COAST HIGHWAY 101	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
18	LITTLE OAKS EQUESTRIAN PARK	2879 LONE JACK RD	Park/horse corral/landscaped areas	NOT TRIBUTARY	High Priority	Lower Escondido Creek
19	MILDRED MACPHERSON PARK	1045 S VULCAN AVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
20	MOONLIGHT BEACH	400 B STREET	Beach access/park/landscaped area/parking lot	TRIBUTARY TO PACIFIC OCEAN SHORELINE	High Priority	Encinitas
21	MS4	CITY WIDE	MS4	TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
22	OAKCREST PARK	1219 ENCINITAS BLVD	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Encinitas
23	ORPHEUS PARK	482 ORPHEUS AVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
24	PAUL ECKE SPORTS PARK	278 SAXONY RD.	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Encinitas
25	REQUEZA STREET FACILITY	397 REQUEZA ST	Municipal yard/sediment/materials storage	NOT TRIBUTARY	High Priority	Encinitas
26	ROADS, STREETS AND HIGHWAYS	CITY WIDE		TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
27	WASTEWATER COLLECTION FACILITY	2695 MANCHESTER AVE	Administrative offices/Municipal yard	NOT TRIBUTARY	High Priority	Cardiff
28	SCOTT VALLEY PARK	1602 WILLOWHAVEN	Park/landscaped areas	TRIBUTARY TO ENCINITAS CREEK	High Priority	La Costa South
29	SPECIAL EVENTS	CITY WIDE	Recreational facilities, parks, landscaped areas, roads, streets and highways	MAY BE TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
30	SUN VISTA PARK	2011 AVENIDA LA POSTA	Park/landscaped areas	NOT TRIBUTARY	High Priority	La Costa South
31	SWAMI'S BEACH	1298 S COAST HIGHWAY 101	Beach access/parking lot	NOT TRIBUTARY	High Priority	Encinitas
32	WIRO PARK	2232 EL CAM DEL NORTE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Lower Escondido Creek/Ranch Santa Fe
33	CARDIFF PUMP STATION	2690 MANCHESTER AVE	Pump station	NOT TRIBUTARY	Low Priority	Cardiff
34	CIVIC CENTER	505 S VULCAN AVE.	Administrative offices/parking lot	NOT TRIBUTARY	Low Priority	Encinitas
35	ENCINITAS COMMUNITY & SENIOR CENTER	1140 OAKCREST PARK DR	Administrative offices/parking lot	NOT TRIBUTARY	Low Priority	La Costa South
36	D STREET BEACH	450 D STREET	Beach access and vista point	TRIBUTARY TO PACIFIC OCEAN SHORELINE	Low Priority	Encinitas
37	FIRE STATION #1	415 2ND ST	Fire station	NOT TRIBUTARY	Low Priority	Encinitas
38	FIRE STATION #2	1867 MACKINNON	Fire station	NOT TRIBUTARY	Low Priority	Cardiff
39	FIRE STATION #3	801 ORPHEUS AVE	Fire station	NOT TRIBUTARY	Low Priority	Leucadia
40	FIRE STATION #4	2011 VILLAGE PARK	Fire station	NOT TRIBUTARY	Low Priority	La Costa South
41	FIRE STATION #5	540 BALOUR DR	Fire station	NOT TRIBUTARY	Low Priority	Encinitas
42	HALL PROPERTY	425 SANTA FE DR.	Undeveloped park site	NOT TRIBUTARY	Low Priority	Cardiff
43	HIGHWAY 101 PUMP STATION	S. COAST HIGHWAY 101	Pump station	NOT TRIBUTARY	Low Priority	Cardiff
44	I STREET VIEWPOINT	498 I STREET	Vista point	NOT TRIBUTARY	Low Priority	Encinitas
45	INDIAN HEAD CANYON	SAXONY ROAD/QUAIL HOLLOW DR	Undeveloped park site	NOT TRIBUTARY	Low Priority	Leucadia
46	MOONLIGHT BEACH PUMP STATION	305 THIRD ST.	Pump station	TRIBUTARY TO COTTONWOOD CREEK	Low Priority	Encinitas
47	OLIVENHAIN PUMP STATION	MANCHESTER/I-5	Pump Station	NOT TRIBUTARY	Low Priority	Cardiff
48	PHOEBE PUMP STATION	1200 block of N. Coast Highway 101	Pump Station	NOT TRIBUTARY	Low Priority	Leucadia
49	SAN DIEGUITO WATER DISTRICT*		Pump Station	NOT TRIBUTARY	Low Priority	La Costa South/Encinitas
50	SAN DIEGUITO WATER DISTRICT*		Water reservoir/water storage	NOT TRIBUTARY	Low Priority	La Costa South/Encinitas
51	SAN DIEGUITO WATER DISTRICT*		Water reservoir/water storage	NOT TRIBUTARY	Low Priority	Encinitas
52	SAN DIEGUITO WATER DISTRICT*		Water recycling reservoir	NOT TRIBUTARY	Low Priority	Encinitas
53	SAN DIEGUITO WATER DISTRICT*		Pressure regulating station/no activities on site	NOT TRIBUTARY	Low Priority	Encinitas
54	SAN DIEGUITO WATER DISTRICT*		Pressure regulating station/no activities on site	NOT TRIBUTARY	Low Priority	Cardiff
55	SWAMIS BLUFFS PARCELS	1400 S. COAST HIGHWAY 101	Undeveloped site	NOT TRIBUTARY	Low Priority	Encinitas
56	STANDARD PACIFIC PARK	OLYMPUS / PIRAEUS	Undeveloped site	NOT TRIBUTARY	Low Priority	Leucadia
57	STONESTEPS BEACH	350 SOUTH EL PORTAL	Beach access and vista point	NOT TRIBUTARY	Low Priority	Leucadia
58	UV TREATMENT FACILITY	305 THIRD ST.	UV Treatment Facility	TRIBUTARY TO COTTONWOOD CREEK	Low Priority	Encinitas

***Note: The San Dieguito Water District's facility addresses have been omitted for security purposes.**

Appendix C-2 Municipal Activities Report

Item No.	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2010-11 Annual Result
1.	Report on updates to the municipal inventory and prioritization (J.3.a.(3)(c)i).	July 1, 2009-June 30, 2010		See Appendix C-1
2.	Confirmation that the designated BMPs were implemented, or required to be implemented for: municipal areas and activities (J.3.a.(3)(c)ii).	July 1, 2009-June 30, 2010		See Sections 4.2.3, 4.3.3, 4.4.3, 4.5.3 and 4.6.3
3.	Confirmation that the designated BMPs were implemented, or required to be implemented for: special events (J.3.a.(3)(c)ii).	July 1, 2009-June 30, 2010		See Section 4.7.3
4.	A description of inspections and maintenance conducted for municipal treatment controls-Municipal Filter Inserts (J.3.a.(3)(c)iii).	July 1, 2009-June 30, 2010		See Section 4.4.4.1
5.	A description of inspections and maintenance conducted for municipal treatment controls-UV Treatment Facility (J.3.a.(3)(c)iii).	July 1, 2009-June 30, 2010		See Section 4.4.4.1
6.	Identification of the total number of catch basins and inlets (J.3.a.(3)(c)iv).	July 1, 2009-June 30, 2010		1,757
7.	Identification of the number of catch basins and inlets **inspected** (J.3.a.(3)(c)iv).	July 1, 2009-June 30, 2010		2,503
8.	Identification of the number of catch basins and inlets found with accumulated waste exceeding 33% of design capacity ((J.3.a.(3)(c)iv).	July 1, 2009-June 30, 2010	All inlets and catch basins within the City are inspected on an annual basis, which is sufficient in ensuring the catch basins do not reach one-third of capacity and that self-cleaning facilities remain free of trash and debris.	0
9.	Identification of the number of catch basins and inlets **cleaned** (J.3.a.(3)(c)iv).	July 1, 2009-June 30, 2010		2,503
10.	Identification of total distance (miles) of the MS4 (J.3.a.(3)(c)v).	July 1, 2009-June 30, 2010		63 miles of pipe
11.	Identification of distance of the MS4 **inspected** (J.3.a.(3)(c)v)**.**	July 1, 2009-June 30, 2010		63.6 miles of pipe
12.	Idenitification of distance of the MS4 found with accumulated waste exceeding cleaning criteria (J.3.a.(3)(c)v).	July 1, 2009-June 30, 2010		0
13.	Identification of distance of the MS4 **cleaned** (J.3.a.(3)(c)v)**.**	July 1, 2009-June 30, 2010		1.54 miles of pipe
14.	Identification of total distance (miles) of open channels (J.3.a.(3)(c)vi).	July 1, 2009-June 30, 2010		2.43 miles

Appendix C-2 Municipal Activities Report

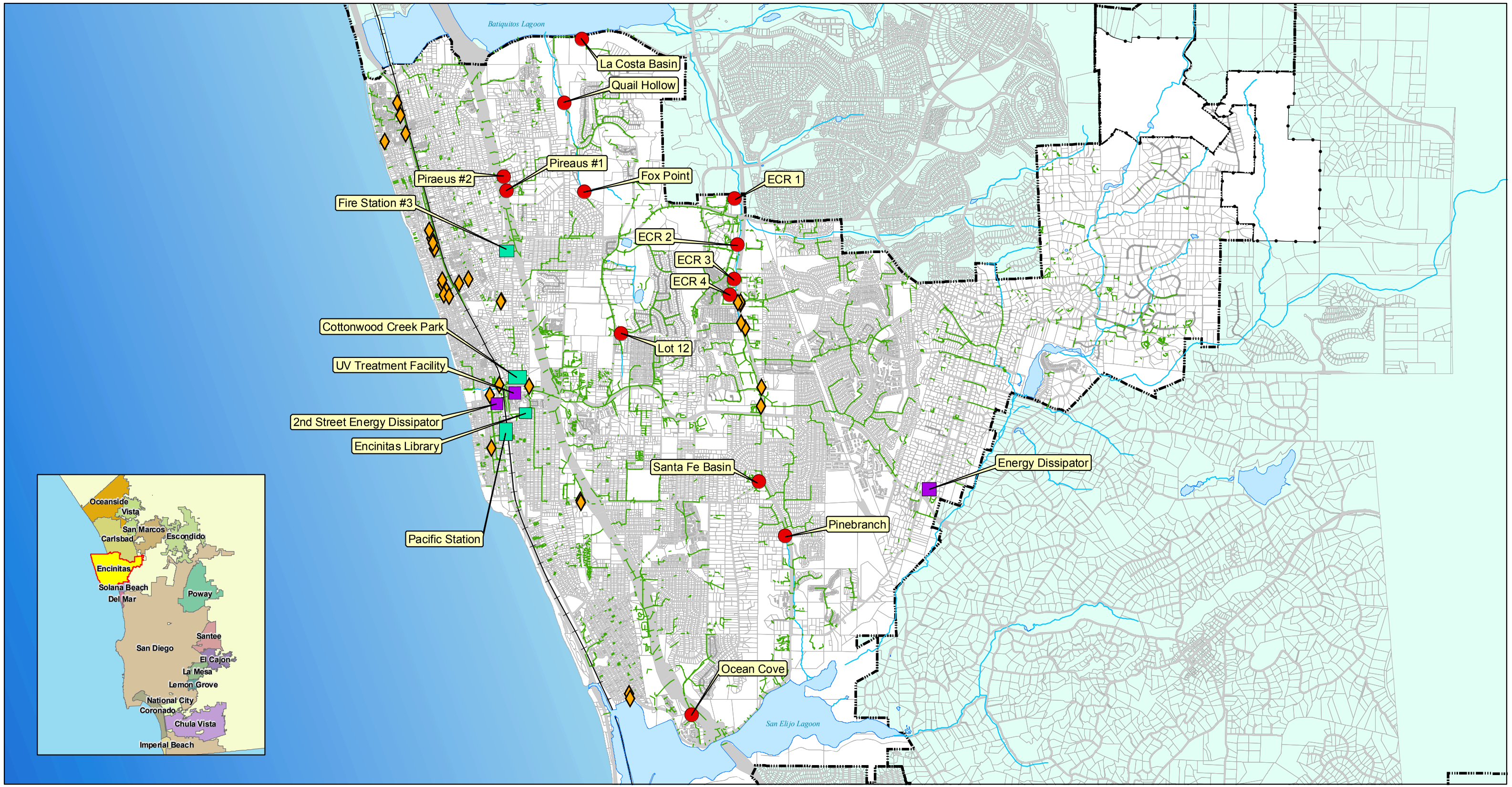
Item No.	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2010-11 Annual Result
15.	Identification of distance of open channels **inspected** (J.3.a.(3)(c)vi).	July 1, 2009-June 30, 2010		4.86 miles
16.	Identification of distance of open channels found with anthropogenic litter (J.3.a.(3)(c)vi).	July 1, 2009-June 30, 2010		.69 miles
17.	Identification of distance of open channels **cleaned** (J.3.a.(3)(c)vi).	July 1, 2009-June 30, 2010		.69 miles
18.	Amount of waste and litter (tons) removed from catch basins (J.3.a.(3)(c)vii).	July 1, 2009-June 30, 2010	* The combined total amount of waste and litter removed from catch basins and inlets is 81.3 tons.	81.3 tons *
19.	Amount of waste and litter (tons) removed from inlets (J.3.a.(3)(c)vii).	July 1, 2009-June 30, 2010	* The combined total amount of waste and litter removed from catch basins and inlets is 81.3 tons.	81.3 tons *
20.	Amount of waste and litter (tons) removed from the MS4 (J.3.a.(3)(c)vii).	July 1, 2009-June 30, 2010		401 tons
21.	Amount of waste and litter (tons) removed from the open channels (J.3.a.(3)(c)vii).	July 1, 2009-June 30, 2010		317 tons
22.	Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification of the finding (J.3.a.(3)(c)viii).	July 1, 2009-June 30, 2010		None
23.	Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented or required to be implemented for municipal areas and activities (J.3.a.(3)(c)ix).	July 1, 2009-June 30, 2010		See Section 4.3.3.1
24.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating the **highest** volumes of trash and/or debris (J.3.a.(3)(c)x).	July 1, 2009-June 30, 2010		75 curb miles
25.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)x).	July 1, 2009-June 30, 2010	See Section 4.2.4	Weekly

Appendix C-2 Municipal Activities Report

Item No.	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2010-11 Annual Result
26.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating **moderate** volumes of trash and/or debris (J.3.a.(3)(c)xi).	July 1, 2009-June 30, 2010		92 curb miles
27.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)xi).	July 1, 2009-June 30, 2010	See Section 4.2.4	Twice a month
28.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating **low** volumes of trash and/or debris (J.3.a.(3)(c)xii).	July 1, 2009-June 30, 2010		280 curb miles
29.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)xii).	July 1, 2009-June 30, 2010	See Section 4.2.4	Monthly
30.	Identification of the total distance of curb-miles swept (J.3.a.(3)(c)xiii).	July 1, 2009-June 30, 2010		Approximately 11,330 miles
31.	Identification of the number of municipal parking lots (J.3.a.(3)(c)xiv).	July 1, 2009-June 30, 2010		4
32.	Identification of the number of municipal parking lots swept (J.3.a.(3)(c)xiv).	July 1, 2009-June 30, 2010		4
33.	Identification of the frequency of sweeping (J.3.a.(3)(c)xiv).	July 1, 2009-June 30, 2010	All beach parking lots are swept once per week April through September and once per month October through March.	See Section 4.2.4
34.	Amount of material (tons) collected from street and parking lot sweeping (J.3.a.(3)(c)xv).	July 1, 2009-June 30, 2010		1,861 tons
35.	A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4 (J.3.a.(3)(c)xvi).	July 1, 2009-June 30, 2010		See Section 4.5.4.1
36.	Identification of the number of fixed municipal sites requiring inspections (J.3.a.(3)(c)xvii).	July 1, 2009-June 30, 2010	Refer to Appendix C-1 list of all High Priority Municipal Facilities	29
37.	Identification of the number of municipal sites inspected (J.3.a.(3)(c)xvii).	July 1, 2009-June 30, 2010		29
38.	Identification of the frequency of inspections (J.3.a.(3)(c)xvii).	July 1, 2009-June 30, 2010		Annual

Appendix C-2 Municipal Activities Report

Item No.	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2010-11 Annual Result
39.	A description of the general results of the inspections (J.3.a.(3)(c)xviii).	July 1, 2009-June 30, 2010		See Appendix C-6
40.	Confirmation that the inspections conducted addressed all the required inspection steps and follow-ups to determine full compliance (J.3.a.(3)(c)xix).	July 1, 2009-June 30, 2010	All inspections conducted meet BMP requirements	See Appendix C-6
41.	The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken (J.3.a.(3)(c)xx).	July 1, 2009-June 30, 2010	In FY 2010-11, there was 1 corrective action and a follow-up inspection as a result of the routine annual inspections at all high priority municipal facilities. Details of the corrective action for all routine municipal inspections can be found in Appendix C-6. The Clean Water Program hotline also received a total of 8 municipal complaints during the reporting period. A total of 8 complaints were investigated which resulted in 6 violations, 0 NOVs, 0 citations, 6 education actions and 3 follow-up inspections.	0
42.	A description of notable activities conducted to manage urban runoff from municipal areas and activities (J.3.a.(3)(c)xxi).	July 1, 2009-June 30, 2010		See Sections 4.2.4, 4.3.4, 4.4.4, 4.5.4, 4.6.4 and 4.7.4



FY 2010-2011 Encinitas Municipal BMP Locations

- Storm Drain Inlet Filters
- Detention Basin
- Structural BMP
- Multiple BMPs
- Storm Drains
- Streams
- Roads

This map was produced by the City of Encinitas GIS and is designed for internal use only. The map is based on the best data available at the time of production and is not guaranteed to survey accuracy. City of Encinitas, SanGIS, SANDAG and other data are represented.

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Coordinate System:
California State Plane Feet, Zone 6
Datum: NAD83

Date of Map Production: September, 2011

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0 2,500 5,000 Feet

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POLLUTION PREVENTION
(Does not apply to Special Ceremonies)

Storm drains are not connected to the City's sewer system. All pollutants allowed to enter the storm drain system flow directly to our beaches, ocean, lagoons, and other waterways without being treated. The City of Encinitas is required by the San Diego Regional Water Quality Control Board to report on pollution prevention measures taken at special events held throughout the City.

In the area provided on the next page or on a separate sheet of paper, please complete the following questions and describe methods of pollution prevention that will be implemented at your proposed event.

1. Describe how trash, recycling, and debris will be managed (i.e. extra bins, temporary fencing, etc.)

2. If your event will include food production, describe how excess oil and grease will be disposed of. These materials cannot be dumped into the streets or storm drain system.

3. Please identify any other potential pollutant generating sources or activities that may take place (i.e. portable toilets).

For questions, please call the City's Clean Water Program at (760) 633-2787.

Appendix C-5 Approved Special Events in FY 2010-11

	Event	Event Date	Time	Location	Estimated Attendance	Clean-up Deposit required?
1	Cottonwood Creek Environmental Film Series	7/1/10	7-9pm	Pacific Station 687 S Coast Hwy 101	100	
2	Fire Stafey Awareness Event	7/1/10	11:30am-1:30pm	Magdalena Ecke Family YMCA	200	
3	Sunday Summer Concerts	7/11, 7/25, 8/8, 8/22	3pm-5pm	MLB	2000	
4	29th Annual Carlsbad Triathlon	7/11/10	8am-1pm	Tamarack State Beach (Carlsbad)	1100	
5	Encinitas Classic Car Nights	7/15, 8/19, 9/16	5:30-7:30pm	F Street from Hwy 101 to 2nd Street	400	
6	Solana Beach Triathlon & Duathlon	7/25/10	5:30-11am	Hwy 101	1400	
7	St John's Fiesta de las Flores	8/13-8/15	10am-7pm	1001 Encinitas Blvd	7000	
8	Dog Days of Summer	8/14/10	10am-3pm	Cardiff- Liverpool to Chesterfield on Ne	4000	
9	21st Annual Taste of Mainstreet	8/26/10	6pm-9pm	Hwy 101 from Encinitas Blvd to K Stree	1000	
10	LeucadiART Walk	8/29/10	8am-6pm	Hwy101 btwn Marcheta and W. Glaucu	3000	
11	Labor Day Family Picnic	9/6/10	8am-6pm	Oakcrest Park	100	
12	Wavecrest 2010	9/17 & 9/18	12 & 3pm	MLB Parking Lot	5000	
13	Challenge Walk MS 2010	9/24-9/26/10	8am-2pm	Route throughout City	350	
14	26th Annual CA Coastal Cleanup Day	9/25/10	8am-1pm	Swamis, Beacons, MLB	100 per site	
15	Encinitas Lifestyles Fashion Show	9/25/10	5-8pm	710 S Coast Hwy 101- Charlie's	300	
16	16th Annual Oktoberfest	9/26/10	10am-6pm	El Camino Real at Mountain Vista	35000	$300.00
17	Fire Engineer Promotional Testing	9/27/10	8am-6pm	MLB Parking Lot	15	
18	Encinitas Fire Safety Expo	10/2/10	8:30am-2:30pm	MLB Parking Lot	250	
19	Feeling Fit Festival	10/3/10	10am-2pm	951 Via Cantebria- Leo Mullen	800	
20	SD County Library Book Festival	10/9/10	8am-6pm	Viewpoint Park	200	
21	Pink Pancake Breakfast for a Cure	10/10/10	8am-11am	MLB	500	
22	Bike MS Bay to Bay Tour	10/16/10	8am-4pm	MLB Parking Lot	1000	
23	City of Encinitas P&R Community Garage Sale	10/23/10	8am-12pm	Community Center parking lot	300	
24	Cycle for Life	10/30/10	7am-3pm	Mira Costa College	200	
25	ISF High School Surf Team Competition	10/30, 10/31,11/13, 11/14, 3/13	7am-4pm	MLB/D Street Beach	200	
26	Safe Trick or Treat	10/31/10	4-9pm	Hwy 101 from D to J Streets	1,000	
27	Bike the Coast	11/6/10	6:30am-12pm	MLB Parking Lot	500	
28	Fall Festival Street Fair	11/21/10	9am-4pm	Hwy 101 from D to J Streets	50,000	
29	L8 Nights and Sidewalk Sale	12/2,9,16,23 and 12/26-31	5-8pm, 11am-5pm	Hwy 101 from D to K Streets	200	
30	City of Encinitas Holiday Parade	12/4/10	3:30-9pm	Downtown Encinitas	15,000	
31	NSSA Jr #4	12/11/10	7am-5pm	MLB	75	
32	NSSA Explorer #5	1/15 &1/16/11	7am-5pm	D Street	150	
33	Scholastic Surf Series	2/5 & 2/6/11	7am-4:30pm	D Street/MLB	150	
34	Teen Driving Safety 5K Run	2/12/11	7am-12pm	MLB	250	
35	Burn Institute Boot Drive	4/6/11	7:30-9:30am	Encinitas Intersections	10 participants	
36	April Street Fair	4/9 & 4/10/11	9am-5pm	Hwy 101 from D to J Streets	40,000	$300.00
37	Ragnar Relay So Cal '11	4/16/11	3-10:30am	Various	4200	
38	Easter Egg Hunt Festival	4/23/11	10am-1pm	Ecke Sports Park	5000	
39	Easter Service	4/24/11	6am-1pm	MLB	450	
40	CWC Environmental Film Series	4/28, 5/26, 6/23	6-7pm	Pacific Station 687 S Coast Hwy 101	80	
41	Creek to Bay Cleanup	4/30/11	8am-12pm	MLB	100	
42	Encinitas Garden Festival	4/30/11	8am-5pm	Crest Dr- Santa Fe to Birmingham	1000	
43	Great Strides/ Walk	5/1/11	8am-2pm	MLB	400	
44	Tour de Cure	5/7/11	5am-4pm	Mira Costa College	1200	
45	Walk for Life Fundraiser	5/7/11	8am-12pm	MLB	75	
46	Encinitas Sprint Triathlon	5/8 & 5/15/11	6:30am-12pm	MLB	1500	
47	City of Encinitas 5K	5/14/11	8-10am	MLB	5000	
48	MLB Paddle and Swim	5/14 & 5/15/11	8-11am	MLB	400	
49	JTF Scholarship Award Picnic	5/15/11	9am-6pm	Oakcrest Park	150	
50	Fox 5 Morning News "On the Road"	5/20/11	3-11am	MLB, Library	50	
51	San Diego Century Bicycle Tour	5/21/11	6am-6pm	Mira Costa College	1500	
52	K5 Summer Surf Klassic	5/28/11	5am-5pm	D Street	100	
53	Law Enforcement Torch Run	6/1/11	6-9am	Coast Hwy 101	10	
54	Encinitas Pet Health Expo	6/5/11	9am-1pm	City Hall	500	
55	Encinitas Environment Day	6/5/11	10am-4pm	Cottonwood Creek Park	2000	
56	City of Encinitas Employee Recognition Lunch	6/17/11	9am-2pm	Encinitas Viewpoint Park	150	
57	Encinitas Festival of the Arts	6/25/11	9am-5pm	El Camino Real and Manchester Ave	500	

Appendix C-6 Routine Municipal Inspection Summary FY 2010 - 2011

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
1	**133901**	5/25/11	Requeza Yard	By EMERSON, MIKE: 8/30/2011 2:33:34 PM Inspected by John Ugrob	No Corrective Actions Required			
2	**133902**	5/25/11	Calle Magdelena Public Works Facility	By EMERSON, MIKE: 8/30/2011 2:55:33 PM Inspected by John Ugrob	No Corrective Actions Required			
3	**135903**	5/25/11	A Tank Site	By EMERSON, MIKE: 8/30/2011 3:02:48 PM Inspected by John Ugrob	No Corrective Actions Required			
4	**135904**	5/25/11	W. W. C. Facility	By EMERSON, MIKE: 8/30/2011 3:10:33 PM Inspected by John Ugrob	No Corrective Actions Required			
5	**135905**	5/23/11	Paul Ecke Sports Park	By EMERSON, MIKE: 8/30/2011 3:18:46 PM Inspected by Mike Wells	No Corrective Actions Required			
6	**135906**	5/23/11	Encinitas Viewpoint	By EMERSON, MIKE: 8/30/2011 3:41:37 PM Inspected by Mike Wells	No Corrective Actions Required			
7	**135908**	5/17/11	Leo Mullen Sports Park	By EMERSON, MIKE: 8/30/2011 4:04:15 PM Inspected by Mike Wells	Spill kit	No. Completed: 5/24/2011		
8	**135910**	5/23/11	Las Verdes Park	By EMERSON, MIKE: 8/30/2011 4:18:21 PM Inspected by Mike Wells	No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
9	**135911**	5/17/11	Oakcrest Park	By EMERSON, MIKE: 8/30/2011 4:38:12 PM Inspected by Mike Wells	No Corrective Actions Required			
10	**135914**	5/24/11	Scott Valley Park	By EMERSON, MIKE: 8/31/2011 9:15:42 AM Inspected by Mike Wells	No Corrective Actions Required			
11	**135922**	6/20/11	Cardiff sports park	By EMERSON, MIKE: 8/31/2011 5:38:37 PM Inspected by Bob Keeley	No Corrective Actions Required			
12	**135926**	6/20/11	Cardiff Sports Park Expansion	By EMERSON, MIKE: 9/1/2011 2:15:38 PM Inspected by Bob Keeley	No Corrective Actions Required			
13	**135927**	6/20/11	Cottonwood Creek Park	By EMERSON, MIKE: 9/1/2011 2:23:11 PM Inspected by Bob Keeley	No Corrective Actions Required			
14	**135928**	6/20/11	Leucadia Oaks Park	By EMERSON, MIKE: 9/1/2011 2:29:10 PM Inspected by Bob Keeley	No Corrective Actions Required			
15	**135929**	6/22/11	Hawk View Park	By EMERSON, MIKE: 9/1/2011 2:33:40 PM Inspected by Bob Keeley	No Corrective Actions Required			
16	**135930**	6/21/11	Sun Vista Park	By EMERSON, MIKE: 9/1/2011 2:50:44 PM Inspected by Bob Keeley	No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
17	**135931**	6/22/11	Wiro Park	By EMERSON, MIKE: 9/1/2011 3:11:04 PM Inspected by Bob Keeley	No Corrective Actions Required			
18	**135932**	6/22/11	Little Oaks Equestrian Park	By EMERSON, MIKE: 9/1/2011 3:39:06 PM Inspected by Bob Keeley	No Corrective Actions Required			
19	**135933**	6/30/11	Beacon's Beach	By EMERSON, MIKE: 9/1/2011 3:48:29 PM Inspected by Terry Smith	No Corrective Actions Required			
20	**135934**	6/30/11	Glen Park	By EMERSON, MIKE: 9/1/2011 3:54:10 PM Inspected by Terry Smith	No Corrective Actions Required			
21	**135935**	6/30/11	Grandview Beach	By EMERSON, MIKE: 9/1/2011 3:58:27 PM Inspected by Terry Smith	No Corrective Actions Required			
22	**135936**	6/30/11	H Street viewpoint	By EMERSON, MIKE: 9/1/2011 4:03:11 PM Inspected by Terry Smith	No Corrective Actions Required			
23	**135937**	6/30/11	J Street Viewpoint	By EMERSON, MIKE: 9/1/2011 4:07:00 PM Inspected by Terry Smith	No Corrective Actions Required			
24	**135938**	6/30/11	Leucadia Roadside park	By EMERSON, MIKE: 9/1/2011 4:13:17 PM Inspected by Terry Smith	No Corrective Actions Required			
25	**135939**	6/30/11	Mildred Macpherson Park	By EMERSON, MIKE: 9/1/2011 4:27:50 PM Inspected by Terry Smith	No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
26	**135940**	6/30/11	Moonlight Beach	By EMERSON, MIKE: 9/1/2011 4:32:05 PM Inspected by Terry Smith	No Corrective Actions Required			
27	**135942**	6/30/11	Orpheus Park	By EMERSON, MIKE: 9/1/2011 4:36:18 PM Inspected by Terry Smith	No Corrective Actions Required			
28	**135943**	6/30/11	Swami's Beach	By EMERSON, MIKE: 9/1/2011 4:40:54 PM Inspected by Terry Smith	No Corrective Actions Required			
29	**136164**	5/26/11	Encinitas Ranch Golf Course-Maintenance		No Corrective Actions Required			

Total: 29

Total NOVs: 0

Appendix D

Industrial and Commercial

D-1 **Stationary Commercial Inventory**

D-2 **Industrial Inventory**

D-3 **Industrial and Commercial Inspection Form**

D-4 **Inspection Summary Form**

D-5 **Routine Inspections Summary Table**

D-6 **Mobile Commercial Inventory**

D-7 **Commercial Business Notification Letter**

D-8 **Mobile Business Notification Letter**

Appendix D-1: FY 2010-11 Commercial Inventory - Stationary Facilities

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
Field Description ►	Name used to identify facility in database.	Street number of facility.	Suite or unit number or letter, if needed.	Name of street facility is located on.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.									Is facility a tributary to 303(d) listed receiving water and generating pollutants for which the water body is impaired?	Does the facility pose a high threat to water quality?
1	A & J Ultimate Petsitting Service	210	12	A St	Encinitas	CA	92024	4904.51	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
2	California Backyard Birds	1283		Encinitas Blvd	Encinitas	CA	92024	4904.51	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
3	Companion Pet Care Professionals	1466		Encinitas Blvd	Encinitas	CA	92024	4904.51	753	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
4	Gentle Touch Cat Grooming	146		Phoebe St	Encinitas	CA	92024	4904.51	753	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
5	Grateful Dog	802		N Coast Highway 101	Encinitas	CA	92024	4904.51	753	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
6	Holiday Pet Hotel	551		Union St	Encinitas	CA	92024	4904.51	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
7	Kamp Kanine, L L C	389		Requeza St	Encinitas	CA	92024	4904.51	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
8	Moonlight Pet Sitting	152	21	N Coast Highway 101	Encinitas	CA	92024	4904.51	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
9	North Coast Equestrian Park, Inc.	1877		Olivenhain Rd	Encinitas	CA	92024	4904.51	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
10	Pet Nutrition Center Encinitas	123	G	N El Camino Real	Encinitas	CA	92024	4904.51	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
11	Puppy Love Pet Grooming	191	211	N El Camino Real	Encinitas	CA	92024	4904.51	753	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
12	Santa Fe Animal Clinic	301	A	Santa Fe Dr	Cardiff	CA	92007	4904.51	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
13	Sit And Stay Awhile Pet Care	251		Calle De Madera	Encinitas	CA	92024	4904.51	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
14	Surf Dogg	2009		Sheridan Rd	Encinitas	CA	92024	4904.51	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
15	The Animal Keeper	155		Saxony Rd	Encinitas	CA	92024	4904.51	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
16	The Drake Center For Animal Health	195		N El Camino Real	Encinitas	CA	92024	4904.51	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
17	V C A North Coast Animal Hospital	414		Encinitas Blvd	Encinitas	CA	92024	4904.51	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
18	Way To Walk Dog Walkers	1659		Neptune Ave	Encinitas	CA	92024	4904.51	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
19	Affordable Window Chip Repair	127		S El Camino Real	Encinitas	CA	92024	4904.51	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
20	Bradley Allen Autobody Painting	204		N Coast Highway 101	Encinitas	CA	92024	4904.51	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
21	California Body & Paint	320		N El Camino Real	Encinitas	CA	92024	4904.51	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
22	Custom Cycle Creations, Inc.	324	B	N El Camino Real	Encinitas	CA	92024	4904.51	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
23	Fender Mender	326		N El Camino Real	Encinitas	CA	92024	4904.51	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
24	Rancho Auto Body	591	A	Westlake St	Encinitas	CA	92024	4904.51	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
25	A+ Smog Test Only Center	449		Second St	Encinitas	CA	92024	4904.51	7549	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
26	Ace Cars And Vans	1244		N Coast Highway 101	Encinitas	CA	92024	4904.51	5521	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
27	Bassett Auto Sales	1445		Encinitas Blvd	Encinitas	CA	92024	4904.51	5521	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
28	Duru Inc./San Dieguito Towing/Dba Road One	1205		S Coast Highway 101	Encinitas	CA	92024	4904.51	7549	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
29	Encinitas Smog Test Only Center	682		S Coast Highway 101	Encinitas	CA	92024	4904.51	7549	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
30	F. I. C. Smog	322	C	N El Camino Real	Encinitas	CA	92024	4904.51	7549	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
31	Happy Auto Sales	148		N Coast Highway 101	Encinitas	CA	92024	4904.51	5521	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
32	790 First Street, L L C -D B A Sofspra	790		S Coast Highway 101	Encinitas	CA	92024	4904.51	7542	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
33	All Car Center	140		N Coast Highway 101	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
34	An Luxury Imports Of San Diego, Inc. (BMW Encinitas)	1302		Encinitas Blvd	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	High
35	Auto Parts Pros, L L C	523	100	Encinitas Blvd	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
36	Auto Zone #5657	120		Leucadia Blvd	Encinitas	CA	92024	4904.51	5531	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
37	Brad's Foreign & Domestic	565	200C	Westlake St	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
38	C P A Group, Inc./Dba Encinitas Foreign & Domestic	901		Second St	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
39	Cameron Ventures, Inc./Dba "Midas"	328		N El Camino Real	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
40	Cardiff Classics Inc.	1049		S Coast Highway 101	Encinitas	CA	92024	4904.51	7549	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
41	Certified Transmission Encinitas	322	F	N El Camino Real	Encinitas	CA	92024	4904.51	7537	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
42	Charlie's Foreign Car 197	751		Second St	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	High
43	Coast Brake & Wheel	444		S Coast Highway 101	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
44	Coastal Foreign Auto Service	320	A	N El Camino Real	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
45	Dan's Precision Alignment Center	565	200F	Westlake St	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
46	Discount Tire Company	107		N El Camino Real	Encinitas	CA	92024	4904.51	5531	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
47	El Camino Tire & Brake	330		N El Camino Real	Encinitas	CA	92024	4904.51	5531	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
48	Encinitas Automotive, Inc.	322	A	N El Camino Real	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
49	Encinitas Car Wash	293		N El Camino Real	Encinitas	CA	92024	4904.51	7542	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
50	Encinitas Ford	1424		Encinitas Blvd	Encinitas	CA	92024	4904.51	5511	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
51	Encinitas Japanese Car Specialists, Inc.	328	A	N El Camino Real	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
52	Furgerson's Garage	807		Second St	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
53	Harris Radiator Works, Inc.	274		N Coast Highway 101	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
54	Hazar, Inc. D B A Precision Tune Auto Care	318	A	N El Camino Real	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
55	Hugo's European Car Service, Inc.	110		N Coast Highway 101	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
56	Jiffy Lube #1764	221		N El Camino Real	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
57	K & B Auto Service & Repair	320	D	N El Camino Real	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
58	Keith's Automotive	215		W G St	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
59	Moonlight Motors, Inc.	215		Melrose Ave	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
60	Olson's Hand Car Wash	127		S El Camino Real	Encinitas	CA	92024	4904.51	7542	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
61	O'Reilly Auto Parts #3154	180		N El Camino Real	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
62	Paul's Auto Electric	325		Melrose Ave	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
63	Pep Boys/ Manny, Moe & Jack #701	256		N El Camino Real	Encinitas	CA	92024	4904.51	5531	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
64	Rays Automotive Service	1051		S Coast Highway 101	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
65	Rover Repairs, Inc./Dba California Rover	386		Encinitas Blvd	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
66	Scott's Automotive	1508		N Coast Highway 101	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
67	Speedy Lube & Tune & Brake, Inc. Dba	225		N El Camino Real	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
68	Studio St. John	110		N Coast Highway 101	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
69	Suspension Plus North County, Inc.	322	E	N El Camino Real	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
70	Technical Auto Repair	140	C	N Coast Highway 101	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
71	Transmasters Transmissions	184	C	N Coast Highway 101	Encinitas	CA	92024	4904.51	7537	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
72	Valvoline Instant Oil Change	127	B	S El Camino Real	Encinitas	CA	92024	4904.51	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
73	San Diego Botanical Gardens	230		Quail Gardens Dr	Encinitas	CA	92024	4904.51	8422	Botanical Garden	Yes	No	No	Yes	No	No	Yes	No	No	No	Low
74	Home Depot, The #660	1001		N El Camino Real	Encinitas	CA	92024	4904.51	5211	Building Material	No	No	No	No	No	No	No	Yes	Yes	No	Low
75	1st. Street Bar	656		S Coast Highway 101	Encinitas	CA	92024	4904.51	5813	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
76	7-Eleven # 13620	592		Santa Fe Dr	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
77	7-Eleven # 18087 / Moonlight Partners, Inc.	105		W D St	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
78	7-Eleven # 18087F	105		W D St	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
79	7-Eleven # 2111-17475 C	1446		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
80	A Little Moore	1030		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
81	Angelos Burgers	608		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
82	B G J Restaurants, Inc. (El Callejon)	345	C	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
83	Baker & Olive, L L C	165	A	S El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
84	Bar Leucadian, Inc.	1542		N Coast Highway 101	Encinitas	CA	92024	4904.51	5813	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
85	Barracuda Grill	641		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
86	Beach Grass Cafe	1476		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
87	Beach Tea House 101	1076		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
88	Beachside Bar & Grill	806		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
89	Berry Happy, Inc. Dba/Berry Happy	480		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
90	Bety's	1464		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
91	Bird House Grill	250	A	N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
92	Blue Ribbon Artisan Pizzeria	897	102	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
93	Borrelli's Pizza Inc.	285	106	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
94	Boscinita's, Inc. (Boston's)	294		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
95	Brett's B B Q	1505		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
96	Bubby's	937	106	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
97	Calypso	576		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
98	Captain Kenos	158		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
99	Chicks Natural	191	107	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
100	Chili's Grill & Bar #448	1004		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
101	Chinatown Restaurant	118		Leucadia Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
102	Chins Szechwan Encinitas, Inc.	625		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
103	Chipotle Mexican Grill # 222	268		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
104	Coco's #881	407		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
105	Cool Breeze Farms	244		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
106	Cotixan Mexican Food	219		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
107	D Street Bar And Grill	485		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
108	Dairy Queen Encinitas	1465	B	Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
109	Daley Double	546		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
110	Darshan Bakery And Cafe	949		Second St	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
111	Del Mar Swirls, (Store # 2)	204	G	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
112	Del Taco	130		Calle Magdalena	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
113	Dennys 6828	135		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
114	E Street Cafe	130		W E St	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
115	East Village Asian Diner	628		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
116	Einstein Bros. Bagels #2309	1006	B	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
117	El Q' E R O	564		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
118	El Nopalito Market	560		Santa Fe Dr	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
119	El Pollo Loco #3431	1002		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
120	El Torito Market	948	A	N Coast Highway 101	Encinitas	CA	92024	4904.51	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
121	El Torito Restaurant	1068		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
122	Elizabethan Desserts	155		Quail Gardens Dr	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
123	Encinitas Ale House	1044		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
124	Encinitas Cafe	531		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
125	Encinitas Donut Shop	580		Santa Fe Dr	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
126	Encinitas Oggi's, Inc.	305		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
127	Encinitas Ranch Cafe & Golf School	1275		Quail Gardens Dr	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
128	Encinitas Yogurt & Ice Cream	1070	C	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
129	Filiberto's Mexican Food	476		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
130	Fountain Of Youth Juice	168		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
131	Froots	127	J	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
132	Fulanos	145		Leucadia Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
133	Garcia's Mexican Cuisine & Creative Catering	1486		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
134	Garden Fresh Restaurant Corp DBA Soup Plantation	109		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
135	Garden State Bagels	191	106	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
136	Giant New York Pizza & Pasta	191	110	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
137	Giovanni's Sandwich Shop	764		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
138	Global Grind Coffee	540		Cornish Dr	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
139	Golden Bowl Restaurant	1337		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
140	Gordy's Bakery	441		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
141	Greek American Family Restaurant	392		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
142	Henry's Farmers Market # 123	1327		Encinitas Blvd	Encinitas	CA	92024	4904.51	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
143	Honey Baked Ham	459		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
144	Honey's Bistro & Bakery	632		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
145	Isabelle Briens, Inc.	127	A	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
146	Islands Restaurant, L P	1588		Leucadia Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
147	J. S. Foods/Dba Burger King	242		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
148	Jamba Juice Co. #760	272	A	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
149	Jamroc 101 Caribbean Grill	101		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
150	Java Express	325		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
151	Java Hut Coffee Co.	1001		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low

Appendix D-1: FY 2010-11 Commercial Inventory - Stationary Facilities

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
152	Jawz II, Inc.	1468		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
153	Jorges Mexicatesen	267	E	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
154	Jorge's Mexicatessen	417	B	Santa Fe Dr	Cardiff	CA	92007	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
155	Juanita's Taco Shop	290		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
156	Just Peachy	1354		N Coast Highway 101	Encinitas	CA	92024	4904.51	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
157	K C'S Tandoor	1070	A	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
158	Kaito Restaurant	130	A	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
159	Karinas Taco Shop	916		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
160	Kealani's	137		W D St	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
161	Kentucky Fried Chicken	266		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
162	Kims Vietnamese Chinese Restaurant	745	103	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
163	Kona Koffee Hut	230		Quail Gardens Dr	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
164	Kotija Jr. Taco Shop	852		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
165	L & L Hawaiian Barbeque Encinitas	215	G	S El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
166	La Bonne Bouffe	471		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
167	Le Papagayo	1002		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
168	Leucadia Donut Shop	1604		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
169	Leucadia Liquor	640		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
170	Leucadia Pizza, Inc. D B A -Leucadia Pizzeria	315	V	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
171	Leucadia Sushi Bar	996	E	N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
172	Little Caesars Pizza	118		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
173	Lotus Cafe	765	101	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
174	Lumberyard Tavern & Grill	967	101	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
175	M & N Foods	1137		Regal Rd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
176	Mama Houli & Sister T	423		La Mesa Ave	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
177	Manhattan's Giant Pizza	143		W D St	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
178	Mc Donald's / Encinitas Town Center	1064		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
179	Mc Donald's Of Encinitas	1271		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
180	Mexico Viejo Mexican Food	1465	E	Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
181	Mister Sushi	111	A	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
182	Miyabi Japanese Steakhouse & Sushi	211	C	S El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
183	Mozy	698		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
184	Mr. Peabodys	136		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
185	N. Carrillo Corp. DBA Tomiko	87		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
186	Naked Cafe	288	C	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
187	Noodles & Company	260	C	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
188	N-The Tube Dog	90	214	N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
189	Ogata Japanese Cuisine	615		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
190	Panda Express #500	1084	E	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
191	Pannikin Coffee & Tea	510	A	N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
192	Pantry 22, L L C/Dba East Village	628		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
193	Papa John's Pizza #1596	337		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
194	Papa Toni's Pizza	554		Santa Fe Dr	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
195	Passage To India, Inc.	257	K	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
196	Pasta Bravo	1042	J05	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
197	Peet's Operating Company, Inc. (Peet's Coffee and Tea)	119	G	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
198	Pei Wei Asian Diner	1560	A	Leucadia Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
199	Pick Up Stix #7205	127	H	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
200	Pizza Hut #315067	127	G	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
201	Pizzicato	252	5	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
202	Potato Shack Cafe	120		W I St	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
203	Prescription For Java	477		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
204	Quickie Food Store	233		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
205	Quiznos Classic Subs	337	A	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
206	Ralphs Grocery Company #168	125		N El Camino Real	Encinitas	CA	92024	4904.51	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
207	Raul's Mexican Food	490		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
208	Restaurant Leadership Grioup, L L C DBA Jack in the Box	1439		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
209	Rico's Taco Shop	165	L	S El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
210	Rizing Steele, Inc. DBA Naked Cafe	288	C	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
211	Robbie's Road House Grill	530		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
212	Roberto's	274	B	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
213	Roberto's Mexican Food	1900	D	N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
214	Roberts Enterprises, L L C DBA Flippin Pizza	215	H	S El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
215	Rosanna's Pasta	270	I	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
216	Round Table Pizza	1321		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
217	Roxy Restaurant	517		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
218	Rubio's Fresh Mexican Grill #7	252	4	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
219	Sake House-Yumeya	1246		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
220	Santa Fe Cafe	120	A	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
221	Savory Restaurant	267	A	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
222	Siamese Basil Restaurant	527		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
223	Soup Plantation	109		N El Camino Real	Encinitas	CA	92024	4904.51	5813	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
224	Spartan Holdings, Inc. DBA Pacific Q Billiards	1454		Encinitas Blvd	Encinitas	CA	92024	4904.51	5813	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
225	St Tropez Bistro.Com	947	D103	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
226	St. Germaine's Cafe	1010	112	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
227	Stadium Sports Bar & Restaurant	149		S El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
228	Starbucks Coffee #5391	947	D101	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
229	Starbucks Coffee #588	258	B2	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
230	Starbucks Coffee #6546	1560	B	Leucadia Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low

Appendix D-1: FY 2010-11 Commercial Inventory - Stationary Facilities

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
231	Stater Bros. Markets #158	1048		N El Camino Real	Encinitas	CA	92024	4904.51	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
232	Steakhouse 66,Inc./D B A Firefly Grill And Winebar	251	B	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
233	Sub Palace Leucadia	810		N Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
234	Subman	113	E	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
235	Subway #27567	1560	C	Leucadia Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
236	Subway Sandwiches & Salads #18383	765	104	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
237	Sunny Sub., L L C	252	1	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
238	Super Donut #1	465		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
239	Super Donuts #2	252	2	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
240	Surf Brothers Teriyaki	274	A	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
241	Surfdog, Inc.	1126		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
242	Sushi Bar Blue Fin	257	D	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
243	Sushi Do	1031	101	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
244	Swamis Cafe	1163	A	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
245	Taco Bell, #25497	1502		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
246	Target T - 1029	1010		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
247	Thai Pan Express	138		N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
248	The 101 Diner	552		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
249	The 3rd. Corner Wine Shop & Bistro	897	F104	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
250	The Greenery Raw Food Cafe	133		Daphne Ave	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
251	The Kairos Group, Inc. DBA Chuao	937	C109	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
252	The Quick Fix	144		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
253	Today's Pizza And Salad	481		Santa Fe Dr	Cardiff	CA	92007	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
254	Tok Subs, Inc. DBA Subway	138		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
255	Town Center Juice Stop	1042	C	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
256	Trader Joe's #25	115		N El Camino Real	Encinitas	CA	92024	4904.51	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
257	Trattoria Gusto	429		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
258	Trattoria I. Trulli	830	A	S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
259	Uncle Duke's Bar	107		Diana St	Encinitas	CA	92024	4904.51	5813	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
260	Verma's Toasty, Inc./Quizno's #7305	1042	A	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
261	Vigilucci's Trattoria Italiana	505		S Coast Highway 101	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
262	Vons Food & Drug #2144	262		N El Camino Real	Encinitas	CA	92024	4904.51	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
263	Vons Grocery #2351	453		Santa Fe Dr	Cardiff	CA	92007	4904.51	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
264	Wahoo's Fish Taco	1006	C	N El Camino Real	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
265	Wendy's Restaurant	102		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
266	Zafferano, Inc./Dba Sage Grill	1506		Encinitas Blvd	Encinitas	CA	92024	4904.51	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
267	7-Eleven # 13627	102		Leucadia Blvd	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	High
268	7-Eleven # 24335D-2111	1988		Village Park Way	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
269	Arco Nanak Petro	1766		N Coast Highway 101	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
270	Barry W. O' Brien Inc.	310		Encinitas Blvd	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
271	C N G Inc.	160		Encinitas Blvd	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	Yes	High
272	Chevron Stations, Inc #1943 / 95664	540		La Costa Ave	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
273	Encinitas Gasoline & Auto Service (Shell Station)	1355		Encinitas Blvd	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
274	Encinitas Promenade Gas & Oil Change	1580		Leucadia Blvd	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
275	Kihack Management L L C (Chevron Encinitas)	350		Encinitas Blvd	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
276	Leucadia Shell	865		Orpheus Ave	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
277	Rosanos 76	236		N El Camino Real	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
278	Shell 210	510		Santa Fe Dr	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
279	Valero Of Encinitas	325		Encinitas Blvd	Encinitas	CA	92024	4904.51	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	High
280	Encinitas Ranch Golf Course	1275		Quail Gardens Dr	Encinitas	CA	92024	4904.51	7997	Golf Course	No	No	No	Yes	No	No	Yes	No	No	No	Low
281	Encinitas Ranch Golf Course Maintenance	1253		Paseo De Las Flores	Encinitas	CA	92024	4904.51	7997	Golf Course	No	No	No	Yes	No	No	Yes	No	No	No	Low
282	Glorious Gardens Landscape Design	495		Leucadia Blvd	Encinitas	CA	92024	4904.51	781	Landscaping	No	No	No	Yes	No	No	Yes	No	No	No	Low
283	R. C. P. Block & Brick, Inc.	577		N Vulcan Ave	Encinitas	CA	92024	4904.51	5211	Masonry	No	No	No	No	No	No	No	Yes	No	No	Low
284	Abels Flowers & Plants	712		Clark Ave	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
285	Anne & Drews Flower Patch	184		N Coast Highway 101	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
286	Armstrong Garden Centers	701		N El Camino Real	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
287	Bird Rock Tropicals	221		Princehouse Ln	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
288	Cal Pacific Plant Farm	1122		Orpheus Ave	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
289	Chino Greenhouses	1253		Urania Ave	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
290	Coral Tree Farm & Nursery	598		Park Ln	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
291	Cordova Gardens	902		Encinitas Blvd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
292	Dramm & Echter, Inc.	1150		Quail Gardens Dr	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
293	Emerald M. Growers, Inc.	834		Leucadia Blvd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
294	Encinitas Greenhouses	351		Union St	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
295	Erwin Mojonnier Ent.	2009		Sheridan Rd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
296	Flora Bunda	603		Union St	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	High
297	Franco's Flowers	842		Leucadia Blvd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
298	Go Green Agriculture	712		Clark Ave	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
299	Greens & Things, Inc.	950		Brittany Ave	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
300	Grow Master	1253		Urania Ave	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
301	Horace Anderson Greenhouses	375		La Costa Ave	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
302	Hydro Scape Products, Inc.	750		S Coast Highway 101	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	High
303	J & S Green Houses	748		Requeza St	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
304	La Costa Farms	1911		Saxony Rd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
305	Lattin	804		Capri Rd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
306	Leucadia Floral & Plant	1114	1	N Coast Highway 101	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
307	Lopez Flowers	440		Saxony Rd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
308	May Greenhouses, Inc.	241		Andrew Ave	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
309	Miguel Estevez Flowers	708		Del Rio Ave	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low

Appendix D-1: FY 2010-11 Commercial Inventory - Stationary Facilities

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
310	Pacific Verde Nursery, Inc.	556		Union St	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
311	Pacifica Flowers Inc.	514		La Costa Ave	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
312	Seedling Express	440		Saxony Rd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
313	Specimen House, Inc.	782		Leucadia Blvd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
314	Sunny Whlse. Flowers	2009		Sheridan Rd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
315	Sunshine Gardens	155		Quail Gardens Dr	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
316	Tayama Greenhouse	710		Requeza St	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
317	The Orchid Place	829		Bracero Rd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
318	Twigs By Teri	155		Quail Gardens Dr	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
319	Two Together L L C, Dba The Palm Company	395		Sunset Dr	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
320	W. F. Muhlethaler	350		Seeman Dr	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
321	Walt Hoehn	1752		Eolus Ave	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
322	Weidner's Gardens, Inc.	695		Normandy Rd	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
323	Weston Nut Farm	1751		Noma Ln	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
324	Wilma Romero	870		Devonshire Dr	Encinitas	CA	92024	4904.51	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
325	rePLANET	262		N El Camino Real	Encinitas	CA	92024	4904.51	5093	Other - Recycling	Yes	Yes	Yes	No	No	Yes	No	No	Yes	No	High
326	Frazee Paint	270	C	N El Camino Real	Encinitas	CA	92024	4904.51	5231	Painting	No	No	No	No	No	No	No	No	No	No	Low
327	Privateer Coatings	1114		N Coast Highway 101	Encinitas	CA	92024	4904.51	5231	Painting	No	No	No	No	No	No	No	No	No	No	Low
328	The Sherwin-Williams Company #8557	208		N El Camino Real	Encinitas	CA	92024	4904.51	5231	Painting	No	No	No	No	No	No	No	No	No	No	Low
329	Vista Paint Corporation	133		N El Camino Real	Encinitas	CA	92024	4904.51	5231	Painting	No	No	No	No	No	No	No	No	No	No	Low
330	Del Rancho Pools	1315		Encinitas Blvd	Encinitas	CA	92024	4904.51	1799	Pool	No	No	No	No	No	No	No	No	No	No	Low
331	Leslie's Swimming Pool Supplies #506	270	G	N El Camino Real	Encinitas	CA	92024	4904.51	1799	Pool	No	No	No	No	No	No	No	No	No	No	Low
332	Cardiff Animal Hospital, Inc.	2159		San Elijo Ave	Cardiff	CA	92007	4904.61	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
333	Dirty Dogs	2107		San Elijo Ave	Cardiff	CA	92007	4904.61	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
334	Dove Hollow Dressage Center, Inc.	1084		Double LI Ranch Rd	Encinitas	CA	92024	4904.61	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
335	Platinum K 9	632		S Willowspring Dr	Encinitas	CA	92024	4904.61	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
336	Rancho Los Amigos Equestrian Ctr.	3049		Camino Del Rancho	Encinitas	CA	92024	4904.61	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
337	Underwater Environment	442		Rancho Santa Fe Rd	Encinitas	CA	92024	4904.61	5999	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
338	7-Eleven # 21805A-2111	2240	A	Encinitas Blvd	Encinitas	CA	92024	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
339	A & M Investment, Inc./Dba East Coast Pizza	2015		San Elijo Ave	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
340	Beach City Cafe	102		Aberdeen Dr	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
341	Beach House Restaurant	2530		S Coast Highway 101	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
342	C H L N, Inc. D B A: The Chart House	2588		S Coast Highway 101	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
343	Cardiff Seaside Market, Inc.	2087		San Elijo Ave	Cardiff	CA	92007	4904.61	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
344	Champagne French Bakery Cafe'	162	E10	S Rancho Santa Fe Rd	Encinitas	CA	92024	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
345	Cicciotti's Trattoria Italiana	1933		San Elijo Ave	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
346	Firenze Trattoria	162	G10	S Rancho Santa Fe Rd	Encinitas	CA	92024	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
347	Harvest Ranch Market	162	E50	S Rancho Santa Fe Rd	Encinitas	CA	92024	4904.61	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
348	K I S Juice Bar & Restaurant	2591		S Coast Highway 101	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
349	Kraken	2531		S Coast Highway 101	Cardiff	CA	92007	4904.61	5813	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
350	Las Olas, Inc.	2655		S Coast Highway 101	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
351	Mandarin City	815		Birmingham Dr	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
352	Nfarooqi Enterprises, L L C DBA Jack in the Box	1967		San Elijo Ave	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
353	Pipes Cafe	121		Liverpool Dr	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
354	Premier Food Services, Management Group, Inc.	3333		Manchester Ave	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
355	Rimel-Zenbu Cardiff, L L C	2005		San Elijo Ave	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
356	Summers @ Besta Wan	148		Aberdeen Dr	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
357	T M P Restaurant Group, L L C DBA Bentley's	162	C10	S Rancho Santa Fe Rd	Encinitas	CA	92024	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
358	The Original Pancake House	160	D10	S Rancho Santa Fe Rd	Encinitas	CA	92024	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
359	Trattoria Positano	2171		San Elijo Ave	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
360	V G Donuts & Bakery	106		Aberdeen Dr	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
361	Wine Steals Cardiff	1953	100	San Elijo Ave	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
362	Yogis Beach Bar & Restaurant	2633		S Coast Highway 101	Cardiff	CA	92007	4904.61	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	High
363	7-Eleven # 25766B	2211		San Elijo Ave	Cardiff	CA	92007	4904.61	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
364	Cardiff 76 Rosano's	3085		Manchester Ave	Cardiff	CA	92007	4904.61	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
365	Cardiff Valero	820		Birmingham Dr	Cardiff	CA	92007	4904.61	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	High
366	Chevron Stations Inc. #1967	805		Birmingham Dr	Cardiff	CA	92007	4904.61	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
367	Dream Petroleum, Inc.	633		Birmingham Dr	Cardiff	CA	92007	4904.61	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
368	A & M Farms	1534		Crest Dr	Encinitas	CA	92024	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
369	Barrels And Branches: Garden & Gift	1452		Santa Fe Dr	Encinitas	CA	92024	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
370	Brown's Plants, Inc.	1264		Lake Dr	Cardiff	CA	92007	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
371	C M Landscape Maint. Services	1313		Lake Dr	Encinitas	CA	92024	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
372	California Greenhouses, Inc.	1753		Lake Dr	Encinitas	CA	92024	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
373	Cardiff Palm Trees 2	333		Liszt Ave	Cardiff	CA	92007	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
374	Gish Foliage	1255		Lake Dr	Encinitas	CA	92024	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
375	K D Palms	1545		Lake Dr	Encinitas	CA	92024	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
376	Orchid Barron	804		Cathy Ln	Cardiff	CA	92007	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
377	Rancho Verde	1616		Lake Dr	Cardiff	CA	92007	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
378	Raspy	335		Santa Fe Dr	Encinitas	CA	92024	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
379	The Palm Source	1329		Lake Dr	Encinitas	CA	92024	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
380	Tierra Verde Resources, Inc.	1545		Lake Dr	Encinitas	CA	92024	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
381	Wilkens Palm Tree Nursery	1470		Mackinnon Ave	Cardiff	CA	92007	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
382	Williamson Produce	3111		Manchester Ave	Cardiff	CA	92007	4904.61	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	High

Appendix D-2: FY 2010-11 Industrial Inventory

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
Field Description ►	Name used to identify facility in database.	Street number of facility.	Suite or unit number or letter, if needed.	Name of street facility is located on.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.									Is facility a tributary to 303(d) listed receiving water and generating pollutants for which the water body is impaired?	Does the facility pose a high threat to water quality?
1	Encinitas Landfill	2099		Encinitas Blvd	Encinitas	CA	92024	4904.610000	4953	Industrial - Closed Landfill	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	High
2	San Dieguito Transportation	1142		Bonita Dr	Encinitas	CA	92024	4904.610000	4151	Industrial - Vehicle Storage	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	High
3	San Elijo Joint Powers Authority	2695		Manchester Ave	Cardiff	CA	92007	4904.610000	9511	Industrial - Wastewater Treatment	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	High

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION REPORT
CLEAN WATER HOTLINE: 760-633-2787
http://cwp.ci.encinitas.ca.us

Revised 3/09

Type of Inspection:	☐ Annual (Date):	☐ Complaint Investigation (Date):	
Business Name:		Size: Sq.Ft.	SIC Code:
Street Address:		Mailing Address:	
Contact Person(s):		Property Manager (PM):	
Business Phone/Fax:		PM Phone/Fax:	
Business Email:		PM Email :	
Does facility have a current Encinitas business certificate? ☐Yes ☐No #: Exp:			

A. Training **Number of Employees:**

1. Are employees trained? ☐Yes ☐No a. Training log at facility? ☐Yes ☐No Last time trained:

B. Liquid Storage (Oil, Grease, Antifreeze) ☐NA

2. ☐Trap- Last Maintained(LM): ☐Interceptor- LM: By: Every ____ months

3. ☐Bin- LM: ☐Clarifier- LM: By: Every ____ months

a. Is there secondary containment? ☐Yes ☐No b. Overhead Coverage? ☐Yes ☐No

4. Are other outdoor items adequately stored/covered? ☐Yes ☐No ☐NA

5. Does facility have a spill kit? ☐Yes ☐No a. Posted spill response plan? ☐Yes ☐No

C. Cleaning Activities

6. Does facility conduct any of the following activities?:

Washing Floor Mats: ☐Y ☐N Vehicle Washing/Fueling: ☐Y ☐N Hosing Off / Power Washing Site: ☐Y ☐N

a. Is wash water contained and disposed of properly? ☐Y ☐N

D. Waste Management	Yes	No	N/A	Comments
7. Are the storm drains and site free of litter and debris?				
8. Downspouts directed away from areas of potential pollutants?				

9. Does trash/recycling storage area meet the following requirements?:

Receptacle Lids Closed: ☐Y ☐N Clean/Well Maintained: ☐Y ☐N Are bins overflowing?: ☐Y ☐N

10. Does the facility properly maintain the following landscape/maintenance issues: ☐NA

Erosion Control: ☐Y ☐N Over-irrigation Runoff: ☐Y ☐N Reclaimed Water Use: ☐Y ☐N Stockpiles: ☐Y ☐N

E. Other Storm Water Management

11. Is the site free of any evidence of illicit connections and illegal discharges? ☐Yes ☐No

F. Corrective Actions Needed? ☐Yes ☐No If yes, see Inspection Summary

G. Follow Up Inspection? ☐Yes ☐No Date: _____ If yes, see Inspection Summary

H. Education or Best Management Practice (BMP) Information Distributed:

☐Restaurant Brochure Eng/Span ☐What's Cooking Guide Eng/Span ☐Auto Brochure Eng/Span ☐Green Wrench Guide Eng/Span ☐Only Rain ☐10 Simple Ways ☐Yard and Garden Care Eng/Span ☐Doorhanger ☐Business card ☐Green Business ☐Spill Response Guide ☐Other:

Inspector Name: **Signature:** **Date:**

Notes:

FOR OFFICE USE ONLY

ASSESSMENT (circle appropriate level - "5" is highest level)	
Level of knowledge regarding stormwater issues: 1 2 3 4 5	WO#:
Level of cleanliness, BMP implementation, orderliness of site: 1 2 3 4 5	Follow Up WO#

CITY OF ENCINITAS

Commercial & Industrial

STORMWATER QUALITY INSPECTION SUMMARY

(760) 633-2787 ◆ FAX (760) 633-2818 ◆ npdesmail@cityofencinitas.org

ISSUED TO: _____

CONTACT PERSON: _____

SITE ADDRESS: _____

PHONE #: ( ) _____

❒ **NO CORRECTIVE ACTIONS REQUIRED**

REQUIRED CORRECTIVE ACTIONS

ALL REQUIRED CORRECTIVE ACTIONS IDENTIFIED BELOW MUST BE COMPLETED AND REPORTED TO THE CITY BY THE FOLLOWING DATE: ____/___/____

❒ **Obtain Spill Kit**

❒ **Post Spill Response Plan**

❒ **Provide and Document Employee Training**

❒ **Provide Secondary Containment for Storage of Fluid/Liquid**

❒ **Provide Coverage for Outdoor Storage of Fluid/Liquid Waste**

❒ **Provide Coverage for Exposed Equipment and/or Parts**

❒ **Clean Litter and Debris From Site, Trash Areas, and/or Storm Drain**

❒ **Clean/Maintain Outdoor Storage Areas**

Other Corrective Actions/Comments:

_____

_____

_____

_____

The corrective actions listed above are required pursuant to Encinitas Municipal Code Section 20.08.110. Failure to comply with minimum Best Management Practice (BMP) Standards may result in further enforcement action by the City of Encinitas.

Inspector (Signature) **Date**

Responsible Party (Signature) **Date**

FOLLOW UP INSPECTION

❒ **All Corrective Actions Completed**

❒ **Corrective Actions Not Complete – Enforcement Action Required**

Inspector Sign-Off **Date**

Appendix D-5 Routine Commercial Inspections Summary **FY 2010 - 2011**

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
1	**121721**	7/14/10	Roberto's		Obtain spill kit; post spill response plan; provide and document employee training.	No. Completed: 7/15/2010		
2	**122369**	9/28/10	Ogata Japanese Cuisine	From: Request ID: 96621, 9/28/2010 10:12:53 AM DIS-BUILDING WASH Discharge of building or sidewalk washwater Problem Details: Restaurant hosing off sidewalk without containment. Problem Comments: By RYGIEL, KRISTINE: 9/28/2010 10:15:52 AM Sent advisory notice to restaurant with minimum required BMPs for commercial facilities on 9/28/10.	No Corrective Actions Required			
3	**125522**	11/18/10	Shell Oil (CNG INC)		Provide and document employee training. Review Hazmat storage containers.	No. Completed: 12/2/2010		
4	**125524**	10/18/10	Beach City Cafe		Obtain spill kit, provide 2nd containment and overhead cover for fluid/liquid.	No. Completed: 11/9/2010		
5	**125526**	12/6/10	Baker and Olive		No Corrective Actions Required			
6	**125527**	11/10/10	Wendy's #3015		No Corrective Actions Required			
7	**125529**	11/10/10	Little Caesars		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
8	**125530**	11/9/10	Cardiff Valero		No Corrective Actions Required			
9	**125531**	11/10/10	VGs Donuts & Bakery		No Corrective Actions Required			
10	**125532**	11/10/10	Uncle Duke's		No Corrective Actions Required			
11	**125534**	11/10/10	Tomiko		No Corrective Actions Required			
12	**125538**	11/30/10	Las Olas		No Corrective Actions Required			
13	**125542**	12/2/10	KI's Juice Bar and Restaurant		No Corrective Actions Required			
14	**125543**	12/2/10	Kraken		No Corrective Actions Required			
15	**125595**	12/2/10	Chart House		No Corrective Actions Required			
16	**125596**	12/2/10	The Beach House		No Corrective Actions Required			
17	**125597**	11/9/10	Go Green Agriculture		No Corrective Actions Required			
18	**125598**	12/16/10	Leucadia Floral and Plants		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
19	**126676**	2/11/11	Juanita's Tacos		Provide and document employee training; clean/maintain outdoor grease storage structure.	No. Completed: 2/22/2011		
20	**126677**	12/8/10	L&L Hawaiian BBQ		No Corrective Actions Required			
21	**126678**	1/20/11	Chevron Encinitas		No Corrective Actions Required			
22	**126679**	1/20/11	Gordy's Bakery		No Corrective Actions Required			
23	**126707**	1/20/11	Honey Baked Ham		No Corrective Actions Required			
24	**126708**	1/20/11	Java express		No Corrective Actions Required	Yes	No. Completed: 2/9/2011	
25	**126710**	1/24/11	McDonald's Corporation		No Corrective Actions Required			
26	**126713**	1/24/11	Jack in the Box		Clean all trash and debris from under dumpster.			
27	**126718**	1/25/11	The Quick Fix		No Corrective Actions Required			
28	**126720**	1/20/11	Valero		Provide cover for outdoor hazmat liquid; clean litter from trash area.	Yes	No. Completed: 2/9/2011	

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
29	**126723**	1/24/11	Henry's Farmers Market		Post spill response plan; clean oil from grease bin lid.	No. Completed: 2/9/2011		
30	**126849**	2/22/11	Pipes Cafe		No Corrective Actions Required			
31	**126901**	12/17/10	Jawz Inc		Provide 2nd containment and overhead cover for piant and oil. Provide cover for microwave and cardboard.			
32	**126902**	2/11/11	Kotija Jr Taco Shop		No Corrective Actions Required			
33	**126903**	12/6/10	Stadium Sports Bar and Restaurant		Obtain Spill kit, post spill response plan. Provide and document employee training. Provide cover for outdoor storage of grease. Clean litter from trash area. Clean outdoor storage areas.	No. Completed: 1/11/2011		
34	**126919**	2/24/11	Peet's Coffee and Tea		No Corrective Actions Required			
35	**126921**	2/14/11	Flora Bunda		Provide and document employee training			
36	**126922**	3/3/11	Chick's Chicken		No Corrective Actions Required			
37	**127903**	4/12/11	Hydro-Scape Products		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
38	**127905**	3/16/11	Prescription for Java		No Corrective Actions Required			
39	**127907**	3/14/11	Boston's Pizza		No Corrective Actions Required			
40	**127909**	3/14/11	Naked Cafe		No Corrective Actions Required			
41	**127911**	3/14/11	Vons #2144		No Corrective Actions Required			
42	**127912**	3/10/11	Burger King		No Corrective Actions Required			
43	**127913**	3/7/11	Giant New York Pizza		No Corrective Actions Required			
44	**127914**	4/19/11	Panda Express		No Corrective Actions Required			
45	**127916**	2/22/11	Summers @ Best-a-wan		Obtain spill kit; Provide 2nd containment for oil on west side.	No. Completed: 3/10/2011		
46	**127919**	2/17/11	Garcia's Encinitas		Obtain spill kit; post spill response plan; provide employee training; provide 2nd containment and overhead cover for outdoor storage.	No. Completed: 3/7/2011		
47	**127921**	4/8/11	Java Hut coffee Co.		Provide 2nd containment tray for storage of fluid/liquid waste.	No. Completed: 4/13/2011		

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
48	**127925**	3/7/11	Thai Pan Express		Obtain spill kit; post spill response plan; provide employee training; provide 2nd containment and overhead cover for liquid storage; clean little and debris from oil storage	No. Completed: 4/13/2011		
49	**128150**	2/24/11	Soup Plantation		No Corrective Actions Required			
50	**128152**	4/19/11	El Torito		No Corrective Actions Required			
51	**129179**	5/24/11	Encinitas Golf Course		No Corrective Actions Required			
52	**129220**	5/24/11	Re-planet		No Corrective Actions Required			
53	**129222**	5/24/11	Fire Fly Grill & Wine Bar		No Corrective Actions Required			
54	**129223**	3/11/11	Cotixan Mexican food		2nd containment for grease Bin, employee training	No. Completed: 4/26/2011		
55	**129225**	5/6/11	Yogi's Beach Bar		2nd containment for grease	No. Completed: 5/17/2011		
56	**129227**	5/23/11	El Callejon		No Corrective Actions Required			
57	**129228**	5/25/11	Lotus cafe		Employee training			
58	**129230**	5/26/11	Encinitas Ranch Golf Course		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
59	**129231**	3/31/11	El Pollo Loco		Obtain Spill Kit, 2nd containment, overhead coverage, clean trash area	No. Completed: 5/26/2011		
60	**129233**	6/1/11	Shell Station		No Corrective Actions Required			
61	**129235**	6/1/11	Brett's BBQ		No Corrective Actions Required			
62	**129243**	6/2/11	Pei Wei Asian Diner		No Corrective Actions Required			
63	**129245**	6/2/11	Seven Eleven		No Corrective Actions Required			
64	**129246**	6/3/11	Cardiff 76 Rosano's		No Corrective Actions Required			
65	**129249**	6/6/11	Williamson Produce		No Corrective Actions Required			
66	**129270**	6/6/11	Dirty Dogs		No Corrective Actions Required			
67	**129271**	6/7/11	Firenze Trattoria		No Corrective Actions Required			
68	**129272**	6/7/11	Manhattan Giant Pizza		No Corrective Actions Required			
69	**129274**	6/8/11	Raspy Growers		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
70	**129275**	6/7/11	Charles Foreign Car 197		No Corrective Actions Required			
71	**129276**	6/13/11	RCP Block & Brick		No Corrective Actions Required			
72	**129286**	5/23/11	leucadia Pizzeria		spill kit, 2nd containment, coverage, clean trash area	No. Completed: 6/14/2011		
73	**133309**	6/14/11	Seven Eleven 25766B		Cover and tray	No. Completed: 6/16/2011		
74	**133313**	6/1/11	Angelo Burger		spill kit, post spill plan, cover and tray	No. Completed: 7/18/2011		
75	**133315**	6/2/11	St Germain's		tray	No. Completed: 7/18/2011		
76	**133317**	1/25/11	Golden Bowl		No Corrective Actions Required			
77	**133318**	1/26/11	El torito Market		No Corrective Actions Required			
78	**133319**	2/2/11	Giovanni's Sandwitch Shop		No Corrective Actions Required			
79	**133320**	6/8/11	Lumberyard Tavern & Grill		No Corrective Actions Required			
80	**133321**	6/7/11	Baracuda Fresh Grill		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
81	**133325**	6/1/11	Blue Ribbon Artisan Pizzeria		No Corrective Actions Required			
82	**133369**	5/26/11	Beachside Grill		tray, cover & clean trash area	No. Completed: 8/1/2011		
83	**133371**	2/22/11	Mozy Cafe		tray	Yes	Yes Follow up will be completed in FY 11-12	
84	**133535**	6/22/11	Taco Bell		spill kit, post spill plan, provide and document employee training, clean trash area of spilled oil and other debris	No. Completed: 8/3/2011		
85	**133537**	5/23/11	Raul's Mexican Food		roof, tray, training	No. Completed: 8/4/2011		
86	**133842**	2/22/11	Technical Auto Repair		No Corrective Actions Required			
87	**133843**	2/22/11	Anne and Drew's Flower Patch		No Corrective Actions Required			
88	**133844**	2/22/11	Cool breeze Farms		No Corrective Actions Required			
89	**133847**	12/16/10	Privateer Coatings		No Corrective Actions Required			
90	**133848**	4/19/11	Weston Nut Farm		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
91	**133849**	4/19/11	Coral Tree Farm and Nursery		No Corrective Actions Required			
92	**133851**	5/6/11	East Village Asian Dinner		Spill kit, post spill plan, training, and oil coverage Follow up will be completed in FY 11-12			
93	**133853**	6/3/11	Mr. Peobodys		Spill Kit, spill plan Follow up will be completed in FY 11-12			
94	**133858**	6/16/11	Zenbu/Rimel's		2nd containment for oil, Clean up trash Follow up will be completed in FY 11-12			
95	**133860**	6/3/11	Jack In the box		Post spill plan, document training, cover oil, clean oil off trash area, Follow up will be completed in FY 11-12			
96	**133868**	6/16/11	BMW Encinitas		2nd containment & coverage for oil storage, coverage for other outdoor items, clean debris and trash from storm drain Follow up will be completed in FY 11-12			
97	**133883**	1/26/11	Le Papagayo		No Corrective Actions Required			

Total: 97

Total NOVs: 0

Appendix D-6 Mobile Commercial Inventory

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants								
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash
Field Description ▶	Name used to identify facility in database.	Street number of facility.	Suite or unit number or letter, if needed.	Name of street facility is located on.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.								
1	Dog Behavior 101	2142 Montgomery Ave	F	Montgomery Ave	Cardiff	CA	92007	4904.61		Mobile- Animal	Yes	Yes	No	Yes	No	No	No	No	No
2	Dogs Are Awesome Pet Sitting Services	1305 Mackinnon Ave	B	Mackinnon Ave	Cardiff	CA	92007	4904.61		Mobile- Animal	Yes	Yes	No	Yes	No	No	No	No	No
3	North Co. Coastal Canine Care	1549 San Elijo Ave		San Elijo Ave	Cardiff	CA	92007	4904.61		Mobile- Animal	Yes	Yes	No	Yes	No	No	No	No	No
4	Robertson Relief Vet Services	785 Fieldstone Ln		Fieldstone Ln	Encinitas	CA	92024	4904.51		Mobile- Animal	Yes	Yes	No	Yes	No	No	No	No	No
5	Sunland Ranch	3675 Copper Crest Rd		Copper Crest Rd	Encinitas	CA	92024	4904.51		Mobile- Animal	Yes	Yes	No	Yes	No	No	No	No	No
6	Underdog Pet Sitting	2439 Caminito Ocean Cove		Caminito Ocean Cove	Cardiff	CA	92007	4904.61		Mobile- Animal	Yes	Yes	No	Yes	No	No	No	No	No
7	70 Moto Parts, L L C	1873 Haymarket Rd		Haymarket Rd	Encinitas	CA	92024	4904.51		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
8	B B'S Auto Detail Wheel Polishing	606 Stratford Dr		Stratford Dr	Encinitas	CA	92024	4904.51		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
9	Blue Coast Taxi	928 Brass Way		Brass Way	Encinitas	CA	92024	4904.51		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
10	Cardiff Limousine	844 Bonita Dr		Bonita Dr	Encinitas	CA	92024	4904.51		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
11	Coast Highway Taxi	815 Wood Dr		Wood Dr	Encinitas	CA	92024	4904.51		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
12	Color Solutions Auto Two	126 Triton Cir		Triton Cir	Encinitas	CA	92024	4904.51		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
13	Elite Auto Trim	4265 Manchester Ave		Manchester Ave	Encinitas	CA	92024	4904.61		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
14	In Motion Motors	3675 Copper Crest Rd		Copper Crest Rd	Encinitas	CA	92024	4904.51	8999001	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
15	J C'S Taxi Service	919 Brass Way		Brass Way	Encinitas	CA	92024	4904.51		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
16	Lucas' Cab	117 Rosebay Dr	21	Rosebay Dr	Encinitas	CA	92024	4904.51		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
17	Mc Garry Mobile Detailing Systems	2134 Carol View Dr	116	Carol View Dr	Cardiff	CA	92007	4904.61		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
18	Mercedes West Auto Wholesale	2026 Oxford Ave		Oxford Ave	Cardiff	CA	92007	4904.61		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
19	Miller Tire & Wheels, Inc.	248 La Veta Ave		La Veta Ave	Encinitas	CA	92024	4904.51		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
20	Trinity Express	1457 Pegaso St		Pegaso St	Encinitas	CA	92024	4904.61		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
21	Wallace Courier	523 Samuel Ct		Samuel Ct	Encinitas	CA	92024	4904.51		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
22	Whalen Performance	1726 Avenida Melodia		Avenida Melodia	Encinitas	CA	92024	4904.51		Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
23	A - 1 Patio & Remodeling Experts	1280 Santa Fe Dr		Santa Fe Dr	Encinitas	CA	92024	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
24	A C Energy Systems, Inc.	224 Birmingham Dr	1A	Birmingham Dr	Cardiff	CA	92007	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
25	A. P. Cottam Co.	123 Jasper St	12	Jasper St	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
26	Archibald Sheet Metal	125 A St		A St	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
27	Artisan Textures And Drywall	909 Woodlake Dr		Woodlake Dr	Cardiff	CA	92007	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
28	B L T Construction, Inc.	1923 Lahoud Dr		Lahoud Dr	Cardiff	CA	92007	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
29	Beeson Squared Construction	1572 Caudor St		Caudor St	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
30	Better Homes Construction	231 Countryhaven Rd		Countryhaven Rd	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
31	C A L Republic Co.	700 Garden View Ct	201	Garden View Ct	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
32	Caliber Drywall	1253 N Vulcan Ave	3	N Vulcan Ave	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
33	Coastal Construction Group	742 Neptune Ave		Neptune Ave	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
34	Creative Garage Door Systems	1665 Orange Blossom Way		Orange Blossom Way	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
35	D. Bell Construction, Inc.	1539 Caudor St		Caudor St	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
36	Eric Jason Cashion, Dba: Siding Solutions	168 Coop Ct		Coop Ct	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
37	Finishing Touch Moulding, Inc.	921 Hymettus Ave		Hymettus Ave	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
38	Green Building Squared, Inc.	1572 Caudor St		Caudor St	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
39	Harbinger Electric	129 W Glaucus St	A	W Glaucus St	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
40	Hudson Construction Incorporated	3462 Calle Margarita		Calle Margarita	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
41	J Z Framing, Inc.	134 S Jayton Ln		S Jayton Ln	Encinitas	CA	92024	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
42	J. Bryant Concepts	565 Requeza St		Requeza St	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
43	J. Con Builders	1630 Gitano St		Gitano St	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
44	K L R Bobcat And Hauling Services	1924 Country Grove Ln		Country Grove Ln	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
45	Langtree Woodworking	301 Horizon Dr		Horizon Dr	Encinitas	CA	92024	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
46	M R B Construction	1265 N Vulcan Ave		N Vulcan Ave	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
47	Michael Buys Quality Builders	1802 Belle Grove Rd		Belle Grove Rd	Encinitas	CA	92024	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
48	Pacific Coast Glazing, Inc.	908 Nolbey St		Nolbey St	Cardiff	CA	92007	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
49	Pacific Custom Builders	146 W Glaucus St		W Glaucus St	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
50	Paul Beeson H H P	1572 Caudor St		Caudor St	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
51	Prola Landscape Design	1333 San Elijo Ave		San Elijo Ave	Cardiff	CA	92007	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
52	R. A. Booker Builders, Inc.	3451 Toscano Ct		Toscano Ct	Encinitas	CA	92024	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
53	Remoca General Contractors	818 Summerhill Ct		Summerhill Ct	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
54	Richard Thaisz Construction	1403 Caminito Septimo		Caminito Septimo	Cardiff	CA	92007	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
55	Robert R. Lovci	1236 Rubenstein Ave		Rubenstein Ave	Cardiff	CA	92007	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
56	Sahba Javedani	624 Faith Ave		Faith Ave	Cardiff	CA	92007	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
57	So - Cal Shade Sails	1009 Hurstdale Ave		Hurstdale Ave	Cardiff	CA	92007	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
58	Steffen Enterprises, Inc.	1008 Saxony Rd		Saxony Rd	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
59	Sun Cal Solar Incorporated	745 Winding Way		Winding Way	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
60	Tom Plumb	469 Summer View Cir		Summer View Cir	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
61	Van Veen Team	1145 Aloha Dr		Aloha Dr	Encinitas	CA	92024	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
62	Village Property Systems, Inc.	131 Aberdeen Dr		Aberdeen Dr	Cardiff	CA	92007	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
63	W O A Builders, Inc.	110 Requeza St		Requeza St	Encinitas	CA	92024	4904.51		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
64	Wolf Home Inspections	742 Cole Ranch Rd		Cole Ranch Rd	Encinitas	CA	92024	4904.61		Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
65	Dave De Jour	2080 Montgomery Ave		Montgomery Ave	Cardiff	CA	92007	4904.61		Mobile- Eating/Drinking	Yes	Yes	No	No	Yes	No	No	No	Yes

Appendix D-6 Mobile Commercial Inventory

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants								
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash
Field Description ▶	Name used to identify facility in database.	Street number of facility.	Suite or unit number or letter, if needed.	Name of street facility is located on.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.								
66	Farm To Fork	404 La Veta Ave		La Veta Ave	Encinitas	CA	92024	4904.51		Mobile- Eating/Drinking	Yes	Yes	No	No	Yes	No	No	No	Yes
67	101 Window Cleaning	910 Hermes Ave		Hermes Ave	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
68	Anonymous Window Cleaning	1727 Legaye Dr		Legaye Dr	Cardiff	CA	92007	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
69	Aztech Cleaning Services	1627 Valleda Ln		Valleda Ln	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
70	Bart Forry Home Repairs	704 Regal Rd	C12	Regal Rd	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
71	Belman Handyman	738 Snapdragon St		Snapdragon St	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
72	Blade Dufour Handyman Service	905 Woodlake Dr		Woodlake Dr	Cardiff	CA	92007	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
73	Bouche Construction	1115 Balour Dr		Balour Dr	Encinitas	CA	92024	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
74	Bright Visions Window Washing	616 Lynwood Dr		Lynwood Dr	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
75	Clean Sweep	1252 Mackinnon Ave		Mackinnon Ave	Cardiff	CA	92007	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
76	D V Environmental Group	1829 Forestdale Dr		Forestdale Dr	Encinitas	CA	92024	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
77	Designs By The Sea	1511 Calle Tulipanes		Calle Tulipanes	Encinitas	CA	92024	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
78	Dirt - Busters	808 Regal Rd	J1	Regal Rd	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
79	Ed's Handyman Service	1372 Hymettus Ave		Hymettus Ave	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
80	Handyman	226 Meadow Vista Way		Meadow Vista Way	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
81	Heavenly Views Window Cleaning	1123 Gardena Rd		Gardena Rd	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
82	Jesus Fuentes	2039 Shadow Grove Way		Shadow Grove Way	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
83	Linda Messling	454 Requeza St	224	Requeza St	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
84	Liquid Pool And Spa Service	16 E I St		E I St	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
85	Lux Homes	378 Fulvia St		Fulvia St	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
86	M H S - Works	1008 Cottage Way		Cottage Way	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
87	Madrigal Handyman Service	513 S Willowspring Dr		S Willowspring Dr	Encinitas	CA	92024	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
88	Mike Hidalgo, Inc.	119 Europa St		Europa St	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
89	North County Handy Man	1270 Avenida Miguel		Avenida Miguel	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
90	North County Hauling Service	1117 Woodlake Dr		Woodlake Dr	Cardiff	CA	92007	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
91	Patrice Alexander	2437 Oxford Ave		Oxford Ave	Cardiff	CA	92007	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
92	Phil's Handyman Service	1726 Old Mill Rd		Old Mill Rd	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
93	R. K. Enterprises	658 Santa Fe Dr		Santa Fe Dr	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
94	Reva Hydro Jetting	1056 Lark Song Ln		Lark Song Ln	Encinitas	CA	92024	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
95	Romeo Godinez Handyman	1159 Gardena Rd		Gardena Rd	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
96	San Diego Stone Care	731 Snapdragon St		Snapdragon St	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
97	Seacoast Plumbing	1334 Caminito Septimo		Caminito Septimo	Cardiff	CA	92007	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
98	Sparkle Window Cleaning	2427 Newcastle Ave		Newcastle Ave	Cardiff	CA	92007	4904.61		Mobile- Handyman	No	No	No	No	No	No	No	No	No
99	Spectrum Builders	699 N Vulcan Ave	84	N Vulcan Ave	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
100	The London Window Cleaner	285 Rodney Ave		Rodney Ave	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
101	Turn Key Construction Handyman Services	444 N El Camino Real	87	N El Camino Real	Encinitas	CA	92024	4904.51		Mobile- Handyman	No	No	No	No	No	No	No	No	No
102	Alberta Santiago	1020 Aloha Dr		Aloha Dr	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
103	All About Cleaning Services	1168 Arcadia Rd		Arcadia Rd	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
104	All In Carpet Cleaing	720 Devonshire Dr		Devonshire Dr	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
105	Bob's Carpet Care, Inc.	336 Sanford St		Sanford St	Encinitas	CA	92024	4904.51	7217001	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
106	Cardiff Cleaningworks	375 Dublin Dr		Dublin Dr	Cardiff	CA	92007	4904.61		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
107	Cardiff Maintenance	2233 Lagoon View Dr		Lagoon View Dr	Cardiff	CA	92007	4904.61		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
108	Cifuentes Residential & Commercial Cleaning	1646 Landquist Dr		Landquist Dr	Encinitas	CA	92024	4904.61		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
109	Claudia's Housekeeping Services	1338 Mackinnon Ave		Mackinnon Ave	Cardiff	CA	92007	4904.61		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
110	Clean & Clear Windows	244 Second St	D	Second St	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
111	Coastal Carpet Cleaning	1252 Hygeia Ave		Hygeia Ave	Encinitas	CA	92024	4904.51	7217	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
112	David Rivers Cleaning Services	1743 Old Mill Rd		Old Mill Rd	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
113	Doctor Playground, Inc.	123 Jasper St	46	Jasper St	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
114	Drenie's Housecleaning	1421 San Elijo Ave	B	San Elijo Ave	Cardiff	CA	92007	4904.61		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
115	Encinitas Janitorial Service	699 N Vulcan Ave	109	N Vulcan Ave	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
116	Favorite Maid	404 Encinitas Blvd	258	Encinitas Blvd	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
117	Jason Cardoza General Maintenance	884 Del Riego Ave		Del Riego Ave	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
118	Just Us Cleaning And House Sitting	1066 Guildford Ct		Guildford Ct	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
119	Kamin's Cleaning Services	170 Phoebe St	11	Phoebe St	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
120	Nayeli Kim Dba Anago Of San Diego	1015 Guadalajara Dr		Guadalajara Dr	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
121	Organic Steam Carpet Clean	2039 Willowood Ln		Willowood Ln	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
122	Pacific Coast Maintenance	981 N Vulcan Ave	8	N Vulcan Ave	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
123	Petra Cleaning	351 Countrywood Ln		Countrywood Ln	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
124	Professiional Cleaning & Errands	1099 Regal Rd		Regal Rd	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
125	Ranch & Coast Mortgage Group, Inc.	149 W D St		W D St	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
126	Rita's Cleaning Services	796 Clark Ave		Clark Ave	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
127	Romero's Carpet Cleaning	1190 Encinitas Blvd	146	Encinitas Blvd	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
128	Seaside Janitorial Service	1019 1/2 Hermes Ave		Hermes Ave	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
129	Terry's Cleaning Service	2157 Pleasant Grove Rd		Pleasant Grove Rd	Encinitas	CA	92024	4904.61		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
130	Toledo House Cleaning	1146 Gardena Rd		Gardena Rd	Encinitas	CA	92024	4904.51		Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants								
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash
Field Description ▶	Name used to identify facility in database.	Street number of facility.	Suite or unit number or letter, if needed.	Name of street facility is located on.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.								
131	Aguirre Services	347 Cerro St		Cerro St	Encinitas	CA	92024	4904.61		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
132	Alfonso Rey Landscape Maintenance	351 Sprucewood Dr		Sprucewood Dr	Encinitas	CA	92024	4904.61		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
133	All Cities Hauling	280 Cottage Grove Ln		Cottage Grove Ln	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
134	Alonzo	755 Regal Rd		Regal Rd	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
135	Arnulfo Medina Landscaping	1408 Hermes Ave	A	Hermes Ave	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
136	Arroyo Landscaping Design	910 Nardo Rd		Nardo Rd	Encinitas	CA	92024	4904.51	0781	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
137	Benny's Gardening	1010 Balour Dr		Balour Dr	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
138	Bradley Landscape Development, Inc.	607 N Vulcan Ave		N Vulcan Ave	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
139	Carrillo Tree Maintenance	794 Clark Ave		Clark Ave	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
140	Coco's Landscape And Maintenance	1744 Knollfield Way		Knollfield Way	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
141	Crown Pool And Landscape	2126 Via Tiempo		Via Tiempo	Cardiff	CA	92007	4904.61		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
142	Enrique Landscaping	1020 Aloha Dr		Aloha Dr	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
143	Falling Waters Landscape, Inc.	774 Lotus Blossom St		Lotus Blossom St	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
144	Felix Sanchez Gardening Service	880 Del Rio Ave		Del Rio Ave	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
145	Galapacifica Landscape	924 Encinitas Blvd	73	Encinitas Blvd	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
146	Greg Stone Landscape Architects	69 Mcneill Ave		Mcneill Ave	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
147	Gresham Landscaping & Consulting	1734 Noma Ln		Noma Ln	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
148	J A Landscape	2068 Bulrush Ln		Bulrush Ln	Cardiff	CA	92007	4904.61		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
149	J M D Landscape, Inc.	187 N Vulcan Ave		N Vulcan Ave	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
150	Jean Nordstrom	2156 Mountain Vista Dr		Mountain Vista Dr	Encinitas	CA	92024	4904.61		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
151	Jeremy Spath Landscape Design	390 La Veta Ave		La Veta Ave	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
152	John Hanna & Associates	1753 Swallowtail Rd		Swallowtail Rd	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
153	L. L. M. Landscape, Inc.	675 Requeza St		Requeza St	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
154	Lattin	246 A Neptune Ave		Neptune Ave	Encinitas	CA	92024	4904.51	5193	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
155	M A C Design & Development	471 Chesterfield Dr		Chesterfield Dr	Cardiff	CA	92007	4904.61	1799001	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
156	Mijangos Landscaping	1608 Charro St		Charro St	Encinitas	CA	92024	4904.61		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
157	Mitchell Aquarium Service	591 Hygeia Ave	A	Hygeia Ave	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
158	Morrison Workshop	875 Del Rio Ave		Del Rio Ave	Encinitas	CA	92024	4904.51	0781	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
159	Murillo Gardening Services	1216 Mackinnon Ave		Mackinnon Ave	Cardiff	CA	92007	4904.61		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
160	Pacific View Landscapes	2444 Manchester Ave		Manchester Ave	Cardiff	CA	92007	4904.61		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
161	Rajan Brown Landscape Design & Consulting	281 Fraxinella St		Fraxinella St	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
162	Silva's Landscaping	1105 Regal Rd		Regal Rd	Encinitas	CA	92024	4904.51	0782001	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
163	Zachary Jones Landscaping	704 Regal Rd	C3	Regal Rd	Encinitas	CA	92024	4904.51		Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
164	Kessing Painting,Inc.	261 Caliban Ct		Caliban Ct	Encinitas	CA	92024	4904.51	1799001	Mobile- Painting	No	No	No	No	No	No	No	No	No
165	Russell Handy Painting	2056 Bulrush Ln		Bulrush Ln	Cardiff	CA	92007	4904.61		Mobile- Painting	No	No	No	No	No	No	No	No	No
166	Shawn's Painting Services	721 Arden Dr		Arden Dr	Encinitas	CA	92024	4904.51		Mobile- Painting	No	No	No	No	No	No	No	No	No
167	A Plus Pool And Spa Service	1190 Encinitas Blvd	247	Encinitas Blvd	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
168	Absolute Fountain Service	730 Third St		Third St	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
169	Aqua Tech Pool Care, L L C	233 Delphinium St		Delphinium St	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
170	Aquatic Perfection	1590 Avenida De Los Lirios		Avenida De Los Lirios	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
171	Bishop Pool Service And Repair	744 Foxglove St		Foxglove St	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
172	Blue Water Of La Jolla	2008 Wandering Rd		Wandering Rd	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
173	C D Pools	1265 Rubenstein Ave		Rubenstein Ave	Cardiff	CA	92007	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
174	James Kandiguranis Pools	1853 N Vulcan Ave	4	N Vulcan Ave	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
175	Leisure Friends,	368 N El Camino Real		N El Camino Real	Encinitas	CA	92024	4904.51	7389114	Mobile - Pool	No	No	No	No	No	No	No	No	No
176	Lonely Island Pool Services	1427 Arbor Ct		Arbor Ct	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
177	Mayer Pool Service & Repair	1553 Plumtree Dr		Plumtree Dr	Encinitas	CA	92024	4904.61	7389001	Mobile - Pool	No	No	No	No	No	No	No	No	No
178	Pacific Coast Pool Service	1439 Linda Sue Ln		Linda Sue Ln	Encinitas	CA	92024	4904.51	7389001	Mobile - Pool	No	No	No	No	No	No	No	No	No
179	Palisades Pool And Spa Service	230 Gloxina St		Gloxina St	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
180	Pro Clean Pools & Spas	1052 Arcadia Rd		Arcadia Rd	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
181	Ranch And Sea Pool Care	1686 Falcon Hill Ct		Falcon Hill Ct	Cardiff	CA	92007	4904.61	7389114	Mobile - Pool	No	No	No	No	No	No	No	No	No
182	Rancho Santa Fe Pool Service	2039 Willowood Ln		Willowood Ln	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
183	The Pool Pros	2061 Village Park Way	123	Village Park Way	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
184	The Poolman	349 N Vulcan Ave		N Vulcan Ave	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
185	Wilson Pools Plus	185 Village Run East		Village Run East	Encinitas	CA	92024	4904.51		Mobile - Pool	No	No	No	No	No	No	No	No	No
186	Frazee Paint	270 N El Camino Real	C	N El Camino Real	Encinitas	CA	92024	4904.51	5231	Mobile- Painting	No	No	No	No	No	No	No	No	No
187	Privateer Coatings	1114 N Coast Highway 101		N Coast Highway 101	Encinitas	CA	92024	4904.51	5231	Mobile- Painting	No	No	No	No	No	No	No	No	No
188	The Sherwin-Williams Company #8557	208 N El Camino Real		N El Camino Real	Encinitas	CA	92024	4904.51	5231	Mobile- Painting	No	No	No	No	No	No	No	No	No
189	Vista Paint Corporation	133 N El Camino Real		N El Camino Real	Encinitas	CA	92024	4904.51	5231	Mobile- Painting	No	No	No	No	No	No	No	No	No
190	Del Rancho Pools	1315 Encinitas Blvd		Encinitas Blvd	Encinitas	CA	92024	4904.51	1799	Mobile - Pool	No	No	No	No	No	No	No	No	No
191	Leslie's Swimming Pool Supplies #506	270 N El Camino Real	G	N El Camino Real	Encinitas	CA	92024	4904.51	1799	Mobile - Pool	No	No	No	No	No	No	No	No	No

CITY OF ENCINITAS

Clean Water Program



Minimum Required

STORMWATER BEST MANAGEMENT PRACTICES

for Commercial Facilities



YOUR BUSINESS CAN MAKE A DIFFERENCE!



What is a stormwater Best Management Practice (BMP)?

The term "Best Management Practice" (BMP) refers to a combination of effective and economical practices, techniques, and/or activities that can help prevent or reduce stormwater runoff pollution. It's simple: only rain goes in the storm drain.

How do stormwater BMPs apply to your business?

The City of Encinitas has established minimum stormwater BMP requirements for all commercial businesses in the City. These minimum BMP standards are summarized below for your information and awareness. Please note that some facilities may require additional BMPs as determined by the City, based upon activities or materials specific to that location. *(Encinitas Municipal Code chapter 20.08)*

FOR MORE INFORMATION:

See http://bmp.projectcleanwater.org for more information on Best Management Practices relating to specific commercial business activities.

To report stormwater pollution in the City of Encinitas, please call the Clean Water Hotline: (760) 633-2787

For any questions regarding the City's Clean Water Program or the information presented above, email: npdesmail@cityofencinitas.org

Printed on recycled paper.

BMP CATEGORIES:

Employee Education and Training

Education and training is an essential and cost effective pollution prevention method. It is important to provide and document employee training. A training log should be kept at the facility to ensure that all employees are properly trained in stormwater pollution prevention practices. At a minimum, all employees should be trained on the following:

- Knowledge of Best Management Practices (BMPs) for every activity performed on the job. (Please visit *http://bmp.projectcleanwater.org* for activity specific practices)
- Proper spill prevention and response procedures (containment, control, cleanup - do NOT hose it down)
- The location and proper use of clearly labeled spill kit and spill response guide.
- The location of all stormwater drains and inlets, and the knowledge that they all lead to the ocean.

Indoor/Outdoor Liquid Storage

Commonly stored liquids including grease, oil, and other fluids that may be kept in a container inside or outside may pose a potential threat to water quality if they can overflow, get knocked over, or leak. Properly storing these fluids is a key component to effective pollution prevention at any business. The following practices comply with minimum BMP standards for liquid storage — and will help to keep them out of the stormwater system.

- Keep containers that store fluid or liquid inside an additional container to provide secondary containment
- Provide overhead coverage for outdoor storage of fluid or liquid waste
- Schedule regular waste pick-ups to prevent spills and overflows from storage containers
- Perform regular maintenance and cleaning of storage areas

Good Housekeeping

Routine maintenance and clean-up is essential to minimizing stormwater pollution from your business. When cleaning up outdoors, it is important to keep debris and contaminants from running into the storm drain system. The following good practices should be applied to all cleanup and maintenance activities to prevent storm drain pollution:

- Dry cleaning methods (i.e. using a broom to sweep instead of a hose) will reduce water usage and lessen the potential to pollute. Also, using a mop and bucket will eliminate runoff; the wash water can then be disposed of in the sink or toilet (NOT the storm drain)
- Wash water from activities such as hosing off sidewalks and patios, vehicle washing, and cleaning floor mats should be directed toward or done over pervious areas (i.e. lawn, dirt, flower bed, shrubs, and planted areas).
- If using water as a clean-up method and it cannot be re-directed to a vegetated area, proper storm drain protection (i.e. sand bags) must be utilized to capture all washwater.

Trash/Recycling Storage and Management

Properly maintained trash, recycling, and debris containment areas are an easy way to protect the environment. Simple steps like keeping trash dumpster lids closed and immediate cleanup of spilled materials (solid or liquid) will go a long way. The following practices must also be applied to better manage trash, debris and other waste materials:

- Ensure the site, trash/recycling areas, and storm drains are free of litter and debris.
- Trash containers and dumpsters must be in good condition and free of holes.
- All receptacles must have closed lids or be placed in a covered area.





Common urban runoff contaminants include: oil and grease from cars; pesticides, herbicides and fertilizers from lawns and landscaped areas; soapy water from carpet cleaning and vehicle washing; sediment from construction projects; loose trash such as cigarette butts and soda bottles; and many other sources associated with everyday activities. There are many simple things that everyone can do to help prevent stormwater pollution.

-Project Clean Water



CITY OF ENCINITAS

Clean Water Program



Minimum Required

STORMWATER BEST MANAGEMENT PRACTICES

for Mobile Business Activities



YOUR BUSINESS CAN MAKE A DIFFERENCE!



What is a stormwater Best Management Practice (BMP)?

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How do stormwater BMPs apply to your business?

The City of Encinitas has established minimum stormwater BMP requirements for all commercial businesses in the City. These minimum BMP standards are summarized below for your information and awareness. Please note that some businesses may require additional BMPs as determined by the City, based upon activities or materials specific to that location. *(Encinitas Municipal Code chapter 20.08)*

FOR MORE INFORMATION:

See http://bmp.projectcleanwater.org for more information on Best Management Practices relating to specific commercial business activities.

To report stormwater pollution in the City of Encinitas, please call the Clean Water Hotline: (760) 633-2787

For any questions regarding the City's Clean Water Program or the information presented above, email: npdesmail@cityofencinitas.org

Printed on recycled paper.

BMP CATEGORIES:

Employee Education and Training

Education and training is an essential and cost effective pollution prevention method. It is important to provide and document employee training. At a minimum, all employees should be trained on the following:

- Knowledge of Best Management Practices (BMPs) specific to mobile business activities. Please visit *http://bmp.projectcleanwater.org* for activity specific BMPs related to your business.
- Knowledge of the storm drainage system, and how to locate drains and inlets that must be protected.
- How to use appropriate and easily accessible supplies to properly control and eliminate any discharge to the storm drain system.
- Proper spill control and cleanup procedures.

Proper Waste Handling (solid, liquid, and hazardous wastes)

Before starting any job, consider the types of waste that may be generated including wash water, chemical compounds, residual construction or repair materials, paints, oil and grease, and loose trash and debris. It is important to properly control, contain, and transport these materials to prevent spills and discharge from entering the storm drain system. The following steps will help to manage waste generated from your mobile business activity:

- Do not dispose of ANY waste material in the storm drain system.
- Liquid non-hazardous wastes may be disposed of in the sanitary sewer (i.e. sinks, toilets) if appropriate, or placed in sealed containers and disposed of properly.
- Solid wastes should be removed from the worksite in waste containers with a lid and disposed of at appropriate waste sites.
- Inspect and label all hazardous material waste containers prior to removal. For details in the management, transport, and disposal of specific waste, contact the County of San Diego Hazardous Materials Division at (619) 338-2231.

Equipment Cleanup

Equipment cleanup activities should always be conducted away from storm drain inlets, and performed in a manner to prevent the release of any material into the street, curb, gutter, alley or any other conveyance facility. To ensure compliance with minimum BMP standards for equipment cleanup activities, follow these simple practices:

- Equipment cleanup should be conducted in a container such as a bucket, tub or basin to control liquids and prevent runoff.
- Alternatively, conduct equipment and material cleanup activities in an area contained by a berm or plastic liner to collect and contain all fluids.
- Dispose of waste water into a sanitary sewer drain (i.e. sink, toilet) as appropriate or into a vegetated area (i.e. lawn, flower bed, dirt area).





Common urban runoff contaminants include: oil and grease from cars; pesticides, herbicides and fertilizers from lawns and landscaped areas; soapy water from carpet cleaning and vehicle washing; sediment from construction projects; loose trash such as cigarette butts and soda bottles; and many other sources associated with everyday activities. There are many simple things that everyone can do to help prevent stormwater pollution.

–Project Clean Water



Appendix E

Residential

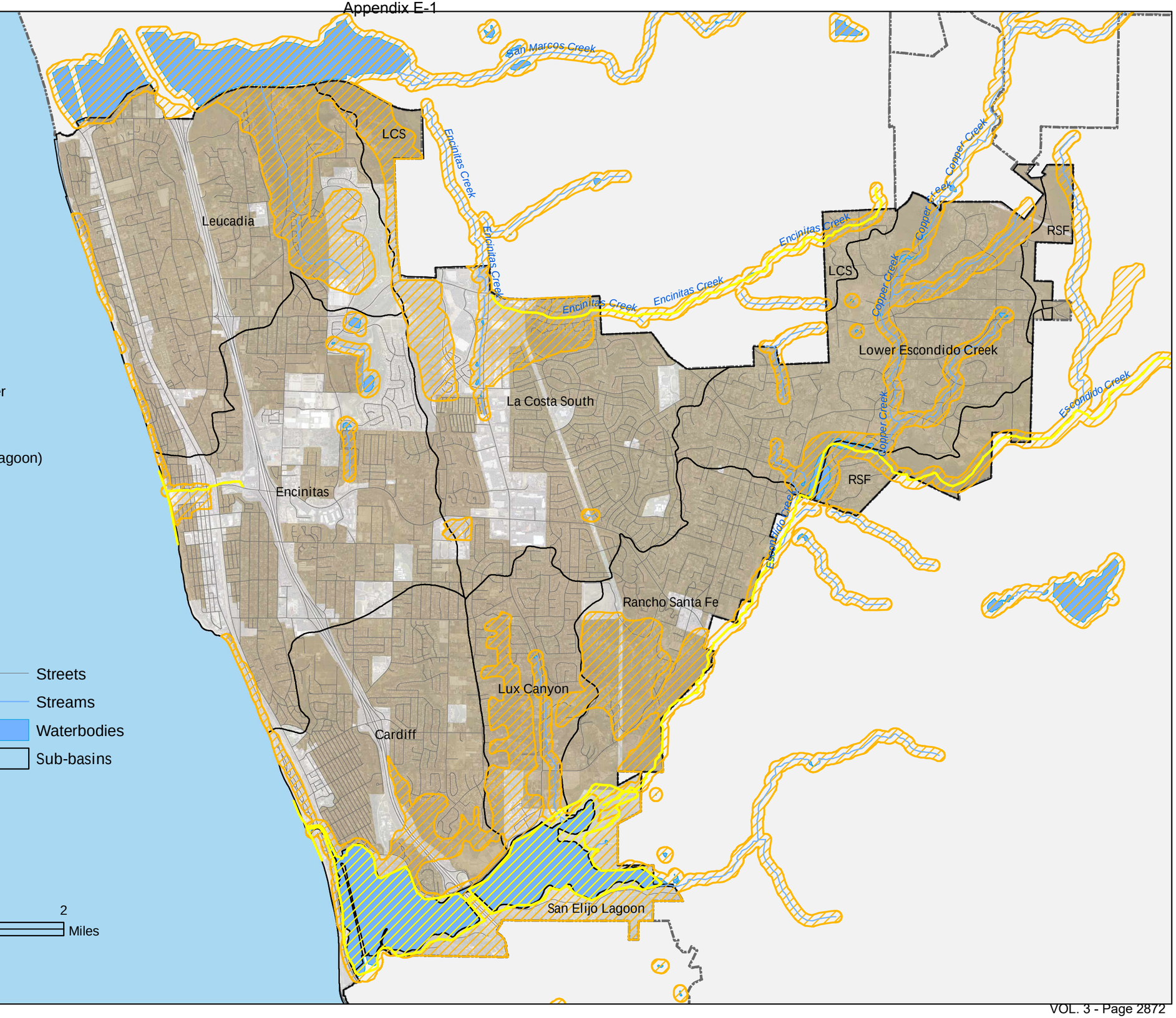
E-1 Map of High Threat to Water Quality Residential Areas

City of Encinitas

High Threat to Water Quality Residential Areas

High Threat to Water Quality Residential Areas in the City of Encinitas include:

- All residential areas within 500ft of any 303(d) listed water body or lagoon
- All residential areas within, directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an ESA
- The residential area to the west of Interstate 5 within the Cardiff sub-basin (drains to San Elijo Lagoon)
- The residential area south of Sylvia St, west of Second Street, and north of K Street (drains to Cottonwood Creek and Moonlight Beach)



Appendix F

Education

F-1 **Regional Mobile Business Outreach and Education Plan**

F-2 **NCSWP Construction Brochure**

F-3 **City of Encinitas Brochures (English/Spanish)**

F-4 **Encinitas Environmental Services Guide**

F-5 **Outreach Materials for FY 10-11**

F-6 **Regional Residential Education Plan**

Regional URMP Attachment 5.0

Regional Mobile Business Outreach and Education Strategy

FINAL - March 20, 2008

Submitted by the San Diego Stormwater Copermittees in partial fulfillment of the requirements of San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (the San Diego Municipal Stormwater Permit)

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1.0 INTRODUCTION

This document describes a **Regional Mobile Business Outreach and Education Program** to be collaboratively conducted by the Copermittees of NPDES Order No. R9-2007-0001 (Permit). It was developed by the Mobile Business Subcommittee of the Copermittees' Outreach Workgroup. Permit section D.3.b.(4)(a) requires that each Copermittee develop and implement a program to reduce the discharge of pollutants from mobile businesses to the MEP. Section D.3.b.(4)(b) further states "if they choose to, the Copermittees may cooperate in developing and implementing their programs for mobile businesses, including sharing of mobile business inventories, BMP requirements, enforcement action information, and education." Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the Copermittees have chosen to collaborate on a regional mobile business outreach and education strategy. It addresses the following elements:

- Inventory Development and Maintenance;
- Establishment of Minimum BMP Requirements; and
- Outreach and Education (Including Business Notifications).

Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this Strategy.

2.0 SOURCE CHARACTERIZATION

Mobile businesses provide services at offsite locations rather than from fixed bases of operation. Services may be provided at, but are not limited to, residential, industrial, municipal, and commercial areas. Permit Section D.3.b.(1), identifies 12 categories of mobile business types that will be addressed as part of this regional Strategy. Table 1 identifies these businesses types and the potential pollutants associated with each. Additional characterization and description of these sources will be conducted during the development and implementation of the regional program elements described in Section 2.0

Table 1 – Identification of Mobile Business Types and Associated Pollutants-of-Concern

Source Type	Bacteria	Metals	Pesticides	Sediment	Trash	Nutrients	Organics	Oil/Grease
1. Auto Repair, Maintenance, Fueling, Cleaning		X		X	X		X	X
2. Equipment repair, maintenance, fueling, or cleaning		X		X	X		X	X
3. Mobile automobile or other vehicle washing		X		X	X		X	X
4. Pest control services		X	X				X	
5. Mobile carpet, drape or furniture cleaning							X	
6. Cement mixing or cutting				X		X	X	
7. Masonry				X		X	X	
8. Painting and coating		X			X		X	
9. Landscaping	X	X	X	X		X	X	
10. Pool and fountain cleaning		X		X		X	X	
11. Portable sanitary services	X				X	X	X	
12. Power washing services	X	X	X	X	X	X	X	X

3.0 REGIONAL PROGRAM ELEMENTS

The Regional Mobile Business Outreach and Education Program will consist of several elements to be developed and implemented by June 2010.

3.1 Inventory Development and Maintenance

Permit section D.3.b.(1) requires that each Copermittee keep as part of its commercial sources inventory a listing of mobile businesses known to operate within its jurisdiction, and section D.3.b.(4)(b) encourages Copermittees to share these inventories. In addition to sharing inventory information, the Copermittees have determined that the collaborative development of a shared regional inventory would promote consistency in the regulation of mobile businesses, and would promote cost-efficiency by eliminating redundancy between individual inventories and avoiding duplicative notifications. The Copermittees

intend to utilize a consultant to compile this inventory. It is expected to be completed by June 2009. Prior to the completion of a shared inventory, the Copermittees will continue to meet the requirements of section D.3.b.(4)(b) by individually maintaining and updating as necessary their existing jurisdictional mobile business inventories. These will be used as a starting point for the development of a consolidated inventory. The consultant will also be tasked with researching other information sources such as unlicensed mobile businesses operating within the County, as well as with managing updates to the inventory in subsequent years.

3.2 Establishment of Minimum BMP Requirements

Permit section D.3.b.(4)(a)i requires that Copermittees develop and implement minimum standards and BMPs to be required for each of the various types of mobile businesses. The Copermittees also intend to collaborate in the development of a minimum set of BMP standards for each type of mobile business addressed through the regional effort. Existing resources such as jurisdictional minimum BMPs, the Project Clean Water Clean Water Tool Box (http://www.projectcleanwater.org/bmp/) and the Think Blue website (http://www.sandiego.gov/thinkblue) will be reviewed by the Copermittees in developing these common standards. A consultant may also be utilized for BMP development support. This task is expected to be completed by June 2009.

3.3 Outreach and Education Strategy

Permit section D.3.b.(4)(a)iv requires that Copermittees develop and implement an outreach and education strategy for mobile businesses. A variety of educational methods and approaches will likely be utilized in complying with this requirement. These will be determined by the Copermittees during the development of this task. The centerpiece of the Copermittees' education strategy will be business notifications. This element is described further below.

3.4 Business Notifications

Permit section D.3.b.(4)(a)iii requires that, within the first three years of implementation of the updated JURMP, each Copermittee must notify the owner/operator of each

inventoried mobile business their minimum standards and BMP requirements and local ordinances. The Copermittees will collaboratively develop and implement a regional notification strategy to inform mobile businesses of their obligation to comply with the local ordinances of the jurisdictions where they operate. In addition to assisting in the development of this strategy, the consultant will be tasked with notifying businesses and tracking when and how they were notified. Potential notification options include mailing, emailing, workshops, and website posting. This task will be completed no later than March 24, 2011, but is targeted for completion by March 2010.

3.5 Implementation Schedule

Implementation of the Regional Mobile Business Outreach and Education Program will begin during FY 08/09, with all major tasks targeted for completion by the end of FY 2009/10. The consultant may also be retained for future management of the inventory and other tasks as needed. Major milestones are summarized below.

FY 2008/09

- Consultant selection by Subcommittee
- Completion and maintenance of regional inventory by consultant
- Development of regional minimum BMPs

FY 2009/10

- Notification of businesses by consultant (by January 2010)
- Final report including status of notifications submitted to Copermittees

4.0 INDIVIDUAL COPERMITTEE RESPONSIBILITIES

Although many of the specific requirements of Permit section D.3.b.(4)(a) will be collaboratively addressed through the completion and implementation of the Regional Mobile Business Outreach and Education Program, the responsibility for ensuring individual Permit compliance ultimately remains with each Copermittee. These responsibilities are briefly discussed below.

4.1 Inspections and Enforcement

Permit section D.3.b.(4)(a)ii requires that Copermittees develop and implement an enforcement strategy which specifically addresses the unique characteristics of mobile businesses operating within their jurisdictions. Section D.3.b.(4)(a)v further requires that Copermittees conduct inspections of mobile businesses as needed (e.g., on a complaint basis). The Regional Mobile Business Outreach and Education program will not address inspections or enforcement of mobile businesses; these responsibilities are retained individually by each Copermittee.

4.2 Education and Outreach

Copermittees are expected to participate as requested in the development of the Education and Outreach Strategy described in Section 3.3 above. Individual Copermittees may also have specific needs or requirements not addressed through this effort. Each jurisdiction retains the responsibility for developing additional education programs or strategies in accordance with their own needs, and as necessary to ensure their own Permit compliance.

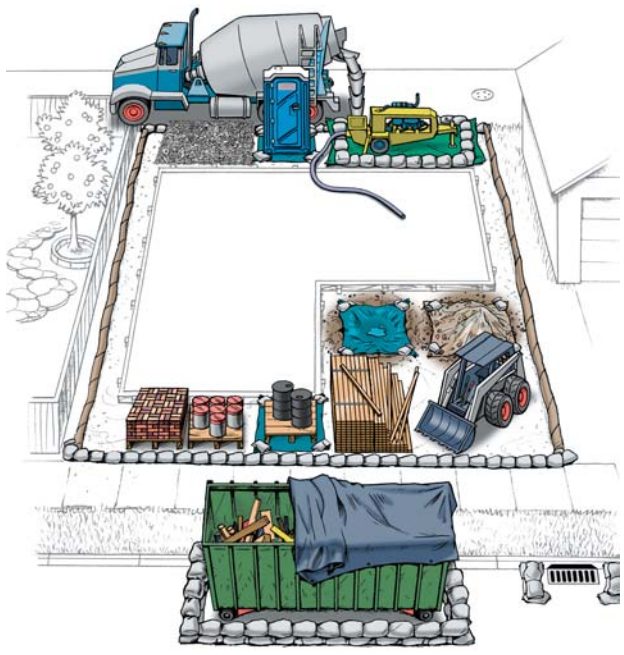
4.3 Inventory Updates

As described in Section 3.1 above, individual Copermittee mobile business inventories will initially be used as a starting point for the development of a consolidated regional inventory. Copermittees are expected to make their inventories available as requested, and to provide updated information as determined necessary for future updates.

4.4 BMP Requirements

Copermittees are expected to make their jurisdictional BMPs and requirements available as requested during the development of regional standards and program content. The Regional Mobile Business Outreach and Education Program will emphasize standardized, common content. In the event that an individual Copermittee determines that their specific requirements are not adequately addressed by the Regional Program, they will be responsible for completing additional notifications or other needed measures.

A Pollution Prevention Guide for the Construction Industry



North County Storm Water Program

Carlsbad • Del Mar • Encinitas • Oceanside • San Marcos • Solana Beach • Vista

Only Rain in the Storm Drain

Water Quality Regulations for Construction Sites

Dear Contractor,

The North County Storm Water Program (NCSWP) is a collective of jurisdictions in northern San Diego County working together to protect our watersheds. We believe that reducing pollution is critical to maintaining our communities' way of life.

It is our hope that this brochure will help you identify activities that are recognized to cause water pollution and implement appropriate Best Management Practices (BMPs) to minimize their impact. By providing you with these tools, we hope to make your job easier while keeping our waterways clean.

Each jurisdiction will be inspecting their construction sites to ensure the protection of water quality. We look forward to seeing the BMPs presented in this brochure implemented at your sites.

Together we have the ability to preserve and improve the quality of life in our communities.

Sincerely,

The North County Storm Water Program

Contact Phone Numbers:

City of Carlsbad
760-602-2719

City of San Marcos
760-744-1050

City of Encinitas
760-633-2787

City of Del Mar
858-755-9313

City of Oceanside
760-435-5800

City of Solana Beach
858-720-2470

City of Vista
760-726-1340

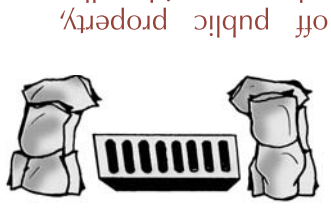
Best Management Practices

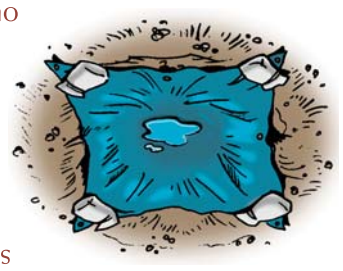
The following is a list of BMPs and pollution prevention measures that shall be implemented at all construction sites:

1. **Conduct daily site cleanings.**
2. **Develop spill response and containment procedures.**
3. **Educate employees and subcontractors about BMPs.**
4. **Develop an erosion control plan for wind and rain.**
5. **Regularly maintain all BMPs at project site.**

Construction materials such as paint, dirt and trash often find their way into our storm drains, polluting the environment and jeopardizing our creeks, rivers, lakes, lagoons, and ocean.

The NCSWP is working with contractors to implement what are known as Best Management Practices (BMPs) on all construction sites. That is, methods used to keep pollution out of our storm drains and off public property, such as sidewalks, streets, parkways and alleys. Carrying out and maintaining these BMPs on the construction site is critical to protecting our ocean and lagoons.

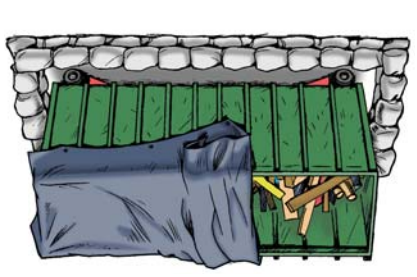




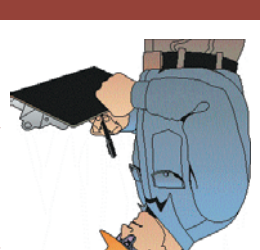
Right-of-Way Permitting

We understand that there are times when space on construction sites is limited. If at any point, you (as a contractor or subcontractor) need to use the public right-of-way in order to work or store materials, you must apply for a special permit. This permit allows you to use the City's right-of-way for specific activities, such as:

- Storage of materials or equipment
- Dumpsters
- Portable toilets
- Scaffolding
- Temporary fencing



Each jurisdiction has established an enforcement program to ensure that all businesses operate in compliance with all appropriate storm water laws and other City requirements. Contractors, site supervisors and property owners can be held responsible for violations, which may lead to a civil penalty of up to $10,000 per day and/or reimbursing the local jurisdiction for all expenses associated with clean up.



Inspection and Enforcement Program

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All construction sites are required to implement Best Management Practices (BMP) to prevent storm water pollution. This brochure is intended to assist your construction site in understanding BMP requirements.

Each municipality has one or more persons dedicated to ensuring that all construction sites are in compliance with state and local storm water control regulations. Contact your local municipality for further information.

Water Quality Regulations for Construction Sites

In 1972, the environmental Protection Agency developed regulations to control water pollution. As a result, the National Pollutant Discharge Elimination System (NPDES) Permit was created. NPDES permits are issued to municipalities as well as construction sites. In addition to complying with local regulations, which are governed by our municipal NPDES permit, you may be required to obtain a NPDES permit through the State of California under the City's storm water regulations. Under this permit, you may be required to obtain coverage under this permit.

Construction sites can contribute pollutants, such as sediment, metals, and chemicals, to our local creeks, rivers, lakes, lagoons, and ocean. These pollutants make their way down our streets and into storm drains, eventually discharging to the nearest body of water.

All construction sites are required to implement Best Management Practices (BMP) to prevent storm water pollution. This brochure is intended to assist your construction site in understanding BMP requirements.

Each municipality has one or more persons dedicated to ensuring that all construction sites are in compliance with state and local storm water control regulations. Contact your local municipality for further information.

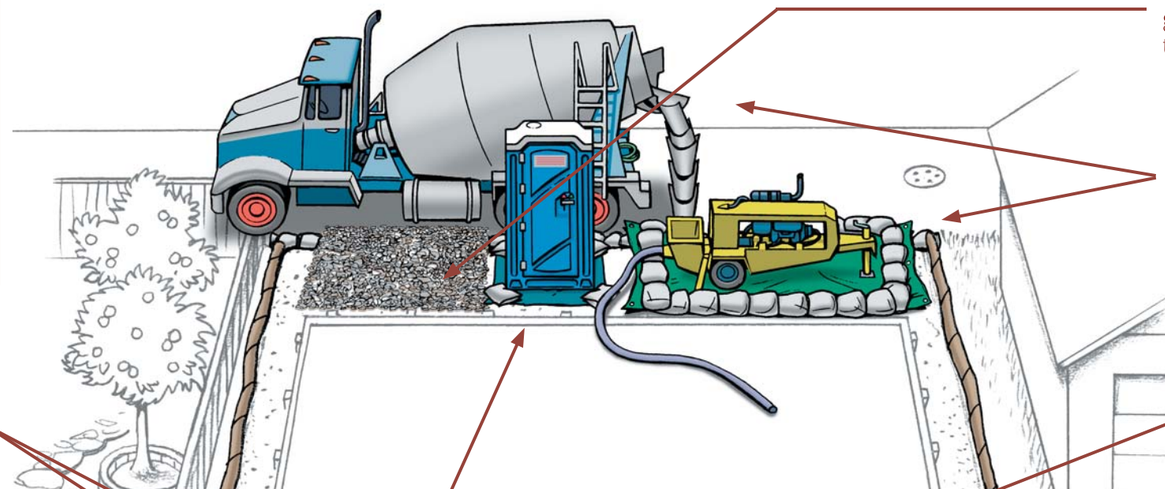
Best Management Practices

Site Overview

Protecting our water resources improves our quality of life and preserves the local environment for our children and future generations.

Untreated storm water and/or unintentional spills at work sites can flow into storm drains and pollute creeks, rivers, lakes, lagoons or the ocean. These discharges are prohibited by law.

The following drawing illustrates Best Management Practices (BMPs) that are recommended for construction sites in North County cities to protect storm drains and minimize pollution. Please check for local requirements.



Materials Storage

All building materials and fuel stored on the site must be contained and covered. It is illegal for contractors to wash out paint brushes in the street or dump any residues in the storm drain. Paint brushes and spray guns must be contained and disposed of properly.

Tracking Controls

All entrances and exits on the site must have coarse gravel or steel shaker plates to limit offsite sediment tracking.

Concrete Trucks/Pumpers

Pumpers must be surrounded by perimeter controls, such as gravel bags. Plastic sheets also must be placed beneath concrete pumpers at all times., and residual materials must be cleaned up as well. Washout areas must be used whenever cleaning trucks.

Washout area

The disposal of "wet" construction materials should be handled in the washout area. This includes paint, stucco and concrete. Use a berm and/or plastic


Mantenimiento
Automotriz
Automotive
Clean

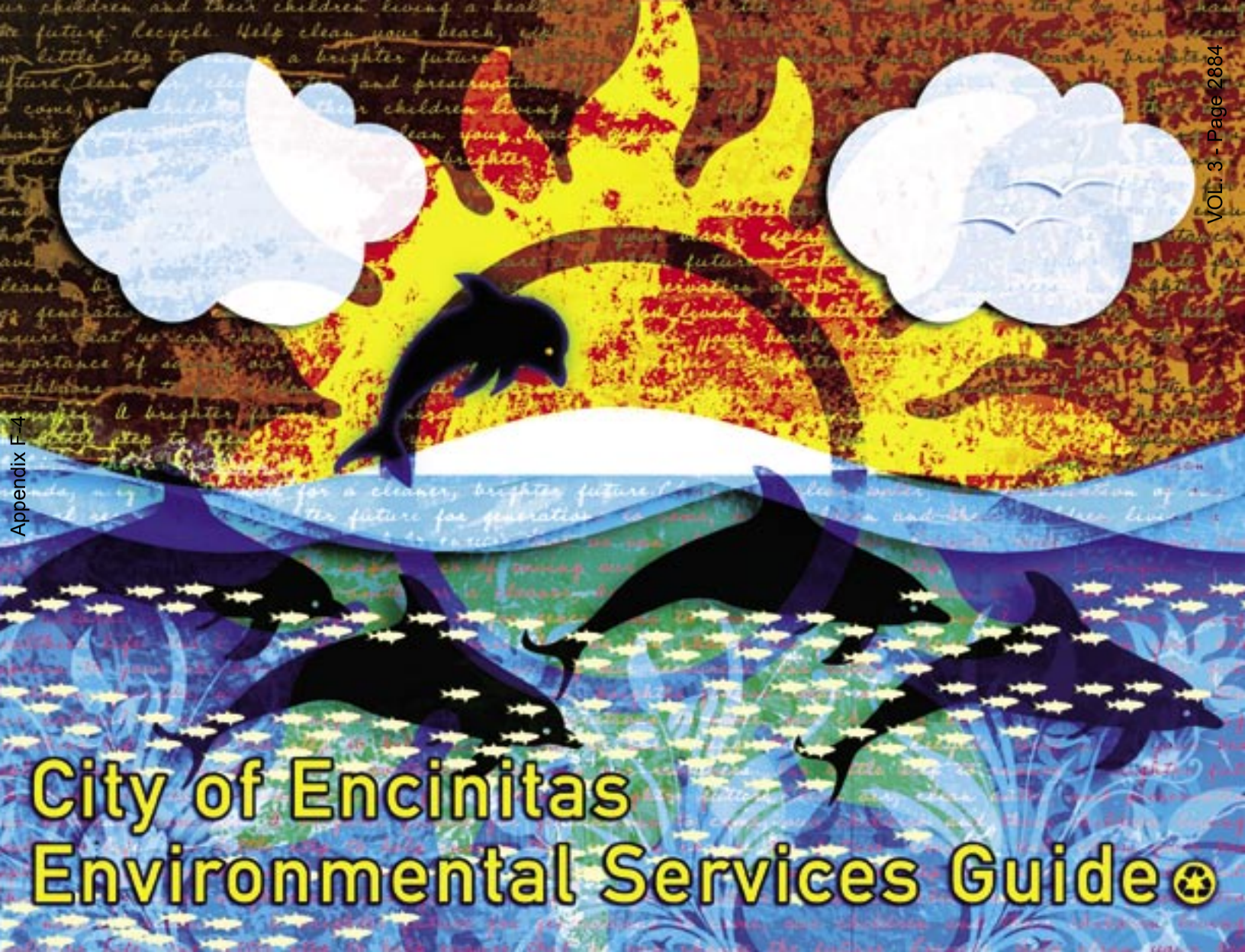

Empresas Constructoras
Developers
Simple and Cost Effective Ways to
Comply with Storm Water Regulations
Clean


Hiring a
Handy Man
Clean


Diazinón
Diazinon
Clean


Los Restaurantes
Restaurants Can
Help Keep our
Waterways Clean
Clean


Cuidado del
Patio y del jardín
Yard & Garden
Care
Clean


City of Encinitas
Environmental Services Guide

Ocean protection

The ocean begins at your front door.



Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to carry rainwater away from developed areas to prevent flooding. Untreated storm water and the pollutants it carries flow directly into our creeks, rivers, lagoons, and the ocean.

Storm water pollution can have a serious impact on water quality in Encinitas. Pollutants from the storm drain system can harm marine life as well as coastal and wetland habitats. They can also degrade our recreational beach areas and contribute to beach postings.

Storm water pollution comes from a variety of sources, including:

- Sediment from construction, home improvement, and landscaping projects
- Excess pesticides and fertilizer from lawns, gardens, greenhouses, and nurseries
- Trash/litter
- Oil and metals from cars
- Detergents, cleaners, and solvents from car washing and power washing activities
- Bacteria from pet waste

Did you know?

One gallon of oil can pollute about one million gallons of water.
- California Integrated Waste Management Board

We all live in a watershed

A watershed is an area of land which drains all the water into creeks, rivers, lagoons, and eventually the ocean. The City of Encinitas drains into Cottonwood Creek, Moonlight Beach, San Elijo Lagoon, and Batiquitos Lagoon.

HEALTHY WATERSHEDS = HEALTHY COMMUNITIES

In Encinitas we are surrounded by water and your actions either help or hurt the environment. Healthy watersheds are vital to our quality of life. Here are some tips to help keep our community clean:

- Properly dispose of all trash and debris
- Use fertilizers and pesticides sparingly. For more information visit: www.ipm.ucdavis.edu
- Adjust sprinklers and prevent over-watering. For more information visit: www.bewaterwise.com
- When possible, take your car to a commercial car wash
- Keep your car properly maintained to prevent fluid leaks
- Volunteer at cleanup events in Encinitas
- Pick up after your pets

To report an illegal discharge or for more information, visit us online at:
www.ci.encinitas.ca.us/resident/environment/cleanWP
or call our Clean Water Hotline at (760) 633-2787.





Color Changing Mood Pencil



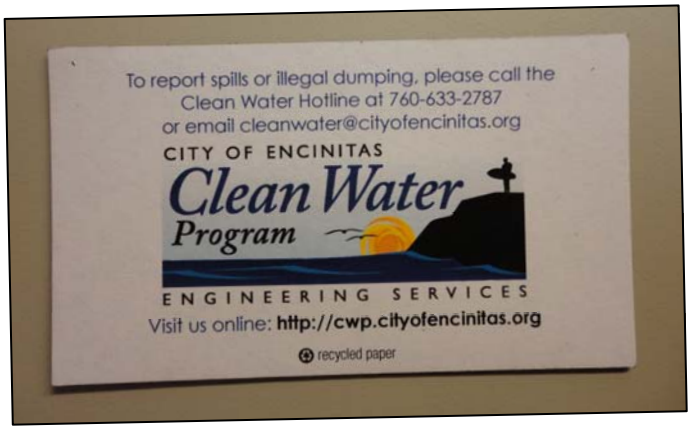
Pet Waste Bag Dispenser



Recycled Shop Towel



Recycled Key Chain



Magnet

CITY OF ENCINITAS

Clean Water Program



ENGINEERING SERVICES

Clean Water Hotline: 760-633-2787

♻ made from 85% post-industrial recycled paper

Regional URMP Attachment 2.0

Regional Residential Education Plan

FINAL – March 20, 2008

Submitted by the San Diego Stormwater Copermittees in partial fulfillment of the requirements of San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (the San Diego Municipal Stormwater Permit)

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1.0 INTRODUCTION

The Regional Residential Education Program is a joint effort by the Copermittees of the Municipal Stormwater Permit (Order No. R9-2007-0001, NPDES No. CAS0108758). The Regional Residential Education Plan (Plan) contains recommended strategies for the successful development and implementation of the Regional Residential Education Program. Per section F.1 of the Permit, as amended by Addendum No. 1 on December 12, 2007, this program must be collaboratively developed and implemented by March 24, 2008.

In the past, Copermittees have been limited in their ability to pursue strategies which may have a much greater potential to influence knowledge and behavioral change in residential populations. There are several benefits to implementing an enhanced regional program to target residential sources of stormwater pollution. First, it will encourage the development of consistent messages throughout the region. Second, a regional approach will enable Copermittees to better leverage resources and utilize economies of scale. Finally, stormwater and urban runoff pollution frequently cross jurisdictional boundaries, making collaborative approaches a necessity. While the regional program will be coordinated extensively among the Copermittees, it is not meant to supplant the jurisdictional and watershed programs.

The overall goals of the program are to increase awareness and knowledge, improve attitudes toward stormwater pollution and provide a foundation for changing behaviors that contribute to stormwater pollution. Based on extensive input from the Copermittee Regional Stormwater Management Committee (RMC) and the Education & Residential Sources Workgroup, as well as an independent analysis of existing educational efforts, the following objectives were developed to support these goals:

1. Maintain a consistent image, message, and brand
2. Use positive messages to increase knowledge and awareness, and ultimately change behavior
3. Develop community partnerships to leverage resources

4. Develop assessment strategies for program effectiveness

The Regional Education & Residential Sources Workgroup advises the RMC on regional shared outreach activities as necessary to support the requirements of the Permit. The Education & Residential Sources Workgroup plans, develops, and implements the various aspects of the stormwater education program. Education & Residential Sources Workgroup participants have traditionally combined efforts to reach business, industrial, and residential communities across the San Diego region. However, in accordance with the most recent NPDES Permit, this Plan represents a distinct effort to target residential sources of stormwater pollution.

Messages developed by the Education & Residential Sources Workgroup are designed to increase knowledge and awareness of regional stormwater issues and encourage positive changes in behavior. Assessment methods and measures have also been developed to evaluate the effectiveness of these messages and the strategies used to deliver them. Program evaluation methods and strategies will evolve as various program elements are implemented. Regional assessment methods will measure knowledge, awareness, and attitudes of residents. Program elements that are determined to be ineffective or least effective will be replaced by more effective elements or improved upon as needed. The regional program will also facilitate the measurement of changes in pollutant generating behaviors by the jurisdictional and watershed programs.

As a basis for developing this Regional Residential Education Plan, the Copermittees contracted with TRG & Associates to develop *Recommended Options for the San Diego Regional Stormwater Educational Program*. This document contains a number of recommended strategies for the successful development and implementation of a regional residential education program. It includes an extensive literature review, an analysis of existing educational programs in San Diego, and a comprehensive list of public awareness surveys. The literature review outlines other programs in the State that have

successfully implemented regional residential stormwater education programs. The document also summarizes the strengths and weaknesses of existing residential education efforts, provides suggestions for how they can be improved, provides a brief analysis of baseline public awareness surveys that have been implemented locally within the last five years, and offers recommendations for improving assessment methods and survey instruments.

2.0 SOURCE CHARACTERIZATION

The San Diego region occupies 4,261 square miles with a population of approximately 3 million people. Estimates for the year 2007 indicate that the San Diego regional population is 29% Hispanic and 71% non-Hispanic. Non-Hispanic persons include African Americans, American Indians, Native Hawaiians, Asians, and persons of a multitude of races, ethnicities, and cultures. SANDAG currently estimates that the median household income in the San Diego region is $68,388. According to the US Census Bureau in 2004 only 10.9% of San Diego's population was living below the poverty level, compared to 13.2% Statewide. Other estimates indicate that as much as 25% of California's population is living below the poverty level. Much of the region's quality of life revolves around the water resources.

Residential areas have been shown to be a prevalent source of urban runoff in the San Diego region, although less than ten percent of the region is developed as residential land. Most of the urban activity is clustered in the western third of the county, near coastal areas. However; residential land–based activities throughout the entire region contribute to polluted stormwater runoff.

The Regional Residential Education Program will focus efforts on high priority residential pollution sources that are common throughout the San Diego region. Water quality monitoring data and source characterization studies have provided the Copermittees with useful information in determining regional residential sources of stormwater pollution and constituents of concern. Regional threats to water quality were initially outlined in the Report of Waste Discharged and finalized in the Permit. Section

F.1.a of the Permit describes the process for determining which pollutants will be addressed by the program.

2.1. Regional Constituents of Concern

The following constituents of concern were determined to be the primary pollutants from residential sources for the San Diego region:

- Bacteria
- Nutrients
- Sediment
- Pesticides
- Trash

Some jurisdictions may have additional high priority pollutants. Each jurisdiction will be individually responsible for addressing additional pollutants and their sources. The pollutants listed above will remain the focus of the Regional Residential Education Program.

2.2. Pollutant-generating Activities and Constituents of Concern

Table 1 outlines residential pollutant generating activities and associated constituents of concern generated by residential areas in the San Diego region.

Table 1) Pollutant Generating Activities

Pollutant Generating Activities	Priority Constituents				
	Bacteria	Nutrients	Pesticides	Sediments	Trash
• Leaving pet waste in yard, street or sidewalk • Improper disposal of pet waste	X	X			
• Over-irrigation • Improper irrigation and system maintenance	X	X	X	X	
• Fertilizer use • Pesticide use • Landscaping activities	X	X	X	X	
• Cleaning outdoor impervious surfaces (i.e., driveways and patios)	X	X		X	X
• Improper waste disposal	X	X	X	X	X

2.3. Target Audiences

As described above, this program is intended to address the entire residential community of the San Diego region. This residential audience will be further described in terms of two specific target audiences in order to design more effective education and outreach strategies. The target audiences for the Regional Residential Education Program have been identified based on information gathered by the consultant (TRG and Associates), who utilized data from market research conducted by the County and City of San Diego and surveys gathered from other case studies. Although there may be other smaller groups of target audiences, regional outreach must realistically target the highest priority demographics in order to effectively utilize program funds. The following describes the target audiences for the campaign:

1. Primary Target Audience- English speaking residents and homeowners
2. Underserved Target Audience- Spanish speaking communities and Low Socio-Economic Status (SES)

One of the challenges of program implementation will be to develop messages that appeal to these communities. While creating content and developing materials for the primary target audience may be relatively straightforward, methods and approaches will need to be modified in order to engage the Underserved Target Audience. For example; some messages will be more conducive to translation into the Spanish language than others. Once translated, Spanish language media will be used to disseminate these messages.

According to the US Census Bureau, 33% of San Diego County residents speak a language other than English at home (2000). The same data indicates that 26.7 % of the regional population is Hispanic or Latino. Although this number varied within jurisdictions from 49.5% in Chula Vista to 11.7% in Carlsbad, it is clear that every jurisdiction in the region has significant populations of Hispanic or Latino residents. Therefore, although there are many languages spoken in San Diego, Spanish speaking communities are likely the most common throughout the region.

Research indicates that the motivating factors in Spanish speaking communities are 1) health and commitment to family, 2) children, and 3) finances. Similar priorities are found within the low SES communities. Hence, some messages will resonate more strongly with the communities among the Underserved Target Audience. Other messages may need to be modified in order to create a more appealing campaign. Low SES in California is defined as household annual income less than $25,000. Low SES residents tend to obtain information and resources from different sources than the residents within the Primary Target Audience. Again, message delivery becomes a key issue. In order to address all of these issues, specific outreach strategies will need to be developed in order to effectively reach the Underserved Target Audience.

3.0 TARGETED CHANGES TO KNOWLEDGE, AWARENESS AND BEHAVIOR

The overall goals of the Regional Residential Education Program are to raise the levels of knowledge and awareness with regards to stormwater pollution among residents, while encouraging changes to behaviors that are harmful to San Diego's waterways. The program will generally educate residents on 1) The difference between stormwater conveyance systems and sanitary sewer systems 2) the connection of storm drains to local waterways and 3) common residential sources of urban run-off. These are the general knowledge and awareness concepts upon which more specific messages will be built.

Recent research indicates that many residents do not understand that storm drains and sanitary sewer systems are completely separate. While sewage is treated, everything that goes down a storm drain goes directly to a creek, bay, or the ocean. The City of San Diego conducted a public opinion survey in 2007 in which 91% of respondents said they had heard the term "storm drain" before. However, only 46% knew that the water entering storm drains is not treated. This is a fundamental stormwater pollution prevention issue and general awareness concept. Awareness of the stormwater conveyance system is the first step towards understanding pollution prevention. Increasing knowledge and awareness that the system leads directly to local waterways will help residents to understand that urban sources of pollution have a direct effect on water quality. The awareness and knowledge of these issues are precursors to adjustments in attitudes (i.e.: increased concern for preventing this type of pollution).

Ultimately, it is anticipated that the program's targeting increased awareness and knowledge of these concepts will lead to positive changes in attitude. Furthermore, improved attitudes toward the importance of stormwater issues can provide motivation for changing pollutant generating behaviors.

In keeping with the program goals, the Copermittees have agreed on a number of positive behavior outcomes for each stormwater issue presented to the target audience. Pollutant generating activities are listed in Table 2, along with the knowledge required to understand the significance of the stormwater impacts. Also listed are numerous examples of desired behavior outcomes. Since it may not be feasible to craft messages that address each of the desired behavior outcomes listed in Table 2, some behaviors may be considered primary and targeted before others. Secondary behaviors will be targeted only if the initial efforts are determined to be unsuccessful. It is important to recognize that the Copermittees agreed on these issues and the associated behaviors, and some may wish to further utilize the concepts listed in Table 2 in their jurisdictional and/or watershed programs.

Table 2) Pollutant Generating Activities and Examples of Positive Behavior

Pollutant Generating Activities	Knowledge/Awareness	Examples of Desired Behavior Outcomes
• Leaving pet waste in yard, street or sidewalk • Improper disposal of pet waste	Pet waste left in the yard and streets may introduce solids, bacteria, and nutrients to the storm drain and/or receiving water bodies.	• **Pick up pet waste during walks** • Pick up pet waste around home • **Properly dispose of pet waste in trash can or bin**
• Over-irrigation • Improper irrigation and system maintenance	Over-irrigation causes water and pollutants in its path to run into the storm drain and/or receiving water bodies.	• **Reduce over-irrigation** • Use irrigation controller technology to reduce the amount of over-watering • **Inspect and maintain irrigation system regularly** • Adjust irrigation schedule according to seasonal changes
• Fertilizer use • Pesticide use • Landscaping activities	Fertilizers and pesticides become pollutants that can be harmful to natural ecosystems when entering receiving water bodies. Soil, sediment, and yard waste can clog storm drains and/or receiving water bodies.	• Use plants that reduce the need for fertilizers (i.e.: native plants) • Apply chemical fertilizers and pesticides only as needed and at the appropriate time • **Use organic or slow-release fertilizers** • **Use Integrated Pest Management** • Store chemicals inside in a shed or storage cabinet where they are protected from rainfall • **Collect grass clippings and yard waste** • **Dispose of grass clippings and yard waste in the proper containers** • Protect exposed soil from rain with a tarp, vegetation, and/or mulch
• Cleaning outdoor impervious surfaces (i.e.: driveways and patios)	When it rains, trash, dirt, and chemicals that have built up on these surface can run into the street, the storm drain, and eventually local waterways.	• **Clean driveways, walkways, and patios by sweeping instead of hosing** • Direct wash water to soak in to lawn or garden
• Improper waste disposal	Litter and debris dropped on the ground will be washed into storm drains and local water bodies.	• **Put litter and cigarette butts in trash cans or bins** • Keep lids closed on trash cans or bins

Although many positive behaviors have been identified that may be encouraged by the messages developed in this program, the following have been selected as the primary desired behaviors to result from the changes to knowledge, awareness, and attitudes:

- Pick up pet waste and properly dispose of in trash can or bin
- Reduce over-irrigation by regularly inspecting and maintaining irrigation systems
- Reduce fertilizer use by applying chemical fertilizer only as needed and using organic or slow-release fertilizers
- Reduce chemical pesticide use through Integrated Pest Management
- Collect grass clippings and yard waste and place them in the appropriate disposal container in order to prevent them from entering the storm drain systems
- Sweep up outside areas such as driveways, walkways, and patios instead of hosing them down
- Put litter and cigarette butts in trash cans or bins

Specific messages will be designed to increase knowledge and awareness, and therefore encourage the behaviors listed above. Regional messages will be initially developed to address only the primary targeted behaviors. Once a baseline is established and program implementation is underway, Copermittees will have the opportunity to evaluate the knowledge, awareness, and willingness of the residential target audiences to adopt these behaviors. Other positive behaviors from Table 2 may also be substituted, if necessary.
It can reasonably be expected that the regional program will be able to measure success in terms of increasing knowledge and awareness, and improving attitudes, of residents.

Knowledge describes the accuracy of one's beliefs and awareness indicates recognition of the severity of the issues whereas attitude can be described as an individual's evaluation of it (favorable or unfavorable).

As a result of the regional efforts, Copermittees expect to see an increase in the general awareness of storm drain systems and their connection to local waterways, as well the sources of urban run-off. Specifically, residents should understand the difference between the stormwater conveyance system and sanitary sewer systems. They should become aware that water entering storm drains flows untreated to local waterways. Residents should also be able to accurately identify sources of stormwater pollution (i.e.: pet waste). Attitudes toward stormwater pollution should also improve. Ideally, there will be an increase in the numbers of households or individuals engaging in the desired behavior outcomes as a result of their increased knowledge and awareness. These targets will be measured using the assessment methods described in Section 6.0.

The primary assessment tool will be the public opinion surveys. A baseline regional residential telephone survey will be conducted in 2008 and, ideally, at one other point during the current permit cycle. The numeric objectives for survey results are set so that they exceed the statistical margin of error of 2.5 percent (assuming a sample size of 1000) so that if they are achieved, they will be statistically significant. In addition, the objectives are intentionally set high, with the understanding that they are intended as a point of reference rather than a pass/fail measure. With that in mind, Copermittees have set a target of a 10% change in knowledge that storm drains are separate from sanitary sewer systems, a 10% increase in the awareness that all storm drains are connected to local waterways, and a 15% increase in the number of participants who can identify residential sources of stormwater pollution.

4.0 EDUCATIONAL METHODS AND APPROACHES

A variety of methods and approaches will be utilized to implement the program objectives. As described above, the Regional Residential Education Program objectives are 1) to maintain a consistent image and brand 2) use positive messages to change behavior 3) develop community partnerships and 4) develop strategies to assess program effectiveness. The following regional program elements are designed to meet these objectives:

- Standardized Regional Brand (Think Blue)
- Regional Think Blue Website
- Mass Media (Broadcast and Outdoor)
- Regional Outreach Materials (Development and Distribution)
- Regional Outreach Event
- Partnerships
- Regional Stormwater Hotline
- Public Relations

Some of the elements are designed for program management whereas others are outreach methods. Program management elements include standardizing the Think Blue brand, message and material development, and partnership development. The program will have a multi-faceted outreach approach utilizing a regional website, mass media (broadcast and outdoor), public relations, printed materials and promotional items, and regional outreach such as a community event. Implementation of all the recommendations is dependent on funding for each year. Therefore, some activities may be feasible only if sufficient or additional funds are available in a given year.

4.1 Standardized Regional Brand (Think Blue)

The Think Blue campaign has created a locally recognizable brand that has demonstrated effectiveness in stormwater outreach. Expanding the brand to the regional program has obvious benefits for all of the Copermittees. With a consistent look and brand, the Copermittees can continue to conduct their own outreach; however they can use the Think Blue brand in conjunction with their materials for consistency. There will be a Think Blue Graphic Standards Guide that provides the correct fonts, colors and standards to be used for all outreach materials. This will help reinforce the Think Blue brand and provide standards for its use in messages and materials. Messages and materials may need to be continuously revised in order to keep current and effectively reach target audiences.

4.2 Regional Think Blue Website

A regional Think Blue website will help build upon and reinforce the branding strategy. The Internet is a powerful means of communication. Web sites can reach large audiences with relatively minimal effort. The regional website will be developed and maintained by a contractor. It could contain easy to download, user friendly information sheets, links to Copermittees websites, and short surveys or quizzes. The regional web site, along with the new logo and slogan, will increase program visibility.

4.3 Mass Media

Although the website is an important component of the outreach efforts, many residents still get the great bulk of their environmental messages from more traditional venues such as the television and radio (broadcast media). Public Service Announcements (PSA) and advertisements are the most common forms of broadcast media. Some PSAs have already been developed under the Think Blue campaign and through the combined efforts of the Copermittees. The Copermittees can utilize funds to expand or complement the existing Think Blue campaign. The public relations component will involve news coverage such as news stories, interviews, and event coverage. Public relations provide

valuable outreach opportunities that will be sought whenever possible. Outdoor media such as bus placards and billboards can also be utilized for outreach. The location of outdoor media advertisements will need to be carefully placed in order to reach the regional target audience.

4.4 Regional Outreach Materials and Community Events

Print materials and promotional items are critical items for successful outreach. Materials include items like fact sheets, brochures, flyers, booklets, coupon booklets, posters, and doorknob hangers. These materials are easily created and the target audience can refer to them repeatedly. Promotional materials are good for promoting the regional brand, increasing knowledge and awareness, and encouraging simple actions to prevent stormwater pollution. They will be designed to also serve as visual prompts that remind people to choose behaviors that protect and improve water quality.

A regional outreach event can be an energizing and successful venue for distributing outreach messages. Careful attention should be given to participating in a community event so that the effort reaches residents from the entire region. Extensive planning, material or display development, coordination, and marketing will be necessary in order to prepare for one successful regional outreach event. This is an endeavor that will involve identifying events that reach the entire region as well as coordinating, funding, and staffing the selected event. The Copermittees expect to participate in up to two regional events over the duration of this permit cycle. Some examples of regional events that may be considered are the San Diego County Fair, the Miramar Air Show, or a local sports venue.

4.5 Partnerships

Partnerships are both a management and outreach element of the program. A partnership is a voluntary collaboration of agencies, organizations, or other groups or individuals that have joined to work toward a common goal. The Copermittees can maximize resources through the use of partnerships. The potential for partnerships is immense for the

Copermittees. Potential partnerships include local water districts (combine conservation and pollution prevention messages), hardware stores and nurseries, pet stores, and Homeowner's Associations and Property Management Companies. Initial development of partnerships with businesses and business organizations, nonprofits, other government agencies, will be necessary before the full benefits can be realized. Copermittees may then encourage partners to distribute materials or spread messages through signage, advertising and websites. Partnerships will require time to develop and may not be fully recognized until later in the permit cycle.

4.6 Regional Stormwater Hotline

Although a regional stormwater hotline is already in place, successful outreach may lead to an increase in hotline calls. The regional hotline can also help the public gain access to information quickly and easily. The hotline will be promoted through the website, media advertising and other promotional venues. The number of calls to the hotline can be tabulated to help gauge whether some advertising is effective (if the call to action is a hotline call). Since the hotline will also be an important measure of program success, careful consideration will be given to managing the hotline as the program implementation moves forward.

4.7 Behavior Specific Outreach Methods

Table 3 lists the primary target behaviors for the program during this permit cycle. The table indicates which of the outreach methods described above may be utilized to deliver messages designed for each behavior. These were selected as the primary targets because they have current appeal. Primary target behaviors may be updated as program evaluation progresses. If necessary, resources may be reallocated to address the other (secondary) target behaviors previously listed in Table 2.

Table 3) Applicability of Outreach Methods to Primary Target Behaviors

Primary Target Behaviors	Potential Methods of Outreach						
	Website	Mass Media Broadcast	Mass Media Outdoor	Public Relations	Material Distribution	Partnerships	Regional Community Events
Pick up pet waste and dispose of in trash bin	X	X	X	X	X	X	
Reduce over-irrigation by regularly inspecting and maintaining irrigation systems	X			X	X	X	X
Apply chemicals to lawn and garden only as needed	X	X		X	X	X	X
Use organic or slow-release fertilizers	X	X		X	X	X	X
Collect grass clippings and dispose of them in the proper container	X				X		
Employ Integrated Pest Management	X	X	X		X	X	X
Sweep outside areas instead of hosing them down	X		X		X		
Put litter and cigarette butts in trash cans or bins	X			X	X	X	X

Specific messages will be developed to increase knowledge and awareness that will lead to each desired behavior outcome

4.8 Program Implementation

While the overall goals of the program are to educate the general public in order promote knowledge and awareness and decrease pollutant generating behaviors, a successful program will also require coordination among the Copermittees. Program planning and message development are key components of the program that will precede full implementation. Message delivery will be ongoing. Subsequently, as results from assessments are reviewed, messages and delivery methods will need to be revised. Therefore, there are essentially three steps in the program implementation process 1)

development, 2) implementation, and 3) assessment. For the purposes of this report, the development phase includes planning projects as well as developing materials and messages. Implementation includes initiating a program element (such as media outreach) as well as maintaining the ongoing nature of the element once it is in place. Assessment includes all levels of determining the effectiveness of program elements, as well as making revisions that reflect the knowledge gained through assessment.

Table 4 charts the schedule of program implementation over the 5-year permit cycle. Strategies to achieve these objectives will be implemented over the 5-year permit cycle. Because some upfront planning and development is necessary, the first year will focus on standardizing a regional brand, developing messages, and determining the most appropriate methods for disseminating messages on a regional scale (i.e.: a regional website). Copermittees may also begin fostering partnerships in the initial years of the program. Subsequent years will build on this foundation. Copermittees may decide to refine messages and could begin leveraging resources through partnerships.

Table 4) Projected General Implementation Schedule

Program Elements	Year 1: 2007-08	Year 2: 2008-09	Year 3: 2009-10	Year 4: 2010-11	Year 5: 2011-12
Branding	D	D, I, A	I, A	I, A	I,
Regional Website	D	D, I, A	I, A	I, A	I,
Regional Hotline	D	D, I	I, A	I, A	I,
Mass Media	D	D, I	I, A	D, A	I,
Regional Outreach (Marketing and Community Events)	D	D, I	I, A	D, A	I,
Materials Development & Distribution	D	D, I, A	D, I, A	D, A	D, I
Public Relations	D	D, I	I, A	D, A	I,
Market Research & Assessment Tools	D, I, A	D, I, A	D, I, A	D, I, A	D, I,
Partnerships	D, I	D, I,	I, A	I, A	I

Development (D), Implementation (I), Assessment (A)

4.9 Social Marketing Approaches

In all of the aforementioned efforts, a variety of social marketing approaches will be utilized whenever possible. There are so many techniques described as social marketing that it is not possible to utilize them all, especially with limited staff and budgets. Social marketing uses many of the principles of social psychology and marketing techniques to bring about behavior change. Rather than being product oriented, social marketing focuses on people and their behaviors. All social marketing approaches use audience research to learn how to motivate an audience to change one or more recurring actions.

Social marketing consists of several basic components that result in delivering messages that will increase knowledge and awareness, thereby prompting people to change certain behaviors. The challenge is to present the new behavior in a positive way and emphasize the benefits to adopting a new behavior. Forming strategic partnerships with community resources can help to achieve the end goal of behavior change. Social marketing campaigns deliver messages that are strategically created and positioned to give people a compelling reason to adopt a new behavior. In order to overcome the barriers to action it is necessary to understand what the barriers are and why they exist. Researching and understanding the audience is a critical step in developing a social marketing campaign. Messages are conveyed through advertising, websites, materials and other communications. Messages should be simple, memorable and easy to follow. There should be one simple message for each of the targeted areas of knowledge and awareness. Each message needs to be used consistently in communications.

Community Based Social Marketing (CBSM) is a type of social marketing. It has gained popular appeal among the environmental community as an effective alternative to traditional information-based marketing approaches. CBSM packages basic principles of behavior change and social science research in a way that provides a usable framework for practitioners working to promote positive behavior change.

A key element of the CBSM approach is to pilot test the program with a small representative segment of the community, and compare the results to a control group. For example, a small jurisdiction may implement a project that essentially serves as a pilot for the regional program. If the pilot is not successful, the strategy should be refined and then pilot tested again. If the pilot is successful at changing behavior, the strategy can be implemented more broadly throughout the community or on a regional level. Once the successful pilot program has been widely implemented CBSM requires that the program be carefully evaluated at several points to measure continued success.

The Copermittees have agreed that CBSM offers a solid foundation for developing an effective program. However, it may not always be feasible to utilize the CBSM approach on a regional scale, hence the need for a combined approach that uses traditional social marketing techniques as well as CBSM. Some methods will lend themselves more readily to developing CBSM based approaches. When implementing each of the methods, a CBSM approach will be pursued whenever feasible.

5.0 RELATIONSHIP OF REGIONAL, WATERSHED, AND JURISDICTIONAL OUTREACH

The Regional Residential Education Program is designed to meet the Permit requirements for residential education based on regional needs and issues. The first step in meeting these requirements is to establish a regional brand and consistent image. The City of San Diego's regionally recognized Think Blue logo will be utilized as the Regional Residential Education Program's brand. During the implementation phase of the permit cycle the Copermittees will work collaboratively with the City of San Diego to update and standardize the Think Blue brand. A Graphics Standards Manual will be developed by the City of San Diego and adopted by the Copermittees in order to facilitate ease of material development and ensure a consistent regional image. Existing jurisdictional programs may also choose to use the Think Blue brand, maintain individuality, or

combine both programs for maximum impact. In a similar manner, watershed activities may be coordinated under the Think Blue brand, so long as the standards are adhered to.

Copermittees will hire a contractor to build and maintain a regional Think Blue website. The website may include links to jurisdictional program, watershed program websites, and other regional websites such as Project Clean Water. The regional Think Blue website will provide user friendly information for the public in a single location, thereby promoting consistency and coordination among the regional, jurisdictional, and watershed programs.

In addition, the Education & Residential Sources Workgroup provides a platform for integration of regional, jurisdictional, and watershed messages. The Education & Residential Sources Workgroup also coordinates activities between non-profit organizations, private institutions, and governmental agencies providing environmental and water quality education. Regular meetings will continue to provide a forum for educators, trainers, and public information officers to collaborate, share methods and materials, and seek policy level support and direction.

Watershed and jurisdictional programs should look to the Regional Residential Education Program when designing residential educational activities. The Regional Residential Education Program can thereby serve as a basis for developing these other programs. Some specific watershed or jurisdictional issues may not be covered by the Regional Residential Education Program, and must still be met by the individual or Watershed Copermittees as required by the Permit. These issues will be addressed in the watershed or jurisdictional programs. In this manner, the watershed and jurisdictional programs can supplement the Regional Residential Education Program in order to ensure that all requirements are met. As a result, each jurisdictional program may be unique in some respects and elements of the watershed programs may go beyond those in the regional program.

While the regional program may play a role in encouraging behavior changes, it is more feasible for jurisdictional programs to be able to measure actual behavioral changes resulting from increased knowledge and awareness because of their ability to implement pilots on a small scale. The broad based regional program will be implementing methods and utilizing assessment tools that most accurately gauge attitudes, knowledge, and awareness. Positive changes in attitudes and awareness are generally accepted as precursors to behavior change. Therefore, due to the difficulty of assessing behavior change on a regional level, demonstrating behavior change will therefore reside with the jurisdictional and watershed programs. In order to facilitate the assessment of jurisdictional and watershed programs, the Plan outlines assessment tools for measuring changes in knowledge and awareness through the regional program. These measures can also be tailored to meet the needs of the jurisdictional and watershed programs that implement CBSM pilots or focused outreach efforts, which provide excellent opportunities to assess behavior change. Section 6.0 describes assessment tools in further detail.

6.0 ASSESSMENT OF REGIONAL EDUCATION ACTIVITIES

In order to evaluate whether the various components of the program are resulting in the targeted knowledge and awareness outcomes, a number of assessment methods may be utilized. A random digit dial telephone survey will be the primary tool for measuring changes resulting from implementation of the regional program. Different types of assessment methods will be employed in order to gauge the outcomes of each activity and thereby determine effectiveness. Copermittees will review and assess existing survey data while developing the new regional baseline survey. Public opinion surveys will be alternated with other assessment methods to adequately assess the overall effectiveness of the Regional Residential Education Program. Copermittees have agreed to work cooperatively on funding and conducting market research and surveys. Measurement tools outlined in the Plan may be modified somewhat to correspond with different program elements. The Plan basically provides a model for program effectiveness

assessment. Specific assessment methods will depend on the type of outreach or education activity conducted and other constraints.

Copermittees will work with the City of San Diego to conduct a county-wide random digit dial telephone survey in order to obtain baseline information on knowledge, awareness, attitudes, and behaviors pertaining to stormwater. Results of the survey will guide further adaptation of the program objectives. Ideally, another public opinion survey will be conducted later in the permit cycle to assess any changes resulting from program implementation. Once the baseline is established, future permit cycles may involve one or more public opinion surveys. Additional evaluation methods may be utilized once specific media, promotions, and outreach activities are implemented. Results will enable Copermittees to determine the most effective outreach methods and make modifications to the programs as needed.

Outcome levels used in this program are based on the Hierarchy of Targeted Outcomes Pyramid referred to in the NPDES Permit, which includes outcome levels 1-6. Outcome levels 1-3 will be most applicable to educational and outreach activities. Table 5 illustrates potential assessment methods that may be utilized for each of the activities being considered. Level 1 outcomes indicate compliance with permit based activities. This is the most basic means of assessing program effectiveness. Measuring Level 2 outcomes will indicate changes in attitudes, knowledge and awareness. Surveys and quizzes provide the most common means for measuring Level 2 outcomes. Level 3 outcomes provide an opportunity to measure behavioral changes and implementation of Best Management Practices (BMPs). This can be accomplished through observations and program specific counts. For example, tracking sales of less toxic pesticides in a store where IPM information is available may indicate changes in the behavior of consumers. Level 4 outcomes indicate actual load reduction, and are more practical for activities such as clean up events or Household Hazardous Waste collection activities, which are sometimes associated with outreach activities.

Table 5) Potential Program Element Assessment Measures

Activity/ Level		Type of Assessment Measure
Branding		
1		Updating materials to reflect new regional brand.
2		Count number of survey respondents who are aware of brand/program.
3		N/A
4		N/A
Website		
1		Count number of hits to website, interactive use/quizzes taken, etc.
2		Administer survey/quiz to assess attitude/knowledge of web users.
3		Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data. Downloads of informational brochures.
4		N/A
Mass Media/Public Service Announcement (PSA)/Public Relations		
1		Count number of household/individuals reached.
2		Administer survey/quiz to assess attitude/knowledge of PSA recipients.
3		Comments and feedback received regarding PSA via the hotline or website.
4		N/A
Outreach Materials (i.e.: fact sheets and brochures)		
1		Count number of fact sheet/brochures handed out.
2		Administer survey/quiz to assess attitude/knowledge of fact sheet/brochure recipients
3		Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data.
4		N/A
Regional Outreach Event		
1		Count number of visitors to booths, brochures handed out, surveys/quizzes completed, etc.
2		Count number of mail-in cards, number of volunteers to organization, number of persons who attended community event. Administer survey/quiz to assess attitude/knowledge of visitors
3		Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data.
4		N/A

Partnerships

1	Count number of incentives distributed, participants in the program.
2	Survey or quiz to assess attitude/knowledge of volunteers pre- and post- participation
3	Administer survey to assess behavior change in program participants or count observable behavior of program participants and compare to pilot data, historical data, and/or control group. Count number of mail-in cards, number of volunteers to organization, or number of persons who signed a petition directed from incentive program.
4	Count amount of load reduction in targeted residential area or count amount of load removed from targeted area

Hotline

1	Count number of calls to hotline.
2	Administer survey/quiz to assess attitude/knowledge of hotline users.
3	Administer survey to assess behavior change of participants in program and compare to pilot, historical, or control data, count observable behavior of participants in program and compare to pilot data and/or control group.
4	N/A

7.0 CONCLUSIONS AND RECOMMENDATIONS

The San Diego region has widely diverse socio-economic, ethnic, biological, and physical characteristics. These characteristics create the region's appeal and present many challenges to the entities charged with developing and implementing an effective Regional Urban Runoff Management Program (RURMP).

The Regional Residential Education Program is a component of the San Diego RURMP. This program is designed to increase knowledge and awareness of stormwater issues and potentially change pollutant generating behaviors. Research indicates that these are attainable goals under a well-funded, long term, multi-faceted and strategic public outreach campaign.

In order to implement program goals, the Copermittees have agreed on general objectives: 1) maintain a consistent image, message and brand 2) use positive messages to increase knowledge and awareness, thereby increasing the likelihood of behavior change 3) develop community partnerships and 4) develop strategies to assess program effectiveness. In order to efficiently accomplish these objectives, Copermittees have agreed to adopt Think Blue as the regional flagship brand. In addition, strong and

focused outreach messages will be selected to increase knowledge and awareness and ultimately target the primary pollutant generating behaviors from residential activities.

The basic program elements include an array of methods and approaches that will be utilized for program management, message delivery, and effectiveness assessment. Over time, the Regional Residential Education Program will be adapted to utilize the most effective outreach and education strategies practicable while maintaining a clear focus for the entire region. Annual reports will summarize progress and provide an opportunity to reflect on the year's successes and shortcomings. At the end of the 5-year permit cycle, Copermittees will be able to assess of the program's progress and develop more effective regional outreach strategies.

Appendix G

JURMP Annual Report Requirements Checklist

G-1 Requirements Checklist

Appendix G
JURMP Annual Report Requirements Checklist

2.0 Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location In Report**
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2.4, 2.3, 2.4.4.1, 2.4.4.2
ii. Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.4.4.2, 2.4.4.3, 2.4.4.4
iii. A listing of the development projects to which SUSMP requirements were applied.	2.4.4.3, Table 2-2
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.4.4.3, 2.4.4.4
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.4.4.3
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.4.4.3 (N/A)
vii. An updated treatment control BMP inventory.	2.4.4.4, Appendix A-1
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.4.4.7
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.4.4.6
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.4.5
xi. A listing of any projects which received a SUSMP waiver.	2.4.4.3 (N/A)
xii. A description of implementation of any SUSMP waiver mitigation program.	2.4.4.3 (N/A)
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.4.3.1, 2.4.4.1
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.4.4.3 (N/A)
xv. A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	2.4.4.3

2.0 Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location In Report**
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	2.4.4.3 (N/A)
xvii. The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	2.4.4.8
xviii. A description of notable activities conducted to manage urban runoff from development projects.	2.4.3.1, 2.4.4.1, 2.4.4.4, 2.4.4.6, 2.4.4.7

3.0 Construction

Permit Annual Reporting Requirement—Section J.3.a.(3).(b)	**Location in Report**
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.5.1
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2.2, Appendix B-1
iii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iv. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.4.1
v. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.5.4 (N/A)
vi. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.5.3, 3.5.4 (N/A)
vii. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	Appendix B-1
viii. A description of the general results of the inspections.	3.5.5.2
ix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5.5.1
x. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.5.5.2, Appendix B-6 and H-1
xi. A description of notable activities conducted to manage urban runoff from construction sites.	3.2.2, 3.3, 3.4.1.1

4.0 Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
i. Any updates to the municipal inventory and prioritization.	Appendix C-1
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2.3, 4.3.3, 4.4.3, 4.5.3, 4.6.3, 4.7.3
iii. A description of inspections and maintenance conducted for municipal treatment controls.	4.4.4.1, Appendix C-2
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4.4.1, Appendix C-2
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	Appendix C-2
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	4.4.4.1, Appendix C-2
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4.4.1, Appendix C-2
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	N/A
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	4.3.3.1
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2

4.0 Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2
xiii. Identification of the total distance of curb-miles swept.	4.2.4, Appendix C-2
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.2.4, Appendix C-2
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.2.4, Appendix C-2
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	4.5.4.1
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.3.2, 4.3.4.3, Appendix C-2
xviii. A description of the general results of the inspections.	4.3.4.3, Appendix C -6
xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	4.3.4.3, Appendix C -6
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	Appendix C-6 and H-1
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	4.2.4, 4.4.2, 4.4.4.1, 4.5.4.1, 4.7.3.1, 4.7.4

5.0 Industrial and Commercial

Permit Annual Reporting Requirement—Section J.3.a.(3).(d)	**Location in Report**
i. Any updates to the industrial and commercial inventory.	5.2.2, Appendix D-1 and D-2
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.4.5, 5.3.4.4, Appendix D-5 and H-1
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.4.4, 5.3.4.1 Appendix D-7 and D-8
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.4.2 Appendix D-1, D-2 and D-5
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.4.1
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4.3, 5.2.4.5
vii. Identification of the number of third party inspections conducted.	5.2.4.3 (N/A)
viii. Identification of efforts conducted to verify third party inspection effectiveness.	5.2.4.3 (N/A)
ix. A description of efforts implemented to address mobile businesses.	5.3.4
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4.5, 5.3.4.4 Appendix H-1
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4.5
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	5.2.4, 5.3.4

6.0 Residential

Permit Annual Reporting Requirement—Section J.3.a.(3).(e)	**Location in Report**
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2 Appendix E-1
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.3, 6.4.3, Appendix H-1
iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4.2
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4.2
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.2.3
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4.3, Appendix H-1
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4.4, Appendix F-6
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	6.4

7.0 IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
To be included in FY 2010-11 Illicit Discharge Detection and Elimination Component on December 15, 2011.	N/A

8.0 Education

Permit Annual Reporting Requirement—Section J.3.a.(3).(g)	Location in Report
i. A description of education efforts conducted for each target community.	8.3
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	8.3.1
iii. A description of education efforts conducted for municipal departments and personnel.	8.2
iv. A description of education efforts conducted for the new development and construction communities.	8.3.2
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.3.4

9.0 Public Participation

Permit Annual Reporting Requirement—Section J.3.a.(3).(h)	Location in Report
i. A description of public participation efforts conducted.	9.3

10.0 Fiscal Analysis

Permit Annual Reporting Requirement—Section J.3.a.(3).(j)	Location in Report
i. A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order.	10.1, 10.2, 10.3, 10.4

11.0 Effectiveness Assessment

Permit Annual Reporting Requirement—Section J.3.a.(3).(i)	Location in Report
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11.2, 11.3

12.0 Special Investigations

Permit Annual Reporting Requirement—Section J.3.a.(3).(k)	Location in Report
i. A description of any special investigations conducted.	12.1, 12.2

13.0 Non-Emergency Firefighting

Permit Annual Reporting Requirement—Section J.3.a.(3).(l)	Location in Report
i. A description of efforts conducted to reduce pollutant discharges from non-emergency fire fighting flows.	13.2

14.0 JURMP Revisions

Permit Annual Reporting Requirement—Section J.3.a.(3).(m)	Location in Report
i. A description of any proposed revisions to the JURMP.	14.0

Appendix H

Complaint Response

H-1 Construction Summary

Municipal Summary

Commercial Summary

Industrial Summary

Residential Summary

Referrals or Requests for Info Summary

Appendix H-1 Construction Complaint Response Summary FY 2010 - 2011

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	96362	8/10/10	Sediment	Discharge of water - Old pool water from 1076 sitting in private drainage ditch at 1065 Guadalajara.	WO#121682 : By EMERSON, MIKE: 8/27/2010 4:37:23 PM site inspection took photos contacted GC. He indicated that he had cleaned the drainage ditch behind complainant's home. Private drain Case closed	No	No		Yes			ENC	10/21/10
2	96425	8/2/10	Const waste	Discharge of sediment - Sediment discharge from construction zone.	WO#121699 : By EMERSON, MIKE: 8/30/2010 1:56:39 PM Site inspection spoke to GC to clean up street. Contractor will clean street and will street sweep on 8/31/10 WO#121700 : By EMERSON, MIKE: 8/30/2010 2:06:48 PM Site inspection area cleaned up case closed	Yes	No		Yes			ENC	10/21/10
3	96543	9/14/10	Cement wash	Discharge of concrete cutting slurry or wash water. - Concrete cutting in street, concrete in gutter.	WO#122112 : By EMERSON, MIKE: 9/14/2010 1:50:27 PM Site inspection contacted GC to dry clean up street took photos WO#122121 : By EMERSON, MIKE: 9/15/2010 11:11:22 AM Area cleaned up took photos case closed	Yes	Yes		Yes			CBS	9/14/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
4	96545	9/14/10	Cement debris	Discharge of concrete waste. - Concrete wash in front to construction site no BMPs Concrete debris in street down hill from construction site no BMPs Concrete wash in front to construction site no BMPs	WO#122113 : By EMERSON, MIKE: 9/14/2010 2:04:12 PM Site inspection contacted GC to dry clean up street took photos WO#122122 : By EMERSON, MIKE: 9/15/2010 11:16:49 AM Area cleaned up took photos case closed	Yes	Yes		Yes			CBS	9/14/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
5	96546	9/14/10	Concrete Debris	Discharge of concrete waste. -	WO#122114 : By EMERSON, MIKE: 9/14/2010 2:19:53 PM Site inspection contacted GC to dry clean up street took photos WO#122123 : By EMERSON, MIKE: 9/15/2010 11:19:59 AM Area cleaned up took photos case closed	Yes	Yes		Yes			CBS	9/14/10
6	96667	10/6/10	Silt	Discharge of construction debris - Construction debris discharge. No BMPs.	WO#122528 : By EMERSON, MIKE: 10/6/2010 5:24:12 PM Site inspection took photos of sediment in the road. Contacted resident and informed her that the sediment needs to be swept up no wash down needs unless all the wash water is captured. Also needs perimeter erosion control BMPs. WO#122550 : By EMERSON, MIKE: 10/11/2010 2:22:45 PM Site inspection took photos of BMPs in place signed off NOV Case closed	Yes	No	10/6/10	Yes			LCS	10/8/10
7	98778	10/20/10	Sediment	Discharge of sediment - Lack of BMPs and discharge of sediment. Referred to construction inspector.	WO#124807 : By RYGIEL, KRISTINE: 10/27/2010 3:04:19 PM Per construction inspector: maintenance required on gravel bags and BMP swale. Forwarded corrective actions to responsible party for follow up. Case closed	Yes	No		Yes			LUC	10/27/10
8	99054	12/20/10	Water/ sediment	Discharge of sediment - Water flowing from construction site, possible sediment discharge.	WO#125787 : By EMERSON, MIKE: 12/27/2010 4:57:37 PM Site inspection observed large amount of water in front of	No	No		Yes			CBS	1/13/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					house. Owner indicated that there is very little drainage in this area and that the water was run off from the road. He does not like the standing water and wants a CIP to fix it for good. Case closed								
9	99095	12/22/10	Sediment	Discharge of sediment - Uncovered dirt piles-lack of BMPs.	WO#125799 : By EMERSON, MIKE: 12/28/2010 10:38:28 AM Site inspection took photos issued NOV and citation WO#125801 : By EMERSON, MIKE: 12/28/2010 10:51:13 AM Site inspection min BMPs in place (sand bags around parameter) Case closed	Yes	No	12/23/10	Yes	12/23/10		CBS	12/27/10
10	99101	12/22/10	Sediment/ water	Discharge of sediment - Construction site pumping muddy water from their job site.	WO#125811 : By EMERSON, MIKE: 12/28/2010 11:46:14 AM Site inspection spoke to GC and he showed me how he is keeping all of the water on site. Took photos case closed.	No	No		Yes			CBS	1/24/11
11	99111	12/23/10	Sediment/ water	Discharge of sediment - Construction site dewatering without BMPs.	WO#125678 : By RYGIEL, KRISTINE: 12/23/2010 1:33:23 PM Construction inspector witnessed illegal dewatering at a site. Spoke with general contractor onsite and asked him to stop the dewatering. Sent NOV and $200 Citation 12/23/10. Case closed	Yes	Yes	12/23/10	Yes	12/23/10		LUC	12/23/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
12	99113	12/23/10	Sediment	Discharge of sediment - Sediment runoff during rain event.	WO#125813 : By EMERSON, MIKE: 12/28/2010 2:41:55 PM Site inspection took photos contacted contractor to install some Min BMPs. WO#125814 : By EMERSON, MIKE: 12/28/2010 2:47:21 PM Site inspection Min BMPs installed Case closed	Yes	No		Yes			ENC	12/27/10
13	99119	12/21/10	Silt/sediment	Discharge of sediment - Sediment runoff from construction site.	WO#125821 : By EMERSON, MIKE: 12/28/2010 5:30:18 PM 12/21/10 Site inspection took photos rain water has been diverted away from site BMPs need maintenance called construction/grading inspector to contact contractor. WO#125822 : By EMERSON, MIKE: 12/28/2010 5:33:10 PM 12/23/10 Site inspection took photos of newly installed Min BMPs to fix problem. Case closed WO#126208 : By EMERSON, MIKE: 1/11/2011 11:24:51 AM Site inspection with clean water manager took photos of leaking construction site, contacted construction inspector. Inspector informed us that the contractor had been contacted and to go ahead and write a citation if the site is leaking. WO#126211 : By EMERSON, MIKE:	Yes	No	1/4/11	Yes	1/4/11		ENC	1/4/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					1/11/2011 11:48:09 AM Site inspection took photos of leaking construction site, contacted construction inspector. Who said and to go ahead and write a citation if the site is leaking contractor has been warned repeatedly. Case closed								
14	99120	12/21/10	Silt/sediment	Discharge of sediment - Construction site dewatering without BMPs.	WO#125823 : By EMERSON, MIKE: 12/28/2010 5:38:44 PM Site inspection took photos of site dewatering contacted contractor and informed him of the illegal discharge and that he would be receiving a citation Case closed	Yes	Yes	12/23/10	Yes	12/23/10		CBS	1/24/11
15	99165	12/29/10	Sediment	Discharge of sediment - Received report of dewatering sediment	WO#126272 : By EMERSON, MIKE: 1/18/2011 10:54:50 AM Site inspection observed no evidence of dewatering. Site workers confirmed that no discharge has taken place Case closed	No	No		Yes			LUC	1/24/11
16	99166	12/29/10	Sediment	Discharge of sediment - received complaint of poor BMPs site draining sediment	WO#126269 : By EMERSON, MIKE: 1/18/2011 10:35:46 AM 12-29-11 Site inspection site leaking called contractor to fix leak ASAP (1043am) took photos WO#126270 : By EMERSON, MIKE: 1/18/2011 10:41:25 AM 1-3-11 site inspection took photos of site still leaking no work done. Issued citation and NOV By EMERSON, MIKE: 1/18/2011 10:45:13 AM 1-5-11 received call	Yes	No	1/3/11	Yes	1/3/11		LUC	3/25/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					from contractor regarding citation and questioned why there was no warning. Informed contactor that a call was made to fix BMPs on 12/29/10 same contractor phone number where promises were made to implement BMPs. Case closed								
17	99188	1/4/11	Cement gray water	Discharge of concrete cutting slurry or wash water. - Concrete cutting with no BMPs.	WO#126130 : By EMERSON, MIKE: 1/6/2011 5:20:42 PM Site inspection took photos contacted employee regarding cement and water discharge into storm drain. Requested dry clean up or collecting all wash water. WO#126131 : By EMERSON, MIKE: 1/6/2011 5:28:48 PM Site inspection took photos was contacted by property owner. Explained codes and that additional clean up is needed. WO#126132 : By EMERSON, MIKE: 1/6/2011 5:32:31 PM Site inspection area cleaned up but still has stains. Case closed	Yes	Yes		Yes			LUX	1/6/11
18	99239	1/10/11	H2O mixed with cement and sediment	Discharge of sediment - Dewatering causing sediment runoff.	WO#126261 : By EMERSON, MIKE: 1/14/2011 10:50:37 AM Site inspection took photos of drainage pattern. Appears that the dewatering spilled over into the storm drain, left card for contractor to call me. Received call from contractor and informed him that any dewatering that reaches the storm	Yes	No		Yes			CBS	1/24/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					drain is a violation. He understood and thanked me for the education. Case closed.								
19	99347	1/31/11	Yellow powder	Other discharge - Yellow powder runoff is appearing on Melba across from the Nursery subdivision that is under construction, behind the Lutheran Church.	WO#126519 : By EMERSON, MIKE: 2/2/2011 1:04:58 PM Site inspection met contractor and called complainant and inspector. Appears to be pollen case closed	No	No		Yes			ENC	3/24/11
20	99593	3/11/11	Dust/dirt	Discharge of sediment - Dust leaving property	WO#127101 : By EMERSON, MIKE: 3/15/2011 10:40:33 AM Site inspection (1405) contacted worker who informed me that they are actively spraying down the site with water to ensure no dust is leaving the property and water/sediment is not being deposited on the street. In addition, there is a street sweeper constantly sweeping the street. I observed truck entering site with minimal dust that settled on site. Received phone call from contractor (1420) volunteering any requested actions. No violation. Called DEH and reported actions. Case closed	No	No		Yes			LUC	4/7/11
21	99630	3/22/11	Sediment	Discharge of sediment - Runoff from construction site after rain event.	WO#127332 : By RYGIEL, KRISTINE: 3/24/2011 8:57:25 AM Per construction inspector: No sediment was found in street. Ongoing inspection and monitoring. All BMPs in place. Case closed	No	No					LUC	3/24/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
22	99655	3/17/11	Silt	Discharge of sediment - Sediment in street and uncovered stockpiles.	WO#127397 : By EMERSON, MIKE: 3/29/2011 4:03:35 PM Site inspection took photos of failing BMPs and silt discharge. Contacted construction inspector to contact contractor to implement or replace BMPs. WO#127399 : By EMERSON, MIKE: 3/29/2011 4:12:21 PM Site inspection took photos City construction inspector completed inspection report and site was maintained. Case closed	Yes	No	3/24/11	Yes	3/24/11		CBS	3/24/11
23	99656	3/21/11	Sediment	Discharge of sediment - Sediment discharge during rain event. Lack of BMPs. Dewatering site without BMPs.	WO#127394 : By EMERSON, MIKE: 3/29/2011 3:41:23 PM Site inspection took photos of BMPs. Contacted construction inspector to contact contractor to implement or replace BMPs. WO#127395 : By EMERSON, MIKE: 3/29/2011 3:49:01 PM Site inspection with program manager and completed inspection report. Site looks good Case closed	Yes	Yes	3/24/11	Yes	3/24/11	Cottonwood Creek	ENC	3/24/11
24	99658	3/21/11	Sediment	Discharge of sediment - Dewatering site without BMPs.	WO#127391 : By EMERSON, MIKE: 3/29/2011 3:23:44 PM Site inspection took photos of De-watering activities into storm drain. Contacted worker to discontinue immediately. Received call from contractor requesting area where he could de-water. He was informed that he would need a permit from the RWQCB.	Yes	No	3/24/11	Yes	3/24/11		ENC	4/7/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					WO#127392 : By EMERSON, MIKE: 3/29/2011 3:31:08 PM Site inspection took photos completed inspection report and referred to City construction inspector for follow up. Case closed								
25	99659	3/21/11	Sediment	Discharge of sediment - Sediment discharge during rain event.	WO#127383 : By EMERSON, MIKE: 3/29/2011 2:58:02 PM Site inspection took photos of failing BMPs and sediment discharge. Contacted construction inspector to contact contractor to implement or replace BMPs. WO#127388 : By EMERSON, MIKE: 3/29/2011 3:13:09 PM Site inspection took photos of BMPs. Appears they still have open slopes but perimeter BMPs appear to be implemented case closed	Yes	No	3/24/11	Yes	3/24/11		ENC	4/7/11
26	99660	3/21/11	Sediment	Discharge of sediment - Failing BMPs during rain event.	WO#127372 : By EMERSON, MIKE: 3/29/2011 1:17:03 PM Site inspection took photos was contacted site contractor who informed me that he had contacted his erosion/sediment control contractor to shore up site. WO#127373 : By EMERSON, MIKE: 3/29/2011 1:25:48 PM Site inspection took photos was contacted site contractor who informed me that he had contacted his	Yes	No		Yes			ENC	3/24/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					erosion/sediment control contractor and had shored up site. In addition to the street sweeper going around the neighboring streets.. By EMERSON, MIKE: 3/29/2011 1:29:03 PM 3/23/11 site inspection site appears to be ready for the approaching rain events. WO#127374 : By EMERSON, MIKE: 3/29/2011 1:33:29 PM Site inspection took photos walked site with contractor requested entrance/exit BMPs and informed contractor that de watering into the storm drain requires a permit from the RSWQCB. Water can be moved around on the site or removed by porter truck. Case closed								
27	99661	3/21/11	Sediment	Discharge of sediment - Failing BMPs, sediment runoff during rain event. Vacant construction site.	WO#127368 : By EMERSON, MIKE: 3/29/2011 11:12:22 AM Site inspection took photos of sediment leaving site. Contacted construction inspector to notify contractor to shore up site. Spoke with clean water manager regarding enforcement and it was agreed to have construction inspector monitor/inspect site. WO#127369 : By EMERSON, MIKE: 3/29/2011 11:16:42 AM 3-24-11 Site inspection from construction inspector and notified contractor to shore up site. 3-25-11 site inspection site OK	Yes	No					LUC	4/7/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Case closed								
28	99688	3/30/11	H2O	Discharge of water - report of large water discharge	WO#127477 : By EMERSON, MIKE: 3/30/2011 4:07:21 PM Site inspection contacted contractor on seen who indicated that he was cleaning the garage and the sump went off shooting the water into the street. He immediately stopped. Case closed	No	No		Yes			CBS	4/7/11
29	99707	4/4/11	Sediment	Discharge of sediment - Sediment discharge from construction site.	WO#127553 : By RYGIEL, KRISTINE: 4/4/2011 3:24:20 PM Construction inspector investigated complaint. Informed contractor to remove or cover stockpiles and clean sediment discharge. Case closed	Yes	No		Yes			LCS	4/4/11
30	99726	4/8/11	Stucco wash waste	Discharge of water - Power washing without containment	WO#127915 : By EMERSON, MIKE: 4/25/2011 1:32:25 PM Site inspection contacted General contractor to discontinue allowing construction wash to flow into TC BMPs. The contractor understood that those TC BMPs are for after construction and will discontinue discharge of construction waste into TC BMPs. Case closed	Yes	Yes		Yes			ENC	5/10/11
31	99727	4/7/11	h20	Discharge of sediment - Discharge of sediment water	WO#127918 : By EMERSON, MIKE: 4/25/2011 1:44:46 PM Site inspection contacted water truck driver who indicated that he was just doing what he was told to	Yes	Yes		Yes			CBS	5/10/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					empty the water into a storm drain. Contacted his supervisor who stated that the driver was to empty truck water onto vegetated bank. Driver will be talked to Case closed								
32	99753	4/13/11	Sediment	Discharge of sediment - New construction site lacking BMPs.	WO#127836 : By EMERSON, MIKE: 4/22/2011 8:13:46 AM Site inspection took photos contacted contractor to install BMPs and clean storm drain WO#127837 : By EMERSON, MIKE: 4/22/2011 8:18:50 AM Site inspection took photos signed off 3 of the 4 correction actions By EMERSON, MIKE: 4/22/2011 1:00:19 PM called contractor and emailed three storm drain cleaner contractors By EMERSON, MIKE: 7/7/2011 2:48:19 PM 5/9/11 contractor hired Down stream to clean storm drain By EMERSON, MIKE: 7/26/2011 10:58:08 AM 7/12/11 met with contractor and requested proof of storm drain cleaning. Gave me ph # of contractor that cleaned the storm drain. Called contractor left message. By EMERSON, MIKE: 7/26/2011 10:59:45 AM 7/26/11 Called contractor and left	Yes	No	4/14/11	Yes			LCS	7/15/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					message to call me to provide proof of storm drain cleaning. By EMERSON, MIKE: 7/26/2011 3:30:32 PM Received call from contractor stating that they did the work and sent the invoice to corporate. GC to obtain invoice and forward to the City. By EMERSON, MIKE: 7/29/2011 9:55:27 AM Received copy of invoice to clean out storm drain on 5/13/11 case closed								
33	99786	4/19/11	Sediment/ cement	Discharge of sediment - Building inspector observed poor BMPs and discharge into storm drain	WO#127790 : By EMERSON, MIKE: 4/20/2011 5:01:31 PM Site inspection took photos contacted contractor to clean up street and to use BMPs WO#127791 : By EMERSON, MIKE: 4/20/2011 5:07:16 PM Site inspection area cleaned up case closed	Yes	Yes	4/19/11	Yes				4/20/11
34	99795	4/14/11	Sand	Discharge of sediment - Site inspection took photos called contractor	WO#127828 : By EMERSON, MIKE: 4/21/2011 4:01:27 PM Site inspection took photos called contractor site will be cleaned within 24hrs WO#127833 : By EMERSON, MIKE: 4/21/2011 4:16:14 PM Site inspection took photos of cleaned up area case closed By EMERSON, MIKE: 4/21/2011 4:18:36 PM Signed off NOV and faxed it to contractor	Yes	Yes	4/14/11	Yes			LUC	4/18/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
35	99836	4/28/11	Concrete wash water	Discharge of concrete waste. - Contractors washing off concrete materials into storm drain.	WO#128067 : By RYGIEL, KRISTINE: 5/2/2011 10:35:44 AM Site investigation 4/28/11 showed wash water discharge into storm drain. Spoke with contractors on site to inform them of their violation. Sent NOV and Warning Citation on 5/2/11. Case closed	Yes	Yes	5/2/11	Yes	5/2/11		ENC	5/2/11
36	100179	6/17/11	Construction wash	Discharge of paint - received email that there was paint running down the street	WO#128973 : By EMERSON, MIKE: 7/6/2011 12:24:40 PM Site inspection contacted worker to discontinue discharge and dry clean area case closed	Yes	No		Yes				8/9/11
37	100187	6/16/11	Construction waste	Discharge of construction debris - received complaint from construction inspector that they are staging in the street	WO#129009 : By EMERSON, MIKE: 7/6/2011 4:08:15 PM Site inspection observed no discharge case closed	Yes	No					ENC	8/9/11
38	100200	5/16/11	Sediment	Discharge of sediment - Received call from engineering inspector requesting enforcement discharge and no BMPs	WO#129036 : By EMERSON, MIKE: 7/7/2011 11:44:51 AM Site inspection took photos contacted manager and requested clean up and discontinue discharge and install BMPs in the future. WO#129037 : By EMERSON, MIKE: 7/7/2011 11:51:41 AM Site inspection area cleaned up took photos thanked manager case closed	Yes	No	5/16/11	Yes			LCS	8/9/11
39	100205	5/17/11	Sediment	Discharge of sediment - roof gutters draining into sediment that flows into storm drain	WO#129040 : By EMERSON, MIKE: 7/7/2011 1:41:35 PM Site inspection contacted contractor to fix BMPs took photos	Yes	No	5/17/11	Yes			LCS	8/9/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					WO#129041 : By EMERSON, MIKE: 7/7/2011 1:47:02 PM Site inspection area cleaned up took photos thanked manager case closed								
40	100212	5/31/11	Sediment	Discharge of sediment - Received call complaining of sediment discharge from trucks.	WO#129049 : By EMERSON, MIKE: 7/7/2011 4:00:35 PM Site inspection did not observe any discharge By EMERSON, MIKE: 7/7/2011 4:05:14 PM Contacted contractor who inform us that they are street sweeping and power washing street and collecting all wash water. case closed	No	No		Yes			LUC	8/9/11
41	100216	6/30/11	Tile cutting debris	Discharge of concrete cutting slurry or wash water. - Received call from SDWD inspector complaining about tile cutting debris discharging into storm drain.	WO#129067 : By EMERSON, MIKE: 7/11/2011 10:34:25 AM Site inspection took photos contacted manager and requested clean up and discontinue discharge and install BMPs in the future.	Yes	No		Yes			ENC	8/9/11
Totals	**41**					**32**	**12**	**16**	**38**	**10**			

Appendix H-1 Municipal Complaint Response Summary FY 2010 - 2011

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	96622	9/27/10	Sewer smell	Discharge of sewage - The runoff drain along side my home to the south has a horrible, foul, sewer odor.	WO#122453 : By EMERSON, MIKE: 10/4/2010 1:34:32 PM Site inspection took photos of inlet contacted complainant who informed me that a City representative had already met with her. Contacted Waste water and they reported that they had received the complaint on Wednesday 9/29 and contacted the complainant and cleaned and deodorized inlets on both sides on 9/30. Case closed	No	No		Yes			ENC	10/21/10
2	98769	10/19/10	Rain run off with human feces	Discharge of sewage - Human waste from homeless people behind public works yard being washed into storm drain.	WO#124842 : By EMERSON, MIKE: 11/1/2010 5:44:42 PM Site inspection took photos contacted property manager for PW and the church to the east. Could not find source. Manager cleaned up waste Casa closed	Yes	No		Yes			ENC	12/14/10
3	98770	10/19/10	Sediment	Discharge of sediment - Sediment discharge in driveway as a result of work done on irrigation system.	WO#124871 : By EMERSON, MIKE: 11/2/2010 10:42:29 AM Site inspection took photos and requested better BMPs and clean up of sediment WO#124872 : By EMERSON, MIKE: 11/2/2010 10:47:40 AM Site inspection area cleaned up and BMPs were updated Case closed	Yes	No		Yes			ENC	12/14/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
4	98837	11/8/10	Used motor oil	Other discharge - A couple 5 gallon buckets have been placed on the south side of Manchester Ave, just west of the freeway. Contents unknown.	WO#124944 : By EMERSON, MIKE: 11/8/2010 2:46:05 PM Site inspection took photos of dumped oil in soap containers. Called PW to remove and dispose. Casa closed	Yes	No					CBS	12/14/10
5	99115	12/21/10	Sediment	Discharge of sediment - Sediment runoff during rain event.	WO#125817 : By EMERSON, MIKE: 12/28/2010 3:48:52 PM Site inspection called PW to clean up took photos Casa closed	Yes	No		Yes			CBS	1/24/11
6	99121	12/21/10	Silt/sediment	Discharge of sediment - Sediment runoff during rain event	WO#125824 : By EMERSON, MIKE: 12/28/2010 5:52:38 PM 12/21/10 Site inspection took photos rain water has been diverted away from site BMPs need maintenance called construction/grading inspector to contact contractor. WO#125825 : By EMERSON, MIKE: 12/28/2010 5:56:32 PM 12/23/10 Site inspection took photos of newly installed Min BMPs to fix problem. Case closed	Yes	No		Yes			CBS	12/23/10
7	99595	3/10/11	Sediment	Discharge of sediment - Replacing valve, accidental break of potable water pipe caused erosion.	WO#127433 : By EMERSON, MIKE: 3/30/2011 10:28:39 AM Site inspection took photos of broken valve and poor BMPs. Contacted site lead worker and his supervisor to ensure proper clean up and preventative actions for future jobs WO#127434 : By EMERSON, MIKE: 3/30/2011 10:33:17 AM Site inspection took photos of clean up street Case Closed	Yes	No		Yes		Cottonwood Creek	ENC	3/11/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
8	100213	6/6/11	Sewer smell	Discharge of sewage - received call from lifeguards regarding sewer smell	WO#129050 : By EMERSON, MIKE: 7/7/2011 4:18:41 PM Site inspection took photos called waste water and the JPA could not find source case closed	No	No					ENC	8/9/11
Totals	**8**					**6**	**0**	**0**	**6**	**0**			

Appendix H-1 Commercial Complaint Response Summary FY 2010 - 2011

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	96190	7/2/10	Lack of BMPs	Discharge of oil. - Numerous containers of oil left behind gas station- seen during follow up commercial inspection. Gas station owner said they are not his and gave contact for responsible party	WO#121657 : By EMERSON, MIKE: 8/27/2010 10:50:34 AM Site inspection took photos WO#121677 : By EMERSON, MIKE: 8/27/2010 3:31:28 PM Site inspection took photos Case closed	Yes	No		Yes			LCS	8/27/10
2	96196	7/5/10	wash water	Discharge of building or sidewalk wash water - A man was power washing outdoor area over the 4th of July weekend without inlet protection, and some wash water was going into storm drain.	WO#121658 : By EMERSON, MIKE: 8/27/2010 11:02:26 AM Site inspection contacted manager Case closed	No	No		Yes			LCS	10/21/10
3	96204	7/6/10	construction waste/cement	Discharge of concrete waste. - Cement slurry into street	WO#121659 : By EMERSON, MIKE: 8/27/2010 11:16:22 AM Site inspection took photos called Manager WO#121660 : By EMERSON, MIKE: 8/27/2010 11:22:23 AM Site inspection took photos of cleaned up area Case closed	Yes	No		Yes			LUC	7/26/10
4	96227	7/8/10	black Sediment	Other discharge - Culvert full of black gunk on Zona Gale Rd. Slight sewer smell.	WO#121668 : By EMERSON, MIKE: 8/27/2010 1:45:37 PM Site inspection took photos and called PM for Landscaper info WO#121669 : By EMERSON, MIKE: 8/27/2010 2:01:27 PM Site inspection with Landscaper took photos does NOT use	Yes	Yes		Yes			ENC	10/21/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					reclaimed water. Does clean swale weekly case closed								
5	96233	7/14/10	Grease	Discharge of food waste. - Neighboring restaurant calling to complain that restaurant is dumping grease into the sewer and causing back ups in the system.	WO#121673 : By EMERSON, MIKE: 8/27/2010 2:16:24 PM Site inspection with Leucadia Waste water no evidence of overflow or spill completed storm water quality routine inspection case closed	No	No					LCS	10/21/10
6	96294	7/26/10	Oil	Discharge of oil. - Oil stain in street leading from auto shop.	WO#121678 : By EMERSON, MIKE: 8/27/2010 3:39:50 PM Site inspection contacted Business owner who stated that the leak occurred over Fourth of July weekend. "A car was towed to us that we could not fix. We did clean up after the vehicle was towed away Case closed	No	No		Yes			LUC	10/21/10
7	96331	8/3/10	Paint chips	Discharge of paint - Contractors at Union Bank discharging wash water into alley.	WO#121680 : By EMERSON, MIKE: 8/27/2010 3:59:06 PM Site inspection took photos contacted workers to clean up WO#121681 : By EMERSON, MIKE: 8/27/2010 4:04:26 PM Site inspection OK to close case	Yes	Yes	8/3/10	Yes			ENC	8/3/10
8	96349	8/5/10	Water	Discharge of building or sidewalk wash water - Every night large amount of water from cafe goes into the street. Possibly from cleaning activities.	WO#121697 : By EMERSON, MIKE: 8/30/2010 1:34:54 PM Site inspection contacted worker and gave ed info no evidence of discharge case closed	No	No		Yes			LUC	10/21/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
9	96417	8/19/10	oil	Discharge of oil. - Allegedly in the parking lot of this business, people are doing oil changes and maintenance on their cars. Oil is all over the ground in the parking area.	WO#121541 : By RYGIEL, KRISTINE: 8/24/2010 3:39:54 PM Visited site and spoke with regional manager. No oil observed in parking lot. Took pictures of signs posted. Regional manager is going to post more signs. Case Closed	No	No		Yes			LUC	8/24/10
10	96419	8/23/10	wash water	Discharge of building or sidewalk wash water - Restaurant uses bleach to wash off front sidewalk every Monday morning.	WO#121557 : By RYGIEL, KRISTINE: 8/24/2010 3:58:23 PM Met with restaurant employee. No discharge observed. Left flyer on power washing. Will call property owner. Case Closed	No	No		Yes			ENC	8/24/10
11	96427	7/28/10	dirt	Discharge of sediment - Private storm drain clogged with sediment.	WO#121702 : By EMERSON, MIKE: 8/30/2010 2:20:17 PM Site inspection Took photos contact business and property owners WO#121728 : By EMERSON, MIKE: 8/31/2010 11:31:47 AM site inspection took photos call PM Case Closed	Yes	No		Yes			LCS	8/30/10
12	96431	8/23/10	Wash water	Discharge of building or sidewalk wash water - Business hosing off pavement without BMPs.	WO#121732 : By EMERSON, MIKE: 8/31/2010 12:09:32 PM Site inspection contacted worker and gave educational information Case Closed	No	No		Yes			ENC	10/21/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
13	96440	8/26/10	Water	Discharge of water - Cleaners dumped water into the parking lot.	WO#121733 : By EMERSON, MIKE: 8/31/2010 1:11:56 PM Site inspection contacted bus owner to discharge water into sink and not storm drain Case Closed	No	No		Yes			LCS	10/21/10
14	96459	8/30/10	Wash water	Discharge of building or sidewalk wash water - Carpet cleaners dumping wash water into storm drain.	WO#121734 : By EMERSON, MIKE: 8/31/2010 1:23:32 PM Site inspection took photos confirmed address with complainant and call business for explanation By RYGIEL, KRISTINE: 10/21/2010 2:07:16 PM Sent NOV 9/2/10 Case Closed	Yes	Yes	9/2/10	Yes			LCS	10/21/10
15	96463	8/27/10	dirt	Discharge of sediment - Workers not using any BMPs dirt appears to be flowing into storm drain	WO#121735 : By EMERSON, MIKE: 8/31/2010 2:00:26 PM Site inspection took photos called and emailed PM WO#122455 : By EMERSON, MIKE: 10/4/2010 2:53:34 PM Met with property maintenance supervisor and explained issues sprinkler work, BMP clean out and recent discharge. Sprinkler work complete on 9/29/10. Still waiting for invoice for BMP clean out. By EMERSON, MIKE: 7/26/2011 10:52:48 AM 7/26/11 left voicemail and email to Property management provide proof of maintenance By EMERSON, MIKE: 7/26/2011 3:21:40 PM Received email with invoice stating that the	Yes	No		Yes			LCS	10/4/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					BMP is in compliance (attached) case closed								
16	96464	8/30/10	Wash water	Discharge of other wash water - wash water in alley	WO#121736 : By EMERSON, MIKE: 8/31/2010 2:11:23 PM Site inspection took photos of cleaning water discharge contacted worker Case Closed	Yes	No		Yes			ENC	10/21/10
17	96509	9/9/10	Wash water	Discharge of other wash water - Neighbor witnessed carpet cleaners unload their wash water in the street.	WO#121945 : By RYGIEL, KRISTINE: 9/10/2010 7:38:49 AM Carpet cleaners had already left the residence when the call was received. Sent an advisory notice to carpet cleaners regarding the alleged discharge with Minimum Required BMPs for Mobile Business Activities. Case Closed	Yes	Yes		Yes			LUX	9/10/10
18	96542	9/14/10	Hydraulic fluid	Other discharge - Trash truck's hydraulic or brake fluid line broke and left a stain in the street.	WO#122115 : By EMERSON, MIKE: 9/14/2010 2:52:14 PM Site inspection took photos. Appears that the fluid was cleaned but it has left a stain in the roadway. I contacted site manager who informed me that the street sweeper had leaked the fluid. Street sweeper indicated that they had a spill on Friday 9/10/10 and cleaned it up that day. Sweeper will send email with the steps they took to clean up the spill. They will contact clean water when spills occur from now on. Case closed	Yes	Yes		Yes			LUC	10/21/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
19	96582	9/21/10	Wash water	Discharge of building or sidewalk wash water - Restaurant hosing off floor mats without containing wash water.	WO#122324 : By EMERSON, MIKE: 9/23/2010 11:18:38 AM Site inspection took photos of a puddle water. Contacted restaurant owner, manager, property owner and complainant regarding draining. Case Closed	Yes	No	9/22/10	Yes			LUC	12/14/10
20	96610	9/20/10	Cigarette butts	Discharge of food waste. - Complaint stated that there is vomit outside of the bar frequently without timely clean up.	WO#122457 : By EMERSON, MIKE: 10/4/2010 4:10:05 PM Site inspection took photos contacted manager/owner worker who stated that the area is cleaned up everyday. The clean up company will be notified of this complaint. Manager started cleaning immediately. Case Closed	Yes	No		Yes			ENC	10/21/10
21	96611	9/22/10	Cement wash	Discharge of concrete waste. -	WO#122458 : By EMERSON, MIKE: 10/4/2010 4:20:32 PM Site inspection took photos contacted manager/owner worker who stated that he will clean area immediately. WO#122459 : By EMERSON, MIKE: 10/4/2010 4:31:43 PM Site inspection area cleaned up case closed	Yes	No	9/22/10	Yes			ENC	9/23/10
22	96612	9/21/10	Sidewalk wash water	Discharge of other wash water - Gallery Owner was power washing sidewalk without required BMPs	WO#122460 : By EMERSON, MIKE: 10/4/2010 4:47:46 PM Site inspection took photos called owner to discontinue discharge. Case Closed	Yes	No		Yes			LUC	10/21/10

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23	96625	9/27/10	Wash water	Discharge of other wash water - Inspector observed stains and wetness all over trash area. Plaza maintenance worker confirmed that the trash area was washed out	WO#122475 : By EMERSON, MIKE: 10/5/2010 10:36:07 AM Site inspection took photos contacted landscaper and business manager. Showed the manager the cleaning stains. He said he would contact his maintenance personnel ASAP to discontinue discharge. By RYGIEL, KRISTINE: 10/21/2010 10:55:41 AM Sent NOV 9/28/10 Case Closed	Yes	No	9/28/10	Yes			LCS	10/21/10
24	96626	9/25/10	Hydraulic fluid	Discharge of oil. - received incident report from FD stating that there was a large hydraulic spill and the driver left the scene without clean up	WO#122483 : By EMERSON, MIKE: 10/5/2010 12:20:18 PM Site inspection took photos contacted local workers to get story of discharge. Contacted hauler and requested receipt from clean up company. In addition, requested additional clean up. WO#122484 : By EMERSON, MIKE: 10/5/2010 12:27:47 PM Site inspection area cleaned up took photos Case closed	Yes	Yes	9/30/10	Yes			LCS	10/4/10
25	96631	9/29/30	Potable water	Discharge of water - Water flowing out of storm drain at corner of Lake and Woodlake.	WO#122454 : By EMERSON, MIKE: 10/4/2010 2:19:42 PM Site inspection took photos of inlet. SDG&E sump pump Case closed	No	Yes					CBS	10/21/10
26	96666	10/6/10	Sediment	Discharge of construction debris - Exposed pavers in street, no BMPs.	WO#122531 : By EMERSON, MIKE: 10/7/2010 4:37:39 PM Site inspection took photos of discharge and no BMPs Issued NOV to owner to comply by	Yes	Yes	10/6/10	Yes			LCS	10/7/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					10-8-10 2pm WO#122532 : By EMERSON, MIKE: 10/7/2010 4:45:22 PM Site inspection took photo appears to be in compliance Case closed								
27	98771	10/20/10	Silt/sediment	Discharge of sediment - Sediment/rock discharge- lack of BMPs.	WO#124873 : By EMERSON, MIKE: 11/2/2010 11:00:26 AM Site inspection took photos of silt discharge and failing BMPs contacted grower to clean up and update BMPs WO#124874 : By EMERSON, MIKE: 11/2/2010 11:07:24 AM Site inspection area cleaned and new BMPs installed took photos Case closed	Yes	No		Yes			RSF	12/14/10
28	98772	10/20/10	Silt/sediment	Discharge of sediment - Sediment discharge during rain event.	WO#124808 : By EMERSON, MIKE: 10/27/2010 3:21:22 PM Site inspection took photos. 10/27/10 emailed SDG&E Willie gators 'WGaters@semprautilities.com' WO#124878 : By EMERSON, MIKE: 11/2/2010 2:44:31 PM Site inspection took photos of silt discharge and failing BMPs contacted SDG&E to clean up and update BMPs WO#124945 : By EMERSON, MIKE: 11/8/2010 2:50:30 PM Site inspection area cleaned up took photos	Yes	Yes		Yes			LCS	12/14/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Case closed								
29	98774	10/20/10	Silt/sediment	Discharge of sediment - Sediment discharge during rain event	WO#124877 : By EMERSON, MIKE: 11/2/2010 2:36:43 PM Site inspection took photos of silt discharge and failing BMPs contacted SDG&E to clean up and update BMPs WO#124946 : By EMERSON, MIKE: 11/8/2010 3:03:50 PM Site inspection area cleaned up case closed	Yes	No		Yes			LCS	12/14/10
30	98775	10/21/10	Silt/sediment	Discharge of sediment - Sediment discharge during rain event.	WO#124875 : By EMERSON, MIKE: 11/2/2010 2:21:37 PM Site inspection took photos of silt discharge and failing BMPs contacted SDG&E to clean up and update BMPs	Yes	No		Yes			LCS	4/8/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					WO#124947 : By EMERSON, MIKE: 11/8/2010 3:07:40 PM Site inspecti9on area cleaned up case closed								
31	98776	10/21/10	Sediment	Discharge of sediment - Sediment discharge during rain event.	WO#124839 : By EMERSON, MIKE: 11/1/2010 5:00:02 PM Site inspection took photos of failing BMPs (straw waddles were not secured into the ground and vegetation was dumped into drainage swale blocking flow.). WO#124840 : By EMERSON, MIKE: 11/1/2010 5:07:59 PM Site inspection took photos of failing BMPs (straw waddle were not secured into the ground vegetation in drainage swale). Sent photos to Caltrans WO#124841 : By EMERSON, MIKE: 11/1/2010 5:18:01 PM Site inspection took photos of large amount of dirt in drainage ditch. Two workers stated that they are replacing the drainage inlet. Received call from Amid requesting that there should be an onsite meeting. WO#124949 : By EMERSON, MIKE: 11/8/2010 4:33:48 PM site inspection took photos of upgraded BMPs Case closed	Yes	Yes		Yes			CBS	12/23/10
32	98777	10/21/10	Silt sediment	Discharge of sediment - Sediment discharge during rain event	WO#124835 : By EMERSON, MIKE: 11/1/2010 4:01:19 PM Site inspection took	Yes	Yes		Yes			ENC	10/28/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					photos of failing BMP (sandbags were too low to handle sediment flow). Sent photos to Caltrans. WO#124836 : By EMERSON, MIKE: 11/1/2010 4:12:51 PM Site inspection took photos and emailed them to Caltrans WO#124837 : By EMERSON, MIKE: 11/1/2010 4:38:42 PM Site inspection area cleaned up new BMP (silt fence) in place Case closed								
33	98780	10/20/10	silt	Discharge of sediment - Sediment discharge from unpaved driveway.	WO#124833 : By EMERSON, MIKE: 11/1/2010 3:02:00 PM Site inspection with engineering development review division. Took photos of street and detention basin and sent them to PW. No source of sediment was found Case closed WO#124834 : By EMERSON, MIKE: 11/1/2010 3:16:56 PM Site inspection silt removed case closed	Yes	No		Yes			LUX	12/14/10
34	98781	10/25/10	Cement wash	Discharge of concrete cutting slurry or wash water. - Concrete wash water into street. No BMPs.	WO#124800 : By EMERSON, MIKE: 10/27/2010 10:12:54 AM Site inspection took photos issued NOV place sandbags and cones at storm drain inlet WO#124802 : By EMERSON, MIKE: 10/27/2010 10:30:16	Yes	No	10/25/10	Yes			CBS	10/26/10

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					AM Site inspection took photos of area that was clean up signed off NOV Case closed								
35	98822	11/3/10	Sediment	Discharge of sediment - Received complaint from Construction inspector stating that there is brown discharge possibly cement in the street	WO#124935 : By EMERSON, MIKE: 11/5/2010 3:28:23 PM Site inspection took photos of brown discharge contacted worker and issued NOV to dry clean up or capture all wash water. WO#124936 : By EMERSON, MIKE: 11/5/2010 3:36:20 PM Site inspection took photos of cleaned up area signed off NOV	Yes	Yes	11/3/10	Yes			ENC	11/3/10
36	98836	11/5/10	Sediment	Discharge of sediment - received complaint of sediment discharge during rain events	WO#124941 : By EMERSON, MIKE: 11/8/2010 10:04:04 AM Site inspection took photos of silt discharge sent email to President and vice present WO#124950 : By EMERSON, MIKE: 11/8/2010 4:41:28 PM Site inspection met complainant on site. Took photos of straw waddles. Still needs more sediment control on south side. PW will call complainant regarding street maintenance. Case Closed	Yes	No						3/28/11
37	98850	11/9/10	Gas/fuel	Discharge of liquid fuels. - Large truck leaking fuel into gutter	WO#124952 : By EMERSON, MIKE: 11/9/2010 1:30:19 PM Site inspection contacted drivers and requested that they fix the leak. Called PW to clean up and gave ED flyer to driver. Case Closed	Yes	Yes		Yes			ENC	12/14/10

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38	98955	12/2/10	Sediment	Discharge of sediment - Sprinklers causing erosion into Ki's parking lot	WO#125327 : By EMERSON, MIKE: 12/3/2010 2:55:52 PM Site inspection took photos and called property owner to fix irrigation problem. Tenants will call if problem persists. Case closed	Yes	No		Yes				12/14/10
39	98969	12/6/10	wash water from mats	Discharge of building or sidewalk wash water - Restaurants cleaning floor mats outdoors Saturday 12/4 at 10pm.	WO#125454 : By EMERSON, MIKE: 12/8/2010 2:14:28 PM 12/6/10 called owner/operator to consult his staff regarding who may have washed out the kitchen mats. 12/8/10 Owner reported that his guys did not do it. He was informed that he will be sent an alleged NOV Case closed	Yes	No	12/8/10	Yes			LCS	12/14/10
40	99013	12/13/10	Black substance	Other discharge - Sewage/leak/black mold coming out of the south side of the building.	WO#125516 : By EMERSON, MIKE: 12/13/2010 4:34:36 PM Site inspection, took photos, contacted manager who indicated that a plumber has been contacted and has confirmed does not appear to be originating from the sewer he checked all of the pipes and is to return to find leak that is coming out of the south building face. WO#125599 : By EMERSON, MIKE: 12/20/2010 10:38:32 AM Site inspection took photos of area. It appears that the hole on the wall was sealed and the ground was	Yes	No		Yes			LUC	12/15/10

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					cleaned up. Contacted plumber on site and was informed that the drainage lines are to be televised. Requested that the owner provide copies of invoices. Leucadia waste water has been notified. By EMERSON, MIKE: 12/27/2010 2:19:30 PM Received call from respondent stating that he was waiting for the invoice but the leak was fixed. Case closed By EMERSON, MIKE: 1/4/2011 10:26:29 AM Received a Billing Statement dated 12-19-10 showing all the plumbing work that was performed to fix the leak (attached) Case closed								
41	99114	12/21/10	Sediment	Discharge of sediment - Sediment runoff during rain event.	WO#125815 : By EMERSON, MIKE: 12/28/2010 3:11:49 PM Site inspection took photos of large erosion called contractor to install some Min BMPs fix problem. WO#125816 : By EMERSON, MIKE: 12/28/2010 3:26:04 PM 12/22/10 Site inspection took photos rain water has been diverted away from erosion. By EMERSON, MIKE: 12/28/2010 3:27:19 PM 12/23/10 Site inspection took photos of contractor installing Min BMPs to fix problem.	Yes	Yes		Yes			CBS	1/24/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
42	99116	12/21/10	Trash debris	Discharge of trash - Open dumpster lids	WO#125818 : By EMERSON, MIKE: 12/28/2010 4:16:07 PM Dumpster open during rain event contact operator to close them	Yes	No		Yes			CBS	1/24/11
43	99117	12/21/10	Trash debris	Discharge of trash - Dumpster lids open, no recycling.	WO#125819 : By EMERSON, MIKE: 12/28/2010 5:17:23 PM Site inspection took photo of open dumpster during a rain event closed it and contacted bar tender to keep it closed especially during a rain events they will comply and thanked me for closing the lid. Case Closed	Yes	No		Yes			SEL	1/24/11
44	99118	12/21/10	Trash Debris	Discharge of trash - Dumpster lids open	WO#125820 : By EMERSON, MIKE: 12/28/2010 5:22:07 PM Site inspection took photo of open dumpster during a rain event closed it and contacted bar tender to keep it closed especially during a rain event they will comply and thanked me for closing the lid. Case Closed	Yes	No		Yes			SEL	1/24/11
45	99183	1/3/11	sediment	Discharge of sediment - Proactive site inspection showed discharge of sediment from the SDG&E road and the Parks & Rec Trail	WO#126024 : By EMERSON, MIKE: 1/4/2011 1:46:46 PM Site inspection took photos (1/3/11) emailed SDG&E contact for road discharge and Parks & Rec. for the trial discharge (1/4/11) WO#126268 : By EMERSON, MIKE: 1/18/2011 10:25:20 AM Site inspection area cleaned up took photos case closed	Yes	No		Yes			LCS	1/24/11

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46	99192	1/5/11	Gray water	Discharge of sewage - Customer saw employee take gray water from the bathroom toilet and dump it into the grass outside the store.	WO#126129 : By EMERSON, MIKE: 1/6/2011 4:53:41 PM Site inspection contact employee regarding dumping sewer water. He indicated that it was gray water and will dump it in the toilet next time. Case closed	No	No		Yes			LCS	1/24/11
47	99237	1/10/11	silt	Discharge of sediment - Replacing power hole, no BMPs.	WO#126267 : By EMERSON, MIKE: 1/18/2011 10:03:23 AM Site inspection took photos of silt discharge By EMERSON, MIKE: 1/18/2011 10:17:47 AM 1/18/11 sent email to SDG&E Case Closed	Yes	Yes		Yes			ENC	4/7/11
48	99241	1/10/11	H2O	Discharge of water - Excess water runoff with sheen causing slip hazard.	WO#126233 : By EMERSON, MIKE: 1/13/2011 10:31:20 AM Site inspection met neighbor on site he indicated that people used to dump their old motor oil in the vacant lot east of 770 Munevar took photos Appears to be ground water. 1/13/11 emailed photos to street Division of PW. Case Closed	No	No		Yes			CBS	1/24/11
49	99293	1/20/11	H2O	Discharge of water - Excessive water flowing from driveway/hillside into storm drain.	WO#126304 : By EMERSON, MIKE: 1/20/2011 5:03:40 PM Site inspection spoke to worker that were clearing out a storm drain or rain water. Waste water confirmed that it was private storm drain case closed	No	No		Yes		cottonwood creek	ENC	1/24/11
50	99323	1/26/11	Wash water	Discharge of water - Power washing store's sidewalks, possibly without containment. Occurred at 6am	WO#126529 : By EMERSON, MIKE: 2/2/2011 1:43:21 PM Contacted Manager of Ralph's who referred me to Property	No	No		Yes			LCS	4/7/11

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					Manager Sudbury. Contacted PM and sent link to PCW bmp detail for cleaning sidewalks. To make sure they capture all wash water. Clean Water Manager sent follow up email to complainant (attached) case closed								
51	99324	1/26/11	Vegetation	Discharge of yard waste - Complaint of Landscape Company blowing leaves into the storm drain.	WO#126520 : By EMERSON, MIKE: 2/2/2011 1:13:06 PM Site inspection appeared that the contractor was cleaning up all vegetation. Contacted lead worker who confirmed that all vegetation was cleaned up case closed	No	Yes		Yes			ENC	4/7/11
52	99334	1/25/11	Concrete	Discharge of concrete waste. - Pile concrete rubble next to storm drain Pile concrete ruble next to storm drain	WO#126456 : By EMERSON, MIKE: 1/28/2011 3:22:52 PM Site inspection worker cleaned up rubble Case Closed	Yes	No		Yes			ENC	4/7/11
53	99354	2/1/11	Dirt	Discharge of sediment - Three uncovered piles of dirt/debris in parking lot behind suite 119.	WO#126505 : By EMERSON, MIKE: 2/1/2011 3:54:16 PM Site inspection contacted Facilities Manager regarding storage of stock piles he said it would be covered and removed within a week. Took photos of stock piles. WO#126609 : By EMERSON, MIKE: 2/11/2011 10:18:05 AM Site inspection took photos of uncovered stock piles. Called facilities Manager to call me when stock pile is in compliance (removed or covered). WO#126764 :	Yes	No		Yes			ENC	2/16/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					By EMERSON, MIKE: 2/22/2011 9:21:19 AM Site inspection took photos of covered Stock piles case closed								
54	99376	2/5/11	Wash water	Discharge of building or sidewalk wash water - Staff witnessed restaurant hosing off sidewalk without containment.	WO#126557 : By RYGIEL, KRISTINE: 2/7/2011 9:36:22 AM NOV to be sent 2/8/11 Case Closed	Yes	No	2/8/11	Yes			LUC	2/7/11
55	99427	2/11/11	Wash water	Discharge of vehicle wash water - Business washing company trucks in driveway without containment.	WO#126630 : By EMERSON, MIKE: 2/14/2011 1:48:31 PM Site inspection took photos contacted worker and issued NOV. Worker discontinued and will capture all wash water in the future. Case closed	Yes	Yes	2/11/11	Yes			LUC	4/7/11
56	99433	2/11/11	Silt and greenhouse debris	Discharge of sediment - Nursery owner is illegally dumping sediment and other debris into the storm drain channel behind the nursery	WO#126704 : By EMERSON, MIKE: 2/16/2011 11:20:49 AM Site inspection met with business owner conducted storm water quality inspection. 2/15/11 inspected drainage swale below business took photos of some greenhouse debris called business owner to clean area of all his debris and install some erosion/sediment control BMPs at the discharge location. 2/16/11 met with clean water staff regarding clean up responsibilities appears that adjacent property owner needs to maintain drainage ditch. WO#126766 : By EMERSON, MIKE: 2/22/2011 10:03:06 AM Site inspection with John Smith of SDWD and Mike Piper of JPA.	Yes	No		Yes			ENC	7/11/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Took photos of silt/sediment discharge into drainage swale. John and Mike to contact HOA's landscaper regarding reclaimed water discharge into MS4. I contacted nursery owner and met him on site and showed him the silt discharge from his business. He agreed to work with the HOA to clean the swale and discontinue silt discharge to re inspect in 30 days. Called waste water to inspect their access to sewer. By EMERSON, MIKE: 2/23/2011 3:13:23 PM 2-23-11 received email from SDWD stating that line was capped next to freeway and Sprinkler heads removed along culvert. Attached emails and photos to this work order WO#127476 : By EMERSON, MIKE: 3/30/2011 3:05:13 PM Site inspection took photos walked site with business owner temporary BMPs OK but requested permanent fix to drainage BMPs. It was agreed to meet monthly to monitor status. Next meeting 4/21/11. WO#129239 : By EMERSON, MIKE: 7/21/2011 3:46:46 PM Site inspection area cleaned took photos case closed								

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57	99454	2/16/11	H2O	Discharge of water - White tinted water coming from storage tank off Via Cantabria.	WO#126765 : By EMERSON, MIKE: 2/22/2011 9:34:09 AM Site inspection took photos of water turning white milky color after flowing through a pipe. Called OMWD confirmed that it is an allowable discharge as they are draining water tank and de-chlorinating the water discharge. No violation case closed.	No	No		Yes			LCS	5/10/11
58	99509	2/24/11	Wash water from tire inspections	Discharge of vehicle wash water - Business washing off tires into gutter.	WO#126843 : By EMERSON, MIKE: 2/28/2011 9:20:17 AM Site inspection contacted worker took photos and contacted manager to discontinue illegal discharge. Case closed.	Yes	No		Yes			LCS	4/7/11
59	99510	2/25/11	Silt	Discharge of sediment - Flushing hydrant created erosion.	WO#126846 : By EMERSON, MIKE: 2/28/2011 11:08:02 AM Site inspection contacted OMWD's supervisor. Took photos and met supervisor on scene. Requested clean up and to discontinue illegal discharge. WO#126847 : By EMERSON, MIKE: 2/28/2011 11:11:29 AM Site inspection took photos appears that no clean up has occurred. WO#127459 : By EMERSON, MIKE: 3/30/2011 11:31:56 AM Site inspection, Appears they still have open slopes but perimeter BMPs appear to be implemented case closed	Yes	No		Yes			RSF	4/7/11

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60	99537	2/28/11	Silt	Discharge of sediment - received Complaint of sediment discharge during rain event.	WO#126927 : By EMERSON, MIKE: 3/3/2011 3:16:11 PM Site inspection took photos and sent them to the Sempra/SDG&E to clean up street and replace gravel bags. WO#127437 : By EMERSON, MIKE: 3/30/2011 10:42:56 AM Site inspection took photos of clean up street Case Closed	Yes	No		Yes			LCS	4/7/11
61	99596	3/11/11	H2O	Discharge of water - Drainage from neighboring property causing erosion.	WO#127431 : By EMERSON, MIKE: 3/30/2011 10:12:32 AM Site inspection took photos was contacted site manager to contact his supervisor or property manager/owner regarding the drainage from behind their building. WO#127432 : By EMERSON, MIKE: 3/30/2011 10:21:34 AM Site inspection took photos was contacted site manager to contact his supervisor or property manager/owner regarding the drainage from behind their building. By EMERSON, MIKE: 7/11/2011 2:40:21 PM Pm contacted me with phone # case closed see other SR 100200	Yes	No		Yes			LCS	3/28/11
62	99678	3/21/11	Silt	Discharge of sediment - silt discharge from failing BMPs and rain into street	WO#127442 : By EMERSON, MIKE: 3/30/2011 10:55:25 AM Site inspection took photos of failing BMPs and silt discharge. Contacted business to	Yes	No		Yes			LCS	4/7/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					contact contractor/crew to implement or replace BMPs and clean up street. WO#127445 : By EMERSON, MIKE: 3/30/2011 11:01:49 AM Site inspection took photos area cleaned up case closed.								
63	99679	3/28/11	Sediment	Discharge of sediment - sediment discharge from failing BMPs and rain event	WO#127449 : By EMERSON, MIKE: 3/30/2011 11:08:54 AM Site inspection took photos of failing BMPs and silt discharge. Contacted business to contact contractor/crew to implement or replace BMPs and clean up street. WO#127927 : By EMERSON, MIKE: 4/25/2011 2:20:49 PM Site inspection area cleaned up took photos sent thank you email case closed	Yes	No					LCS	5/10/11
64	99686	3/30/11	Silt/mud	Discharge of sediment - received complaint stating mud and silt runoff from rain event	WO#129279 : By EMERSON, MIKE: 7/26/2011 11:26:21 AM Site inspection no discharge observed case closed	No	No					LUC	7/26/11
65	99705	4/4/11	Grease/oil	Discharge of food waste. - Restaurant's grease interceptor overflowing.	WO#127922 : By EMERSON, MIKE: 4/25/2011 1:56:28 PM Site inspection took photos of spill contacted manager to clean up collecting all wash water. In addition contacted Leucadia waste water. WO#127924 : By EMERSON, MIKE: 4/25/2011 2:01:36 PM Site inspection took photos of spill	Yes	No		Yes			LCS	4/4/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					contacted manager to clean up collecting all wash water. In addition contacted Leucadia waste water. Case Closed								
66	99713	4/5/11	Wash water	Discharge of building or sidewalk wash water - Restaurant hosing off back area without containment.	WO#127857 : By EMERSON, MIKE: 4/22/2011 4:07:49 PM Site inspection took photos contacted bar tender issued NOV to discontinue discharge. Case Closed	Yes	No	4/5/11	Yes			ENC	5/10/11
67	99725	4/8/11	Antifreeze	Discharge of antifreeze - Radiator blew up in parking lot of bank.	WO#127910 : By EMERSON, MIKE: 4/25/2011 1:07:49 PM Site inspection took photos of spill contacted manager to clean up collecting all wash water. Received a call from manager that cleaning crew power washed site and collected all wash water. Case Closed	Yes	No		Yes			ENC	5/10/11
68	99728	4/5/11	H20	Discharge of water - Complaint of overwatering at restaurant.	WO#127668 : By EMERSON, MIKE: 4/13/2011 10:24:23 AM Site inspection took photos contacted manager and was informed that the power outage on 3/31/11 reset the sprinklers to factory settings. He has contacted his landscaper and the adjusted the system to prevent over irrigation. He was informed that SDWD and Clean water will send additional information to assist in compliance with applicable codes. By EMERSON, MIKE: 4/13/2011 10:33:22 AM 4/6/11 SDWD dropped off conservation notice. Case Closed	No	No		Yes		ocean	SEL	5/10/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
69	99744	4/10/11	Wash water	Discharge of water - Inspector observed a constant stream of water flowing into the storm drain no BMPs	WO#127902 : By EMERSON, MIKE: 4/25/2011 10:39:55 AM Site inspection contacted manager who stopped the discharge. Case Closed	Yes	No		Yes			LCS	5/10/11
70	99797	4/19/11	Building wash	Discharge of building or sidewalk wash water - Specialist observed colored discharge and no BMPs	WO#127834 : By EMERSON, MIKE: 4/21/2011 4:50:40 PM Site inspection contacted worker and called his supervisor regarding drainage from house washing into storm drain. WO#127835 : By EMERSON, MIKE: 4/21/2011 4:55:56 PM Site inspection area cleaned up signed off NOV case closed	Yes	Yes	4/14/11	Yes			ENC	4/18/11
71	99809	4/14/11	Wash water	Discharge of water - Clean water staff observed cement work and wash down with no BMPs	WO#127899 : By EMERSON, MIKE: 4/25/2011 10:14:27 AM site inspection contacted worker and advised them of the regulations and how they were in violation. Requested dry clean up ASAP WO#127900 : By EMERSON, MIKE: 4/25/2011 10:17:31 AM Site inspection area clean up case closed	Yes	Yes		Yes			ENC	4/14/11
72	99810	4/11/11	Wash water	Discharge of water - Inspector observed flow at PW yard from window washing activities	WO#127908 : By EMERSON, MIKE: 4/25/2011 11:44:57 AM Site inspection tried to contact facility managers none on seen. Contacted worker who informed me that they were dumping the bucket wash water in the storm drain. They will discontinue this practice and dispose of the wash water into a	Yes	Yes		Yes			ENC	5/10/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					vegetated or impervious area from now on. Case Closed								
73	99868	5/5/11	Wash water	Discharge of building or sidewalk wash water - Power washing building without containment.	WO#128114 : By RYGIEL, KRISTINE: 5/6/2011 8:36:26 AM Site inspection showed water runoff in alley from behind the bar to E Street. Sent NOV and Citation Warning on 5/5/11. Case Closed	Yes	No	5/5/11	Yes	5/5/11		ENC	5/6/11
74	99889	5/9/11	Cement	Discharge of concrete cutting slurry or wash water. - Restaurant under construction. Concrete cutting, washing off materials into alley.	WO#129010 : By EMERSON, MIKE: 7/6/2011 4:17:41 PM Site inspection contacted owner and requested clean up collecting all waste material. Case Closed	Yes	No		Yes			ENC	8/9/11
75	100136	6/21/11	Reclaimed water	Discharge of water - report of reclaimed water going into the storm drain	WO#128714 : By EMERSON, MIKE: 6/22/2011 3:38:40 PM Site inspection took photos contacted workers and their supervisors. Sent email with photos. Workers turned off water supply, will test system to ensure no over spray and will install signs case closed	Yes	No		Yes			CBS	8/9/11
76	100138	6/16/11	Wash water	Discharge of building or sidewalk wash water - worker washing building without containment photos were taken	WO#128716 : By EMERSON, MIKE: 6/22/2011 4:40:50 PM Case Closed	Yes	No	6/20/11	Yes			LCS	8/9/11
77	100191	5/9/11	Trash and grease	Discharge of trash - inspector observed overfilled trash containers	WO#129032 : By EMERSON, MIKE: 7/7/2011 10:42:24 AM Site inspection took photos contacted manager to clean up and maybe order additional pick ups. Case closed	Yes	No		Yes				5/17/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
78	100199	5/9/11	Gray water laundry	Discharge of sewage - Received call from water inspector complaining of gray water discharge	WO#129033 : By EMERSON, MIKE: 7/7/2011 11:17:37 AM Site inspection took photos contacted manager and requested clean up and discontinue dumping. WO#129035 : By EMERSON, MIKE: 7/7/2011 11:29:05 AM Site inspection area cleaned up took photos thanked manager case closed	Yes	No		Yes			LUC	5/17/11
79	100206	5/17/11	Kitty litter oil and trash	Discharge of trash - Trash containers open and kitty litter not cleaned up during rain event	WO#129042 : By EMERSON, MIKE: 7/7/2011 2:20:34 PM Site inspection took photos contacted manager to clean up litter and closed dumpsters WO#129043 : By EMERSON, MIKE: 7/7/2011 2:36:14 PM Site inspection area cleaned up took photos thanked manager case closed	Yes	Yes	5/17/11	Yes			LCS	5/17/11
80	100210	5/18/11	Sediment	Discharge of sediment - Received call complaining of sediment water discharge.	WO#129047 : By EMERSON, MIKE: 7/7/2011 3:35:44 PM Site inspection took photos contacted manager and requested clean up and discontinue discharge and install BMPs in the future. WO#129237 : By EMERSON, MIKE: 7/21/2011 3:30:46 PM Site inspection stock pile removed case closed	Yes	No		Yes			CBS	7/11/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
81	100217	6/22/11	Other discharge	Other discharge - Received complaint about alley behind business smelled bad	WO#129070 : By EMERSON, MIKE: 7/11/2011 10:57:42 AM Site inspection did not observe any discharge but did see pore management practices took photos and put restaurant on priority inspection list for FY 11-12. Case Closed	Yes	No					ENC	8/9/11
82	100222	6/16/11	Bleach	Discharge of other wash water - received complaint that man was cleaning sidewalk with beach inspector to investigate	WO#129076 : By EMERSON, MIKE: 7/11/2011 11:42:32 AM Called respondent back and was informed that cleaner was done a few days ago. Contacted PW streets who are issuing a no fee construction permit to drill curb so discharge will flow under sidewalk. Case closed	Yes	No		Yes			LCS	8/9/11
Totals	**82**					**65**	**21**	**17**	**75**	**1**			

Appendix H-1 Industrial Complaint Response Summary FY 2010 - 2011

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
0													
Totals													

Appendix H-1 Residential Complaint Response Summary FY 2010 - 2011

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	96263	7/19/10	sed, vegi, blgd waste	Discharge of yard waste - Yard waste, construction waste, and dirt/gravel in storm drain channel	WO#121675 : By EMERSON, MIKE: 8/27/2010 2:29:04 PM site inspection took photos of ditch west of homes on monaco and left door hangers at 207, 215, 223, 231 avenida De Monaco. spoke to HOA president Sabi Kent (279 Aveinida De Monaco) all mantenance is to be completed by the private home owers	Yes	No		Yes			ENC	10/21/10
2	96274	7/22/10	auto waste	Discharge of antifreeze - Neighbors' truck is leaking transmission fluid onto street.	WO#121676 : By EMERSON, MIKE: 8/27/2010 3:25:46 PM site inspection took photos contacted resident to fix leak	Yes	No		Yes			ENC	10/21/10
3	96329	8/2/10	blue stain from old tarp	Other discharge - Complaint of trash and paint residue in street in front of 1260 and 1272.	WO#121679 : By EMERSON, MIKE: 8/27/2010 3:49:43 PM Site inspection took photos contacted realtor	Yes	No		Yes			CBS	10/21/10
4	96426	8/2/10	sediment	Discharge of sediment - Broken sprinkler causing sediment discharge.	WO#121698 : By EMERSON, MIKE: 8/30/2010 1:50:50 PM Site inspection contacted resident took photos	Yes	No		Yes			ENC	10/21/10
5	96467	8/31/10	oil & cat litter	Discharge of oil. - Car leaking oil in street and driveway.	WO#121792 : By EMERSON, MIKE: 9/2/2010 11:51:29 AM site inspection took photos of oil and kitty litter on drive way and in street. Recived call from resident stating that he will sweep up kitty litter and fix leak ASAP case closed	Yes	No		Yes			LCS	10/21/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
6	96496	8/30/10	H20	Discharge of water - TC BMP not draining	WO#121832 : By EMERSON, MIKE: 9/7/2010 5:49:34 PM 8/30 site inspection spoke to resident/complainant regarding slow to non drainage and health concerns from mosquitoes. By EMERSON, MIKE: 9/7/2010 5:56:02 PM 9/2/10 discussed case with program manager and senor civil engineer. Appears to be an unothorized change in TC BMP. Engineer resent email to resident. emailed and called Vector control By EMERSON, MIKE: 9/7/2010 5:57:46 PM 9/3/10 received call from vector control that there were mosquitoes in the inlet and it was treated and will be watched until it is modified. WO#124805 : By EMERSON, MIKE: 10/27/2010 1:42:26 PM Issued nov/citation to comply by 12/1/10 for unauthorized change to permanent TC BMP on south side of property By RYGIEL, KRISTINE: 12/14/2010 8:50:54 AM Construction permit was issued to repair the drainage swale and signed off 12/13/10.	Yes	No	10/27/10	Yes	10/27/10		ENC	10/27/10
7	96497	9/7/10	H2O	Discharge of water - Continuous water discharge from curb outlets.	WO#122014 : By EMERSON, MIKE: 9/13/2010 9:44:07 AM Site inspection took photos of constant	No	Yes		Yes			ESC	10/21/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					drainage. Contacted owner who stated that they have tried several times to find the source of the water. They have asked their landscaper, water department and a leak specialist and determined that it is ground water. Inspected back yard appeared dry. Case closed								
8	96498	9/7/10		Discharge of vehicle wash water - washing off race trucks in driveway	WO#121831 : By EMERSON, MIKE: 9/7/2010 5:30:14 PM Site inspection contacted resident and informed him on storm water regulations No discharge observed case closed	No	No		Yes			LUC	10/21/10
9	96526	9/10/10	water	Discharge of water - complaint ant says her neighbor is draining their hot tub into the street with a PVC pipe	WO#122015 : By EMERSON, MIKE: 9/13/2010 10:06:37 AM Site inspection no discharge observed. 9/13/10 received call from owner stating that they drain their hot tub into the sewer case closed	No	No		Yes			ENC	10/21/10
10	96529	9/10/10	PAINT	Discharge of paint - RESIDENT PAINTING CAR IN DRIVEWAY	WO#122016 : By EMERSON, MIKE: 9/13/2010 10:42:21 AM Site inspection gave ed info no discharge case closed	No	No		Yes			ENC	10/21/10
11	96532	9/13/10	wash water	Discharge of building or sidewalk washwater - Staff witnessed power washing without containment.	WO#122036 :	Yes	No		Yes				9/13/10
12	96568	9/20/10	h2o	Discharge of water - Over-irrigation water coming from apt complex	WO#122456 : By EMERSON, MIKE: 10/4/2010 3:44:47 PM Site inspection took photos of inlet contacted landscape	No	No		Yes			ENC	10/21/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					worker who stated that a pipe had broken on Friday 9/17 and was repaired that day. The worker was informed that the city received a complaint about constant run-off. The representative understood the issue and will try to discontinue the flow.								
13	96613	9/23/10	h2o	Other discharge - Complainant reported discolored fluorescent water appearing in pond.	WO#122461 : By EMERSON, MIKE: 10/4/2010 4:55:12 PM Site inspection with program manager. Took photos appears to be the same condition that occurred last year	No	No					ESC	10/21/10
14	96646	9/30/10	none	Discharge of oil. - Resident says he witnessed his neighbor dumping oil onto the ground and covering it up with dirt 5 days ago.	WO#122485 : By EMERSON, MIKE: 10/5/2010 1:35:11 PM Site inspection took photos of no drainage case closed By EMERSON, MIKE: 10/14/2010 11:01:15 AM 10/14/10 sent NOV and called respondent and complaint. WO#124830 : By EMERSON, MIKE: 11/1/2010 12:48:54 PM Site inspection area cleaned up took photos case closed	Yes	No	10/14/10	Yes			ENC	12/14/10
15	96668	10/6/10	wash water	Discharge of vehicle wash water - Resident washing boat in street.	WO#122526 : By EMERSON, MIKE: 10/6/2010 5:08:13 PM Site inspection took photos of resident washing boat in street. Requested that he capture the wash water. After reviewing the code and checking with the manager it appears that	No	No		Yes			LCS	10/21/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					this is an exempted discharge. Left message with resident that it is not a violation Case closed								
16	96669	10/6/10	oil	Discharge of oil. - Car dripping oil in street	WO#122527 : By EMERSON, MIKE: 10/6/2010 5:13:55 PM Site inspection took photos of large oil stains in the road. Left message with resident that it needs to be cleaned up capturing all the wash water and fix leak and use a drip pan. WO#124663 : By EMERSON, MIKE: 10/14/2010 4:38:47 PM site inspection took photos of cleaned up area and drip pan on driveway for red PU truck case closed	Yes	No		Yes			LCS	10/14/10
17	98723	10/14/10	water	Discharge of water - Runoff coming from an open drain near the street on the north side of the driveway. Possibly over-irrgiation, causing erosion.	WO#124675 : By EMERSON, MIKE: 10/18/2010 5:26:59 PM Site inspection took photos. Called complainant and asked that they call me when there is no rain and there is discharge so that we can find the source. No discharge case closed.	No	No		Yes			LUC	10/21/10
18	98758	10/21/10	sediment	Discharge of water - Resident concerned with water from vernal pool collecting on his street. Forwarded to PW Streets for street repair.	WO#124832 : By EMERSON, MIKE: 11/1/2010 2:07:11 PM Contacted streets division of the PW department and discussed voice mail and solutions to the drainage issue. DG was dumped on the corner of Birmingham and Crest. But they can't put	No	No					LUX	12/14/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					DG there as it is too cost prohibited By EMERSON, MIKE: 11/1/2010 2:17:20 PM Site inspection took photos of street sent PW. No source of sediment was found Case closed								
19	98956	12/2/10	clay debris	Other discharge - White substance pooling infrom of house inspector to investigate	WO#125328 : By EMERSON, MIKE: 12/3/2010 4:01:26 PM Site inspection contacted property owner to discontinue washing off dust from ordinments	Yes	No		Yes			ENC	12/14/10
20	98961	12/2/10	H2O	Discharge of other washwater - Received call and email from the RWQCB that there is an illegal connection at 2354 Oxford west in the alley.	WO#125358 : By EMERSON, MIKE: 12/6/2010 10:03:06 AM Site inspection with Clean Water Manager took photos of white pipe that discharges into the unimproved dirt alley. By EMERSON, MIKE: 12/6/2010 10:29:36 AM Emailed results from last investigation to the RWQCB. They will contact the complainant case closed WO#125779 : By EMERSON, MIKE: 12/27/2010 1:45:25 PM Sent email to complainant with permit # for drainage	No	No						12/14/10
21	98977	12/7/10	green liquid	Discharge of antifreeze - Antifreeze spilled in alley at 295 Neptune Ave.	WO#125401 : By EMERSON, MIKE: 12/7/2010 5:20:20 PM Site inspection took photos called PW streets. Streets called and will get the vacon truck to suck up green liquid.	Yes	No		Yes			LUC	12/7/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					WO#125402 : By EMERSON, MIKE: 12/7/2010 5:26:16 PM Site inspection took photos of area cleaned up. Neighbors commented on the algae in the puddle and asked if the city could fix it or require the adjacent property owner to fix it with gravel. They were referred to code enforcement.								
22	99019	12/15/10	leaves	Discharge of yard waste - Resident dumping yard waste into the curb and gutter in front of his house.	WO#125594 : By EMERSON, MIKE: 12/17/2010 1:18:59 PM Site inspection took photos of large amount of leaves in street left door hanger	Yes	No		Yes			LCS	1/13/11
23	99048	12/20/10	Vegetation	Discharge of yard waste - Neighbor trimmed hedges and left trimmings in the gutter.	WO#125785 : By EMERSON, MIKE: 12/27/2010 4:32:50 PM Site inspection took photos of trimmings in storm drain. Contacted resident and requested clean up WO#125786 : By EMERSON, MIKE: 12/27/2010 4:39:16 PM site inspection area cleaned up took photo case closed	Yes	No		Yes			CBS	1/13/11
24	99096	12/22/10	stinky water	Discharge of sewage - Neighbor says there is sewer water flooding the house.	WO#125804 : By EMERSON, MIKE: 12/28/2010 11:13:20 AM Site inspection no one home took photos of uncovered stock pile and standing water mixing with sediment. Complainant was concerned about the run on to her property to the north. Left card at door. Did not appear to be sewer water.	Yes	No		Yes			ENC	12/23/10

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					WO#125806 : By EMERSON, MIKE: 12/28/2010 11:22:27 AM Site inspection took photo left const flyer By EMERSON, MIKE: 1/14/2011 1:15:08 PM 1/10/11 contacted property owner who indicated that he will use Min construction BMPs								
25	99236	1/10/11	H2O	Discharge of sewage - Stinky water draining down Island View to Balour.	WO#126266 : By EMERSON, MIKE: 1/18/2011 9:44:21 AM Site inspection took photos and spoke to residents and waste water. It was concluded that the seepage is from ground water no source.	No	No		Yes			ENC	4/7/11
26	99238	1/10/11	H2O	Discharge of sediment - Possible broken pipe at residence causing runoff.	WO#126264 : By EMERSON, MIKE: 1/14/2011 11:12:22 AM Site inspection took photos of water draining out of driveway. Contacted resident and showed her the discharge she gave me the landlord's phone number. Landlord indicated that the water is not in the same area as his water line and that it is ground water.	No	No		Yes			CBS	1/24/11
27	99240	1/11/11	H2O	Discharge of sediment - Possible broken pipe causing runoff.	WO#126260 : By EMERSON, MIKE: 1/14/2011 10:41:08 AM site inspection contacted owner regarding constant discharge. She said she cleans it and dumps her waste water into her landscaping area. It appears to be ground water. took photos and	No	No		Yes			LCS	1/24/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					informed PW								
28	99253	1/11/11	sediment	Discharge of sediment - Inspector reported silt discharge from work site.	WO#126235 : By EMERSON, MIKE: 1/13/2011 11:00:54 AM Site inspection took photos contacted workers and issued NOV to clean up street by 4pm 1/13/11 WO#126259 : By EMERSON, MIKE: 1/14/2011 10:26:40 AM site inspection area cleaned up signed off NOV and gave it to home owner	Yes	No	1/11/11	Yes			LCS	1/13/11
29	99337	1/27/11	pool water	Discharge of water - received complaint of pool being drained into storm drain	WO#126458 : By EMERSON, MIKE: 1/28/2011 3:37:56 PM Site inspection observed H2o flowing down the storm drain left door hanger. Received call from pool contractor that the water is de chlorinated	No	No		Yes			LCS	4/7/11
30	99348	1/27/11	H2o	Other discharge - Specialist observed white substance flowing out of property drain	WO#126479 : By EMERSON, MIKE: 1/31/2011 1:37:47 PM Site inspection left door hanger and questioned contractors on adjacent property. Received call from property owner stating that it is ground water and it has been flowing for years and would like it to stop. He thinks it may be from over irrigation on uphill properties.	No	No		Yes				4/7/11
31	99386	2/7/11	ground water	Discharge of water - Sump pump water discharges to creek, area around outlet is rusty.	WO#126612 : By EMERSON, MIKE: 2/11/2011 10:43:42 AM Site inspection contacted property owner took photos of French drains and sump pumps. Appears	No	No		Yes			ESC	4/7/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					to be ground water. At the request of the property owner, emailed Vector control to monitor/treat adjacent stream bed. Case closed								
32	99508	2/24/11	White milky fluid	Discharge of paint - White milky fluid running down gutter.	WO#126842 : By EMERSON, MIKE: 2/28/2011 9:14:02 AM Site inspection took photos of milky discharge. Left info at door to call me. WO#126850 : By EMERSON, MIKE: 2/28/2011 2:12:32 PM Site inspection took photos of cleaned up area case closed	Yes	No		Yes			ENC	2/28/11
33	99516	2/28/11	silt	Discharge of sediment - Sediment discharge after rain event. Failing BMPs.	WO#126929 : By EMERSON, MIKE: 3/3/2011 4:35:52 PM Site inspection took photos of street, silt bar and suspected discharger. I called business owner who informed me that they are in the process of moving their business off the subject property. They will call the landlord to get permission to replace BMPs on 2/28/11 By EMERSON, MIKE: 3/3/2011 4:40:32 PM 3/3/11 received email and call from PW requesting fines and cost recovery. Called business owner for update on responsible party WO#126940 : By EMERSON, MIKE: 3/8/2011 3:07:32 PM Site inspection took photos of failing BMPs	Yes	No	3/7/11	Yes	3/7/11		LUC	4/7/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					at 403 Orpheus. Met with clean water manager, it was agreed to put the property owner on notice via NOV. Informed the Palm Co. of this action and obtained property owners phone number and faxed a copy of the notice. By EMERSON, MIKE: 3/8/2011 3:21:57 PM 3/7/11 Called property owner left message that there are sediment discharges occurring from their property after every rain event and that the city had sent and NOV to discontinue discharge and to implement, maintain and/or replace BMPs for sediment control. 3/8/11 received call from property owner stating that they have evicted the palm Co for not paying rent and are auctioning off the remaining trees and will have the property secured with in 30 days. WO#127453 : By EMERSON, MIKE: 3/30/2011 11:19:09 AM Site inspection took photos of BMPs. Appears they still have open slopes but perimeter BMPs appear to be implemented case closed received call with new contact information								
34	99550	3/7/11	oil	Discharge of oil. - Car leaking oil onto street. Black porsche	WO#126935 : By EMERSON, MIKE: 3/8/2011 11:09:38 AM Site inspection observed oil leak took photos left ed info.	Yes	No		Yes			LUC	3/24/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					WO#127435 : By EMERSON, MIKE: 3/30/2011 10:37:55 AM Site inspection took photos of oil leaking from vehicle left card and door hanger.								
35	99588	3/10/11	H2O	Discharge of other washwater - Illegal connection, greywater discharging onto street.	WO#127100 : By EMERSON, MIKE: 3/15/2011 10:17:10 AM CIP co-worker and I met with owners and tenants and inspected area drains. They appeared to be landscape drains from the west side yard and rear patio. Cautioned the tenants not to wash off the patio as it drains into the storm drain case closed	No	No		Yes			ENC	4/7/11
36	99594	3/10/11	pool water	Discharge of water - Pool draining, causing erosion.	WO#127102 : By EMERSON, MIKE: 3/15/2011 11:39:41 AM Site inspection observed erosion downstream from subject property (took photos) but the discharge has stopped. Met with complainant who informed me that she had contacted the discharger after looking online for pool discharge rules and was told it was OK to discharge. I agreed as long as there is no erosion. I contacted PW streets regarding cold patch and street condition. Streets informed me that the street works fine during a rain event and that the discharger needs to slow down the flow and the discharger may have some additional civil responsibilities.	Yes	No		Yes			CBS	4/7/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Contacted the discharger and informed her of the rules. She will comply next time. Case closed.								
37	99657	3/21/11	silt	Discharge of sediment - Sediment from trail easement ran off during event.	WO#127396 : By EMERSON, MIKE: 3/29/2011 3:54:15 PM Site inspection took photos of failing BMPs and silt discharge. WO#127631 : By EMERSON, MIKE: 4/11/2011 4:17:52 PM Site inspection took photos sent closing letter and called and thanked contractor case closed	Yes	No	3/24/11	Yes			LCS	5/10/11
38	99662	3/17/11	reclaimed water	Discharge of water - Leaking reclaimed water sprinklers.	WO#127366 : By EMERSON, MIKE: 3/29/2011 10:42:47 AM 2/15/11 site inspection contacted SDWD and JPA for reclaimed water leakage from sprinklers. They are to contact HOA landscaper to cap off old lines. 3/17/11 site inspection took photos of leaking purple boxes. Called SDWD. WO#127367 : By EMERSON, MIKE: 3/29/2011 10:50:22 AM Site inspection contacted SDWD and JPA for reclaimed water leakage from sprinklers. They are to contact HOA landscaper to inspect all lines for leakage. WO#129238 : By EMERSON, MIKE: 7/21/2011 3:34:59 PM Area cleaned up case closed	Yes	No		Yes			ENC	7/11/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
39	99663	3/28/11	appears to be paint	Discharge of paint - Paint discharge into gutter.	WO#127365 : By EMERSON, MIKE: 3/29/2011 10:20:13 AM Site inspection took photos of white stains in gutter line. Contacted tile guy who indicated that it was the painter that left his waste in the gutter. He will ask one of his workers to try to remove the stains without discharging the wash water into the storm drain. Gave him educational info to give the home owner. Case closed	Yes	No		Yes			LCS	4/7/11
40	99717	4/6/11	UNKNOWN	Discharge of sediment - Broken sprinkler causing erosion. Leaking onto Rubenstin and Westminster	WO#127901 : By EMERSON, MIKE: 4/25/2011 10:36:21 AM Site inspection contacted owner who had already fixed broken sprinkler case closed	Yes	No		Yes			ENC	5/10/11
41	99743	4/11/11	silt	Discharge of sediment - Inspector observed silt discharge from drain construction	WO#127904 : By EMERSON, MIKE: 4/25/2011 10:49:08 AM Site inspection took photos of silt discharge WO#127906 : By EMERSON, MIKE: 4/25/2011 11:01:01 AM Site inspection area cleaned up case closed	Yes	No		Yes			CBS	4/12/11
42	99794	4/20/11	h20	Discharge of water - Waste water reported possible illegal conection to culvert box adjacent to 948 springwood Lane	WO#127818 : By EMERSON, MIKE: 4/21/2011 3:23:06 PM Site inspection took photos researched property obtained permit # 10755-cn signed off in February case closed	No	No		Yes				5/10/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
43	99916	5/12/11	water	Discharge of water - Neighbor emptying pool onto complainant's property.	WO#128205 : By RYGIEL, KRISTINE: 5/12/2011 3:32:05 PM No discharge occurring during site inspection. case closed.	No	No		Yes			ENC	5/12/11
44	100188	5/9/11	sediment	Discharge of sediment - Received complaint from water inspector that there is intermediate discharge with sediment flowing into the street	WO#129011 : By EMERSON, MIKE: 7/6/2011 4:47:54 PM site inspection with water inspector who will monitor discharge case closed	Yes	No					CBS	8/9/11
45	100202	4/5/11	sediment	Discharge of sediment - received Received call from PW complaining of sediment water discharge.	WO#129038 : By EMERSON, MIKE: 7/7/2011 12:45:44 PM Site inspection took photos contacted owner on 5/31/11 to re grade to eliminate discharge WO#129039 : By EMERSON, MIKE: 7/7/2011 12:52:33 PM Site inspection took photos contacted owner to re grade to eliminate discharge case closed.	Yes	No		Yes			ESC	6/1/11
46	100207	5/18/11	sediment	Discharge of sediment - Received call complaining of sediment water discharge.	WO#129044 : By EMERSON, MIKE: 7/7/2011 3:00:51 PM Site inspection took photos contacted owner to re grade to eliminate discharge case closed.	No	No		Yes			CBS	8/9/11
47	100208	5/18/11	sedimnet	Discharge of sediment - Received call complaining of sediment water discharge.	WO#129045 : By EMERSON, MIKE: 7/7/2011 3:15:53 PM Site inspection took photos contacted owner to re grade to eliminate discharge case closed. Called vector control to treat ponding water	No	No		Yes			CBS	8/9/11
48	100209	5/18/11	sedimnet	Discharge of sediment - Received call complaining of sediment water discharge.	WO#129046 : By EMERSON, MIKE: 7/7/2011 3:23:56 PM Site inspection took photos contacted owner	No	No					CBS	8/9/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					to re grade to eliminate discharge case closed. Called vector control to treat ponding water								
49	100211	5/5/11	Pet Waste	Other discharge - Received call complaining of animal waste discharge.	WO#129048 : By EMERSON, MIKE: 7/7/2011 3:54:55 PM Left info at door	No	No		Yes			CBS	8/9/11
Totals	**49**					**26**	**1**	**5**	**44**	**2**			

Appendix H-1 Referral or Request for Info **FY 2010 - 2011**

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
1	96291	7/26/10	Commercial	na- request for info	Discharge of building or sidewalk wash water - Property management company wanted regulations for washing off buildings.		Stormwater Regulations	ENC	7/26/2010
2	96533	9/13/10	Residential	Trash	Discharge of trash - Trash on sidewalk	City Manager Memo dated 5/27/10		CBS	9/13/2010
3	96620	9/27/10	Commercial	NA- request for info	Other discharge - Encinitas business called to get regulations for cleaning sidewalks in front of their business.		Power washing requirements	LUC	9/27/2010
4	98779	10/20/10	Construction	Sediment	Discharge of sediment - Lack of BMPs and discharge of sediment. Referred to construction inspector.	Construction Inspector		LUC	12/14/2010
5	98823	11/4/10	Commercial	Water	Discharge of water - Company called to verify requirements for flushing fire lines. They protect storm drain with filter sock and will ensure no erosion occurs.		Requirements for flushing fire lines	ENC	11/4/2010
6	99007	12/9/10	Residential	Trash/graffiti	Discharge of trash - Resident called to report illegal dumping of trash and graffiti. Problem was in County of SD- referred to County of SD Code Enforcement	County of SD Code Enforcement			12/9/2010
7	99774	4/19/11	Residential	Water	Discharge of water - Water pudding at Vulcan and East F Street on a daily basis because of over-irrigation. Referred to SDWD.	SDWD		ENC	4/19/2011

Commercial Total:	**3**
Residential Total:	**3**
Construction Total:	**1**
Municipal Total:	**0**
Industrial Total:	**0**
Total:	**7**

Appendix I

Public Participation

I-1 **Green Spring List 2011**

I-2 **Official Lifeguard Field Manual**

Encinitas "GREEN SPRING" Activities & Events
(April through June, 2011)

Welcome to the Encinitas "Green Spring" listing of educational activities and events being brought to the community through a collaborative effort of volunteers from the Encinitas Environmental Advisory Commission, Encinitas Environment Day, Downtown Encinitas Mainstreet Association (DEMA) and the Solana Center for Environmental Innovation.

April 22 **Captain Charles Moore** - Friday, 7:00pm - $5 donation suggested
Plastics in our Oceans, Environment & Us – Captain Moore shares his research findings and insights from his trips to the "Great Pacific Garbage Patch" (North Pacific Gyre)
Paul Ecke Central School, 185 Union Street, Encinitas.
Seating is limited, RSVP to Darcy Lyons kdlyons@cox.net

April 23 **Electronic Waste Collection Event** – Saturday, 9 am-Noon, *FREE*
> open to all communities
Solana Center for Environmental Innovation
137 N El Camino Real, Encinitas
(just up the hill past the Sheriff's Substation – follow signs)

April 23 **Paper Shredding Event** – Saturday, 9 am-Noon, *FREE*
Encinitas residents & businesses only, 2 bankers box limit
Encinitas City Hall
505 South Vulcan Avenue, Encinitas
For more information, call (760) 436-4151

April 23 **Solar For Homes** – Saturday, 9:30 am
Encinitas Library Community Room
540 Cornish Drive, Encinitas
Baker Electric Solar educational presentation on solar benefits, financial benefits (rebates, tax credits) including free on-site consultation. RSVP to www.BakerElectricSolar.com or (877) 543-8765.

April 26 **Succulent Wreath Class** – Tuesday, 9 am – 2 pm
San Diego Botanic Garden
http://www.sdbgarden.org/classes.htm

April 28 **Cottonwood Creek Environmental Film Series** - Thursday 6:30 pm – 8 pm, *FREE*
Out There – Insane Waves and an Uncertain Future
Downtown Encinitas Mainstreet Association.
http://www.encinitas101.com/events/the-cottonwood-creek-environmental-film-festival/

April 30 **Beach Cleanup** – Saturday, 9 am-Noon
Moonlight Beach
Encinitas Clean Water Program & Solana Center for Environmental Innovation
Please pre-register at http://www.creektobay.org/

April 30 **Composting Workshop** – Saturday, 10 am - Noon, *FREE*
Solana Center for Environmental Innovation
137 N. El Camino Real, Encinitas
Please register at http://www.solanacenter.org/1workshops.html

Continued.....

April 30 **Encinitas Garden Festival** – Saturday, 10 am – 5 pm
www.EncinitasGardenFestival.org

April 30 **Sacred Altars, Environmental Art Exhibit Opening Reception** Saturday, 6 pm – 8 pm
Encinitas Library Community Room
540 Cornish Drive, Encinitas
30 local artist invitational exhibit curated by Rodney McCoubrey with artwork made from up to 25% recycled materials. More info: www.SacredAltars.blogspot.com
Open to all – Exhibit on display through June 6th

May 7 **Solar Luncheon** – Saturday, 11 am
Encinitas Community Center
1140 Oakcrest Park Drive, Encinitas
Sullivan Solar educational presentation about solar technology, rebates, incentives and their cash-back program specifically for Encinitas.
For more information contact Sullivan Solar at 1-800-SULLIVAN or www.EncinitasSolarProgram.org

May 10 **Water Conservation Workshop** – Tuesday, 6:30 pm *FREE*
Rainwater Capture & Irrigation System Improvements
Learn how to efficiently capture, collect and utilize rainwater AND fine tune your irrigation system for the most efficient water delivery for your landscape. 10% off coupons from Grangetto's for all attendees
Encinitas Community Center, 1140 Oakcrest Park Drive, Encinitas
Please RSVP to GreenCommunity@CityofEncinitas.org

May 18 **Bike Safety Workshop** – Wednesday, 6 pm
Ride Cyclery
559 S. Coast Hwy 101, Encinitas
Keep yourself safe on the road with useful information on: bike safety, training on how to change a tire, importance of hand signals, and other tips. Ride your bike there and receive 20% discount off of bike accessories!

May 20 **Bike to Work Day – *Region-wide***
You know you've been thinking about the idea of riding your bike to work. Everyone else will be doing it - Join interested people from throughout the County in getting out of your car and riding your bike to work. For more information visit: http://www.icommutesd.com/Events/BikeToWorkDay.aspx

May 20 **Arbor Day Activity & Public Works Day –** Friday, Noon-2pm
Encinitas Public Works
160 Calle Magdalena, Encinitas
> Arbor Day Tree Planting dedication, included tree planting demo @ 12:15pm
> Public Works Open House complete with equipment demos for 'kids' of all ages, booths, reusable bag giveaways and a possible "Bag Monster" sighting.

May 21 **Tired of Flats on Hwy 101??! Help Rid Coast Hwy 101 of Thorns in Leucadia –** Saturday, 8am-2pm
Community Work Party: Puncture Vine/Goathead Thorn Removal
Hwy 101 & A Street , Leucadia – moving north
Bring your gloves, sturdy closed toe shoes, a hat, sunscreen, water bottle, shovels, rakes, hoes, good cheer & energy! We will bring coffee and some snacks…bring your own mug, fork, etc…it'll be a **ZERO WASTE PARTY.** For more event details click HERE - **PLEASE RSVP TO:** NoMoreGoathead@gmail.com
*Due to the nature of the work in the City's & NCTD's Right of Ways – all volunteers will need to check in and be trained on safety procedures before starting work.

Continued…..

GREEN SPRING
www.eeday.org

May 21 **Ladybug Day** – Saturday, 10am-12:30pm
San Diego Botanic Garden
Bring your kids (of all ages) to participate in the "Lost Ladybug Project". Help search for and report on ladybugs as part of a cooperative study with Cornell University. There will also be lots of ladybug crafts, an important release of ladybugs and a children's flower arranging activity (each child will be able to take home their own bouquet of fresh flowers).
For more information visit: http://www.sdbgarden.org/ladybug.htm

May 26 **Cottonwood Creek Environmental Film Series** – *FREE,* Thursday 5:30 pm – 9:00 pm
Film: "Wherever You Want to Go" – part of the BMW activate the future series
Included in this special evening is an underground car show from5:30-7:30pm
featuring 10 electric cars and scooters as well as a regional panel discussion
from 8:30-9pm on the future of transportation with regional transportation experts.
Host: Downtown Encinitas Mainstreet Association.
http://www.encinitas101.com/events/the-cottonwood-creek-environmental-film-festival/

May 28 **Electronic Waste Collection & Recycling Event** – Saturday, 9am-Noon
> open to all communities
Solana Center for Environmental Innovation
137 N El Camino Real, Encinitas
(just up the hill past the Sheriff's Substation – follow signs)

May 28 **Hydroponic Gardening Workshop** – Saturday, 9am-Noon
San Diego Botanic Garden
Dynamic hands-on workshop teaching the principles of the hydroponic wick method – a fun and easy sustainable gardening technique. Participants will build and take home their own sustainable garden filled with veggies. To register visit: http://sdbgarden.org/classes.htm

June 5 **Encinitas Environment Day** – 10am-4pm, *FREE*
Come out for a day of amazing environmental awareness booths, vendors, music and activities.
Cottonwood Creek Park
Corner of Encinitas Blvd & Vulcan Avenue, Encinitas
See www.eeday.org for a complete event listing

Regular Ongoing Activities:

Nature Walks & Lagoon Clean-ups - Saturdays
San Elijo Lagoon Conservancy www.sanelijo.org

Leucadia Farmer's Market & Art Fair - EVERY Sunday 10 am – 2 pm
Paul Ecke Central School, 185 Union Street, Leucadia

Cottonwood Creek Clean-ups – 3rd Saturday each month, 8:30 am – Noon
Contact Brad Roth, Project Manager, Cottonwood Creek Conservancy broth@cox.net

All of this programming and coordination has been brought to you by the following organizations and their dedicated volunteers:

Encinitas GREENING OUR COMMUNITY · Solana Center for Environmental Innovation · Encinitas 101

Encinitas Environment Day '11

& The Encinitas Environmental Commission

To give us feedback, or request future events/activities: GreenCommunity@cityofencinitas.org

Visit Encinitas Environmental Commission webpage for any updates to Green Spring Listing

Last Updated - 5/16/2011 10:06 AM

ENCINITAS JR. LIFEGUARDS

N33° 2' 52" / W117° 17' 49"

MOONLIGHT BEACH, CA



OFFICIAL

ENCINITAS MARINE SAFETY DEPARTMENT

JUNIOR LIFEGUARD FIELD MANUAL

CITY OF ENCINITAS CLEAN WATER PROGRAM

The storm drain system carries untreated runoff directly to our creeks, lagoons, and the ocean. Runoff containing trash, pet waste, oil, grease, soap, metals, and other pollutants contributes to high bacteria levels in the ocean and may cause sickness and/or beach closures. The Clean Water Program was created to protect our waterways and keep our beaches clean and safe.

WHAT DOES THE PROGRAM DO?

- Water quality monitoring
- Public outreach & education
- Complaint response and enforcement
- Annual facilities inspections
- Low impact development
- Watershed planning and coordination

CITY OF ENCINITAS
Clean Water Program
ENGINEERING SERVICES

HOW CAN YOU PROTECT OUR WATERWAYS?

- Pick up after your pets. Pet waste carries bacteria, viruses, and parasites that can pose risks to human and environmental health.
- Don't be a litter bug. Trash easily makes its way to the beach.
- Never dispose of household hazardous waste in the trash, sewer system, or storm drains.
- Limit your use of fertilizers and pesticides. Do not apply chemicals if rain is in the forecast, and avoid over-irrigation, which can wash chemicals into the storm drain.
- Sweep or rake instead of using water to wash off outdoor surfaces.
- During home improvements and maintenance activities, do not allow any runoff or debris to enter the street or storm drain. Properly dispose of all wash water, paint and other construction materials.

To report spills or illegal dumping in Encinitas, or for more information on stormwater pollution prevention, please call the **Clean Water Hotline: 760-633-2787**, or email: **cleanwater@cityofencinitas.org** website: **www.cwp.cityofencinitas.org**

CITY OF ENCINITAS

Clean Water Program



ENGINEERING SERVICES

Jurisdictional Urban Runoff Management Program Annual Report

FY 2011-12

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EXECUTIVE SUMMARY

Section J.3 of Water Quality Order No. R9-2007-0001, adopted January 24, 2007, requires the City of Encinitas to prepare a JURMP Annual Report describing all activities conducted by the City to comply with the provisions of the Order. The following report covers the implementation period for Fiscal Year 2011-2012 with a defined reporting period from July 1, 2011 through June 30, 2012. Reporting for this annual report has been prepared in compliance with standards established in Water Quality Order No. 2007-0001, and is based upon the most current information available at the time of document preparation. This report is presented in the standardized annual reporting format developed collectively by the San Diego Region Municipal Stormwater Copermittees.

On March 24, 2008, the City of Encinitas submitted, as required by Order No. 2007-0001, an updated JURMP. The JURMP was prepared as a foundational program document to detail programs, process, procedure, and implementation strategies employed by the City to improve and protect the quality of local surface and receiving waters. As part of the JURMP update process, the following list of objectives was established to set baseline guidance for overall program success:

- Develop programmatic elements to ensure compliance with regulatory standards and provisions mandated in Order No. R9-2007-001.
- Establish management processes and procedures to ensure accountability for program actions and activities.
- Establish and support a set of effective and efficient strategies to address Encinitas water quality concerns.
- Build program elements around integrated assessment approaches in order to evaluate overall performance and effectiveness of program components.

Programmatic reporting, as required and represented in this document, serves as a critical self assessment tool in consideration of the objectives outlined above. However, it should be noted that the value added outcomes, both to the program and to the community of Encinitas, of each program area are in constant review as local, regional, and discipline specific technical and scientific knowledge advances. It is important to recognize the iterative nature of stormwater and surface water quality management, as such programs are comprehensive in nature, and each individual component contributes to the overall effectiveness of program outcomes. Each reporting year provides opportunity to express refinement and acuity of programs and the City's overall progression in the field of stormwater and surface water quality management.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(Greg Shields) 9.24.2012

Greg Shields, P.E.
Interim Director of Public Works

Date

1.0 INTRODUCTION

The Clean Water Act of 1972 established the National Pollutant Discharge Elimination System (NPDES) permit program to regulate the discharge of pollutants from point sources to the waters of the United States. In 1987, the Clean Water Act was amended to include non-point source pollution such as urban runoff, and established a framework for regulating urban storm water runoff and other non-point source pollutants through establishment of various general and individual permits issued to local governments and other agencies.

In 2002, the City of Encinitas (City) developed a Jurisdictional Urban Runoff Management Program (JURMP) document as required by the San Diego Regional Water Quality Control Board (RWCQB) Order No. 2001-01 (2001 Permit). On January 24, 2007, Order No. R9-2007-0001 (Order, Permit, 2007 Permit or Municipal Stormwater Permit), was adopted by the RWQCB, regulating the discharge of urban runoff from municipal separate storm sewer systems (MS4) draining the watersheds of the County of San Diego, the San Diego Unified Port District, the San Diego County Regional Airport Authority, and the incorporated cities of San Diego County, including the City of Encinitas (Copermittees). Under the requirements of Order No. R9-2007-0001, the City prepared and submitted on March 24, 2008 an updated JURMP document describing enhancements to existing programs, as well as newly developed programmatic elements to meet the provisions of the adopted permit.

Section J.3 of Water Quality Order No. R9-2007-0001, requires the City to prepare a JURMP Annual Report describing all activities conducted by the City to comply with the provisions of the Order. The following report covers the implementation period for Fiscal Year 2011-2012 (FY 2011-12) with a defined reporting period from July 1, 2011 through June 30, 2012.

1.1 BACKGROUND

The City of Encinitas encompasses an overall area of nearly 20 square miles and is located along six miles of Pacific coastline in northern San Diego County. The City is characterized by coastal beaches, cliffs, flat-topped coastal areas, steep mesa bluffs and rolling hills. Incorporated in 1986, drawing together the communities of New Encinitas, Old Encinitas, Cardiff-by-the-Sea, Olivenhain and Leucadia, the City has an approximate population of 60,000. Encinitas is bordered by the Pacific Ocean to the west, Batiquitos Lagoon to the north, and the San Elijo Lagoon to the south.

The City of Encinitas is situated entirely within the Carlsbad Hydrologic Unit and is split between the San Marcos Watershed to the north and the Escondido Creek Watershed to the south. The City is naturally divided by eight (8) distinct drainage areas (sub-basins): Cardiff, Lower Escondido, La Orilla, La Costa South, Leucadia, Encinitas, Rancho Santa Fe, and Lux Canyon sub-basins. Encinitas receives an average annual rainfall of approximately ten (10) inches.

The City owns and maintains improved and open storm water channels, underground pipes of varying material, storm water detention basins, catch basins, and a variety of other MS4 facilities.

In general, the City drains to three blue-line creeks: Cottonwood Creek, Encinitas Creek and Escondido Creek. Cottonwood Creek drains the heart of Encinitas and discharges to the Pacific Ocean at Moonlight Beach. In 2006, Cottonwood Creek was 303(d) listed for DDT, phosphorous, and sediment toxicity stressors. Further, the Pacific Ocean is listed as a 303(d) impaired water body at Moonlight Beach for total coliform bacteria indicators due to urban runoff from Cottonwood Creek. Encinitas Creek drains the north-central portion of the City, and drains into Batiquitos Lagoon, which is designated as a Critical Coastal Area in the State of California 2002 Critical Coastal Areas Strategic Plan. In 2006, Encinitas Creek was 303(d) listed for phosphorous impairments, and in 2010 has been listed for selenium and toxicity. Escondido Creek, listed in 2006 for DDT, phosphorous, sediment toxicity, manganese, phosphate, selenium, sulfates, and total dissolved solids, and in 2010 for enterococcus, fecal coliform, and total nitrogen, drains the southern and northwest (Olivenhain) portion of the City and drains into San Elijo Lagoon. San Elijo Lagoon is 303(d) listed as an impaired water body for sediment/siltation, bacteria indicators, and eutrophic conditions.

1.2 PURPOSE AND OBJECTIVES

The purpose of the 2011-2012JURMP Annual Report is to provide a comprehensive account of programmatic activities conducted by the City of Encinitas to meet the requirements of the Order No. 2007-0001. Additionally, the annual reporting process is used to evaluate the overall effectiveness and efficiency of program elements. Notably, a comprehensive program update occurred through the JURMP update process in 2008; therefore, only significant augmentation of program elements or planned changes will be captured in the following annual report. Any program modifications will be for the advancement of the City's program and will comply with all regulations as presented in the Municipal Permit.

2.0 DEVELOPMENT PLANNING

2.1 INTRODUCTION

Being a coastal community, environmental protection and water quality are of utmost importance to the City of Encinitas. As a result, the City has established strong water quality protection policies which are reflected in development planning documents and procedures. Through the implementation of the Development Planning Component of the City's JURMP and other related planning documents, the City aims to reduce the discharge of pollutants from development projects to the Maximum Extent Practicable (MEP) to protect receiving water bodies and manage increases in runoff and erosion from development projects.

This section describes the City's actions during FY 2011-12 which contributed to the successful implementation of the City's Development Planning Component. Included in this section is a summary of recent updates made to land use policies and procedures, a description of the update of the City's Standard Urban Stormwater Mitigation Plan (SUSMP), the development of the San Diego region Hydromodification Management Plan, a review of the development projects approved in the reporting year, and a summary of implementation of the BMP installation, verification, and inspection programs.

2.2 LAND USE PLANNING

The City's land use planning process facilitates (1) the reduction of development project discharges of pollutants from the MS4 to the MEP, (2) the prevention of development project discharges from the MS4 from causing or contributing to a violation of water quality standards, and (3) management of increases in runoff discharge volumes, rates, and durations from development projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force.

The City's land use planning process is fundamentally structured around the following planning, guidance, and enforcement documents:

- General Plan
- Jurisdictional Urban Runoff Management Plan
- Watercourse Protection, Storm Water Management and Discharge Control Ordinance (Municipal Code Chapter 20.08)
- Grading, Erosion and Sediment Control Ordinance (Municipal Code Chapter 23.24)
- Encinitas Stormwater Manual (Local SUSMP & HMP)
- Storm Water Best Management Practices Manual II

The consistent application and regular update, as required or necessary, of each of these documents enables the City to successfully conform to the requirements of section D.1 of the Municipal Permit. The following sections describe the City's land use planning process and the documents in more detail.

2.2.1 BACKGROUND

The City of Encinitas was incorporated in 1986, drawing together the communities of Cardiff-By-The-Sea, Leucadia, Olivenhain, and old and new Encinitas. The City's General Plan was adopted in 1989 and is amended on a limited, as needed basis. The City's JURMP, the Storm Water Ordinance, and the Storm Water BMP Manual II were each originally developed in 2002 as required by Order 2001-01. Each of these documents were reviewed and updated as needed in FY 2007-08 as part of the JURMP update process and as required by Order 2007-001 Municipal Stormwater Permit.

2.2.2 SOURCE CHARACTERIZATION

The City addresses seven major land use categories in its General Plan: residential, office professional, commercial, industrial, public / semi-public, transportation, and ecological / open space / parks. Each of these land uses is associated with different combinations of pollutants and activities that have the potential to negatively affect the surrounding environment. A detailed discussion of the potential threats to water quality associated with existing residential, commercial, industrial, and municipal land uses can be found in their designated sections within this document.

Through the implementation of the land use planning policies, procedures, and requirements established in the General Plan, JURMP, Storm Water Ordinance, Grading Ordinance, BMP Manual II, and the Encinitas Stormwater Manual, the City aims to reduce the potential for pollutant discharges from all planned development and redevelopment land use sources.

2.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

During FY 2007-08, the City of Encinitas updated its land use planning BMPs as required by Order 2007-0001. As part of the 2008 JURMP update process, these BMPs were incorporated into the City's Storm Water BMP Manual II. In FY 2009-10, Clean Water Program staff completed the process of updating the City's local SUSMP to meet the minimum standards established in the updated and approved regional Model SUSMP. The City's new local SUSMP document, titled the Encinitas Stormwater Manual, was adopted in March 2010. In FY 2010-11, as required by the timeframe established in Order 2007-0001, the City incorporated the San Diego Region Hydromodification Mitigation Plan (HMP) into the City's local SUSMP, titled the Encinitas Stormwater Manual (ESM). The most current version of the City's BMP Manual II and the Encinitas Stormwater Manual can be accessed through the Clean Water Program webpage at: http://cwp.cityofencinitas.org. For more detail regarding the development and adoption of the Encinitas Stormwater Manual and the regional Model SUSMP refer to Section 2.2.4.4 and 2.4.4.1 below.

2.2.4 PROGRAM IMPLEMENTATION

2.2.4.1 GENERAL PLAN

The City of Encinitas General Plan addresses multiple water quality and watershed protection principles. Included within the General Plan are a number of proactive policies that pertain to water pollution and land use decisions. Many of the policies directly specify preservation and acquisition of riparian corridors, wetlands, and buffer zones providing important water quality benefits. The policies place limits on disturbances to natural water bodies and drainage systems caused by developments and strive to avoid developing in areas susceptible to erosion and sediment loss. The General Plan also discourages the use of large amounts of impervious surfaces in new development areas, minimizing the transport of urban runoff and pollutants. The breadth of the City's General Plan policies are such that they cross reference each other and have been determined to comprehensively comply with the Municipal Permit.

The City's General Plan document serves as the blueprint for the long-range, orderly, physical development of the City and contains stated community goals and policies designed to protect its environmental, social, cultural and economic resources as the City develops. The General Plan consists of an integrated and internally consistent set of goals, policies, and standards that address a number of issue areas which include land use, circulation, housing, noise, safety, recreation, conservation, and open space.

Portions of the General Plan also encompass the City's Local Coastal Program (LCP) Land Use Plan, which guides development in the City's Coastal Zone pursuant to the Coastal Act. As a result, the City's General Plan and LCP are a combined single document.

The City implements the policies in the General Plan using a variety of resources including: the JURMP, Municipal Code, Storm Water BMP Manual II, the Encinitas Stormwater Manual, Development Agreements, and other various land use plans and permits. Section 2.4 of this document describes how the water quality and watershed policies are implemented through the City's development planning process.

As a component of the 2008 JURMP update (prepared in FY 2007-08) an assessment of the City of Encinitas General Plan was conducted to determine the City's consistency with the watershed protection policies and principles found in the Municipal Permit. The analysis found that the City's General Plan goals and policies are consistent with the Municipal Permit, and no amendments to the General Plan were required as a part of the JURMP update.

In FY 2011-12, Clean Water Program staff remained engaged and productive in the City of Encinitas General Plan Update 2035. As the process of outlining policy statements for the draft General Plan continued throughout the reporting period, Clean Water Program staff worked to ensure that policy statements reflecting the priorities of the program are fully integrated across plan elements. The General Plan Update process will continue over the forthcoming permit reporting year through a combination of draft document review and community outreach, both of which the Clean Water Program will utilize to affect appropriate policy and direction in regards to surface water quality, stormwater management, and interrelated disciplines.

2.2.4.2 JURMP

In compliance with the new Municipal Permit, the City's JURMP document underwent a comprehensive update during FY 2007-08. The JURMP document serves as the City's foundational storm water program management tool, capturing the development process, procedure, and implementation strategies for described elements. The purpose of this document is to present an integrated approach to reducing the discharge of pollutants from the MS4 to the MEP, and to protect and improve the quality of water bodies in Encinitas.

2.2.4.3 STORM WATER ORDINANCE AND GRADING ORDINANCE

As required by section J.a.(3)(b)iii of the Municipal Permit, the City's Watercourse Protection, Stormwater Management and Discharge Control Ordinance *(EMC Chapter 20.08)*, also called the Storm Water Ordinance, was updated during FY 2007-08 to comply with the Municipal Permit. The Storm Water Ordinance sets up the legal framework which enables the City to enforce the water quality and watershed protection principles established in the General Plan and the JURMP. The Storm Water Ordinance also references the City's Storm Water BMP Manual II and enables the City to enforce the minimum BMPs and SUSMP requirements that are outlined in BMP Manual II and extended to the Encinitas Stormwater Manual. The ordinance is periodically reviewed and updated on an as needed basis to ensure that potential discharges of pollutants may be addressed appropriately.

The Grading, Erosion, and Sediment Control Ordinance *(EMC Chapter 23.24)* was thoroughly reviewed and updated in FY 2007-08, approved by City Council on February 25, 2009, and subsequently approved by the California Coastal Commission. The update largely addressed engineering related revisions, but also included some updates which serve to further strengthen the City's legal authority in meeting the provisions of the Municipal Permit related to both construction and post-construction activities. Specifically, the grading ordinance was updated to require that all Priority Projects acquire a grading permit, and that any project proposing 500 square feet or more of impervious surface is reviewed for conformance with City stormwater regulations.

2.2.4.4 LOCAL SUSMP (BMP MANUAL II, ESM, AND HMP)

Over the past serveral years the City's local SUSMP has undergone significant improvement. Updates included transition away from old SUSMP regulations that were housed in Storm Water BMP Manual II and development of the new comprehensive Encinitas Stormwater Manual. The Encintias Stormwater Manual (ESM) currently serves as the City's Local SUSMP and HMP implimentation document. The section below describes the updates that have occurred over the past few years.

Storm Water BMP Manual II

As part of the 2008 JURMP update, Storm Water BMP Manual II was also updated with revised SUSMP requirements required by the Municipal Permit. As a component of this update, the City also integrated the SUSMP provisions into local land use planning and development process and procedure as outlined in the BMP Manual II.

The City originally created Storm Water BMP Manual II in 2002 to be used by individuals involved with development projects within the City. BMP Manual II prescribes minimum stormwater BMPs for Land Development and Construction activities, and is enforceable through reference by the Stormwater Ordinance and the Grading Ordinance. With the development and adoption of the Encinitas Stormwater Manual, BMP Manual II has become more of a reference document. Refer to the following section for details about the Encinitas Stormwater Manual.

Encinitas Stormwater Manual
In FY 2009-10, the City of Encinitas developed the Encinitas Stormwater Manual as its updated local SUSMP based on the approved San Diego Regional Model SUSMP. The revised Model SUSMP was developed to address post-construction urban runoff pollution from development projects and defines the minimum required Low Impact Development (LID), source control, and treatment control BMPs. As required by Order No. 2007-001, all new updates to the San Diego Regional Model SUSMP were incorporated into the City's local SUSMP and land development process and procedures before March 24, 2010. The Encinitas Stormwater Manual and the updated BMP Manual II were adopted by City Council on March 17, 2010 (Resolution No. 2010-18). The Encinitas Stormwater Manual was adopted as Chapter 7 of the City of Encinitas Engineering Design Manual. By doing this the stormwater design requirements became an integral component of the city's engineering regulations. More detail about the completed update can be found in Section 2.4.4.1.

Hydromodification Management Plan (HMP)
In FY 2010-11, the City of Encinitas updated its local SUSMP based on the Regional Board approved San Diego Region Hydromodification Management Plan (HMP). Subsequent to Regional Board approval of the HMP, copermittees updated the Model SUSMP to include the new HMP requirements. The City of Encinitas used the regional model to update the Encinitas Stormwater Manual (local SUSMP). The local update included integration of all of the HMP regulations including HMP applicability requirements, hydromodification sizing factors and hydromodification calculations for IMPs. The City's local update was completed by the required January 14, 2011 deadline and included City Council adoption of the updates.

2.3 ENVIRONMENTAL REVIEW PROCESS

As part of the 2008 JURMP update, the City's environmental review staff evaluated the City's environmental review process and confirmed that the current process accurately evaluates water quality and cumulative impacts and identifies appropriate measures to avoid, minimize, and mitigate those impacts for all development projects.

The California Environmental Quality Act (CEQA) requires environmental review of discretionary applications for development projects. Environmental initial studies are conducted to determine whether the project may have a significant impact on the environment. This review process evaluates a project's potential for significant impacts on water quality. In compliance with the Municipal Permit, additional questions have been provided in the initial study checklist; a tool utilized to evaluate the environmental effects of a project. To evaluate

potential water quality impacts of projects requiring discretionary review, the following questions have been included as part of the initial study checklist:

Would the project:

- *Substantially conflict with city-adopted water quality standards or waste discharge requirements?*
- *Substantially alter the existing drainage pattern of the site or area, including the alteration of a stream or river course, in a manner which would result in substantial erosion or siltation on- or off-site?*
- *Result in a substantial degradation of receiving water quality during construction activities?*
- *Propose a land use or an on-site activity that would substantially degrade receiving water quality?*
- *Substantially increase any pollutant for which* a *tributary water body is listed on the Clean Water Act Section 303(d) list?*
- *Substantially degrade surface water quality within wetland, fresh, marine, or recreational waters?*
- *Substantially degrade groundwater quality?*

The environmental review process ensures that a project's impact on water quality is addressed early in the planning process. If a proposed project is determined to have a significant environmental effect, mitigation measures are required under CEQA to avoid or reduce the effect to below a level of significance. The mitigation measures will normally take the form of adopted permanent Best Management Practices to be incorporated into project plans prior to discretionary approval.

2.4 DEVELOPMENT PROJECT APPROVAL AND VERIFICATION PROCESS

2.4.1 BACKGROUND

As discussed in the previous sections, the City of Encinitas has an established multi-departmental review process for all new development and redevelopment projects. Through the application of the City's Storm Water Ordinance, Grading Ordinance, Storm Water BMP Manual II, Encinitas Stormwater Manual, and development project review process, the City aims to mitigate the negative impacts of urban runoff from development projects to the MEP.

Each proposed discretionary and ministerial project is subject to the City's Development Project Approval and Verification Process. The following sections describe this process in detail.

2.4.2 SOURCE CHARACTERIZATION

As discussed in Section 2.2.2, development projects have the potential to discharge different types and amounts of pollutants based on the project's size and intended land use. Pollutants such as trash and debris are anticipated from all developments, regardless of land use; however, pollutants like bacteria and viruses are more likely to originate from restaurants and residential developments rather than from parking lots and automotive repair shops. Since the potential

for a site to discharge pollutants is unique to each development, the City's design requirements for development projects vary according to size, project characteristics, and anticipated land use.

The City's SUSMP (Encinitas Stormwater Manual), which was developed and adopted as required during FY 2009-10, describes specific categories for Priority Projects. A Priority Project must implement Low Impact Development techniques, source control components, Treatment Control Best Management Practices, and Hydromodification Management Practices to address potential pollutants.

In the City of Encinitas, all development projects, including Standard projects (projects not subject to SUSMP standards), are required to meet the minimum BMP requirements, which are discussed below in Section 2.4.3.

2.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

The City's minimum BMP requirements for all development projects are summarized here and are included in the new Encinitas Stormwater Manual. These minimum BMPs are based on BMPs established in the regional Model SUSMP. All development projects are required to include the following minimum BMPs:

- Implementation of source control BMPs as listed in Appendix A of the Encinitas Stormwater Manual.
- Inclusion of Low Impact Design (LID) features that conserve natural features, set back development from natural water bodies, minimize imperviousness, maximize infiltration, and retain and slow runoff. (Specific LID requirements are dependent on the type of project that is proposed.)
- Compliance with requirements for construction-phase controls on sediment and other pollutants.

SUSMP Priority Projects must submit a grading plan, which includes identification of proposed LID features, source control and treatment control BMPs, calculations for sizing the treatment control BMPs, and a maintenance agreement that will be recorded with the County. The grading plan must also address how the project will manage increases in runoff discharge rates and durations associated with the project, where such increases could cause impacts downstream of the project.

The City does not issue permits to development projects until all minimum BMP requirements are met. Any changes made to a development project's proposed storm water BMPs during project construction must be approved by the City before being implemented.

2.4.3.1 HYDROMODIFICATION MANAGEMENT PLAN (HMP)

To reduce the negative impacts to beneficial uses and stream habitats that are attributed to increased runoff rates and volumes and in compliance with Order No. 2007-0001, the City has collaborated with the other Copermittees to adopt a detailed Hydromodification Management Plan (HMP) for the San Diego Region.

In cooperation with a Technical Advisory Committee (TAC), the Southern California Coastal Water Research Project and the Regional Board the San Diego County Copermittees, including the City of Encinitas endeavored in the scientific research and data gathering necessary to prepare the final HMP. The final San Diego County HMP was completed and subsequently approved by the Regional Board on July 14, 2010. As required by the Municipal Permit, the City of Encinitas updated its local SUSMP (Encinitas Stormwater Manual) to include HMP requirements on January 14, 2011, within 180 days of Regional Water Quality Control Board approval. In accordance with the HMP criteria, the City now requires all Priority Projects (unless otherwise exempt) to comply with the hydromodification standards.

2.4.4 PROGRAM IMPLEMENTATION

As required by the Municipal Permit, the City of Encinitas has implemented a program to ensure that development and redevelopment projects comply with SUSMP requirements, including Low Impact Development, source control, treatment control BMPs, and Hydromodification Management. The Municipal Permit further requires that the City ensure proper installation of treatment control BMPs and their maintenance into perpetuity through such procedures as BMP verification, maintenance agreements, and annual inspections.

The following section provides an overview of the City's SUSMP implementation (including project tracking) during FY 2011-12.

2.4.4.1 MODEL AND LOCAL SUSMP UPDATES

Regional Model SUSMP Update: In addition to the changes discussed above, a comprehensive regional Model SUSMP update was completed by the copermittees during FY 2008-09 and submitted to the Regional Board for approval on January 26, 2009. After incorporation of revisions based on Regional Board comments the Model SUSMP was approved by the Regional Board on March 24, 2009. The comprehensive Model SUSMP update includes the following as required by the Municipal Permit:

- Inclusion of LID, source control, and treatment control BMPs that meet or exceed the minimum requirements of the Municipal Permit.
- Establishment of site, design, and maintenance criteria for each LID and treatment control BMP listed in the Model SUSMP.
- Addition of criteria to help determine conditions where implementation of each LID BMP included in the Model SUSMP is applicable and feasible.
- Addition of a requirement for Priority Projects with low traffic areas and appropriate soil conditions to use permeable surfaces.
- Addition of any necessary restrictions for infiltration BMPs from Priority Projects that generate high levels of pollutants.

Incorporation of Model SUSMP into Local SUSMP: During FY 09-10, the City completed the update of its Local SUSMP (Encinitas Stormwater Manual) to meet the requirements established in the regional Model SUSMP. The local update was completed and adopted by City Council

on March 17, 2010, within one year after the adoption of the Model SUSMP. As described in section 2.2.4.4 and 2.4.3.1 the City's local SUSMP was further updated January 14, 2011 to include regionally adopted HMP requirements.

Development of the Encinitas Stormwater Manual (local SUSMP) involved extensive coordination between several City departments, including Engineering, Planning, Public Works, Parks & Recreation, and the San Dieguito Water District. Involving all appropriate departments in the development of the Encinitas Stormwater Manual provided interdepartmental ownership and awareness of applicable standard and helped to ensure that implementation of the new SUSMP requirements would go smoothly. Clean Water Program staff hosted bi-weekly Stormwater Quality Workgroup sessions from July 2009 through February 2010, providing a collaborative forum for the development of the local SUSMP (Encinitas Stormwater Manual). At these workshop meetings, staff from several departments actively participated in the development of Encinitas-specific document language, implementation tools (such as the Stormwater Checklist and Certification form), template maintenance agreements, and detailed Integrated Management Practice (IMP) design guidelines. The workshop meetings were very successful and allowed for each department to be involved in the integration of the new SUSMP requirements into existing practices and procedures. After commencement of the workshop series, each department was well aware of the new SUSMP requirements and how these requirements would be presented in the Encinitas Stormwater Manual.

The City's updated Local SUSMP is titled the Encinitas Stormwater Manual. The Encinitas Stormwater Manual serves as an implementation guide for stormwater standards to assist the professional development community and the general public in understanding the City of Encinitas SUSMP requirements. The Encinitas Stormwater Manual establishes a regionally consistent and systematic BMP design procedure intended to meet complex and overlapping water quality requirements, including stormwater treatment controls, Low Impact Development (LID) standards, control of potential pollutant sources, and control of runoff peak and duration (hydrograph management).

The Encinitas Stormwater Manual is comprised of five interrelated document sections, each supporting and defining the background, regulatory drivers, process, and procedure necessary to guide project applicants toward compliance with defined stormwater quality requirements.

Section 1 – Policies and Procedures, summarizes all City requirements and subsequent procedural elements pertaining to proposed new development and redevelopment projects.

Section 2 – Concepts & Criteria, describes the water quality science, engineering standards, and regulatory framework that form the basis of stormwater requirements for land development.

Section 3 – Preparing Your Project Submittal, details a procedure for determining applicable project requirements, and drafting and submitting associated materials required for a proposed development project.

Section 4 – Low Impact Development Design Guide, instructs applicants on how to plan, design, and size (engineer) treatment facilities and LID features to meet stormwater requirements.

Section 5 – Operation & Maintenance of Stormwater Facilities, outlines the long-term operation and maintenance requirements for stormwater treatment facilities and establishes the process by which applicants will develop an operation and maintenance agreement for the proposed stormwater facilities.

In addition, the Encinitas Stormwater Manual contains a series of appendices specific to the material presented in each of the sections outlined above, including a stormwater quality checklist and certification, design specification sheets for various facility types, and template maintenance agreements for a variety of project types. Notably, the template maintenance agreements, designed to be used as models for legal agreements between the responsible party and the City of Encinitas for long-term operation and maintenance of the proposed stormwater facilities, have been reviewed by the City's legal counsel.

The Encinitas Stormwater Manual is intended to complement the existing BMP Manual II. While BMP Manual II establishes minimum BMP standards for development projects and construction activities, the Encinitas Stormwater Manual defines implementation policy and procedure by which to plan, select, design, construct, and ultimately maintain required stormwater BMP facilities in the City of Encinitas. Complete versions of the updated BMP Manual II and the new Encinitas Stormwater Manual are available on the City's Clean Water Program webpage at http://cwp.cityofencinitas.org.

2.4.4.2 DEVELOPMENT PROJECT APPROVAL PROCESS

The following section includes a summary of the City's updated development review process which has been implemented since the adoption of the Encinitas Stormwater Manual (local SUSMP).

DISCRETIONARY PROJECTS

Projects requiring a discretionary permit are subject to a three-tier review process that includes an initial predevelopment review prior to submittal to the City, a written self-certification of the BMP requirements for the project, and the application of project conditions of approval to meet storm water pollution control requirements. Those projects requiring an additional, ministerial permit are also subject to engineering plancheck review as described in the Ministerial Project section.

Predevelopment Process

The stormwater element of the predevelopment process is geared toward disseminating information on stormwater pollution control and the City's SUSMP requirements. During this preliminary design phase, engineers and applicants are guided by City staff to provide adequate post-construction BMP facilities in conceptual form and to document those facilities on the site plans upon the initial discretionary permit application submittal. This process results in better designed and integrated post-construction BMPs, since the facilities are included in the project design even in the earliest phases of the project.

Priority Projects (defined by the City of Encinitas as those projects subject to SUSMP requirements), which require more stringent stormwater pollution control methods, are first

identified during the predevelopment process. The categories of development falling under the Priority Project classification can be found in the Encinitas Stormwater Manual and are consistent with the requirements of the Municipal Permit. During the predevelopment meeting, applicants proposing Priority Projects learn that they must implement LID and source control BMPs and must install treatment control and hydromodification BMPs which meet the numeric sizing criteria required by the Municipal Permit. City staff also informs applicants at the predevelopment meeting that installed post-construction BMP facilities must be maintained in good working order into perpetuity. City staff and the applicant and/or engineer discuss options for meeting the numerical post-construction treatment requirements, including volume-based systems and flow-based systems. The applicant is also directed to follow the guidelines detailed in the Encinitas Stormwater Manual when designing post-construction BMPs and submitting plans and documents to Engineering for review. In Encinitas, mechanical treatment systems are discouraged and when accepted may only account for a maximum of 50% of the treatment requirement, with the remainder of the treatment being provided by a natural system.

Stormwater Pollution Control Checklist and Certification

All development project applicants are required to complete a written self-certification of the post-construction BMPs proposed with their project. This certification is required to accompany the initial submittal of each discretionary permit application. The checklist walks the applicant through the process of determining whether their project is a Priority Project and outlines the minimum submittal requirements for Priority Project applicants. The checklist is designed to assist applicants in:

- Classifying their projects as Priority, Standard, or Exempt from SUSMP.
- Determining whether or not the Project must meet HMP requirements.
- Certifying that their project will be designed, constructed, and maintained in conformance with the City's stormwater quality requirements detailed in the Encinitas Stormwater Manual.

The stormwater checklist must be completed by the party responsible for the development project and submitted with the project's permit applications. The stormwater checklist is an appendix of the Encinitas Stormwater Manual. In FY 2010-11 a supplemental HMP checklist was developed to assist applicants in determining whether their project must meet HMP requirements. A copy of the SUSMP and supplemental HMP checklists are provided in this annual report as Appendix A-10 and Appendix A-11.

The Development Review Process

The Engineering Department has established specific Conditions of Development Approval to assure compliance with the City's stormwater pollution control standards. These conditions include construction requirements as well as post-construction BMP standards for effective stormwater pollution control facilities. Once the predevelopment meetings are conducted and the stormwater checklist has been completed, the applicant must follow the requirements established in the Encinitas Stormwater Manual when designing stormwater controls for the proposed project. Once the proposed plan is submitted, the Engineering Department reviews the adequacy of the project's proposed stormwater facilities shown on the site plan and issues

Conditions of Approval to ensure implementation of satisfactory LID, source control, and treatment control BMP measures. The Conditions of Approval take into account the nature of each project site and the work proposed. The Conditions of Approval are then recorded in a covenant against the property.

Applicants not showing adequate construction or post-construction BMP measures on their initial development review submittals are asked to revise their plans and resubmit prior to approval. Stormwater pollution control facilities for Standard projects must meet the minimum requirements established in the Encinitas Stormwater Manual. Priority Projects must additionally show LID, source control, and treatment control BMPs on the project plans. In addition, Hydromodification Management requirements must also be met, unless the project is determined to be exempt from HMP. The project plans must show a feasible solution with substantiating calculations for numerically-sized treatment control BMPs. The process of designing appropriately sized treatment control BMPs is detailed in the Encinitas Stormwater Manual, which is available to all applicants through the City website.

MINISTERIAL PROJECTS

Projects requiring a ministerial permit such as a grading, improvement, or building permit are also required to include post-construction stormwater pollution control facilities in the project design. These BMP facilities must be considered adequate before the project's plans are approved by Engineering staff. Often the project has been scrutinized at the discretionary permit level and the project is already conditioned to provide specific treatment facilities. For those projects not requiring a discretionary permit, the review of the storm water pollution control treatment facilities begins at the Engineering plancheck stage.

The Plancheck Process

City plancheck engineers are trained in the design of stormwater pollution control facilities and serve as resources to the general public and to design engineers. During the plancheck process, every project is reviewed for stormwater construction and post-construction BMPs.

Every plan in plancheck is initially reviewed to determine if it meets the City's definition of a Priority Project. In addition to meeting standard BMP requirements, Priority Projects must provide LID, source control, and numerically-sized treatment control BMPs as required by the Municipal Permit and the Encinitas Stormwater Manual (City's local SUSMP). Hydromodification Management requirements must also be met, unless the project is determined to be exempt from HMP.

The Encinitas Stormwater Manual details the process which must be followed in order to design proposed stormwater treatment control facilities for Priority Projects. The manual also identifies specific design details and documents which must be submitted for review by the City's plancheck engineers. The Encinitas Stormwater Manual and City plancheck engineers emphasize to applicants the variety of natural solutions that may be used in providing stormwater pollution control. Any areas used as post-construction BMPs must be clearly marked on the project plans along with the following associated note: "Stormwater Best Management Practice to be privately maintained and not to be modified without a permit from City". The permitted drawing will become public record; therefore documentation of the

designated treatment areas is maintained. Engineers are also required to complete the Sources and Source Control BMP Checklist and incorporate all of the applicable permanent controls and operational BMPs into the project plans. Potential source control BMPs may include stormwater education, materials storage, erosion control, and waste management in order to meet the minimum SUSMP requirements.

All Priority Projects must comply with the numeric sizing criteria for treatment control BMPs in order to be approved by the City Engineer. Plancheck engineers review the project's hydrology calculations to determine the adequacy of the treatment system proposed. The project applicant is required to assume maintenance responsibility and identify the maintenance mechanism for the treatment system prior to project approval. A covenant ensuring adequate maintenance into perpetuity is recorded against the property. Those projects with the potential for substantial erosion are often required to provide an additional plan for permanent landscaping and irrigation and to place bonds with the City to guarantee successful implementation of the measures shown thereon. Such bonds are retained until all components of the project have been completed (including installation of treatment control BMPs) and the landscaping has become fully established.

During the plancheck process, erosion control plans are also carefully reviewed to ensure compliance with construction BMP measures. Gravel bags, silt fences, stabilized construction entrances, and other methods must be provided where appropriate. Inlets to drainage facilities must be protected from sediment. Additionally, all exposed slopes need to be protected by a combination of hydroseed, permanent landscaping, and other erosion control measures. For more information regarding temporary construction BMPs, refer to Section 3 of this document.

Post-Construction BMP Maintenance Agreements

All Priority Projects under review for ministerial permits must execute a stormwater maintenance agreement guaranteeing the maintenance of permanent BMPs as necessary into perpetuity. The maintenance agreement or covenant includes an attachment depicting the location of specific project BMPs and their detailed maintenance requirements. The agreement is then recorded against and runs with the property. The City of Encinitas has developed, and included as an appendix in the new Encinitas Stormwater Manual, template maintenance agreements for a variety of project ownership scenarios including single family homeowners, Home Owners Associations (HOAs), agents, or commercial entities.

CAPITAL IMPROVEMENT PROJECTS

The City's Capital Improvement Projects (CIP) are subject to the same post-construction BMP requirements as private development. Because many projects are redevelopment, linear, or repair projects, often only construction BMPs are necessary. However, qualifying Priority SUSMP projects must also install post-construction BMPs. Priority CIP Projects are designed to incorporate LID, source control, treatment control BMPs, and hydromodification management measures as required by the Municipal Permit and detailed in the Encinitas Stormwater Manual. The City takes responsibility for long-term maintenance and regular inspection of any installed permanent BMPs. Section 4 of this document provides a description of the City's MS4 maintenance and inspection program.

2.4.4.3 SUSMP PROJECT APPROVAL

During the planning process and prior to project review, the **7** projects listed in Table 2-1 were identified as Priority SUSMP Projects and approved during FY 2011-12. All applicable SUSMP and HMP BMP requirements specified in the City's local SUSMP were applied to each of the projects in Table 2-1. As detailed in Table 2-1, all of the development projects approved in FY 2011-12 were individually reviewed for applicability of Hydromodification Criteria and HMP sizing criteria was required to be met if the project was HMP applicable. All treatment control BMPs met the treatment control BMP sizing requirements outlined in the City's local SUSMP; therefore, the City did not initiate a waiver mitigation program and did not issue any waivers of infeasibility during FY 2011-12.

Table 2-1
SUSMP Priority Projects approved in FY 2011-12

Permit No.		Location	Development Type	Approval Date	HMP Applicability
10598	G	Normandy St and Urania Ave	Redevelopment	12/12/2011	HMP Exemption – Project does not increase the pre-project impervious surface or peak flows at any discharge location.
10839	G	354 Santa Fe Dr	Redevelopment	12/20/2011	HMP Applicable
11112	G	905 Orpheus Ave	New Development	2/6/2012	HMP Applicable
11073	G	194 N El Camino Real	Redevelopment	3/28/2012	HMP Exemption – Project does not increase the pre-project impervious surface or peak flows at any discharge location.
11147	G	934 N Coast Hwy 101	Redevelopment	4/17/2012	HMP Exemption – Project does not increase the pre-project impervious surface or peak flows at any discharge location.
11182	G	400 B Street (Moonlight Beach Redevelopment)	Redevelopment	4/18/2012	HMP Exemption – Project does not increase the pre-project impervious surface or peak flows at any discharge location.
10630	G	425 Santa Fe Dr (Encinitas Community Park)	Redevelopment	5/4/2012	HMP Exemption – Project does not increase the pre-project impervious surface or peak flows at any discharge location.
11249	G	1550 Leucadia Blvd	Redevelopment	6/6/2012	HMP Exemption – Project does not increase the pre-project impervious surface or peak flows at any discharge location.

In FY 2011-12, most of the projects that were approved were redevelopment projects in which existing buildings, pavement or other impervious surface previously existed on the site. The redevelopment of a greenhouse property located on Normandy Street and Urania Avenue provides a good example of the typical Priority SUSMP projects that are permitted by the City of Encinitas. The development will convert the land from agricultural use to residential use. The proposed project will consist of removal of covered growing facilities, installation of three new cul-de-sac streets, and construction of 23 single family homes. Since the project was located on a previously developed site and plans included replacement of more than 5,000 square feet of impervious area, the project was determined to be a SUSMP Priority Project. The project did not create any additional impervious area greater than the impervious area in the pre-project condition; therefore the project was exempt from HMP requirements. To meet Treatment Control requirements, three large bioretention areas were incorporated into the design of the project. These bioretention areas have been situated on the site plan to collect and treat runoff from the streets and the rooftops of the homes prior to the runoff entering the storm drain system. All Treatment Control BMPs were designed accordance with the new SUSMP requirements established in the Encinitas Stormwater Manual.

2.4.4.4 SUSMP PROJECT AND TREATMENT CONTROL BMP TRACKING

In FY 2007-08, Clean Water Program staff worked with GIS staff to implement a comprehensive watershed-based SUSMP tracking system. The GIS data management system was designed to track the SUSMP Priority Projects and the long-term maintenance of all approved treatment control BMPs installed at development sites. As required by the Municipal Permit, the database is capable of tracking the following information:

- Type of treatment control BMP
- Location of the BMP
- Watershed within which the BMP is located[1]
- Date of construction of the BMP
- The party responsible for maintenance of the BMP
- Maintenance certifications or verifications
- Inspection findings
- Any corrective actions issued

Since the initial introduction, the City has been working to continually refine The Treatment Control BMP database, and new projects with treatment control BMPs are added to the database on a routine basis. Database improvements are a result of a thorough review of plans for proposed and built projects, a quality check of the existing data, and coordination with the GIS department. A hardcopy version of the most current inventory of treatment Control BMPs in the City's SUSMP Project and Treatment Control BMP Database is available in Appendix A-1. The inventory includes all operational treatment control BMPs installed at SUSMP priority projects. For a map of all the SUSMP Priority Development Projects approved within the City of Encinitas, refer to Appendix A-2.

[1] The entire City of Encinitas is within the Carlsbad watershed.

With the aid of the City's Treatment Control BMP Inspection Priority flowchart (see Appendix A-3), all development projects with approved treatment control BMPs were prioritized as high, medium, or low Threat to Water Quality (TTWQ) during the 2008 JURMP update, as required by the Permit. In addition, prioritization of each BMP was further refined during subsequent annual Operation and Maintenance Inspections and review of Self-Verification submittals. For new projects with treatment control BMPs that are added to the inventory, prioritization of the project occurs during the first treatment control BMP inspection. When the construction of a new project with treatment control BMPs is completed, the City requires that the treatment control BMP(s) are inspected within the first year and prior to the next rainy season in order to determine prioritization for future inspection frequency. This allows the City to determine TTWQ based on a visual inspection of the project as well as the following criteria:

- Type of project
- Sensitivity of the receiving water body
- Proximity to ESAs
- Size of the BMP
- Recommended maintenance frequency
- Likelihood of operational and maintenance issues associated with the BMP(s)
- Location of the BMP(s)
- Other pertinent factors

The BMP Inspection Priority flow chart addresses basic site and treatment control BMP characteristics that can influence a site's TTWQ such as receiving water body sensitivity and the removal efficiencies of the installed treatment controls. Note that not all development projects and treatment control BMPs are the same; each may have unique water quality risks associated with it. The City considered additional relevant factors beyond those included in the flow chart as necessary.

2.4.4.5 BMP INSTALLATION VERIFICATION

Beginning in January 2008, the City of Encinitas began tracking the verification of post-construction BMPs that were installed on projects throughout the City. Upon project completion, the engineering inspector now requires that the project engineer submit a grading certification letter to the City verifying that all the Low Impact Development, Source Control, and Treatment Control Best Management Practices, as shown on the approved project plans and required by the Encinitas Stormwater Manual, were constructed and are operational, together with the required maintenance covenant(s).

A sample grading certification letter is provided as Appendix A-4. Table 2-2 provides a list of the BMP verifications conducted for priority development projects completed in FY 2011-12.

Table 2-2
BMP Verifications for Priority Development Projects
Completed in FY 2011-12

Permit No.		Location	Construction Date
10115	G	350 Cole Ranch Rd	3/13/2012
9590	G	721 N Vulcan Ave	2/8/2012
10211	G	211 Saxony Rd	7/26/2011
10375	G	1010 N El Camino Real	2/15/2012

Subsequent to the submittal of the grading certification letter, engineering inspection staff inspect the project site to verify that LID, source control, and treatment control BMPs proposed for the project were constructed in compliance with all approved plans, City permits, and ordinances. Inspections of Priority Project sites prior to occupancy allow the City to verify that all BMPs are in place before any anticipated pollutants associated with the occupied site are generated. Engineering inspectors also check to ensure that BMPs have been built according to plans before signing off on each stage of construction. The inspectors use the project's grading plans to identify any missing or incorrectly installed BMPs and deny approval for sites with observed problems. If the engineering inspector is satisfied that the post-construction BMPs were installed as required, the inspector verifies the project engineer's letter with their signature and a date and takes photos of the completed BMP installation. Hardcopies of these signed and certified verification letters and the photos of the BMPs are retained by the Clean Water Program.

2.4.4.6 ANNUAL TREATMENT CONTROL BMP OPERATION AND MAINTENANCE SELF-VERIFICATION

As required by the new Municipal Permit, all treatment control BMPs installed at development projects must be self-verified annually and maintained in perpetuity by a responsible party. As part of the JURMP update, the City of Encinitas established a Treatment Control BMP Operation and Maintenance Self-Verification Program.

During FY 2007-08, Clean Water Program staff prepared the essential elements of the Treatment Control BMP Operation and Maintenance Self-Verification Program. First, a comprehensive list of mailing addresses for completed projects with treatment control BMPs was pulled from the newly developed SUSMP Project and Treatment Control BMP GIS Database. Then, a formal letter was developed to notify property owners of their verification responsibility. An informative Treatment Control BMP brochure was also created to help property owners identify the BMPs that were installed as a part of their development project. Finally, a self-verification form was developed for responsible parties to use to report annual verification of Operation and Maintenance of their treatment control BMPs. In FY 09-10 and FY 10-11, the BMP verification letter was updated in an effort to promote a greater inspection response rate and

self-verification return rate. An example of the updated verification letter, brochure, and form can be found in Appendices A-5, A-6, and A-7, respectively. In some cases additional notifications were required in order to get responsible parties to submit their inspection certification and documentation.

In FY 09-10, in an effort to further improve the self-verification response rate the City developed a webpage and on-line form which responsible parties may use to submit their self-verification documentation. The webpage provides responsible parties with information about the TC BMP Operation and Maintenance Program and allows them to update their ownership and mailing information, certify that their BMPs were annually inspected, maintained and are operational and upload photos and maintenance documentation. The City's Information Technology department has ensured security of personal information by creating a unique Personal Identification Number (PIN) for each responsible party, allowing secure access to property specific BMP information.

In FY 2009-10, the City determined that only those projects that were not designated as requiring a City inspection of their BMPs would be required to conduct a self-verification of their BMPs and submit self-verification documentation. It was reasoned that it would be redundant to require those responsible parties who were already receiving an inspection of their BMPs by City staff to also have to conduct a self-verification. When conducting an inspection, City staff thoroughly assesses the condition of all BMPs on a site and typically the responsible party is present when the inspection is conducted, providing an opportunity to educate the property owner about the function of the facilities on site and their obligations to maintain and preserve them. If deficiencies are identified, corrective actions are noted on the inspection form, and the responsible party is required to complete corrective actions by a specified deadline. Additional detail regarding the City's Treatment Control BMP Operation and Maintenance Inspection Program can be found in Section 2.4.4.7.

All required self-verifications must include an evaluation of all treatment control BMPs by the party responsible for maintenance prior to the start of the rainy season. Within the defined reporting period of this report, the City mailed annual self-verification notifications to each party responsible for the maintenance of treatment control BMPs constructed within the City of Encinitas who was not scheduled to receive a City inspection. The notification package included a letter informing the responsible parties of their inspection and maintenance obligation and a brochure which explains the program and provides examples of common BMPs. Responsible parties were directed to complete the self-verification form online and upload photos showing that all BMPs on their property have been maintained and are in good working order.

Self-Verification Results and Findings

FY 11-12 was the fourth year of implementation of the Treatment Control BMP inspection and maintenance program. The City mailed out a first and second notification reminding responsible parties of their inspection and maintenance obligations. 80% of the parties submitted their self-verification documentation after one or two notifications. This is a signification improvement from the results of past years. Fifteen BMP owners did not submit their self-verification even after receiving two notices (see Table 2-3). In the event that self-

verification documentation was not submitted, City staff made every attempt to conduct a City Inspection in lieu of a Self-Verification and followed-up with a final advisory notice of non-compliance. A total of **3** City Inspections were completed in lieu of Self-Verification. Copies of the three BMP Operation and Maintenance verification letters issued to responsible parties in FY 11-12 may be found in Appendices A-5a, A-5b, and A-5c.

Table 2-3
Summary of Notifications Sent and Self-Verification Submittals Received

Action	Total
Self-Verification Notifications Issued:	80
Self-Verification Submittals Received:	64
City Inspections conducted in lieu of Self-Verification:	3
Non-Responsive Responsible Parties:	12

Upon receipt of a self-verification packet from responsible parties, City staff reviews the completed forms and the required photos and maintenance documentation (if any). Staff determines whether the information is complete or if any further maintenance is required. For a detailed summary of the results and findings of FY 2011-12 treatment control BMP inspections see Appendix A-8. Appendix A-8 includes detailed information about each project, such as project location, inspection date, inspection results, and any City action. As a result of the Self-Verification program (Section 2.4.4.7), there were **9** properties with treatment control BMPs that warranted enforcement action. For a summary of enforcement action, refer to section 2.4.4.8.
The defined reporting period of this report represents the fourth year of implementation of the Permanent BMP Self-Verification Program. City staff continued the use of the online submittal form that was offered to responsible parties as an option to submitting their self-verification documentation. This provided responsible parties with four submittal options—online, email, regular mail, and hand delivery to City Hall. The online form is the preferred submittal option in the notices that were issued to responsible parties and a majority of self-verification forms were submitted via the online form. Since this was the fourth year of implementation, the BMP and Priority Project inventories were more complete due to previous year's efforts to validate current contact information and inform property owners of their maintenance responsibilities and submittal requirements. As detailed in Tables 2-3 and 2-4, the City's implementation process was generally successful.

Table 2-4
Summary of Self-Verification Results and City Actions

Self-Verification Results	**Frequency**
All BMPs in Good Condition	57
Maintenance Conducted or Follow-up Required	10
Non-responsive Owner	13
City Actions	**Frequency**
Submittal Information Validated	61
City Inspected	3
Other City Actions (see Appendix A-8)	16

2.4.4.7 TREATMENT CONTROL BMP OPERATION AND MAINTENANCE INSPECTIONS

During FY 2007-08, Clean Water Program staff developed the City's new Treatment Control BMP Operation and Maintenance Inspection Program. New inspection forms were created, and the Treatment Control BMP inventory database was designed and quality checked. For a detailed description of the development of the GIS-based Treatment Control BMP Inventory and Tracking system refer to Section 2.4.4.4. Notably, unique to the development dynamic of the City of Encinitas, a large number of inventoried BMPs exist on private, single-family residential lots. Therefore, the City of Encinitas Treatment Control BMP Operation and Maintenance Inspection program was developed with this condition in mind.

In FY 2011-12, as required by the Municipal Permit, 100% treatment control BMPs installed at high priority development projects, at least 50% of the medium priority development projects, a minimum of 20% of the total number of projects with approved treatment controls, and a maximum of 200% of the average number of projects with treatment control BMPs approved per year were inspected by the City's inspection staff prior to the rainy season. Implementation of the City's BMP Inspection Program was very effective. The City met, and in most cases far exceeded, all the inspection requirements outlined in Section D.1.e. of the Municipal Permit.

As of July 1, 2011, there were a total of **87** constructed Priority SUSMP projects (7 high, 39 medium, and 39 low priorities) on the City's treatment control inventory (See Appendix A-1). With **13** Priority SUSMP projects approved in FY 2010-11, there was an annual average of **12** projects with treatment control BMPs completed since permanent BMPs were first required on Priority Development Projects in 2003 (see Table 2-5). A total of **40** projects (7 high, 21 medium, and 12 low priorities) with approved and constructed treatment control BMPs were inspected in FY 2001-12. This amounted to **100%** of the high priority sites, **54%** of the medium priority sites, **31%** of the low priority sites, **46%** of the total number of constructed Priority SUSMP sites, and **337%** of the average number of projects with treatment control BMPs approved per year that were inspected in FY 2011-12 (see Table 2-6). In addition, **54%** of the projects with drainage inserts were inspected in FY 2011-12.

Table 2-5
Average Number of Constructed Projects with Treatment Control BMPs

Fiscal Year	Completed Projects
2004-05	6
2005-06	8
2006-07	14
2007-08	15
2008-09	12
2009-10	15
2010-11	13
Average	12

When inspections are conducted in future years, inspection frequencies will be based on the project's assigned TTWQ priority as determined by City staff in FY 2008-09 or assessed during future treatment control inspections, and the criteria outlined in Section 2.4.4.4 of this document. Table 2-7 below presents treatment control BMP TTWQ priorities and their corresponding inspection frequencies.

Table 2-6
Treatment Control BMP Inspection Frequencies

Development Project with Treatment Control BMPs TTWQ	Permit Mandated Inspection Frequency	FY 2011-12 Inspection Frequency
High	Annually (prior to start of rainy season)	100%
Medium*	50% annually	54%
Low	As needed	31%

*Drainage insert controls are considered medium priority BMPs

FY 2011-12 inspections included an examination of all treatment control BMPs at the site to verify that each treatment control BMP was working, being maintained properly, and was in compliance with all applicable City ordinances and permits. Inspection findings were documented by the inspector using the Treatment Control BMP Inspection Form (Appendix A-9). If any deficiencies in operation and maintenance were noted during the inspection, the responsible party was notified and appropriate enforcement actions were taken (as described in Section 2.4.4.8 of this document) to achieve compliance.

Because the majority of the treatment control BMPs installed in the City of Encinitas are on single-family residential lots, great care was taken to educate homeowners of their maintenance, inspection, and self-verification obligations. As noted in section 2.4.4.6, packages mailed to responsible parties included information detailing the BMP operation and maintenance program. When working with homeowners, City stormwater staff devoted personal,

specialized assistance as warranted in order to improve knowledge and awareness and achieve compliance.

For a detailed summary of the results and findings of the FY 2011-12 treatment control BMP inspections see Appendix A-8. Appendix A-8 contains information about each project, such as project location, inspection date, inspection results, and additional City action. Depending on the findings during the course of initial inspections, follow-up inspections were conducted and enforcement action was taken as necessary. For a detailed summary of enforcement action taken as part of the treatment control BMP inspection program, refer to section 2.4.4.8.

Treatment control BMPs that are operated and maintained by the City are considered part of the City's MS4 and are maintained and inspected by Public Works staff on an annual basis. BMPs that are located in specialized public facilities such as parks and libraries may be inspected by City stormwater staff and maintained as necessary by City staff. For more information regarding the maintenance and inspection of the City's MS4 refer to Section 4 of this document.

2.4.4.8 ENFORCEMENT MEASURES FOR DEVELOPMENT SITES

As required by the Municipal Permit, and depending on the severity of the violation, the City enforces its storm water ordinance for all development projects and permanent BMPs as necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. A more detailed description of the different enforcement measures used by the City to enforce its storm water regulations and their legal basis can be found in Section 2 of the 2008 JURMP update document.

As a result of post-construction treatment BMP verification inspections and self-verification results, the City determined that **9** self-verification projects and **one** inspected projects were partially or totally deficient in the installation and or maintenance of post-construction BMPs. Of the total enforcement actions taken 8 were written notices for failure to maintain BMPs or failure to respond to requests for inspection information. Further enforcement action was necessary for two properties; both received written notices of violation. By the date of writing this report one of the Notices of Violation is still pending corrective action. The responsible party has completed most of the corrective actions and is in coordination with the Department of Engineering design review staff to complete and install a solution that is satisfactory to the City.

3.0 CONSTRUCTION

3.1 INTRODUCTION

The purpose of the City's construction component is to maintain an updated inventory of all construction projects, identify pollutant sources from construction projects, educate the construction community, implement construction site Best Management Practices (BMPs), inspect construction sites, provide proper enforcement of violations, and implement all of the requirements of the Municipal Permit as outlined in Section D.2.

3.2 SOURCE CHARACTERIZATION

3.2.1 SITE INVENTORY

Within the defined reporting period of this report, the City of Encinitas has compiled, maintained, and updated a watershed-based inventory of all construction sites within its jurisdiction. The construction inventory for FY 2011-12 included a total of **111** construction sites. During this period, there were **11** high priority sites that were inspected biweekly, **33** medium priority sites that were inspected monthly and **67** low priority sites that were inspected on a biannual basis. The City utilizes an industry standard Geographic Information System (GIS) to maintain an accurate and up-to-date inventory of all construction projects. The GIS inventory includes details on each construction site, including project name, location, sub-basin, type of construction permit, date of permit issuance, inspection prioritization, and the assigned storm water inspector. The City's Clean Water Program staff, in coordination with the City's IT department has designed a technical solution in GIS to inventory and prioritize all construction projects as permits are approved. A more detailed description of the prioritization process is provided below in Section 3.2.2. A fully prioritized construction inventory can be found in Appendix B-1 in addition to a map of all active construction sites located in Appendix B-2.

3.2.2 INVENTORY UPDATES

As required by Section D.2.b of the Municipal Permit the City's watershed-based inventory of construction sites is updated weekly by the Engineering department as new grading permits are approved. The Engineering department shares all approved permit information with the City's IT Department which also maintains an updated inventory of all active construction projects in a GIS database. As part of the 2008 Jurisdictional Urban Runoff Management Plan (JURMP) update process, and to ensure monthly construction inventory management, a construction specific GIS script was developed by the City's GIS staff in ESRI's ArcMap for prioritizing approved construction permits. This mechanism remains an efficient and effective tool in maintaining a current construction inventory, and is accessible via desktop to Clean Water Program staff to execute the GIS script and review the prioritizations on a monthly basis. Regular updates to the inventory include the addition of new construction projects, the removal

of completed construction projects, and re-assignment of inspection frequencies of active construction sites as determined by the City's Clean Water Program staff. A flow-chart that outlines the process by which the inspection frequency of construction projects is determined in GIS can be found in Appendix B-3.

3.3 ORDINANCE UPDATES

As required by Section D.2.a of the Municipal Permit, applicable City documents and ordinances were updated on March 12, 2008 by the City of Encinitas City Council to establish adequate legal authority to enforce applicable storm water requirements. As part of the comprehensive JURMP update completed in March 2008, the City also updated Municipal Code Section 20.08, the Watercourse Protection, Stormwater Management and Discharge Control Ordinance, including construction specific provisions. The City's legal authority related to construction activities was further strengthened on February 25, 2009 when the City Council adopted a revised Grading Ordinance, EMC Section 23.34. Subsequently, the California Coastal Commission approved the adopted changes and the following provisions for storm water pollution control have been incorporated into the City's grading ordinance:

- All grading permits shall comply with the provisions of the City's Best Management Practices (BMP) Manual Part II which provides design, construction, and operation requirements for minimizing storm water pollution related to construction activities (§ 23.24.071).

- Any removal of BMPs that were required for a priority project will require a grading permit for corrective or other action. A requirement may be imposed to replace the BMP with equivalent water quality protection (§ 23.24.080).

- Priority projects for storm water pollution control cannot be exempted from obtaining a grading permit (§ 23.24.090.I).

- Any project creating over 500 square feet of new impervious area has to obtain a construction permit and adhere to all standards in the City's BMP Manual Part II (§ 23.24.105).

- All grading plans shall contain the location, design, detail, and cross section of all erosion control and post construction BMPs (§ 23.24.140).

- If the approved grading plan does not show post construction BMPs in sufficient detail, a precise grading plan for development projects is required to include and accurately depict post construction BMPs for review and approval of the City Engineer (§ 23.24.126).

- Both Interim and Final Erosion and Sediment Control Plans are required (§ 23.24.150, 23.24.160).

- A waste management plan is required to be submitted with all interim erosion control plans. The management of the waste on the construction site must be graphically and verbally described on the grading plan (§ 23.24.150F).

3.4 BEST MANAGEMENT PRACTICE REQUIREMENTS

3.4.1 UPDATED BMP REQUIREMENTS

Through the JURMP update process completed in March 2008, the City reviewed and updated a set of minimum BMPs that must be implemented at all construction sites. Every construction site within the City's jurisdiction is required to implement general site management BMPs and erosion and sediment control BMPs to reduce, retain, and manage pollutant discharges to the Maximum Extent Practicable (MEP). Construction BMP requirements are presented in the Encinitas Municipal Code Chapter 20.08, the City's Storm water Best Management Practices Manual, Parts I and II, and the City of Encinitas' 2008 JURMP Update.

3.4.1.1 SEASONAL SITE MANAGEMENT REQUIREMENTS

Construction sites are required to implement minimum construction BMPs to prevent pollution discharges to the MEP regardless of the season. However, the City also maintains requirements for erosion and sediment control BMPs that are different for the wet season (October 1st – April 30th) than they are for the dry season (May 1st – September 30th). The City's Storm Water Manual Parts I and II provide a detailed list of dry and wet season requirements for all construction sites. Prior to the beginning of the wet season, in September 2011, the City sent **79** Erosion Control letters which included a copy of the City's Municipal Code Sections outlining erosion and sediment controls in wet weather conditions and an educational brochure "A Pollution Prevention Guide for the Construction Industry," to all property owners with active and inactive construction sites in the city (See Appendix B-5).

3.5 PROGRAM IMPLEMENTATION

3.5.1 CONSTRUCTION AND GRADING APPROVAL PROCESS

The City has established a thorough interdepartmental review and approval process for local construction and grading permits. When a construction project comes to the City for approval, it is required to obtain a building permit, a grading permit, or both. A grading permit is required prior to any activity where the total volume of material disturbed, stored, disposed, or used as fill exceeds 50 cubic yards, obstructs a waterway, or occurs over an area of 10,000 square feet. All other projects require a building permit. Both grading and building permits require that plans be submitted and approved by the City. The City's grading ordinance requires that all projects, whether subject to a grading plan or not, are required to minimize site runoff, erosion, and sedimentation. In addition, all

projects requiring a grading permit are required to prepare an erosion and sediment control plan. All permits that go through the City's review and approval process are tracked within a citywide data management system called "HTE".

The grading permit outlines the regulatory (Federal, State, and City) conditions for new construction. The grading permit requires that grading plans be prepared, reviewed, approved, and signed by the City Engineer. As a part of this approval process, the City's Clean Water Program staff may review the grading plans when necessary to ensure compliance with applicable construction specific regulations.

The grading plan approval process consists of a series of plan checks, revisions, and final approvals. Engineering staff reviews the plans for overall compliance with the grading ordinance and for specific compliance with the Storm Water Management Ordinance and Federal and State regulations. If the site falls under jurisdiction of the State's Construction General Permit (CGP) Order No. 2009-0009-DWQ, Engineering staff follows up with the developer to ensure that a Storm Water Pollution Prevention Plan (SWPPP) is properly prepared and submitted. The City also requires proof that a Notice of Intent (NOI) has been issued for sites that are subject to the CGP.

Prior to issuing construction and grading permits, the City's Engineering Department verifies that the proposed construction project plans to implement all applicable required BMPs to reduce pollutant discharges to the MEP. It should also be noted that the general notes for building plans have been amended to include erosion control, sediment control, and materials management practices.

Projects that are generated by the City's Capital Improvement Program (CIP) follow a similar process as the private development projects outlined above. City initiated projects require the use of a Qualified SWPPP Developer (QSD) for the preparation of Storm Water Pollution Prevention Plans (SWPPP) when the project falls under the jurisdiction of the CGP. The City also assures that an NOI is submitted for all sites that are subject to the CGP. During the construction phase of capital projects, contractors are also required to secure the services of a Qualified SWPPP Practitioner (QSP) to assure that CGP requirements are followed. In supplement to contractor required compliance assurance responsibilities, all CIP sites are inspected by City Engineering Inspectors as well as Clean Water Program staff to assure compliance with local standards throughout the life of the project.

3.5.2 BMP IMPLEMENTATION

Clean Water Program staff spends a significant amount of time coordinating storm water management and BMP implementation at construction sites with the help of the City Engineering Inspectors. Construction BMP requirements are presented in the Encinitas Municipal Code Chapter 20.08 and the City's Storm Water Best Management Practices Manual, Parts I and II.

Clean Water Program staff constantly monitors weather patterns and storms in the Pacific through the National Weather Service. Weather reports and forecasts are emailed to all Engineering Inspectors to inform them of the possibility of incoming rain. When the forecast exceeds 40% over the coming five-day period, inspectors inform contractors that additional BMP implementation, maintenance, or replacement should take place, and where necessary, they require responsible parties to have additional BMPs in place at the end of each work day.

Through the review and plancheck process, and supported by the "Watercourse Protection, Stormwater Management and Discharge Control Ordinance," staff maintains the authority to require additional or alternative BMPs to be implemented on individual projects as determined necessary. This allows the Clean Water Program to ensure that the proper sediment control, erosion control, and materials management BMPs are shown on the plans and are to be implemented on-site.

3.5.3 CONSTRUCTION SITES REQUIRING ADVANCED TREATMENT

There were no sites in FY 2011-12 that required advanced treatment. For the majority of the construction sites within the City's jurisdiction, the minimum required BMPs, if correctly installed and maintained, adequately control sediment discharges from the site. If it is determined by the new statewide CGP that a project possesses characteristics that could result in standard construction BMPs being ineffective in the treatment of sediment, resulting in an exceptional Threat To Water Quality (TTWQ), an Active Treatment System (ATS) will be required. Standard criteria for determining projects that pose an exceptional TTWQ and a description of advanced treatment methods are fully described in the statewide CGP.

3.5.4 INSPECTIONS & BMP VERIFICATION

The City has an established inspection program to evaluate compliance with storm water regulations at all construction sites within the City's jurisdiction. The City of Encinitas's Engineering Department employs two full time Engineering Inspectors and two full time contract Engineering Inspectors who are responsible for inspections at all construction sites in the city. Storm water issues such as compliance with the grading and storm water ordinances in the Municipal Code have become one of their main focuses, especially during the wet season.

On January 24, 2008, the RWQCB adopted the 2007 Municipal Permit. Inspection activities for the construction program were updated and implemented at that time to meet the new Municipal Permit requirements as outlined in Order No. R9-2007-0001. During Fiscal Year 2011-12, consistent with required inspection frequencies as outlined in Sections 2.d.1-3 of the Municipal Permit, City staff conducted a total of **202** storm water inspections. Appendix B-1 details the complete Construction Inventory for FY 2011-12, the construction site prioritizations, and the number of inspections conducted at each site.

The Engineering Inspectors captured all construction inspections on a form titled "Storm Water Quality Inspection for Construction Activities", included in Appendix B-4. The inspection form contains questions to ensure all the inspection components required by Section D.2.d.6 of the

Municipal Permit are addressed. The form lists the minimum construction BMPs required by the City and includes check boxes and comment areas to document if BMP installation or maintenance is required or if other corrective actions are necessary. If required BMPs are missing or found to be improperly implemented, appropriate enforcement actions, as described in Section 3.5.5 below are taken.

As part of the 2008 JURMP update process, and codified through BMP Manual II, the City of Encinitas established a maximum disturbed area for grading at 50 acres. Within the defined reporting period of this report, no construction projects in the City of Encinitas were subject to maximum disturbed area or advanced treatment requirements, and therefore no required inspections related to this standard were completed.

3.5.5 COMPLIANCE AND ENFORCEMENT ACTIONS

3.5.5.1 GENERAL ENFORCEMENT

The City is responsible for enforcement of local ordinances and applicable local permits at all construction sites within its jurisdiction. Inspection and enforcement for construction projects is administered by the Engineering Inspectors and other City staff with inspection and enforcement authority.

The City typically employs a tiered, escalating enforcement system which includes verbal warnings and education, written warnings, and administrative citations. However, the City reserves the right to determine the most appropriate enforcement course for a given situation, as dictated by the specifics of each case. For example, a stricter initial enforcement measure may be applied where significant noncompliance is noted or when a potential rain event increases the potential for the violation to have a negative impact on water quality.

Verbal warnings and education will typically be the initial enforcement methods employed, assuming that a) the site or individual does not have a history of non-compliance with storm water regulations, and b) there has not been an observed illegal discharge to the MS4. The inspector will educate the violator on what actions need to be taken to prevent a violation from occurring or to correct the violation and document the violation and verbal warning in the inspection file. A time frame will be given for an identified violation to be corrected, and a follow-up inspection date will be scheduled, which will also be documented.

A written warning is typically issued to violators that are already aware of the City's storm water regulations or to those who have not corrected their actions after being given a verbal warning. Written warnings can be given using a variety of methods, including the issuance of a Notice of Violation (NOV) or Stop / Correct Work Notice. The NOV and Correct Work Notice provide a description of the violation to be corrected, the time frame for correction, and a follow-up inspection date. All Stop Work Notices issued by the City are reported to the RWQCB per the reporting requirements of the Municipal Permit.

Civil penalties for violations of the Encinitas Municipal Code (EMC) are established in EMC Chapter 1.08, and determined violations of storm water regulations may be subject to

administrative citations and associated administrative fines, including those at construction sites. Administrative citations and fines are used in addition to other legal remedies as described in the paragraphs above.

All inspection personnel have the authority to take immediate enforcement actions when necessary. This facilitates timely correction of inadequate BMP implementation, reducing the risk of pollutants discharging from the site. City inspectors conduct follow-up inspections to determine if corrective actions have been taken to comply with City ordinances and minimum BMP requirements. The time frame for a violator to correct a documented violation is determined on a case-by-case basis at the discretion of the inspector.

3.5.5.2 REPORTING AND NON COMPLIANCE

During the FY 2011-12, **21** construction related complaint calls were received through the City's Clean Water Hotline. A total of **21** complaints were investigated by Clean Water Program Staff, there were **16** violations resulting in **17** instances in which educational information was disseminated, **4** instances in which Notice of Violations notices were issued, and **2** instances in which a citation was issued. A complete summary of all construction related complaints can be found in Appendix H-1.

There were an additional **57** correct work notices issued as a result of the routine City inspections at construction sites throughout the fiscal year. With immediate oversight from the City's Engineering Inspectors, contractors were quick to address all complaints and implement the appropriate BMPs to achieve compliance and avoid further enforcement. Appendix B-6 features a summary of all violations and enforcement actions for all routinely inspected construction sites in FY 2011-12.

4.0 MUNICIPAL

4.1 INTRODUCTION

The municipal component of the City's Clean Water Program includes proper management of facilities owned and operated by the City of Encinitas to eliminate or reduce the amount of pollutants that enter the storm drain system. The City maintains streets, the storm drain system, and municipally owned facilities, which includes 17 public parks, 11 parking lots, 6 beach access areas, 6 fire stations, 4 public works yards, 4 administration buildings, 4 open space areas, 3 viewpoints and 1 golf course. The updated municipal facilities inventory is included as Appendix C-1. The City also conducts high Threat to Water Quality (TTWQ) activities, as defined by the Municipal Stormwater Permit, such as power washing and other mobile activities including street and sidewalk repair, building cleaning, painting, graffiti cleaning, and fleet vehicle maintenance. Other prominent water quality related activities include street sweeping, inspections of municipal facilities, educational efforts geared toward municipal personnel and landscaping contractors, annual Municipal Separate Storm Sewer System (MS4) maintenance, and regular upkeep of the sanitary sewer system to prevent overflows.

Due to the large expanse of municipal areas, activities, and functions, City staff must carefully manage pollution prevention measures and Best Management Practices (BMPs) to reduce or potentially eliminate the discharge of pollutants into the MS4 from municipal areas and activities. To comply with the Municipal Stormwater Permit, the City has developed a comprehensive program designed to reduce the amount of pollutants that are transported in urban runoff from municipal areas, activities, and functions.

4.2 ROADS, STREETS, HIGHWAYS, AND PARKING FACILITIES

4.2.1 BACKGROUND

Roads, streets, highways, and parking facilities can collect a variety of pollutants due to routine vehicle use and have a tendency to collect litter and debris from neighboring areas and activities. Regular maintenance is necessary to control pollutants such as sediment, metals, litter, and debris on roads, streets, highways, and parking facilities.

4.2.2 SOURCE CHARACTERIZATION

The City of Encinitas maintains approximately 166 miles of roads, streets, and highways and 11 City owned and operated parking facilities. Roads, streets, highways, and parking facilities are included in the City's municipal inventory, which is included in Appendix C-1.

4.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

Both pollution prevention methods and BMPs are implemented for roads, streets, highways, and parking facilities throughout the City. The City utilizes both the City's BMP Manual Part I and the California Stormwater Quality Association (CASQA) Municipal Handbook to choose applicable BMPs to implement for roads, streets, highways, and parking facilities within the City. Street sweeping and cleaning is the main BMP that is implemented for road, street, highway, and parking facilities (both stand-alone and those associated with a municipal facility) maintenance. Treatment control BMPs used for all roadway projects determined to be priority projects and subject to Standard Urban Storm Water Mitigation Plan (SUSMP) standards, are described in more detail in Section 2.0. The City implements additional controls for roads, streets, highways, and parking facilities adjacent to or tributary to Environmentally Sensitive Areas (ESAs) when determined to be necessary.

4.2.4 PROGRAM IMPLEMENTATION

This section describes the steps that were taken in FY 2011-12 to require and verify the implementation of designated BMPs for all City maintained roads, streets, highways, parking areas, and related activities as outlined in the Municipal Permit Section D.3.a.(5)(a-c).

In compliance with street sweeping standards established in Order 2007-0001, the City implemented an aggressive sweeping schedule for roads, streets, highways, and parking facilities.

The frequency of street sweeping is as follows:

- All arterial roads, streets, highways, and parking facilities identified as consistently generating the highest volumes of trash and/or debris are swept weekly.
- All collector streets and parking facilities identified as consistently generating moderate volumes of trash and/or debris are swept bi-monthly.
- All residential (publicly owned) and parking facilities identified as generating low volumes of trash and/or debris are swept monthly.

In FY 2011-12, a total distance of **9,199 curb miles** was swept, and a total of **2,178 tons of debris** was collected.

The City also maintains parking facilities at six local parks, four local beaches and the Encinitas Community Center. Six parking facilities at the local parks have been identified as generating low volumes of trash, sediment, and debris and are swept monthly from March through September. The Encinitas Community Center and the remaining beach parking lots have been identified as generating moderate volumes of trash, sediment, and debris, and have been assigned a sweeping prioritization of medium priority. The Encinitas Community Center is swept monthly from January through December. The beach parking lots are swept twice a month from January through December. In FY 2011-12, a total of **92.45 tons** of debris was collected from all City maintained parking lots.

In FY 2011-12, the total amount of material collected from both street and parking lot sweeping was **2,270 tons**.

Additionally, in FY 2011-12, the City's Public Works Department through coordinated efforts with Partners with Industry (PWI) collected and removed **224 30-gallon bags** of litter from all of the City's bus stops. The City also partnered with San Diego County probation crews to collect and remove **185 cubic yards** of over-grown vegetation from City right-of-ways based on visual observations and citizen complaints.

4.3 FIXED FACILITIES

4.3.1 BACKGROUND

The City owns and operates a variety of municipal fixed facilities that have been grouped in this section because these facilities receive formal inspections as part of the municipal program. Therefore, the program implementation for these facilities is generally the same. Municipal fixed facilities include the following:

- Parks and Recreational Facilities
- Public Works Facilities
- Potable Water Facilities
- Fire Stations
- Other Fixed Facilities

4.3.2 SOURCE CHARACTERIZATION

The Municipal Permit requires Copermittees to inspect high priority municipal areas and activities annually according to D.3.a.(7)(a). High priority facilities include parks and recreational facilities and other municipal areas and activities that the City determines may contribute a significant pollutant load to the MS4.

As part of the Jurisdictional Urban Runoff Management Program (JURMP) Update process in March 2008, all municipal facilities were assigned an inspection priority based on the Municipal Permit requirements and an evaluation of their threat to water quality. Each site and activity has been evaluated based on a variety of site-specific factors including size, location, type of activity, waste generated, pollutant discharge potential, non-storm water discharges, proximity to receiving water bodies, and any other relevant factors deemed appropriate. Using these criteria, a complete prioritized, watershed based inventory was developed and is included in Appendix C-1.

The City of Encinitas owns, operates, and maintains 56 fixed facilities within the City. Of these facilities, 29 have been designated with a high priority inspection priority and 27 were designated a low inspection priority. All high priority facilities are formally inspected on an annual basis and described further in Section 4.3.4. Both high and low priority facilities are visually inspected on a routine basis by City staff. Any illicit discharges or illegal connections

are immediately referred to the Clean Water Program. All fixed municipal facilities are included in the City's inventory located in Appendix C-1. Figure 4.1 illustrates the various municipal fixed facilities and their associated activities within the City of Encinitas.

Parks and Recreation Facilities

The City maintains 17 public parks, 6 beach access areas, 3 viewpoints, 40 miles of trails, and 70 acres of open space. All landscape maintenance activities are performed through the use of private landscape contractors. Parks and Recreation Department Supervisors are responsible for monitoring contract activities for landscaping which includes; implementing BMPs for pesticide, herbicide, and fertilizer usage, waste removal and control, and maintenance at all municipal parks and recreation facilities.

Public Works Operations Facilities

Public Works operations facilities are important in maintaining the functionality of many publicly offered services. The City of Encinitas maintains a total of four public works facilities, which include the City of Encinitas Wastewater Collection Facility and three public works yards, "A" Tank site, Calle Magdalena and Requeza Street (Appendix C-1).

Potable Water Facilities

The means to provide residents of the City with potable water is an essential activity conducted by the City of Encinitas's San Dieguito Water District. The City maintains an above ground water recycling reservoir, pump station and pressure regulating stations as well as two underground water reservoir/water storage facilities.

Fire Stations

Firefighting capability is an essential element of municipal activities conducted in the City. The City of Encinitas maintains six fire stations, which are included in the municipal inventory (Appendix C-1). Two fire stations within the City, stations #3 and #4, have fueling stations on site.

Other Fixed Facilities

Other fixed municipal facilities include a community center, three administrative buildings, five pump stations, and an Ultra Violet Urban Runoff Treatment Facility (UV Facility). All of these facilities are considered a low priority because many of the activities at these facilities are conducted indoors and do not correspond with activities that are considered a high threat to water quality.

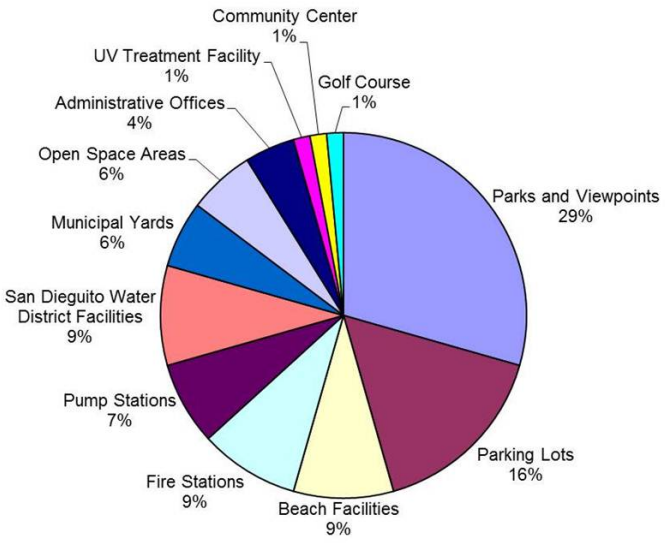


Figure 4.1 City of Encinitas Fixed Facilities

4.3.3 BEST MANAGEMENT PRACTICES

4.3.3.1 UPDATED BMPS

In FY 2007-08, the City established minimum BMPs for various municipal activities at all fixed municipal facilities. The BMPs are outlined in the City's 2008 JURMP Update and the City's BMP Manual Part I. The City also references the CASQA Municipal BMP Handbook when choosing appropriate BMPs for various fixed facility types. More detailed information about BMP implementation at specific facility types is included in the following sub-sections. The City implements additional BMPs as deemed necessary, and implements equivalent BMPs when it is determined that a specific BMP is not feasible at a particular site. In addition to implementing BMPs, the City utilizes pollution prevention measures to reduce or eliminate the amount of pollutants generated from City-owned fixed facilities.

Parks and Recreation Facilities

In FY 2011-12, the City implemented a variety of BMPs to reduce or eliminate the amount of pollutants entering the MS4 from municipal parks and recreation facilities and other open landscaped areas. City personnel implemented general waste management BMPs, and patrons of the facilities were encouraged to recycle and properly dispose of trash and pet waste. Notable activities during the fiscal year included the maintenance of 34 doggie bag dispensers at 10 public parks and along several trails. The City also posted recycling signs along with trash and recycling bag dispensers at 6 beaches during peak holiday weekends throughout the reporting period.

City staff continued operation and maintenance of post-construction BMPs at Cottonwood Creek Park. The park is a prime example of low impact development and includes the following post-construction BMPs: 90 feet of day lighting Cottonwood Creek, porous pavement for all parking areas and driveways, pervious walkways, surface drainage through earthen-bottom open channels, and drought tolerant plants in landscaping areas.

Due to their widespread outdoor use, pesticides, herbicides, and fertilizers can be common pollutants discharged to MS4s. Transport of these pollutants is often a result of the following: (1) runoff from improper irrigation after application; (2) application of chemicals during or prior to storm events; (3) use of chemicals that do not properly absorb to soil or plants; and (4) overspray from chemical applications that may eventually enter the MS4. The City of Encinitas Parks and Recreation Department has prepared and adopted a Policy and Procedures Manual for integrated pest management. Implementation of the policy includes:

- educating and training of staff and contractors on the policy,
- implementing a process of identifying pests and/or problems by site,
- monitoring and record keeping,
- establishing thresholds for pest problems,
- selecting a less toxic treatment, and
- evaluating the success of the treatment.

The Federal Pesticide, Fungicide, and Rodenticide Act and California Title 3, Division 6, Pesticides and Pest Control Operations place strict controls over pesticide application and handling. This Act also specifies training, annual refresher, and testing requirements. The regulations generally include: a list of approved pesticides and selected uses, updated regularly, general application information, equipment use and maintenance procedures, and record keeping. The California Department of Pesticide Regulations and the County Agricultural Commission coordinate and maintain the licensing and certification programs.

In FY 2011-12, the following BMPs were implemented at all municipal parks and recreation facilities, public streets, channels, and right-of-ways to reduce pollution from pesticides, herbicides, and fertilizers:

- Whenever practicable, integrated pest management techniques that rely on non-chemical solutions are implemented.
- City personnel who participate in the application of pesticides are properly trained, maintain Qualified Applicator Certifications and follow guidelines set by the California Department of Pesticide Regulations and the County Agricultural Commission.
- City staff records the applications of all chemical agents by noting the locations, types, and quantities of chemicals used. Records are reported monthly to the Department of Agriculture.
- Pesticide, fertilizer, and herbicide handling and safety refresher sessions are provided to City personnel involved with application.

- The use of fertilizers is minimized as much as possible; compost and soil amendments are used in place of fertilizer, where applicable.
- Employees are trained to handle pesticides, herbicides, and fertilizers properly.
- All federal, state, and local regulations are followed in the use of pesticides, herbicides, and fertilizers.
- Pesticides, herbicides, and fertilizers are applied only when necessary (typically during growing seasons) and not during or prior to anticipated storm events.
- Pesticides are not sprayed when there is a high possibility of the spray drifting into non-target areas or onto non-target vegetation, insects, or animals.
- The City maintains compliance with federal and state reporting law for pesticide use.
- Weeds, grass, and brush are cleared from building perimeters and fence lines to reduce the need for pesticides and herbicide use, when applicable.
- Native plants are used in landscaping, where applicable.
- Diseased plants are removed, and infected parts of plants are removed to minimize the need for pesticide and herbicide use, where applicable.
- Several evapotranspiration gauges located throughout the City are used to monitor microclimates to properly set irrigation systems for different areas of the City and reduce the potential of over-irrigation.
- Flow sensors and master valves prevent water loss in the event of a break in any of the main lines.
- An annual bilingual municipal storm water training session was conducted by Clean Water Program staff for the City's private landscaping contractors during the fiscal year. There were 27 participants in attendance at the training session held on March 22, 2012.

Public Works Operations Facilities

City personnel implement appropriate BMPs for all activities that take place at public works facilities. Storm Water Pollution Prevention Plans (SWPPPs) have been developed for all four public works facilities, which include the City of Encinitas Wastewater Collection Facility and three public works yards, "A" Tank site, Calle Magdalena and Requeza Street. The SWPPPs include a site description, a description of potential sources of pollutants, a summary of existing BMPs, a description of BMPs to be implemented, and a monitoring and record keeping plan. The SWPPPs are maintained at each facility, and all of the facilities are inspected by City staff on an annual basis. Additionally, all Public Works employees are annually trained in storm water management. For more detail regarding municipal staff training refer to Section 8.2 of this document.

Potable Water Facilities

City personnel implement appropriate BMPs for all activities that take place at potable water facilities when deemed appropriate. San Dieguito Water District employees are trained in storm water management on an annual basis. For more detail regarding municipal staff training refer to Section 8.2 of this document.

Fire Stations

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by firefighting activities both at fire stations in the City and locations throughout the City. In FY 2009-10, Fire Station #3 was redesigned to incorporate the following storm water BMPs: bio swales, pervious pavement and a roof cover for the fueling area. Two fire stations (#3 and #5) have permanent treatment control BMPs in place to treat any runoff which may be discharged from washing activities. Notably, significant improvements to fire station #2 (Cardiff), including the addition of treatment control BMP facilities, is anticipated for completion within the forthcoming reporting period. The remaining stations utilize source control BMPs to minimize and control discharges related to washing activities. All firefighting training activities which include firefighting foams are conducted at a fire station outside of the City of Encinitas. In addition to implementing structural BMPs at the fire stations, all City of Encinitas Fire Department employees are trained in storm water management on an annual basis. More detailed information regarding municipal staff training and non-emergency firefighting flows can be found in Sections 8.2 and Section 13 of this document.

Other Fixed Facilities

The City implements pollution prevention methods and BMPs to reduce or eliminate the amount of pollutants generated by the management of public buildings, other fixed facilities, and surrounding areas. The City implements BMPs to control erosion and sediment, during landscaping maintenance, and for waste management, as discussed in the City's BMP Manual Part I and the CASQA Municipal Handbook.

Additionally, the City implements and maintains several pollution prevention practices throughout the City of Encinitas. In FY 2010-11, the City adopted the Parks and Recreation Policy and Procedures Manual for integrated pest management for all departments citywide, expanded its battery collection program to offer public collection of used batteries at the Encinitas Branch Library, the Encinitas Community Center and at all Public Works facilities and fire stations. The City also partnered with the Downtown Encinitas Mainstreet Association to purchase and install 50 trash/recycling containers in downtown Encinitas to increase recycling opportunities. In FY 2011-12, the City installed LED lighting in the parking lots at the Encinitas Civic Center, the Calle Magdalena Public Works Facility and the Encinitas Community Center. The City also hosted an annual community document shredding and e-waste recycling event at the Encinitas Civic Center and coordinated the regional, "Day Without a Bag" program.

Other pollution prevention practices that are maintained at the Encinitas Civic Center, Calle Magdalena Public Works Facility and the Wastewater Collections Division Municipal Yard include the following:

- automatic lighting controls and timers that time lights in specific areas of the building based on specific needs and maximizes the time when lights are out,
- replacing large trash receptacles at each individual desk with mini size trash receptacles and providing large recycling containers for mixed paper and cans/bottles,

- maintaining recycling centers in conference rooms that include mixed paper, cans/plastic, and trash compartments,
- use of seven alternative fuel vehicles,
- use of 100% recycled paper for all copiers and printers,
- Low Impact Cleaning policy which seeks to minimize the impact of the City's cleaning products and procedures on the environment,
- Environmentally Preferable Purchasing policy,
- use of ten energy efficient Dyson hand dryers installed in all of the bathrooms at the Encinitas Civic Center, the Encinitas Community Center and the Encinitas Branch Library and
- solar photo voltaic panels, a high efficiency air conditioning system, and day lighting the building in certain areas at the Encinitas Civic Center.

4.3.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

Fertilizers which are used on landscaped areas in municipal parks and public right-of-way areas are considered a pollutant of concern for the San Elijo Lagoon and its larger drainage area. To mitigate potential discharges of nutrients to the lagoon from Municipal activities, the City requires that the City's landscaping contractors implement an extensive fertilizer management program as described earlier in Section 4.3.3.1. The City will continue to monitor the fertilizer management program, and if the existing measures are found to be deficient, the City may adjust the BMP implementation as needed to achieve a higher level of pollutant reduction.

Similarly, if the City identifies any potential sources of other constituents for which water bodies in the City are 303(d) listed that could be the result of activities at fixed municipal facilities, additional controls will be required to be implemented where applicable. The City will implement additional controls for municipal areas and activities adjacent to or tributary to ESAs when determined to be necessary. Presently, there are no other municipal fixed facilities that have been determined to be a source of pollutants for which water bodies within the City are on the Clean Water Act (CWA) 303(d) list.

4.3.4 PROGRAM IMPLEMENTATION

The City implements the municipal program using a variety of different processes, including maintenance, training and education, inspections, and if necessary, enforcement actions. Program implementation also includes the continuous assessment of municipal programs to ensure that they are designed and executed in a manner that is most effective to reducing, and potentially eliminating, the threat of pollution from fixed municipal facilities.

4.3.4.1 MAINTENANCE

In FY 2011-12, the City continued to conduct regular maintenance activities at fixed facilities, which included landscape maintenance, building maintenance, parking lot, and sidewalk

repair, when necessary. Sweeping of the parking facilities associated with the municipal facility is conducted at these facilities during regular maintenance activities.

The City maintains a regular maintenance schedule for fixed facilities in the City. As previously discussed, City personnel are trained to implement the proper BMPs when at municipal facilities and when engaging in specific activities at those facilities. City personnel are also trained to dispose of any waste properly, and to report illegal discharges/illicit connections as they may come across them during normal work activities.

4.3.4.2 TRAINING AND EDUCATION

Municipal personnel are trained in implementing appropriate BMPs and preventing non-storm water discharges. In FY 2011-12, Clean Water Program staff conducted training for the following municipal departments: Engineering, Fire and Marine Safety, Parks and Recreation, Public Works and the San Dieguito Water District. Additionally, the Streets Division of the Public Works Department discussed storm water issues at regular staff meetings throughout the reporting period. A detailed description of the municipal education program can be found in Section 8.2 of this document.

4.3.4.3 MUNICIPAL INSPECTIONS

City staff performs annual inspections at all of the high priority municipal facilities in the City of Encinitas. As part of the FY 2011-12 program City staff performed a total of **29** high priority inspections. The fixed facility inspection locations and inspection dates are summarized in Table 4-1 below.

Table 4-1
Fixed Facility Inspections

No.	Facility Name	Inspection Date
1	"A" Tank Site Public Works Yard	5/8/2012
2	Calle Magdalena Public Works Yard	5/9/2012
3	Requeza Street Public Works Yard	5/9/2012
4	Wastewater Collection Facility	5/15/2012
5	Encinitas Ranch Golf Course	5/22/2012
6	Beacon's Beach	6/6/2012
7	Cardiff Sports Park	6/11/2012
8	Cardiff Sports Park Expansion	6/11/2012
9	Cottonwood Creek Park	6/11/2012
10	Encinitas Viewpoint Park	6/6/2012

No.	Facility Name	Inspection Date
11	Glen Park	6/15/2012
12	Grandview Beach	6/5/2012
13	H Street Viewpoint	5/29/2012
14	Hawkview Park	6/7/2012
15	J Street Viewpoint	5/30/2012
16	Las Verdes Park	5/29/2012
17	Leo Mullen Sports Park	5/29/2012
18	Leucadia Oaks Park	6/7/2012
19	Leucadia Roadside Park	6/6/2012
20	Little Oaks Equestrian	6/6/2012
21	Mildred Macpherson Park	5/31/2012
22	Moonlight Beach	6/6/2012
23	Oakcrest Community Park	6/6/2012
24	Orpheus Park	6/15/2012
25	Paul Ecke Sports Park	6/1/2012
26	Scott Valley Park	5/21/2012
27	Sun Vista Park	6/6/2012
28	Swami's Beach	5/29/2012
29	Wiro Park	6/6/2012

The recommended BMPs and corrective actions are summarized in the City's Routine Inspection Summary located in Appendix C-6. There were no corrective actions for any of the Municipal fixed facilities during FY 2011-12.

Potable Water Facilities

All of these facilities are considered a low priority and do not receive formal inspections because the activities associated with these facilities are located underground and do not involve any other activities on site.

4.4 MS4

4.4.1 BACKGROUND

The primary functions of municipal separate storm sewer systems (MS4) are to collect and transport surface runoff to receiving waters during storms in order to prevent flooding. The entire MS4 system is considered a high priority due to its tendency to collect and convey pollutants to receiving waters. The City's MS4 consist of streets, curbs, catch basins, inlets, pipes of varying materials, natural creeks and streams, natural channels, concrete channels, culverts, desilting basins, and detention basins. The City also maintains a number of treatment control BMPs such as storm drain filter inserts and a UV treatment facility, which are included in the regular maintenance of the MS4. In order to reduce the transportation of pollutants into receiving water bodies, the City of Encinitas regularly maintains its MS4 to ensure that it remains both fully functional and free of pollutants to the Maximum Extent Practicable (MEP).

4.4.2 SOURCE CHARACTERIZATION

The City maintains a variety of MS4 facilities which includes 1,781 catch basins and inlets, 65.2 miles of storm drain pipe, 2.00 miles of open channels, 14 desilting basins, and 1 Ultra Violet Urban Runoff Treatment Facility located throughout its jurisdiction. The MS4, as one complete entity, is included in the municipal inventory located in Appendix C-1.

The City utilizes an industry standard Geographic Information System (GIS) to maintain an accurate and up-to-date inventory of the MS4. The GIS MS4 inventory includes inlets (i.e. catch basins, curb inlets, grate/inlet combos, etc.), outlets (i.e. curb outlets, headwalls, etc.), manholes, pumps, ditches, channels, storm drain pipes, and detention basins. To ensure that the City's GIS inventory is current and accurate, the MS4 inventory continually undergoes data (feature and attribute) review, quality control and validation by City staff from multiple departments. GIS staff also maintains storm drain infrastructure data by mapping new infrastructure through a combination of field work and Engineering Plans.

In FY 2011-12, the City continued with its Channel Maintenance and Environmental Permitting project by completing a variety of bird and rare plant species surveys, vegetation mapping, and formal wetland delineations which will culminate into a biological resources report and inform the formal CEQA process. It is anticipated in the forthcoming reporting year that additional progress will be made toward formal environmental permit preparation and submittal to various resource agencies.

4.4.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.4.3.1 UPDATED BMP REQUIREMENTS

The City has created and maintains a BMP Manual Part I which establishes the City's minimum BMP requirements for the following components: municipal, residential, industrial/commercial, construction, and new development. The City's JURMP also directs city staff to utilize the

CASQA Municipal Handbook in addition to the BMP Manual to choose applicable BMPs for municipal areas and activities, including MS4 maintenance. All of these BMPs are designed to prevent waste from entering the MS4 system as well as ensuring that waste which is collected during maintenance of the City's MS4 does not re-enter the system.

The 2007 Municipal Permit requires that retrofitting flood management facilities be evaluated to determine the feasibility of providing additional pollutant removal from urban runoff and should only be conducted where determined to be effective. The City of Encinitas does not own or operate any flood management projects or flood control devices that may be retrofitted. However, in FY 2011-12 the City did maintain 10 desilting basins throughout the City that serve a pollutant removal function, particularly for sediment and associated pollutants bound to the sediment. These facilities are inspected on an annual basis and cleaned of debris and sediment as needed. A Municipal BMP map that depicts all of the City's structural BMPs, detention basins and storm drain filter locations can be found in Appendix C-3.

4.4.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS/ACTIVITIES

The City will implement additional controls for MS4 facilities adjacent to or tributary to ESAs when determined to be necessary.

4.4.4 PROGRAM IMPLEMENTATION

The City's MS4 management program includes responding to complaints received by the City's Clean Water Hotline {(760) 633-2787}; detecting and ceasing IC/IDs; inspecting and maintaining MS4s by cleaning, removing sediment, debris, and excessive vegetation, repairing and/or replacing damaged or failing MS4 structures; and by stenciling signs on storm drain inlets warning of effects of illegal dumping. The City trains field staff on implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance, emergency maintenance, and/or discharge control. The City utilizes a combination sewer and storm drain cleaner during MS4 maintenance to collect both dry and liquid debris from catch basins and inlets. Applicable BMPs are used during routine and emergency maintenance. City staff report on the maintenance of the MS4 through an industry standard asset inventory and a work management system that integrates with the City's GIS system. Maintenance is performed on the storm drain infrastructure and captured through work orders that are attached to the storm drain features represented in GIS. Any changes or updates to the MS4 inventory will be reported in future JURMP Annual Reports.

During the FY 2011-12, **10** municipal related complaint calls were received through the City's Clean Water Hotline. A total of **10** complaints were investigated by Clean Water Program Staff, there were **7** violations resulting in **8** instances in which educational information was disseminated, and **1** instance in which a Notice of Violation was issued. A complete summary of all municipal related complaints can be found in Appendix H-1.

All maintenance activities this fiscal year met the Municipal Permit requirements as outlined in Order No. R9-2007-0001. The FY 2011-12 annual results for all municipal activities are summarized below and reported in detail in Appendix C-2.

4.4.4.1 MAINTENANCE

A summary of the City's MS4 operation and maintenance activities that occurred throughout the fiscal year are included below:

- Within the defined reporting period of this report, approximately **558 tons** of waste and litter were removed from the entire MS4. This included the removal of **314 tons** from the catch basins and inlets, **1.88 tons** from the City's storm drain filter inserts, **242 tons** from open channels and 10 desilting basins. All MS4 facilities observed to be collecting relatively high volumes of trash were cleaned between May 1 and September 30.

- Within the defined reporting period of this report, **242 tons** of litter and vegetation were removed from open channels and 10 desilting basins. Cleaning the open channels and the desilting basins is conducted annually/year round or more often when necessary. The City responds to observations or reports of anthropogenic litter in channels and desilting basins in a timely manner.

- Within the defined reporting period of this report the City inspected and cleaned **2,337** catch basins and inlets and removed a total of **314** tons of waste and litter. Storm drain inlets and catch basins that City personnel have identified as gathering a greater amount of trash and debris as compared to other areas of the City are inspected throughout the year and cleaned if necessary. The City's inspection and cleaning activities are sufficient in ensuring the catch basins do not reach one-third of capacity and that self-cleaning facilities remain free of trash and debris. Inspection and cleaning schedules are subject to change based on observations and records of City personnel.

- The City maintains a total of 56 storm drain filter inserts in 34 inlets (some larger inlets may contain more than 1 filter insert) located throughout its jurisdiction to remove sediment, debris, oil, and grease from the MS4. From July 1, 2011 through June 30, 2012, **1.88 tons** of sediment and litter were removed from all 34 inlets. These inserts are maintained on a quarterly basis by a specialty contractor. Table 4-2 below outlines the complete filter insert inventory. A Municipal BMP map that depicts all of the City's storm drain filter locations can be found in Appendix C-3.

- The City of Encinitas has a formal maintenance agreement with the San Elijo Joint Powers Authority to maintain the Ultra Violet Urban Runoff Treatment Facility. The scope of the agreement ensures daily monitoring and inspection, startup and shutdown of the facility as dictated by rain events, and preventative and regular maintenance. In FY 2011-12, over $15,862 was spent on the preventative and regular maintenance of the facility including, pump replacement, control screen and software updates, and other

electronic equipment and parts. The Ultra Violet Urban Runoff Treatment Facility provides the City with a vital treatment function, and ongoing operations and maintenance activities are critical to ensure optimum performance and pollutant removal.

A complete report of all MS4 operation and maintenance activities can be found in Appendix C-2.

Table 4-2
Storm Drain Filter Inserts Inventory

Inlet ID Number	Number of Filters	Location	Inlet Type
1	1	194 El Camino Real @ Via Molena	Curb
2	1	1470 Neptune Ave. in driveway apron	Grate
3	2	337 El Camino Real, in front of Circuit City Mall	Curb
4	1	1638 Neptune in grass shoulder	Grate
5	2	1786 1/2 Highway 101	Curb
6	1	1650 Highway 101	Grate
7	1	970 Hwy 101 in alley, north of Jasper	Grate
8	1	918 N. Hwy 101 in alley	Grate
9	2	204 El Camino Real, in front of Blockbuster Video	Curb
10	1	914 Hwy 101 in alley @ Leucadia Blvd. north of the park	Grate
11	1	828 Hwy 101 in alley, behind building	Grate
12	1	802 Hwy 101 in alley, west of Europa St.	Grate
13	1	129 Cadmus at Highway 101	Grate
14	1	149 Basil St. at Highway 101	Grate
15	4	130 Basil St. at Highway 101	Curb
16	1	130 Athena at Highway 101	Grate
17	2	170 Athena at Highway 101	Curb
18	1	577 N. Vulcan north of Union	Grate
19	1	208 Cereus at Hygeia	Curb
20	3	501 El Camino Real, east side @ Garden View Rd.	Combination
21	1	321 Union at Hygeia	Grate

Inlet ID Number	Number of Filters	Location	Inlet Type
22	1	321 Union across from Hygeia St.	Grate
23	1	1750 Hwy 101 at Bishope Gate	Curb
24	1	750 G St. at Second St. alley	Grate
25	3	364 2nd St. at C Street	Grate
26	5	247 Hwy 101 at NE corner of Encinitas Blvd.	Curb
27	3	102 Encinitas Blvd.	Curb
28	2	485 Santa Fe Dr., west of I-5.	Curb
29	2	485 Santa Fe Dr., north side of street, west of I-5	Curb
30	1	2560 Manchester in alley	Grate
31	1	2582 Manchester across from alley	Grate
32	2	499 El Camino Real, SE corner @ Garden View Rd.	Curb
33	3	398 El Camino Real, SW Corner @ Garden View Rd.	Curb
34	1	398 El Camino Real, across from Circuit City mall	Curb

In FY 2011-2012, the Engineering Department was instrumental in conceptualizing and designing numerous drainage related capital improvement projects (CIP). These projects are outlined in Table 4-3 below.

Table 4-3
Storm Drain CIP Projects

Project Title	Budget	Goal	Status
Stratford Knoll Drainage Improvements	$650,000	Replace existing storm drain channel and increase capacity.	Complete
Encinitas Creek Drainage Channel	$1,100,000	Increase capacity and provide flood control.	In Design
Santa Fe Drive Sidewalk and Drainage Project	$165,000	Installation of drainage improvements including curb, gutter and 330 feet of 18 inch storm drain.	Complete

4.5 SANITARY SEWER SYSTEM

4.5.1 BACKGROUND

Spills and/or leaks caused by a malfunction or failure of a component of the City's sanitary sewer system have the potential to introduce a significant volume of untreated sewage into receiving water bodies. Untreated sewage can contain high concentrations of bacteria, viruses, and parasites, all of which have the potential to negatively impact the environment and pose a significant threat to human health. Untreated sewage also has the potential to contain a variety of hazardous chemicals, which also pose threats to environmental and human health. The City of Encinitas conducts routine inspections and maintenance of the sanitary sewer system to ensure that the system is functioning properly. Routine inspections and maintenance of the sanitary sewer system reduces the potential for an overflow and helps prevent and eliminate infiltration of seepage to the MS4. The City also responds to sanitary sewer overflows to reduce or eliminate the amount of untreated sewage that reaches nearby portals to the MS4 and aids in cleaning up and disposing of overflow residue.

4.5.2 SOURCE CHARACTERIZATION

The City of Encinitas Wastewater Collection Division maintains approximately 122 miles of public sanitary sewer collection pipes.

4.5.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.5.3.1 UPDATED BMP REQUIREMENTS

The City has created and maintains a BMP Manual Part I which establishes the City's minimum BMP requirements for the following components: municipal, residential, industrial/commercial, construction and new development. In March 2008, the City prepared a JURMP Update which directs city staff to utilize the CASQA Municipal Handbook in addition to the BMP Manual to choose applicable BMPs for municipal areas and activities, including maintenance of the sanitary sewer system.

Similar to the MS4 maintenance program, the City trains field staff on implementing BMPs, equipment inspection, and the action plan that is followed for regular maintenance and emergency maintenance and/or discharge control. Structural BMPs are used during routine and emergency maintenance, where applicable.

4.5.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City implements additional controls for sanitary sewer facilities adjacent to or tributary to ESAs, if applicable and when determined to be necessary. The City has a regular sanitary sewer maintenance program that minimizes sanitary sewer overflows (SSO) and is described in more detail below.

4.5.4 PROGRAM IMPLEMENTATION

The City's sanitary sewer management program includes responding to overflows and spills as necessary, identifying spills and leaks, containing and controlling spilled materials, repairing damaged and leaking sewer lines, remediating existing sewer lines as necessary and proper disposal of hazardous waste.

4.5.4.1 MAINTENANCE

The City maintains a routine maintenance schedule for the sanitary sewer system. In FY 2011-12, the entire sewer system was cleaned, and known trouble spots were cleaned on a more frequent basis. The City seeks to reduce and eliminate the amount of seepage from the sanitary sewer system to the MS4 through routine preventative maintenance of both the sanitary sewer and the MS4 systems. Preventative maintenance of both systems allows City officials to detect and eliminate active seepage points before they become a larger problem, and also to repair areas of the system that have a high possibility of becoming a seepage point.

In FY 2011-2012, the Engineering Department was instrumental in conceptualizing and designing CIPs to prevent sewage spills by improving the wastewater collection system. Sewer and emergency repair projects initiated during FY 2011-12 are shown below in Table 4-4.

Table 4-4
Sewer CIP Projects

Project Title	Budget	Goal	Status
Olivenhain Sewer Pump Station	$ 5,300,000	Reduce sewage spills, increase capacity and capture first flush from Interstate 5.	Under Construction
2nd Street Sewer Replacement Project	$4,000,000	Relocate existing sewer line to increase maintainability and increase reliability.	In Design
Olivenhain/Coast Highway Sewer Force Main Replacement	$3,999,900	Replace the existing sewer force mains to minimize spill potential and increase reliability.	Under Construction
Olivenhain Sewer Trunk Line Rehabilitation	$2,000,000	Rehabilitate 54 existing manholes to minimize infiltration and inflow and improve maintenance access.	In Design

In FY 2011-12, the City took the following measures to reduce the seepage from the sanitary sewer system to the MS4:

- 11.40 miles of the sewer system was televised to check pipe conditions,
- 286.59 miles of sewer lines were cleaned,
- 7 storm drain and sewer pipes were repaired.

City staff report on the maintenance of the sewer system through an industry standard asset inventory and work order management system that integrates with the City's GIS system. Maintenance is performed on the sewer infrastructure and captured through work orders that are attached to the features represented in GIS. Any changes or updates to the sewer system inventory will be reported in future JURMP Annual Reports.

On August 8, 2009, the City implemented a Sewer System Management Plan (SSMP). The SSMP is a program that ensures that the sewer system is functioning properly and that the necessary maintenance is conducted. The SSMP also includes a spill response plan that establishes standard procedures for immediate response to all sanitary sewer system overflows (SSOs). In FY 2011-12 the City of Encinitas Wastewater Collection Division personnel were trained in detecting, reporting and responding to SSOs in accordance with the SSMP.

4.6 MOBILE MUNICIPAL ACTIVITIES, INCLUDING POWER WASHING

4.6.1 BACKGROUND

The City conducts a number of activities, which are not confined to any specific locations. Due to the nature of these mobile activities, temporary structural and source control BMPs are implemented as necessary.

4.6.2 SOURCE CHARACTERIZATION

The City conducts a number of activities that are not designated to a specific location. Such activities include, but are not limited to, the following:

- power washing, including graffiti removal,
- street and sidewalk repair and maintenance which includes street striping, street painting and pothole repair, and
- landscape maintenance.

4.6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.6.3.1 UPDATED BMP REQUIREMENTS

The City implements good housekeeping and general pollution prevention measures during municipal maintenance activities, including the mobile activities discussed above. In March 2008, the City established minimum BMPs which were described in the City's 2008 JURMP Update. The JURMP Update directs city staff to utilize the City's BMP Manual Part I and the

CASQA Municipal Handbook to choose applicable BMPs to implement for municipal areas and activities, including mobile activities. BMPs similar to those implemented for the management and maintenance of parks and landscaped areas are implemented for landscape maintenance in landscaped City right-of-way areas such as medians.

4.6.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City implements additional controls for municipal mobile activities adjacent to or tributary to ESAs when determined to be necessary. Presently, City related mobile activities have not been determined to be a source of pollutants for which water bodies within the City are on the CWA 303(d) list. Present BMP implementation activities have been evaluated as effectively reducing pollutant discharge to all receiving waters in the City to the maximum extent practicable (MEP).

4.6.4 PROGRAM IMPLEMENTATION

In FY 2011-12, City field crews were trained to implement BMPs during all mobile activities. The Public Works Department Streets Division received storm water training from Clean Water Program staff on April 26, 2012. The training focused on storm water BMPs as they relate to mobile cleaning activities that take place throughout the City. Additionally, the Public Works Wastewater Collections Division received training from Clean Water Program staff on March 7, 2012. City field crews were trained to properly contain, control, and capture any discharge that was generated by a mobile activity. City field crews were also trained to use mobile equipment properly to ensure all wastewater is collected and that the equipment continues to function properly. For more detail regarding municipal staff training refer to Section 8.2 of this document.

4.7 SPECIAL EVENTS

4.7.1 BACKGROUND

The City of Encinitas hosts a variety of special events throughout the city. These events may include, but are not limited to, festivals, fairs, events for charitable causes, and special occasions. The City recognizes that many special events have the potential to generate significant trash and litter caused by the patrons and the associated activities that occur at the special events. The City has considered the controls that are described in the Municipal Permit and has chosen the BMPs listed in Section 4.7.3.1 below as most effective and efficient for the City's needs. These BMPs are implemented during and/or after special events, where applicable.

4.7.2 SOURCE CHARACTERIZATION

The City of Encinitas hosts a variety of special events at various locations throughout the city; including City sanctioned events and venues, as well as privately managed events. According

to the Encinitas Municipal Code Chapter 6.12, any organized event coordinated for 25 people or more requires an Operations Permit (Special Events Permit). For the purpose of Special Event source characterization, events that require an Operations Permit (as defined by Encinitas Municipal Code Section 6.12) by the City have been identified as priority events.

4.7.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

4.7.3.1 UPDATED BMP REQUIREMENTS

The City has considered many of the controls specific to special events listed in the Municipal Permit. Before any special event permits are approved, applicants must fill out the City's "Special Events Permit P2 Questionnaire" (Appendix C-4) to assess the most appropriate BMPs for their event, and all applications must be reviewed by Clean Water Program staff. Applications are evaluated to ensure that event organizers select an effective combination of BMPs to prevent trash or other pollutants from entering the storm drain system. The City has chosen the following BMPs as most effective and efficient for City needs. Notably, the City may require additional event specific BMPs at any time as determined necessary.

Inlet Protection:

- Identify all storm drain inlets with appropriate signage and prohibitive language to deter illegal dumping and / or discharge.
- Protect all storm drains identified on their site plans. Fabric filters, gravel bags, or other approved inlet protection device over the drain opening are recommended.
- Visually inspect and clean, if necessary, all identified storm drain inlets impacted by the special event activities.

Trash and Debris:

- Adequate trash and recycling containers must be provided throughout the event venue, including at the exit and entry points.
- Regular collection of loose trash and debris must be applied as needed.
- Temporary fencing will be required to be put into place if the event, or any portion thereof, is determined to pose a threat of wind blown debris into any water bodies.
- Post event sweeping of the entire venue area and related staging areas is required.

Temporary Portable Restrooms:

- All temporary portable restrooms will be placed away from all storm drain inlets, drainage swales, water bodies, and any other locations that have the potential to impact the storm drain system.
- All temporary portable restrooms are required to have a secondary containment pan or additional BMPs in place around the stations for possible overflows.
- The contact information for the company responsible for the restrooms will be clearly marked on or around the restrooms.

In addition to the BMPs that are implemented by the applicant, The City of Encinitas implements the following during and/or after special events, where applicable:

- proper management of trash and litter, including temporary trash receptacles for trash,
- street sweeping following the special event,
- other BMPs, as included in the Municipal Permit, when deemed necessary by City personnel, and
- other post clean-up activities, such as catch basin cleaning, when necessary.

The City may also set up storm water informational booths with educational handouts and watershed maps, which demonstrate the impacts of pollution on a watershed. The City will consider implementing additional BMPs depending on the site location, site conditions, and/or type of special event.

4.7.3.2 ADDITIONAL CONTROLS FOR MUNICIPAL AREAS AND ACTIVITIES

The City will implement additional controls for municipal special events adjacent to or tributary to ESAs when determined to be necessary. Presently, special events have not been determined to be a significant source of pollutants for which water bodies within the City are on the CWA 303(d) list. Present BMP implementation activities have been evaluated for effectiveness in reducing pollutant discharge to all receiving waters in the City to the MEP.

4.7.4 PROGRAM IMPLEMENTATION

Events which require a discretionary Special Events Permit from the City, and completion of the BMP specific Special Events Permit P2 Questionnaire (Appendix C-4), must meet minimum pollution control standards as described above, and receive permit approval from the Clean Water Program. More refined event characterization as defined in Section 4.7.2 above, and improved event tracking enhanced the overall efficiency and effectiveness of Special Event oversight. In FY 2011-12, there were **48** special event applications processed by the Clean Water Program (see Appendix C-5).

The Clean Water Hotline is advertised on all Special Events Permit Applications and can be used to report spills during normal business hours. Additionally, the City has an after hours phone number that can be used to report any large or hazardous spills during special events that may occur on weekends or when the City offices are closed. City personnel are on call to respond to any emergency situations that may arise. During City sponsored events, trained City personnel are on hand to ensure that the event remains free of illegal discharges and/or illicit connections to the MS4.

In addition, the City maintains the authority to charge the applicant a Clean-up Fee and Deposit, depending on the size, location, and type of event. Following permitted events, post-event inspections are conducted by City staff, and the location of the event must be returned to pre-event conditions in order for the applicant to receive a full refund of deposited monies. If the City determines that more clean-up is necessary, the deposit will be used as reimbursement

for City time and cleanup efforts including street and parking lot sweeping. The event sponsors or organizers may be charged any excess clean-up fees the City may encounter beyond the amount of the deposit.

5.0 INDUSTRIAL AND COMMERCIAL

5.1 INTRODUCTION

Activities associated with industrial and commercial businesses can contribute pollutants to the City's MS4 (Municipal Separate Storm Sewer System). The City of Encinitas has implemented a program that aims to reduce industrial and commercial pollution discharges from the MS4 to the MEP, prevent industrial and commercial discharges from the MS4 from causing or contributing to a violation of water quality standards, protect local receiving water bodies, and comply with the Municipal Permit.

Commercial facilities within the City of Encinitas include a wide range of service oriented businesses from restaurants to nurseries. There are five main commercial areas within the City. The largest areas are downtown Old Encinitas and the Leucadia business district, along Highway 101 from Swami's Beach to La Costa Avenue. This area contains many different commercial businesses ranging from restaurants to automotive outlets and is the oldest portion of Encinitas. Three industrial facilities are also located in the City: the San Dieguito Union High School District Transportation Cooperative, the San Elijo JPA Water Reclamation Facility, and the inactive Encinitas Landfill.

Within the defined reporting period of this report, Clean Water staff worked diligently to fulfill the requirements of the Order 2007-0001 related to commercial and industrial sectors. The City's geographic information system (GIS)-based commercial inventory was updated and prioritized based on the new requirements of Order 2007-0001 and the guidelines established in the City's 2008 JURMP. FY 2011-12 commercial and industrial facility inspections were based on this prioritization scheme and the new inspection frequencies outlined in Order 2007-0001. Inspections, follow-up, and enforcement actions were tracked using CityWorks, the City's existing GIS-based Work Order tracking system. In addition, the City participated in the regional industrial/commercial workgroup and subgroups, and helped to shape the mobile commercial businesses database and inspection standards. The following section demonstrates the City's successful implementation of required programmatic activities related to the Industrial and Commercial Section of Order 2007-0001 (Section D.3.b) during FY 2011-12.

5.2 INDUSTRIAL AND COMMERCIAL SITES/SOURCES ELEMENT

5.2.1 BACKGROUND

Each stationary industrial and commercial facility has the potential to discharge pollutants into the MS4 and consequently degrade local water quality. Often, the most cost effective and simple solution to reducing pollution is to implement pollution prevention techniques at the source. The Clean Water Program emphasizes the use of pollution prevention methods as a primary mechanism for reducing commercial discharges of pollutants into the City's MS4. Further, the City requires minimum site and activity specific BMPs to be implemented, and inspections and enforcement procedures will be conducted where necessary, to comply with the Municipal Permit.

For the rest of Section 5.2, "commercial facilities" will be used to refer to stationary commercial facilities that are not mobile. The mobile commercial site/sources component is described in Section 5.3.

5.2.2 SOURCE CHARACTERIZATION

A watershed-based inventory of the industrial and commercial sites/sources within the City's jurisdiction was compiled as part of the 2008 JURMP update. As required by the Municipal Permit, the inventory includes the following information for each site/source: facility name; address; pollutants potentially generated by the site/source (and identification of whether the site/source is tributary to a Clean Water Act section 303(d) water body segment and generates pollutants for which the water body segment is impaired); and a narrative description including SIC codes which best reflects the principal products or services provided by each facility. Inventories of commercial and industrial facilities within the City of Encinitas are included in Appendices D-1 and D-2. Mobile commercial businesses do not have a fixed address at which they operate; they are tracked within a separate, non-spatial database (refer to Section 5.3).

The commercial inventory is continually updated as facilities go out of business and new facilities are opened. The GIS department and the Clean Water Program both receive a monthly summary of new and renewed business registrations from the City Clerk's Department. Upon receipt of the monthly summary, a GIS Analyst updates the spatial facility database, and a Clean Water Program staff member updates the storm water inspection information for each business. In addition, Clean Water staff identifies businesses that are not on the facility inventory when complaints are filed about businesses that are not registered with the City. When this occurs, these facilities are added to the inventory. Additionally, when Clean Water staff conducts annual commercial and industrial inspections, they have the opportunity to identify new or closed businesses and update the inventory with these findings.

Three industrial facilities are located in the City of Encinitas—the San Elijo JPA Water Reclamation Facility, San Dieguito Union High School District (SDUHSD) Transportation Cooperative, and the Encinitas Landfill. All three facilities are covered under the Industrial Storm Water General Permit Order 97-03-DWQ. The industrial inventory is included as Appendix D-2. The San Elijo JPA Water Reclamation Facility is a wastewater treatment plant located at 2695 Manchester Avenue. The plant treats approximately 5.25 million gallons of raw sewage per day. The SDUHSD Transportation Cooperative is located at 1142 Bonita Drive and functions as the maintenance shop for the SDUHSD bus fleet as well as the parking area for the buses. The Encinitas Landfill is owned and operated by the County of San Diego. This facility is located at 2099 Encinitas Boulevard and is now closed. The JPA and SDUHSD are inspected by the City of Encinitas, and the Encinitas Landfill is inspected by the County of San Diego. Completed industrial facility inspection forms are available upon request.

As part of the 2008 JURMP update and the development of the SUSMP, the City collaborated with copermittees to identify the pollutant loading potentials of industrial and commercial sources. Table 5-1 lists the pollutants that may be generated by each category of business. The pollutants that may be generated by each individual business can be determined by matching the category of business noted for each of the businesses in the commercial inventory in

Appendix D-1 with the category in Table 5-1 and its corresponding pollutants. Prioritization was assigned via the process described in Section 5.2.4.1.

Table 5-1
Pollutant Loading Potentials of Industrial and Commercial Sources

Site/Source Type	Heavy Metals*	Organics	Oil & Grease	Sediment	Pesticides	Nutrients	Oxygen Demanding	Bacteria/ Viruses	Trash
Airplane Repair	L	L	L	PO	UL	UL	PO	UL	PO
Animal Facilities	UL	UL	UL	PO	UL	L	L	L	PO
Auto Body Repair	L	L	PO	PO	UL	UL	PO	UL	PO
Auto Repair/Maintenance	L	L	L	PO	UL	UL	PO	UL	PO
Boat Repair	L	L	L	PO	UL	UL	PO	UL	PO
Botanical Garden	UL	PO	UL	PO	L	L	PO	L	PO
Building Materials	PO	UL	PO	L	PO	PO	PO	UL	L
Mobile Cleaning	UL	PO	UL	PO	UL	UL	PO	UL	PO
Cement Mixing/Cutting	UL	UL	PO	L	UL	UL	PO	UL	PO
Cemeteries	UL	UL	UL	PO	L	L	PO	PO	PO
Eating/Drinking Establishments	UL	UL	L	PO	UL	UL	L	L	L
Equipment Repair	L	L	L	PO	UL	UL	PO	UL	PO
Fueling	L	L	L	PO	UL	UL	PO	UL	PO
Golf Courses/Parks	UL	UL	UL	PO	L	L	PO	PO	PO
Landscaping	UL	PO	UL	PO	L	L	PO	UL	PO
Marinas	L	PO	L	PO	UL	UL	PO	PO	PO
Masonry	UL	UL	PO	L	UL	UL	PO	UL	PO
Nursery/Greenhouses	UL	PO	UL	L	L	L	PO	PO	PO
Painting/Coating	PO	PO	PO	PO	UL	UL	PO	UL	PO
Pest Control	PO	PO	UL	PO	L	UL	PO	UL	PO
Pool/Fountain Cleaning	UL	UL	UL	PO	UL	UL	UL	UL	UL
Portable Sanitation	UL	PO	PO	PO	UL	L	PO	L	PO
Power Washing	PO	PO	PO	PO	UL	UL	UL	UL	UL
Auto Parking/Storage	L	L	L	L	UL	UL	PO	UL	PO
Mobile Auto Washing	PO	L	PO	PO	UL	UL	PO	UL	PO
Contractor (Mobile)	PO	PO	PO	PO	UL	UL	PO	UL	PO
Handyman (Mobile)	UL	PO	PO	UP	UL	UL	PO	UL	PO
Landfill	PO	PO	PO	L	PO	PO	L	L	L
Wastewater Treatment	UL	UL	L	PO	UL	L	L	L	PO

Notes

L = Likely, PO = Possible, UL= Unlikely

* Heavy metals are a possible pollutant for any facility that has a parking lot.

This table is based on the field experience of D-MAX Engineering and on tables in the Copermittees' Baseline LTEA. D-MAX has conducted more than 1,000 industrial and commercial inspections during which it assessed the pollutant discharge potentials of the inspected facilities.

As required by Section D.3.b(1) of the Permit, all industrial and commercial facilities that meet at least one of the following criteria are included in the inventory:

Industrial Facilities

- Industrial Facilities, as defined at 40 CFR § 122.26(b)(14)
- Facilities subject to the statewide General Industrial Permit or other individual NPDES permit
- Operating and closed landfills
- Facilities subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA)
- Hazardous waste treatment, disposal, storage, and recovery facilities

Commercial Facilities

- Automobile repair, maintenance, fueling, or cleaning
- Airplane repair, maintenance, fueling, or cleaning
- Boat repair, maintenance, fueling, or cleaning
- Equipment repair, maintenance, fueling, or cleaning
- Automobile and other vehicle body repair or painting
- Mobile automobile or other vehicle washing[1]
- Automobile (or other vehicle) parking lots and storage facilities
- Retail or wholesale fueling
- Pest control services
- Eating or drinking establishments, including food markets
- Mobile carpet, drape, or furniture cleaning[1]
- Cement mixing or cutting[1]
- Masonry[1]
- Painting and coating[1]
- Botanical or zoological gardens and exhibits
- Landscaping[1]
- Nurseries and greenhouses
- Golf courses, parks, and other recreational areas/facilities
- Cemeteries
- Pool and fountain cleaning[1]
- Marinas
- Portable sanitary services
- Building material retailers and storage
- Animal facilities
- Power washing services[1]

[1] Mobile commercial businesses are discussed in more detail in Section 5.3.

Both Industrial and Commercial facilities

- All other commercial or industrial sites/sources tributary to a CWA Section 303(d) impaired water body segment, where the site/source generates pollutants for which the water body segment is impaired.
- All other commercial or industrial sites/sources within or directly adjacent to (i.e., within 200 feet of) or discharging directly to coastal lagoons or other receiving waters within an Environmentally Sensitive Area (ESA).
- All other commercial or industrial sites/sources that the City determines may contribute a significant pollutant load to the MS4.

5.2.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.2.3.1 UPDATED BMP REQUIREMENTS

As required by section D.3.b.(2) of the Permit, during the 2008 JURMP update, the City established a set of minimum BMPs for all industrial and commercial sites and incorporated these into the City's BMP Manual I. The list of minimum BMPs includes both structural and non-structural BMPs and is itemized specific to pollutant-generating activity. The City's set of minimum BMPs for industrial and commercial sites/sources also includes pollution prevention methods, where appropriate. A complete list of the City's minimum BMPs for industrial and commercial facilities can be found in the City's BMP Manual I.

Industrial Facility Specific BMPs

Industries subject to the General Industrial Permit are required to prepare a SWPPP (Storm Water Pollution Prevention Plan) and implement the BMPs prescribed therein. At a minimum, the SWPPP should include sections which describe the significant materials present on site, areas and activities that are potential sources of pollutants, and BMPs to address the identified pollutants' sources onsite. In addition, because of the small scale of the City's industrial program, the City is able to require site-specific BMPs at its industrial sites. These BMPs are determined based upon a review of the site's SWPPP and site inspections.

5.2.3.2 ADDITIONAL CONTROLS

As required by section D.3.b.(2)(e), the City of Encinitas requires the implementation of additional controls for industrial and commercial sites and sources that are 1) tributary to CWA Section 303(d) impaired water body segments (where a site/source generates pollutants for which the water body segment is impaired) or 2) directly adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas.

Clean Water Program staff utilizes GIS to maintain the commercial and industrial inventory and has the ability to spatially locate facilities relative to receiving waters and ESAs. Clean Water inspection staff is provided a hard copy map to use as a field reference to make appropriate determinations in consideration of these factors. Clean Water Program staff may prescribe additional controls during inspections of commercial and industrial facilities, as needed, in consideration of the proximity of the facility to the water body and the observed potential of the site to be a significant source of pollutants that may threaten the downstream

water body as necessary and appropriate.

5.2.4 PROGRAM IMPLEMENTATION

This section describes the steps employed by Clean Water Program staff to require and verify the implementation of required designated BMPs for industrial and commercial sources. During FY 2011-12, the City of Encinitas implemented the following industrial and commercial program elements:

- provided education and outreach through inspection actions so that regulated businesses were aware of the City's stormwater requirements;
- inspected inventoried businesses to evaluate compliance with established minimum BMP requirements and the local stormwater ordinance;
- conducted follow-up inspections as necessary to ensure facility compliance with minimum BMP standards;
- took enforcement action as necessary to bring violators into compliance.

5.2.4.1 INVENTORY PRIORITIZATION

As required by section D.3.b(1)(b), when evaluating threat to water quality, the City of Encinitas considered the following attributes of each industrial and commercial business to determine priority status (high or low):

i. Type of activity (SIC code);
ii. Materials used at the facility;
iii. Wastes generated;
iv. Pollutant discharge potential;
v. Non-storm water discharges;
vi. Size of facility;
vii. Proximity to receiving water bodies;
viii. Sensitivity of receiving water bodies;
ix. Whether the facility is subject to the General Industrial Permit or an individual NPDES permit;
x. Whether the facility has filed a No Exposure Certification/Notice of Non-Applicability;
xi. Facility design;
xii. Total area of the site, area of the site where industrial or commercial activities occur, and area of the site exposed to rainfall and runoff;
xiii. The facility's compliance history; and
xiv. Any other relevant factors.

Although not specifically required by the Municipal Permit, the City will continue to classify industrial facilities that have obtained coverage under the General Industrial Permit as high priority. The City's GIS data management system was used to prioritize commercial businesses based upon the following spatially referenced TTWQ criteria:

- proximity to a 303(d) listed water body

- pollutant potential of the facility type
- stormwater violation history

If a facility was identified as having a potential threat based on two or more of these criteria, the facility was determined to be a high priority commercial facility. For example, if the facility is tributary to the San Elijo Lagoon and received a Notice of Violation from the City in the past three years the facility would be considered high priority based upon the additional criteria that the City has established in determining TTWQ. In addition, if during the City's commercial inspection process or based on institutional knowledge, it was determined that additional sites that would otherwise have a low priority should be classified as high priority industrial or commercial facilities, then they were added to the inventory and were inspected.

The City's commercial inventory was updated and prioritized during the defined reporting period of this report and will be prioritized a least once per year prior to conducting annual inspections.

As a result of the City's threat to water quality analysis during FY-2011-12, 14% of the industrial and commercial facilities were identified as high priority. The identified high priority facilities included all three industrial facilities and many of the City's restaurants. For a complete list of prioritized facilities refer to Appendices D-1 and D-2.

5.2.4.2 INSPECTION FREQUENCY

FY 2011-12 commercial facility inspection priorities were established in consideration of inspection frequencies and prioritization standards outlined in Order 2007-0001. In compliance with Section D.3.b.(3)(b) & (c) of the Permit, in FY 2011-12, the City inspected 100% of the industrial and commercial facilities inventoried as high TTWQ and over 25% of all inventoried sites. Consistent with the Permit, mobile businesses are not included when determining the inspection requirements based on percentages of the inventory. The City tracked completed inspections throughout the reporting period to ensure that the minimum inspection frequencies required by the Municipal Permit were met.

In FY 2011-12, the City's industrial and stationary commercial inventories included a total of **390** facilities, of which **53** facilities were identified as having a high TTWQ (**50** stationary commercial facilities and **three** industrial facilities[2]). Rounding to the nearest whole number, 25% of the stationary industrial/commercial inventory would be **98** sites, and 100% of the high TTWQ facilities would be **53** sites.

During FY 2011-12, the City completed inspections for all high priority facilities identified on the industrial/commercial facility inventory. City of Encinitas storm water specialist conducted **two** industrial and **121** commercial site inspections; of which **two** were high priority industrial facilities and **50** were high priority commercial facilities. Therefore, the City of Encinitas met the minimum inspection requirements established in Order 2007-0001 and inspected 100% of all

[2] The Encinitas Landfill is regulated and inspected by the County of San Diego.

the high TTWQ facilities and 32% of all facilities in the industrial and commercial stationary facility inventories.

Table 5-2
Summary of Facility Prioritization and Inspections Conducted in FY 2011-12

TTWQ Prioritization	Number of Facilities	Order 2007-0001 Inspection Requirements	Inspections Completed	
			Total	Percent
High priority	53	100% (53)	53	100%
Low priority	337	as needed	70	21%
Total	390	25% (98)	124*	32%

*Total includes one industrial inspection conducted by the County of San Diego.

5.2.4.3 ROUTINE FACILITY INSPECTIONS

As required by section D.3.b.(3) of the Permit, commercial and industrial facilities in Encinitas are routinely inspected by the City's Clean Water Program staff. Inspections are intended to:

- identify facilities that are not in compliance with the City's Storm Water Management Ordinance and the Municipal Permit;
- provide facilities with information regarding the City's Clean Water Program;
- provide guidance in complying with stormwater regulations (City's Storm Water Management Ordinance, Municipal Permit, etc.); and
- validate and manage the inventory.

During FY 2011-12, City of Encinitas storm water specialist conducted **two** industrial and **121** commercial site inspections for compliance with its ordinances, permits, manuals, and this Order. All inspections included, as applicable:

i. Review of BMP implementation plans, if the site uses or is required to use such a plan;
ii. Review of facility monitoring data, if the site monitors its runoff;
iii. Check for coverage under the General Industrial Permit (Notice of Intent (NOI) and/or Waste Discharge Identification No.), if applicable;
iv. Assessment of compliance with City ordinances and permits related to urban runoff;
v. Assessment of BMP implementation, maintenance and effectiveness;
vi. Visual observations for non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff; and
vii. Education and training on stormwater pollution prevention, as conditions warrant.

The specialist uses a Storm Water Quality Inspection Form to document inspection activities (see Appendix D-3). The specialized form allows staff to document the above listed inspection steps, as applicable, to determine full compliance for each type of facility. In FY 2008-09, staff designed a new triplicate form called Commercial and Industrial Stormwater Quality Inspection

Summary form, which is used in addition to the detailed industrial and commercial inspection form. The form summarizes the corrective actions that are required as a result of the detailed inspection and acts as the responsible party's record of receipt upon completion of the inspection. This customer friendly form more effectively summarizes the inspection results, making corrective action requirements very clear to the business operation owner/manager. The form lists the most common corrective actions and requires a completion date to be met via the signature of the manager/owner. Further, the form effectively aids in the owner's understanding of stormwater regulations and compliance with current and future inspection actions. A copy of this form is included in Appendix D-4. When conducting inspections, the specialist worked with site contacts to provide examples of BMP solutions that could be implemented when corrective actions were necessary to minimize threat to water quality. Effective, low-cost solutions were sought whenever possible, although in some cases more expensive BMPs were needed to reduce pollutant discharges to the MEP. For example a restaurant may be required to provide overhead coverage and secondary containment for outdoor used oil/grease storage. Each business was also evaluated for staff training procedures and the stormwater quality awareness of the contact person; educational information was provided as appropriate. Whenever possible, the findings of the inspection and related corrective actions were discussed with the responsible party while the specialist was at the site. The responsible party was always provided a copy of the inspection summary form, and a complete copy of the detailed inspection report is always available upon request.

For a complete summary and confirmation that the designated BMPs were implemented (or required to be implemented) for industrial and commercial sites inspected in FY 2011-12, see the routine inspections summary in Appendix D-5. This Appendix describes, in detail, actions taken by the specialist to confirm or require that BMPs were implemented at each industrial and commercial site inspected. Appendix D-5 and the associated inspection forms completed for each routine inspection confirm that all inspections conducted in FY 2011-12 addressed all the required inspection steps. Completed forms are available upon request.

Inspection Tracking

Complaint and inspection documentation is filed in the City's GIS database, which is also used to track the number of inspections conducted for the inventoried industrial and commercial sites/sources throughout the reporting period to verify that sites/sources are inspected at the minimum frequencies listed in section D.3.b.(3)(b)& (c) of the Municipal Permit. Clean Water Program staff reference the inspection data in the GIS to assist in facility prioritization, preparing for annual inspections, follow-up inspections, or IDDE investigations.

Third Party Inspections

All commercial inspections conducted in FY 2011-12were completed by City of Encinitas Clean Water Program staff. The City has one full-time stormwater specialist (and three backup specialists) dedicated to conducting routine commercial and industrial inspections and following up on stormwater complaint calls. A third party was not employed to conduct commercial and industrial inspections during this fiscal year. Therefore, verification of third party inspection effectiveness was not necessary.

City staff responsible for conducting stormwater compliance inspections and enforcement of industrial and commercial facilities is trained regularly on inspection and enforcement procedures, BMP implementation, and assessment of monitoring data. Clean Water specialists attend available workshops and regularly receive training through staff meetings and direction from the Clean Water Program Manager. Further, Clean Water staff actively collaborates with inspection staff throughout the San Diego region to share methodologies and approaches that may be beneficial to each jurisdiction. Refer to Section 8.2 for a complete list of workshops, trainings, and conferences attended by Clean Water Program staff in FY 2011-12.

Inspection Follow-up and Enforcement

Clean Water Program staff conducted follow-up inspections at all facilities where deficiencies were identified and corrective actions were required. Follow-up investigations are conducted to ensure that the required BMPs were implemented and confirm full compliance of the facility. A total of **34** follow-up investigations were conducted as part of the FY 2011-12 routine inspection programs. Depending on the severity of the infraction requiring corrective action, inspectors may elect to issue a Notice of Violation and/or monetary citation. In FY 2011-12, all inspected facilities complied with required corrective actions; therefore, **zero** Notices of Violation (NOVs) were requisite to obtain compliance. Appendix D-5 demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the appendix, Clean Water staff aims to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

5.2.4.4 NOTIFICATION

As required by section D.3.b.(2)(c) of the Permit, and initiated in FY 2009-2010, the City of Encinitas notified all inventoried industrial and commercial business of the City's minimum BMP requirements that are applicable to the site and/or activity. Copies of the notification letters (stationary and mobile) are included in Appendices D-7 and D-8 respectively. In addition, during FY 2011-12, the City continued notification efforts as part of routine facility inspections. All industrial and commercial facilities inspected in FY 2011-12 were notified of minimum BMP requirements applicable to their site/source. City of Encinitas stormwater specialists conduct thorough inspections with the owner/operator of each facility. During each inspection the stormwater specialist discusses the applicable BMP requirements in detail with the owner/operators.

5.2.4.5 COMPLAINT INVESTIGATIONS (VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE)

When a complaint is registered with the Clean Water Hotline, NPDES email, or when staff directly observes an illicit discharge involving a commercial facility, a complaint investigation is conducted. All complaints are investigated by City personnel with enforcement authority within a reasonable timeframe. Investigations typically include stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

As required by the Municipal Permit, and depending on the severity of the violation, the City enforces its stormwater ordinance for all commercial and industrial facilities as necessary to maintain compliance with the Permit. Enforcement could include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's GIS work order database (CityWorks).

In FY 2011-12, there were **65** stationary commercial/industrial ICID complaint investigations. Of those investigations, **48** required follow-up assessments, **18** NOVs and **two** citations were issued in order to achieve compliance. A summary of the commercial complaints, violations, and enforcement actions occurring in FY 2011-12 is available for review in Appendix H-1. As a component of complaint investigations, educational information is commonly provided to the owner/operator of commercial facilities to improve knowledge and awareness of stormwater regulations. Materials typically distributed included general stormwater education, BMP requirements, pollution prevention tips, as well as specific municipal code and clean water regulations. During **54** investigations, educational information was provided to the business owner/operator by the Clean Water specialist.

Appendix H-1 demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the appendix, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

Complaint investigation procedures will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report that will be completed and submitted the RWQCB as required by December 15, 2011.

Reporting of Industrial Non-Filers

The City of Encinitas did not identify any industrial sites that may require coverage under the General Industrial Permit but which, to the City's knowledge, did not file NOIs.

5.3 MOBILE SOURCES

5.3.1 BACKGROUND

Illegal discharges tend to be the major area of concern with mobile businesses. Mobile businesses can be difficult to inventory because they may not be based in the City of Encinitas and do not maintain a permanent address. Additionally, new mobile businesses are started, and previously existing mobile businesses go out of business on a relatively regular basis. For the reasons listed, and also simply because they are not consistently present at a fixed location, regular inspections of mobile businesses are not a feasible option.

5.3.2 SOURCE CHARACTERIZATION OF MOBILE SOURCES

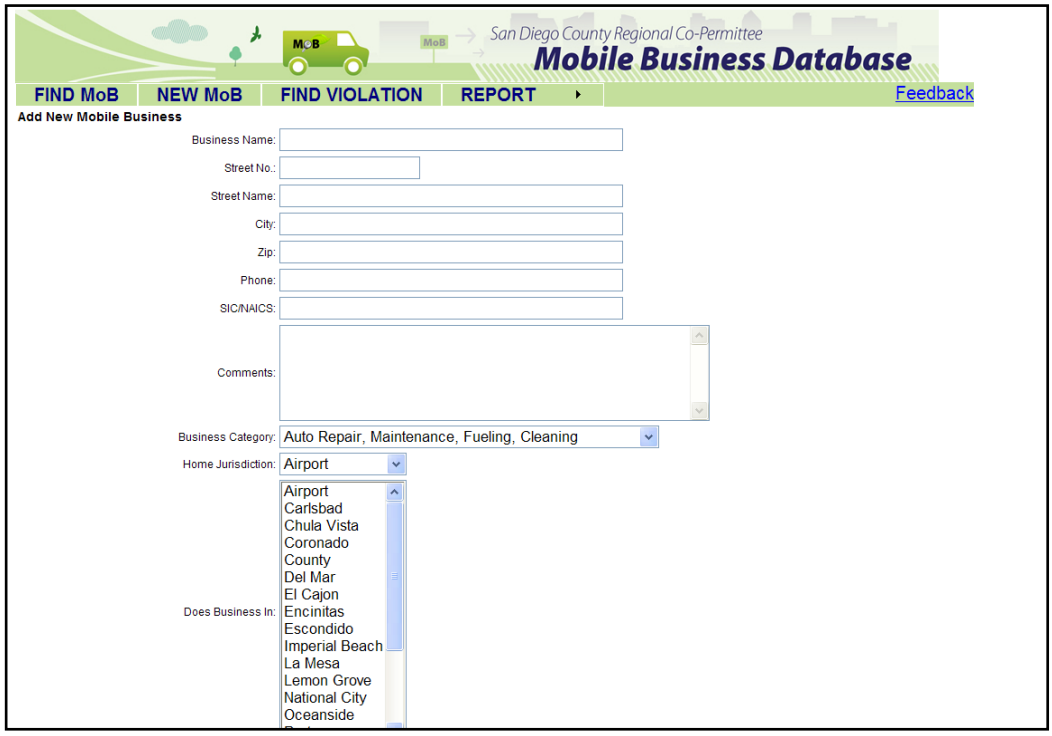
The mobile businesses known to operate within the City's jurisdiction are listed on an inventory separate from the stationary commercial inventory in Appendix D-6. This inventory was comprehensively reviewed and updated during FY 2011-12. The following business types are addressed by the mobile sources element of the City's industrial and commercial program:

- Mobile automobile or other vehicle washing
- Mobile carpet, drape, or furniture cleaning
- Mobile construction trades
  - Cement mixing or cutting
  - Masonry
  - Painting and coating
- Landscaping
- Pool and fountain cleaning
- Power washing services

In addition to the types of businesses listed above, any other mobile business that the City determines to have a significant threat to water quality will be added to the inventory. Because not all mobile businesses have obtained a City of Encinitas business registration certificate or have a base of operations outside the City of Encinitas, Clean Water Program staff is continually refining and updating the mobile commercial inventory. Sources for such inventory updates include reported incidents, general observations by City staff, and available business registration certificates.

In FY 2008-09, the City participated in the development of a regional inventory and tracking system for mobile businesses. The industrial/commercial workgroup worked with a consultant who specializes in database design to create and maintain a mobile businesses database for the region. Figure 5-1 depicts the online form used by copermittees to enter a new business into the regional mobile business database. It is anticipated that this regionally updated and shared database will aid in collaborative enforcement of stormwater violations caused by mobile businesses.

Figure 5-1
Mobile Business Database New Business Entry Form



5.3.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

5.3.3.1 UPDATED BMP REQUIREMENTS FOR MOBILE SOURCES

All BMPs required for stationary sources, described in Section 5.2.3.1 of this document and listed in detail in the City's BMP Manual, are also required for mobile businesses, where applicable. The most important BMPs for most mobile businesses are typically those that address non-stormwater discharge control and spill prevention, control, and cleanup.

5.3.3.2 ADDITIONAL CONTROLS FOR MOBILE SOURCES

Regardless of where the activity occurs, the City categorically prohibits illegal discharges from mobile businesses. If the City finds that the activities of a mobile business are contributing pollutants of concern to a CWA section 303(d) impaired water body segment or are negatively impacting ESAs, additional controls will be required for those activities as applicable. Further, if the City has reason to believe that any mobile business is generating significant illegal discharges in a given area of the City that is tributary to a 303(d) listed water body (and the discharges contain pollutants causing the impairment) or is within, directly adjacent to, or directly discharges to a water body within an ESA, City staff may more frequently visit those areas and/or take other actions to address the illegal discharges.

5.3.4 PROGRAM IMPLEMENTATION

5.3.4.1 EDUCATION/OUTREACH AND NOTIFICATION OF MOBILE SOURCES

In FY 2011-12, the City of Encinitas provided information and outreach regarding stormwater quality to mobile business owners and operators that were contacted as a result of a complaint call *(See Section 5.3.4.4 below for a summary of complaint calls related to mobile business activities)*. Contacted businesses were given educational materials with detailed pollution prevention methods and other related BMPs to aid in their compliance with the City's stormwater ordinance and the Municipal Permit.

In 2009-2010, the City completed a comprehensive mail out to all inventoried mobile businesses known to operate in the City of Encinitas, disseminating minimum BMP requirements to identified proprietors. This effort leveraged upon regional and jurisdictional efforts to develop an exhaustive inventory of mobile businesses conducting a variety of activities. Based upon this well developed effort, the City of Encinitas assuredly met Municipal Permit (Section D.3.b.(2)(c)) requirement to notify inventoried businesses of minimum BMP requirements.

5.3.4.2 INTER-JURISDICTIONAL COORDINATION

During FY 2007-08, the City of Encinitas participated with other Copermittees in a Mobile Business Subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the Copermittees have chosen to collaborate on a regional mobile business outreach and education strategy, which addresses the following elements:

- Inventory Development and Maintenance;
- Establishment of Minimum BMP Requirements; and
- Outreach and Education (Including Business Notifications).

As described above, in FY 2008-09, a consultant was obtained to develop and launch a mobile business database to assist with the implementation of this Mobile Business Program. Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this strategy. See Appendix F-1 for the complete Regional Mobile Business Strategy.

5.3.4.3 INSPECTIONS

The inspections for mobile businesses generally follow the same procedure described in Section 5.2.4.3 of this document. The main focus of most mobile business inspections is on discharge control BMPs. Notably, as part of standard response actions, Clean Water staff work directly with mobile business owners and employees to ensure that their business practices meet the City's minimum BMP standards.

5.3.4.4 COMPLAINT INVESTIGATIONS, VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE

Complaint response, follow-up investigation, and compliance of mobile commercial businesses are handled in the same fashion as stationary commercial facilities. For a general description of the City's complaint response procedures, refer to section 5.2.4.5.

In FY 2011-12, there were **16** mobile complaint investigations conducted. **12** resulted in dissemination of educational information to the business owner/operator; **8** Notices of Violation were issued. Appendix H-1 includes a summary of violations and enforcement actions resulting from complaints about mobile businesses occurring in FY 2011-12.

Complaint investigation procedures, including those related to mobile business operations, will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report, which will be completed and submitted to the RWQCB as required by December 15, 2011.

6.0 RESIDENTIAL

6.1 INTRODUCTION

Approximately 80 percent of the City's 19.4 square mile area is designated as residential in the City's General Plan map. Residential land use comprises a large area of the City, and residential activities can have a considerable effect on the water quality of receiving waters. The City's residential component of the Clean Water Program aims to reduce pollutant runoff from residential areas and activities to the MEP (Maximum Extent Practicable) and prevent residential discharges from the MS4 (Municipal Separate Storm Sewer System) from causing or contributing to a violation of water quality standards.

The overall goal of the program is to minimize the impact of discharges from residential areas on receiving waters in Encinitas and, where possible, to enhance the quality of these resources. The following sections will describe the program activities conducted during FY 2011-12 that contributed to the successful implementation of the City's Residential Component.

6.2 SOURCE CHARACTERIZATION

Residential high threat to water quality areas and activities within the City of Encinitas were identified during the 2008 JURMP update process and are described in detail in the City's 2008 JURMP. The following section identifies the high threat to water quality residential areas and activities that were focused on during FY 2011-12. The Municipal Permit (Order R9-2007-0001) requires each Copermittee to identify and provide a list of the residential areas and activities within its jurisdiction that have been identified as having a high threat to water quality. The following section briefly summarizes this process.

6.2.1 HIGH THREAT TO WATER QUALITY ACTIVITIES

In consideration of the minimum required *high threat to water quality* residential activities listed in section D.3.c.(1) of Order No 2007-0001, the following residential activities were identified as residential activities that hold the greatest threat potential to local receiving water quality:

- Automobile Repair and Maintenance
- Automobile Washing
- Automobile Parking
- Home Improvement, Garden Care Activities, and Product Use
- Disposal of Trash, Pet Waste, Green Waste, and Household Hazardous Waste

6.2.2 HIGH THREAT TO WATER QUALITY AREAS

Section D.3.c. (1) of Order No 2007-001, requires that Copermittees identify all *high threat to water quality* residential areas. During the 2008 JURMP update, the City identified *high threat to water quality* residential areas using the following criteria (as defined in the Municipal Permit):

- Any residential areas tributary to a CWA section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired; and
- Any residential areas within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an environmentally sensitive area (as defined in Attachment C of the Municipal Permit).

The City of Encinitas has several Section 303(d) impaired water bodies and coastal lagoons within or directly adjacent to the City's jurisdictional boundary. The 303(d) impaired water bodies within the City of Encinitas include Cottonwood Creek, Encinitas Creek, Escondido Creek, San Elijo Lagoon, and the Pacific Ocean at Moonlight State Beach and the San Elijo Lagoon Outlet.

Based on the definition in Attachment C of the Order No 2007-0001, Environmentally Sensitive Areas within the City of Encinitas include those areas identified as Natural Resource Sensitive areas in the City's General Plan and the City's Wetland buffer layer. The City does not contain any Areas of Special Biological Significance, water bodies designated with the RARE beneficial use, or areas designated as preserves in the Multiple Species Conservation Program.

In the process of drafting the Regional Residential Education Program, the Regional Outreach Workgroup identified the major pollutants of concern from residential sources for the San Diego region. The major pollutants of concern for residential areas include: bacteria, nutrients, sediment, pesticides, and trash.

In consideration of identified 303(d) listed water bodies, the City's ESAs (Environmentally Sensitive Areas), and the primary pollutants of concern, Clean Water Program staff employed GIS analysis to determine the location of *high threat to water quality* residential areas. Based on this analysis the following residential areas within the City of Encinitas were identified as *high threat to water quality* residential areas:

- All residential areas within 500 feet of any 303(d) listed water body or lagoon
- All residential areas within, directly adjacent to, or discharging directly to a coastal lagoon or other receiving waters within an ESA
- The residential area to the west of Interstate 5 within the Cardiff sub-basin (drains to San Elijo Lagoon)
- The residential area south of Sylvia St, west of Second Street, and north of K Street (drains to Cottonwood Creek and Moonlight Beach)

Appendix E-1 includes a map of residential areas. The map was developed for Clean Water Program staff to utilize in the office and in the field to help identify residential discharges or

activities which could pose a threat to water quality due to their proximity to receiving water bodies and ESAs.

6.2.3 EVALUATION OF OVERSIGHT OF RESIDENTIAL AREAS AND ACTIVITIES

Through an evaluation of effectiveness assessment measures as part of this report (See Section 11.0), it has been reasoned that the City has achieved overall success as it relates to the oversight of residential areas. Hotline complaint calls received, compliance achievement, and dry weather monitoring exceedances as they relate to residential sources all support this assessment. Continual evaluation in subsequent reporting years will be vital to assessing the overall efficacy of oversight related to residential sources.

6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

6.3.1 POLLUTION PREVENTION

Pollution prevention is the act of reducing or eliminating waste at the source by modifying production processes, promoting the use of non-toxic or less-toxic substances, implementing conservation techniques, and re-using materials rather than putting them into the waste stream. Pollution prevention methods have been integrated into the minimum BMPs established for *high threat to water quality* areas and activities.

6.3.2 LIST OF MINIMUM BMPS

As part of the City's 2008 JURMP update, the City designated the following minimum BMPs for *high threat to water quality* residential activities. The minimum BMPs are primarily nonstructural and are targeted at activities specified in Section 6.2 as having a *high threat to water quality*. Pollution prevention methods were incorporated into this set of BMPs, where appropriate. The list of minimum BMPs can also be found in the City's Storm Water BMP Manual I.

(a) Automobile Repair and Maintenance

Pollution Prevention

(1) Employ routine preventative maintenance practices
(2) Reduce vehicle use, whenever possible
- Change driving habits
- Carpool
- Increase the use of public transportation
- Bike or walk for short trips

(3) Make timely vehicle repairs

Leaks and Spills

(1) Prevent leaks and spills from contacting stormwater
- Use drip pans, plastic sheeting, or other materials to contain spills
- Work indoors or under shelter
- If working outdoors, don't work in the rain
- Immediately contain and clean up leaks and spills when they occur
- Use absorbent materials to clean up spills
- Establish cleanup standards
- Require that tools and parts be cleaned only in contained areas

Materials and Waste Management

(1) Properly manage and dispose of automotive wastes and materials
- Properly drain fluids from automobiles
- Dispose of wastes properly and lawfully and recycle used oil and antifreeze
- Store materials and wastes indoors or under cover
- Use secure and watertight containers when storing materials and wastes

(b) Automobile Washing

Management / Reduction* of *Wash Water

(1) Whenever possible, use commercial self-serve or full-serve car washes that properly dispose or recycle their wash water
(2) When washing a vehicle at a residence:
- Wash vehicles over porous surfaces (grass, dirt, etc.) whenever possible
- Use dry cleaning methods to avoid the generation of wash and rinse water
- Turn off the water when not in use or use a controllable spray nozzle
- Encourage the establishment of neighborhood wash areas where wash water and contaminants can be properly managed

Materials and Waste Management

(1) Properly dispose of soapy water or bucket rinse water to the sanitary sewer or soak into a landscaped area
(2) Use dry methods to degrease or clean especially dirty parts prior to wet washing and rinsing (e.g., remove grease or brake dust using towels, etc.)
(3) Refrain from degreasing or cleaning of engine parts in areas other than those designated for such purposes

(c) Automobile Parking

(1) Use routine preventative maintenance practices and make timely vehicle repairs to prevent leaks of automotive fluids
(2) Design and construct parking areas to minimize storm water impacts; covered garages should be plumbed to the sewer system

(d) Home and Garden Care Activities and Product Use

GARDEN AND YARD CARE

Pollution Prevention

(1) Use safe substitutes and alternative methods when gardening:
- Use integrated pest management techniques and biological controls
- Use native plants and drought tolerant species to reduce water use and green waste produced
- Implement planting techniques that attract beneficial insects
- Consider composting, vermiculture and yard waste recycling
- Recommend and encourage practical purchasing practices for pesticides and fertilizers
- Identify "pests" before attempting to eliminate them

(2) Always read label instructions and follow the instructions for garden care products
(3) Implement water conservation practices, whenever possible
(4) Consider xeriscape gardening, including: drip irrigation, soaker hoses, and micro-spray systems
(5) Repair and maintain irrigation systems to reduce excessive runoff
(6) Recycle lawn clippings and green waste through local programs
(7) Plant or mulch hillsides and slopes to prevent erosion

Leaks and Spills

(1) Immediately cleanup spills of gardening chemicals, fertilizers, and soils
(2) Return spilled materials to the container for future use or proper disposal

Materials and Waste Management

(1) Store lawn care products in closed labeled containers and in covered areas
(2) Refrain from using hazardous materials during windy or rainy days
(3) Cover stockpiles of soil, compost, or fertilizers with plastic tarps to prevent dispersal by wind or rain
(4) Dispose of household chemicals to the household hazardous waste collection facility or scheduled drop-off events
(5) Utilize dry sweeping techniques for clean up

Restrictions on Activities

(1) Do not hose off paved surfaces to the street or gutter
(2) Do not dispose of hazardous waste to the trash, landfill, or storm drain

HOME CARE AND MAINTENANCE

Pollution Prevention

(1) Utilize purchasing practices that reduce waste
(2) Use safe substitutes for home cleaning and maintenance

(3) Read and follow product labels
(4) Recycle unused or unwanted products
(5) Use water based paints when possible
(6) Recycle unwanted appliances and household equipment

Leaks and Spills

(1) Clean up hazardous materials spills immediately
(2) Properly dispose of waste from spill cleanup materials

Materials and Waste Management

(1) Store household hazardous materials in closed labeled containers and in a covered area
(2) Recycle latex paint through community programs
(3) Dispose of unwanted household hazardous waste through household hazardous waste collection facilities
(4) Dispose of trash in provided trash cans or shared dumpsters and keep dumpster and trash can lids closed when not in use

Restrictions

(1) Do not dispose of wash waters (carpet cleaning, mop water, paint wash-up, etc.) to the street, gutter, or storm drain

(e) **Disposal of Pet Waste**

Pollution Prevention

(1) Spay or neuter pets to reduce feral populations

Waste Management / Disposal

(1) Clean up after pets when walking them in public places
(2) If pets are allowed to defecate outside, clean up feces from yards
(3) Properly dispose of pet feces in the toilet or trash

Pet Management (Dogs and Cats)

(1) Whenever possible, do not allow pets to run free in residential neighborhoods

Manure Management (Horses and Other Large Animals)

(1) Properly manage manure (including the preparation of manure management plans when appropriate)
(2) Compost or properly dispose of manure
(3) Cover manure stockpiles with plastic tarp to prevent contact with rain

6.4 PROGRAM IMPLEMENTATION

This section describes the steps that were taken in FY 2011-12 to require and verify the implementation of designated BMPs for residential areas and activities.

6.4.1 OUTREACH AND TRAINING

The City has a comprehensive set of Education and Public Participation Programs, which are a component of the City's jurisdictional program. A significant element of these programs consists of educating and engaging residents about ways in which they can minimize their impact on local waterways. Education of the citizens who reside in the City of Encinitas contributes to the implementation of the Residential Component of the City's Clean Water Program. Outreach messages that are relayed to the public include, but are not limited to:

- Impacts of urban runoff on receiving waters
- Distinction between MS4s and sanitary sewers
- Pollution prevention and safe alternatives
- Household hazardous waste collection and recycling
- BMP implementation and BMP maintenance
- Pet and animal waste disposal
- Equipment and vehicle maintenance and repair
- Spill response, containment, and recovery
- Water conservation

During FY 2011-12, Clean Water program staff conveyed these messages to the public through a variety of mechanisms, including:

- Clean Water Program website
- Production and distribution of brochures and promotional items
- Public participation in community events, workshops, and trainings
- Presentations at local schools
- Media coverage
- Response to residential complaints (Clean Water Hotline or email)

Notably, the City's website, including the Clean Water Program pages underwent a comprehensive update in 2011-2012. The website was update to improve overall look and feel, improve navigation, and provide the most current information available to the public. This site continues to be a central location by which to make Clean Water Program information available to the community and critical venue to disseminate activity and source specific minimum BMPs. Implementation of this and all those mechanisms mentioned above by the Clean Water Program helps to make the public aware of the types of activities that have the potential to impact water quality and the BMPs that can be implemented to reduce this impact. Awareness is the first step in the process towards behavioral change. A detailed description of the educational activities implemented by the Clean Water Program can be found in the Section 8.

6.4.2 USED OIL AND HHW COLLECTION SERVICES

The City of Encinitas facilitates the proper management and disposal of used oil, toxic chemicals, and other household hazardous wastes (HHW) through various mechanisms. The City offers its residents door-to-door home collection, two permanent collection facilities, and periodic, temporary collection events for all HHW. In addition, the City requires weekly curbside garbage, recycling, and yard waste pick-up for all residents. The various components of the solid waste and hazardous waste collection services provided by the City are described in detail below.

HHW Home Collection Program - Door-to-door home collection service is available to all residents of the City of Encinitas. Qualifying homebound, elderly, and disabled citizens may request pickup at no charge. Residents not qualifying for free pickup service are charged a nominal fee of $10 for home collection. Materials accepted via the HHW Home Collection Program include:

Household Cleaners: Drain openers, oven cleaners, wood and metal polish / cleaners, toilet bowl cleaners, and disinfectants

Automotive Products: Oil and fuel additives, grease and rust solvents, carburetor and fuel injector cleaners, air conditioning refrigerants, starter fluid, lubricating fluids, radiator fluids and additives, waxes, polishes, cleaners, and transmission additives

Home Maintenance and Improvement Products: Paint thinners, paint strippers, adhesives, paints, stains, varnishes, sealants, and wood preservatives

Lawn and Garden Products: Pesticides, herbicides, and fungicides (poisons)

Miscellaneous: Batteries, fingernail polish removers, pool and photo chemicals

Electronic/Universal Wastes: Electronic waste, or E-Waste, electronic products nearing or at the end of their "useful life," and includes cell phones, computers, televisions, VCRs, stereos, copiers, and fax machines which contain lead and other hazardous materials

Medical Sharps/Pharmaceuticals

Poway and Vista Permanent HHW Collection Facilities - As a member agency of the Regional Solid Waste Association, residents of the City of Encinitas may also drop off household hazardous waste at permanent HHW collection facilities located in the cities of Poway and Vista. The Vista collection center is located at 1145 East Taylor Street, at Laguna Lane. The Poway collection center is located in the South Poway Business Park, at 12325 Crosthwaite Circle off of Stowe Drive. These regional, permanent collection centers are open every Saturday (except holiday weekends) from 9:00am to 3:00pm. No fee is charged to Encinitas residents and no appointments are necessary. Waste collected is separated, packaged, secured, and temporarily stored at the permanent facilities. It is then removed on a regular basis for proper recycling or disposal. Material accepted at the Poway and Vista facilities are the same as those accepted through the Home Collection Program.

Used Oil Recycling Program - The City's used oil recycling program consists of a network of certified automotive waste recycling centers throughout the city. These facilities accept a range of used automobile products including used oil and oil filters. A significant part of this program is the dissemination of educational information regarding the benefits of, and opportunities for, pollution prevention. This program is specifically for the residents of Encinitas and is funded through grants from Calrecycle. A list of the participating oil recycling sites is provided in all oil recycling printed material and on the City's website. Residents may also opt to use the City's door-to-door HHW collection service to recycle their used oil and oil filters. However, most residents are accustomed to taking their used oil and oil filters to the certified centers and the permanent HHW facilities.

Trash and Recycling Services - For public health purposes, the City of Encinitas requires that all residents participate in the City's solid waste collection service. All residents and businesses are liable for payment of fees for the mandatory service (see Municipal Code section 11.20.010, paragraph A). Residential service includes curbside green waste collection and recyclable materials collection in addition to regular garbage collection. The City of Encinitas has an exclusive franchise agreement with EDCO Waste and Recycling Services to provide solid waste collection services in Encinitas for both residential and commercial customers.

Detailed information regarding used oil, HHW, and solid waste disposal is made available to residents through the City's website, ECDO's website, and other various environmental websites. In addition, brochures about household hazardous waste disposal options are available at outreach events staffed by the Clean Water Program, the Solana Center, and EDCO Waste Recycling Services. Brochures and information regarding HHW disposal are also available upon request at City facilities.

Table 6-1 provides a summary of the used oil collected via the City's used oil recycling program. Table 6-2 identifies types and amounts of household hazardous waste collected from residents in Encinitas during this reporting period.

Table 6-1
Used Oil Collected in FY 2011-12

Collection Type	Quantity of Oil (Gallons)	Quantity of Filters (# of Filters)
Certified Centers	418	103
Permanent HHW Centers	730	410
Total	**1138**	**513**

Table 6-2
Household Hazardous Waste Collected in FY 2011-12

Material Type	Description	HHW Collection Facilities*
Flammable	Flammable solid/liquid	3,091
& Poison	Bulked flammable liquids	206
	Oil-base paint	16,218
	Poison (excl. aerosols)	4,929
	Reactive and explosive	0
	Subtotal	**24,444**
Acid	Inorganic & Organic acid	788
Base	Inorganic & Organic base	1,537
Oxidizer	Neutral oxidizers, Organic peroxides	151
	Subtotal	**2,476**
PCB-containing	PCB-containing paint	0
	Other PCB waste	63
	Subtotal	**63**
Reclaimable	Antifreeze	946
	Car batteries	468
	Latex paint	40,532
	Motor oil/oil products	3,554
	Oil filters	154
	Subtotal	**45,654**
Asbestos		0
Universal Waste (UW)	Mercury containing waste	11
	Thermostats/switches/thermometers	0
	Fluorescent Lamps	605
	Rechargeable batteries	75
	Household batteries	765
	Subtotal	*1,456*
Electronic Waste (UW)	SB20/50 covered electronic devices	14,363
	Universal waste electronic devices	14,332
	Subtotal	*28,695*
Aerosols (UW)	Non-empty aerosol containers	0
	Other	0
	Subtotal	**30,151**
Other HHW	Home-generated sharps	308
	Pharmaceutical waste	0
	Compressed gas cylinder	395
	Non-UW aerosol containers	1.334
	Treated Wood	114
	Other	1,108
	Subtotal	**3,259**
Grand Total		**106,047**

*Waste measured in pounds.

6.4.3 COMPLAINT INVESTIGATIONS, VIOLATIONS, ENFORCEMENT, FOLLOW-UP, AND COMPLIANCE

When a complaint is registered with the Clean Water Hotline, NPDES email, or when staff directly observes an illicit discharge, a complaint investigation is conducted. All complaints are investigated by City personnel with enforcement authority within a reasonable timeframe. Investigation typically includes stopping any active discharges, educating the discharger, enforcing discharge prohibitions, and/or cleanup activities by the City or responsible party.

As required by section D.3.c.(3) of Order No 2007-0001, and depending on the severity of the violation, the City enforces its storm water ordinance for all residential areas and activities as necessary to maintain compliance. Enforcement may include verbal or written warnings with education, orders to abate or correct, administrative citations, monetary fines, civil lawsuits, and/or cost recovery actions. Escalating enforcement steps provide flexibility for Clean Water staff to establish appropriate compliance time frames on a case-by-case basis. All complaints and associated violations, enforcement, and follow-up actions are thoroughly documented and tracked through the City's GIS work order database (CityWorks).

In FY 2011-12, there were **59** residential ICID complaint calls. Of these calls, **five** were either issues that were referred to other departments/agencies or requests for information only (requests for information may include car washing regulations, power washing requirements, etc). Of the **54** residential complaint investigations conducted, **41** resulted in dissemination of educational information to the homeowner or resident. Materials typically distributed included general storm water education, BMP requirements, pollution prevention tips, as well as specific municipal code and clean water regulations. In addition to education, FY 2011-12 complaint investigations resulted in **four** Notices of Violation and **one** citation.

A summary of the residential violations and enforcement actions occurring in FY 2011-12 is available for review in Appendix H-1. The tabular summary includes a brief discussion, which includes the follow-up actions taken, for each violation. The table demonstrates that compliance was achieved (or that actions are currently being taken to achieve compliance) and that designated BMPs were required to be implemented. As exemplified by the records in the table, Clean Water staff aim to resolve all violations in a timely and appropriate manner in order to achieve prompt, effective compliance.

Complaint investigation procedures will be detailed in the forthcoming Illicit Discharge and Detection Elimination (Section 7) report that will be completed and submitted to the RWQCB as required by December 15, 2012.

6.4.4 REGIONAL RESIDENTIAL EDUCATION PROGRAM

In prior reporting years, the City of Encinitas collaborated with other jurisdictions in the Education and Residential Sources Workgroup to develop the Regional Residential Education Plan. This plan contains recommended strategies for the development and implementation of

the Regional Residential Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale. The complete Regional Residential Education Plan can be found in Appendix F-6. Details of the implementation of this Plan can be found in Section 8.3.4(d) of this annual report and in the Regional Urban Runoff Management Plan (RURMP) annual report to be submitted under separate cover by the County of San Diego on behalf of the San Diego County Stormwater Copermittees.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION

In accordance with the September 10, 2008 Regional Water Quality Control Board adoption of Addendum No. 2 to Order No. R9-2007-0001, the City of Encinitas will submit the entire FY 2011-12 Illicit Discharge Detection and Elimination Component and attachments no later than December 15, 2012.

8.0 EDUCATION

8.1 INTRODUCTION

The City's outreach program includes an education component and a public participation component. The education component is focused on disseminating educational information to increase public knowledge of stormwater issues, while the public participation component, discussed in Section 9, provides opportunities for the public to become involved in the process of reducing pollutants of concern in stormwater and urban runoff. The education component is primarily implemented by the Engineering Services Department, Clean Water Program.

The Municipal Permit establishes the following five target communities which must be addressed by the education program:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

The overall goal of the education element is to provide an education program that will:

(1) Measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience.

(2) Measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment.

The City conducted or participated in a wide variety of stormwater education activities during the FY 2011-12 reporting period. Education and outreach activities and opportunities are organized and implemented on three levels—Jurisdictional, Watershed, and Regional. For ease of reporting, activities occurring on all levels have been captured below.

8.2 JURISDICTIONAL EDUCATION

8.2.1 Program Identity

Through Citywide environmental efforts and initiatives, stormwater pollution prevention and water quality have been identified as priorities for residents and businesses in the Encinitas community. As a result, the City of Encinitas Clean Water Program staff felt that updating the program identity through a new logo would enhance awareness within the community and help identify the diverse City functions that help to protect local surface water quality in creeks, lagoons, and the ocean. A new Clean Water Program logo was developed in FY 2009-10 and is currently being used on new educational outreach materials,

event giveaways, program correspondence, staff apparel, and our logo is also displayed on our new web site.

8.2.2 Educational Materials Distribution

In FY 2011-12, a total of **3,578** outreach materials were distributed by the Clean Water Program. This includes BMP brochures for Automotive Facilities (English and Spanish), Developers (English and Spanish), Diazinon (English and Spanish), "Hiring A Handyman" (English and Spanish), Restaurants (English and Spanish), and Yard & Garden (English and Spanish). The Program also distributed pencils, reusable shop towels, "Bags on Board" dispensers, construction brochures, watershed posters, door hangers, eating establishment guides ("What's Cooking"), automotive guides ("Green Wrench"), flyers printed from the Project Clean Water Toolbox, Think Blue Regional Calendars, Think Blue Regional bilingual stormwater coloring books, Minimum Required BMP brochures for stationary as well as mobile businesses, and other informational guides. These guides included information on Integrated Pest Management (UCSD Cooperative Extension), water conservation from local water districts and the County Water Authority, County of San Diego Household Hazardous Waste, "10 Simple Ways You Can Help Protect the Ocean" from the Encina Wastewater Authority, and our newest and most colorful addition is the reusable and recycled Clean Water Program bag, made from 85% postindustrial recycled paper.

8.2.3 Municipal Staff Training

As required by Municipal Permit section 5.b.1 (d), activity specific training opportunities were provided to City staff. The summary below outlines departmental training activities conducted during the defined reporting period of this report.

Public Works, Streets Division. FY 2011-12 stormwater training was provided to the Streets Division during regular staff meetings on the following dates:

- August 11, 2011; Municipal Program Best Management Practices: SC-41 Building & Ground Maintenance, SC-70 Road & Street Maintenance, & SC-73 Landscape Maintenance; 13 attendees
- August 25, 2011; Municipal Program Best Management Practices: SC-11 Spill Prevention, Control, & Clean up, SC-71 Plaza & Sidewalk Cleaning, & SC-76 Water & Sewer Utility Maintenance; 13 attendees
- April 26, 2012; Municipal Stormwater Training presented by Clean Water Staff; 13 attendees

Public Works, Wastewater Division: The Clean Water Program works closely with the Wastewater division to prevent illegal discharges from entering the City's waterways. **Eight** staff members from the Wastewater division were trained by Clean Water Program staff on March 7, 2012.

San Dieguito Water District: Seventeen staff members from the San Dieguito Water District were trained on **April 11, 2012**. Topics included a refresher on stormwater regulations, activity specific BMPs, and the relationship between irrigation runoff and stormwater pollution.

City of Encinitas Fire Department: Within the defined reporting period of this report, stormwater training workshops were given to the Fire Department on three separate dates. On **March 12, 2012**, **fifteen** fire personnel were in attendance; **thirteen** fire personnel attended the training on **March 13, 2012**; and **eight** fire personnel were at the **March 14, 2012** training.

City of Encinitas Landscape Contractors: The City contracts with multiple landscaping companies to maintain our parks, beaches, and other public landscaped areas. In collaboration with the City's Parks and Recreation Department, training was given in Spanish to **twenty-seven** staff from the City's landscape contractors on **March 22, 2012**. Topics of this training included activity specific BMPs, City stormwater regulations, and proper materials management.

Engineering Department: Staff from the Clean Water Program and other divisions of the Engineering Department attended the following trainings:

- StormCon – August 23, 2011: Anaheim, CA; 3 attendees
- Stormwater Construction Requirements – September 22, 2011: San Diego, CA; 1 attendee
- Stormwater Inspection and Maintenance – December 13, 2011: Encinitas, CA; 8 attendees
- CASQA Webinar – January 12, 2012: Encinitas, CA; 1 attendee

Clean Water Program, Engineering Department. Clean Water Program staff regularly attends trainings, workshops, and conferences related to stormwater management. This fiscal year staff attended the following:

- California Water Environment Association 2012 Conference – February 29th, 2012: Huntington Beach, CA; 1 attendee
- Floodplain Management Association; Geomorphic Assessment – June 19, 2012: San Diego, CA; 1 attendee

In addition to formal training, Clean Water Program staff is regularly informed of new and emerging water quality regulations, science, and technology through regional meetings, subscription to relevant scientific journals, and individual research.

Multiple City Departments: Staff from various City Departments attended trainings within the reporting period of this report that support the efforts of the City's Clean Water Program.

- Stormwater Quality Workgroup-Design Standards – March 5, 2012

8.2.4 UNDERSERVED TARGET AUDIENCES, HIGH-RISK BEHAVIORS, AND "ALLOWABLE" BEHAVIORS AND DISCHARGES

Underserved Target Audiences - Bilingual Education

For those that work in the City, and for segments of the community that do not speak English as their first language, the City provided bilingual (English/Spanish) brochures at all outreach events. The Clean Water Program utilized the bilingual brochures produced by the City that are targeted at specific trade groups/activities. These brochures include information about Best

Management Practices for Yard and Garden Care, Restaurants, Home Improvement, Pesticides, Developers, and Automotive Care. Bilingual Think Blue Regional Stormwater Coloring Books and calendars were distributed in FY 11-12. Further, a bilingual Clean Water Program staff person provides training and responds to complaint calls as needed in various community sectors.

High Risk Behaviors - Regional Mobile Business Outreach and Education Plan
During FY 2010-2011 the City of Encinitas participated with other copermittees in a Mobile Business Subcommittee to develop the Regional Mobile Business Outreach and Education Strategy. The Industrial/Commercial Workgroup will be overseeing the implementation of that Strategy throughout the permit cycle. A complete description of the education and outreach of mobile businesses and inter-jurisdictional coordination of notifications can be found in section 5.3. See Appendix F-1 for the complete Regional Mobile Business Outreach and Education Strategy.

8.2.5 NEW DEVELOPMENT AND CONSTRUCTION COMMUNITIES

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to the new development and construction communities.

- "A Pollution Prevention Guide for the Construction Industry" was distributed at public events, to engineering construction inspectors and the building department, and displayed at the City of Encinitas Engineering counter for the public. **One hundred and twenty-two** construction brochures were disseminated during the 2011-12 reporting year. This brochure was developed as part of the Carlsbad Watershed Urban Runoff Management Plan workgroup (Appendix F-2).
- Announcements at pre-construction meetings. Pre-construction meetings are attended by Engineering Department inspectors and Clean Water staff as determined appropriate. For all projects, stormwater topics including required construction site BMPs, general site management, post-development BMP construction, and other relevant SUSMP requirements are discussed.
- Construction inspector stormwater coordination. Within the defined reporting period of this report, staff from the Clean Water Program attended inspector staff meetings to provide support and information to the City's construction inspectors.
- Printed materials were provided to contractors and developers in the form of the City's brochure, "Developers – Simple and Cost Effective Ways to Comply with Stormwater Regulations" (Appendix F-3). The brochure is available in Spanish and English.
- Special mailings of information (i.e., wet season erosion control letter). In September 2011 the City mailed **79** letters to local developers and contractors regarding sediment and erosion control BMP requirements for the upcoming rainy season (Appendix B-5). "A Pollution Prevention Guide for the Construction Industry" brochure was inserted into each annual Erosion Control Letter that went to contractors, developers, and job superintendents.

8.2.6 COMMERCIAL/INDUSTRIAL OWNERS AND OPERATORS

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to commercial and industrial sectors of the community:

- Stormwater quality inspections were performed at **121** commercial facilities and two industrial facilities during the FY 2011-12 reporting period. During these inspections individual one-on-one education was presented to each facility manager/owner. Information presented included general stormwater quality information and minimum BMP requirements.

8.2.7 RESIDENTIAL COMMUNITY, GENERAL PUBLIC, AND SCHOOL CHILDREN

The following is a summary of venues and media outlets utilized within the defined reporting period of this report to provide education and training to various residential, community, and school audiences:

- During the defined reporting period of this report, San Dieguito Water District (SDWD) hosted **eight** Water Conservation Classes and held **one** Project WET teacher training. Several of the classes listed below were cosponsored or co-hosted by other local agencies and non-governmental organizations as noted. Additionally, within the defined reporting period of this report, the San Dieguito Water District (SDWD) hosted numerous outreach events geared towards school-aged children. All SDWD events summarized in Table 8-1 below include topics or the distribution of materials related to stormwater pollution prevention.

Table 8-1
SDWD Water Conservation Classes held in FY 2011-12

Date	Event/Location	Material Provided	# of Participants
Jul 19, 2011	City of Encinitas Day Camp at Glen Park	Water cycle activity, California Delta Information Sheet, other puzzle/water sheets, globe toss	75 children ages 5-13
Jul 21, 2011	Mira Costa College student presentation	Water conservation kits & Water for Tomorrow material	25 students
Jul 20, 2011	Mira Costa College student presentation	35 copies of 2010 Water Quality Report for Child Development Class	35 students
Sept 10, 2011	Capri School Volunteer Day to prepare for native habitat	Information on grants, rebates, conservation work; temp tattoos, flower seed	45 adults (approx.)

Date	Event/Location	Material Provided	# of Participants
	restoration Partner: US Fish & Wildlife Service	packets; water and snacks.	
Sept 17-18, 2011	Cardiff Green Expo (Surf Classic & Rerip) at San Elijo Beach	Outreach materials provided at booth	200 people
Sept 29, 2011	Plant Sale & Expo at Home Depot		unknown
Oct 1, 2011	Encinitas' 25th Anniversary Celebration at San Dieguito Heritage Museum	Table event: seed packs, homeowner's guide, rebate info, stickers	250 people (approx.)
Oct 7, 2011	Direct & e-mail of Water Budgets to 84 sites with dedicated landscape meters	Individualized water budgets. Information on water audits & Yard & Garden Care brochures.	84 water customers
Oct 13, 2011	EUSD Green Team Meeting at EUSD District Office	Provided information on what Project WET offers	12 teachers and parents
Oct 18, 2011	Water Science in a Box Presentation provided to Ocean Knoll science coordinator	Water Science in a Box: materials, lesson plans with curriculum match for grades K-1, materials from SDCWA former program, MWD Water Precious Water, Teacher's Guide for Hands-on Water Activities grade 1-6	120 kindergarten and 1st grade students
Oct 29, 2011	Capri School Volunteer Day to prepare for native habitat restoration Partner: US Fish & Wildlife Service had	Homeowner information for water savings, snacks	unknown

Date	Event/Location	Material Provided	# of Participants
	attendees		
Oct 10, 2011	Ocean Knoll Splash Lab visit	Splash Lab materials	117 students
Nov 1, 2011	Ecke Central Splash Lab visit	Splash Lab materials	87 students
Dec 21, 2011	PW Yard – SDWD Safety Meeting	10 minute quick update on surveys & landscape pressure gauges	15 SDWD employees
Jan 3, 2012	Mailers on Turf Replacement Program and Professional Classes offered	Information provided on Turf Replacement Program & professional class offered	76 water customers
Jan 9, 2012	Ocean Knoll Elementary 3rd Grade Travelling Library Presentation		85 students
Jan 10, 2012	Mailers Turf replacement & program schedule & audits/surveys	Turf replacement & program schedule & audits/surveys information	96 water customers (approx.)
Jan 23, 2012	School District Liaison Committee at City Hall		15 people (approx.)
Feb 7, 14, 21, 28, 2010	Landscape Maintenance for Professionals Course at Encinitas Community Center		18 graduates
Feb 22, 2012	PW Yard slide show on water conservation, water supply, delta issues		15 SDWD employees (approx.)
Feb 24, 2012	Magic Of Water – Assembly at St. John School		380 students
Mar 18, 2012	90th Anniversary Newsletter	Newsletter	Website, print and email distribution
Mar 3, 2012	Class on California friendly landscape, design, irrigation, maintenance, soils &		35 attendees (approx.)

Date	Event/Location	Material Provided	# of Participants
	fertilizers. Taught by Steve Sherman, American Society of Landscape Architects		
Mar 9, 2012	Cardiff Elementary School Splashtastic – Assembly		400 students (approx.)
Mar 10, 2012	Home Depot Plant Sale & Expo		200 attendees (approx.)
Mar 13, 2012	Fix a Leak Week Repair Demonstration at City Hall & Community Center		8 people
Mar 15, 2012	Water Conservation teaching materials provided to Ocean Knoll	Ecology & water conservation music CD's, water conservation poster.	unknown
Mar 15, 2012	Project WET program presented at Ada Harris	Thunderstorm poetry, isohyedral lines activity, provided BeWaterSmart video & CWA 4th grade history video.	108 students
Mar 21, 2012	Calendar Contest promotion presented to 3 classes at Capri Elementary	BeWaterSmart video & CWA 4th grade history video	93 students
Mar 22, 2012	Project WET program and Calendar Contest promotion presented at St. John Elementary	Water Education Foundation Materials/unit on California Water Story: CA map, Water Cycle Map, Teacher Guide w/activities	60 4th – 6th grade students
Apr 18, 2012	Splash Lab visit at St. John School	Splash Lab materials	110 students
Apr 19, 2012	5th grade weather & water presentation at Ocean Knoll Elementary		3 classes, 105 students

Date	Event/Location	Material Provided	# of Participants
Apr 21, 2012	Encinitas Garden Festival		300 people
May 15, 2012	Project W.E.T, Kumeyaay & current water use presentation at Ada Harris	Activity book & Incredible Journey	24 3rd grade students
May 18, 2012	Public Works Week Event at Public Works Yard		63 children
May 19, 2012	California Friendly Landscape contest award ceremony at Cuyamaca College		25 people
May 23, 2012	Presentation of poster contest awards at SDWD Board Meeting		60 people (approx.)
May 26, 2012	Sustainable Garden Workshop at Mira Costa College	Sunflower seeds, Don't Plant a Pest brochure, SDWD newsletter, toilet leak tablets, Be Water Wise brochure in eng/span., home composting resource list, Easy Water Wise Gardening (Sunset magazine)	26 people
Jun 2, 2012	90th anniversary powerpoint & giveaways at San Diego Heritage Society Schoolhouse	Practical Plumbing Handbooks, shower timers, seed packets, leak tablets, drip gauges, jar openers (conservation promo), newsletters	25 people (approx.)
Jun 6 & 13, 2012	Project W.E.T, Kumeyaay & current water use presentation at Capri School	Activity book & Incredible Journey	5 classes, 100 3rd grade students
Jun 10, 2012	Encinitas Environment Day	Various brochures and water conservation materials	150 people (approx.)
Jun 13, 2012	Splash Lab visit Ada	Splash Lab materials	109 students

Date	Event/Location	Material Provided	# of Participants
	Harris School		
Jun 29, 2012	Water Conservation presentation to YMCA Discovery Camp, ages 5-7	Incredible Journey: Water by Frank Asch, Search a word, Guzzler Gang booklets, pencils & stickers (teacher gift: water cd)	59 children 12 counselors

- The City of Encinitas Parks and Recreation Department offers a very popular Junior Lifeguard program offered to Encinitas residents as well as young adults and children from throughout the County. An estimated 1,000+ children participate in the Junior Lifeguard Program every summer. In June of 2011, a new field manual was created by the Encinitas Marine Safety Department and through collaboration with Clean Water Staff included a City of Encinitas Clean Water Program page. This printed page explains in detail what the Clean Water Program does, how to protect our waterways, and also includes the Program's hotline phone number, email and website address. Approximately 1,200 official Junior Lifeguard Field Manuals were printed and distributed to the participants and their parents (Appendix I-2) within the defined reporting period of this report.
- A City of Encinitas Environmental Services Guide was originally created in FY 2006-07 and revised and updated in FY 11-12. It continues to be handed out at all public events throughout the City. It is a compilation of information regarding trash and recycling, HHW, electronics disposal and recycling, stormwater management, home composting, and general environmental contacts. The brochure is printed on 100% post-consumer recycled paper (Appendix F-4).
- The Solana Center for Environmental Innovation continued to sell compost bins and worm bins to residents of Encinitas throughout FY 2011-12. All of the bins were subsidized by the City and sold to residents at discounted rates. Bins could be purchased at the Solana Center or at composting events and workshops throughout the City. A total of **456** bins were sold in FY 2011-12.
- Individual Communication. There were **59** residential ICID complaint calls in FY 2011-12. **Five** of those calls were either issues that were referred to other departments/agencies or requests for information only (requests for information may include car washing regulations, power washing requirements, pool draining, etc.). Of the **54** residential complaint investigations conducted, **41** resulted in education provided to parties involved. Materials distributed included general stormwater education, activity specific BMP requirements, pollution prevention education, as well as specific municipal code and clean water regulations.
- Media Coverage (newspaper articles, press releases, etc.): See Table 8-2 below.

Table 8-2
Summary of Media Coverage in FY 2011-12

No.	Title	Date	Source
1	Nearly 250,000 Gallons of Sewage Spills in North County	August 29, 2011	10 News.com
2	ENCINITAS: Growers, biologists debate invasive plant list	September 4, 2011	The North County Times
3	1.9 million gallon sewage spill closes beaches	September 9, 2011	SIGN ON San Diego
4	In San Diego, power is on, but many beaches are closed	September 9, 2011	The Los Angeles Times
5	Green beach fair draws hundreds	September 21, 2011	The Coast News
6	Encinitas Family Forms Volunteer Group to Clean Waterways	September 30, 2011	Encinitas Patch
7	Electric Vehicle Charging Station Coming to Encinitas	October 12, 2011	Encinitas Patch
8	Plastic vortex crusader tells story of discovery	October 19, 2011	SIGN ON San Diego
9	Clean Water Act failing in new climate	October 30, 2011	SIGN ON San Diego
10	Marines deploy novel sewage treatment plan	November 1, 2011	The San Diego Union Tribune
11	UCSC Scientists lead a team deploying robots to forecast toxic algae blooms	November 18, 2011	Santa Cruz Sentinel
12	Rain Brings Urban Runoff to Beaches	December 13, 2011	Encinitas Patch
13	ENCINITAS: City celebrates 'Day Without A Bag'	December 15, 2011	The North County Times
14	San Elijo Lagoon Conservancy Buys Landmark Gateway Property	December 30, 2011	Encinitas Patch
15	New Marine Protected Areas In Effect Jan. 1	January 1, 2012	Encinitas Patch
16	Cigarette Butts on Local Beaches a Growing Problem, Data Shows	January 11, 2012	Encinitas Patch
17	Learn About the Ocean and What We Can Do to Help Save It	February 14, 2012	Encinitas Patch
18	Another Year, Another Big Pile of Trash (and Data)	February 22, 2012	Encinitas Patch
20	Report: Green infrastructure saves money while improving clean water	April 12, 2012	WaterWorld
21	Encinitas Girls Win State Award for Keeping Local Beaches Clean	May 4, 2012	Encinitas Patch
22	U.S. Conference of Mayors To Address Rising Costs of Unfunded Environmental Mandates	May 30, 2012	Water Efficiency

- Workshops and events attended/hosted by the City of Encinitas, San Dieguito Water District and/or the Solana Center in FY 2011-12:

  Coastal Cleanup Day – September 17, 2011
  Cardiff Green EXPO – September 17-18, 2011
  City of Encinitas 25th Anniversary Celebration-October 1, 2011

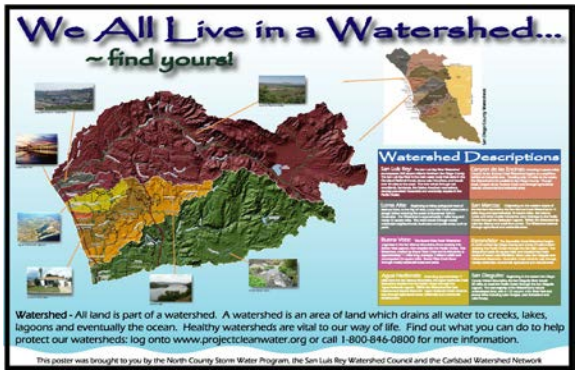
Plant Sale at Home Depot-March 10, 2012
Kid's Day at the Flower Fields – April 1, 2012
Encinitas Garden Festival – April 21, 2012
Creek to Bay Cleanup – April 28, 2012
Public Works Day – May 18, 2012
Encinitas Environment Day – June 10, 2012
San Diego County Fair - Enviro Fair – June 23, 2012

- In November and December of 2011, the Cardiff Library in Encinitas displayed an "IPM Garden Kiosk". The Integrated Pest Management information displayed helps the public address pest control concerns in an environmentally friendly way. This education was offered in English and Spanish.
- In FY 11-12, the Encinitas Library hosted Healthy Ocean Events that promote ocean protection and appreciation. On October 23rd, 2011, Captain Charles Moore from the Algalita Marine Research Foundation spoke about the dangers of marine debris. On February 15th, 2012, Dr. Nigella Hillgarth, executive director of the Birch Aquarium at Scripps Institute of Oceanography gave a "Health of Our Oceans" presentation. Lastly, on February 18th, 2012, Captain Charles Moore presented information on plastic debris in the ocean and his 7,000 mile expedition through the Pacific Ocean's "Western Garbage Patch Gyre," a large vortex of ocean currents where marine debris has accumulated.
- The Green Team met once a month during the 2011-2012 school year to discuss how to improve efficiency, reduce economic costs, and increase environmental awareness throughout the District. The Encinitas Union School District created a Green Team consisting of teachers, principals, parent volunteers, and environmental organizations in the community back in 2009. Topics discussed include waste management, composting, water conservation, energy use, environmental health, and stormwater pollution prevention. The Solana Center monitors large worm bins at Capri Elementary, Paul Ecke Elementary, Ocean Knoll Elementary, Encinitas County Day, Olivenhain Pioneer Elementary, San Dieguito Academy, Flora Vista, and a small worm bin at Mission Estancia Elementary. Solana Center has trained volunteer master composters to give composting/vermicomposting presentations at schools throughout Encinitas. School presentations are conducted both on and off site and scheduled as requested.

8.3 WATERSHED EDUCATIONAL ACTIVITIES

Important components of the City's education program include materials and activities that were generated on a watershed basis to address the high priority water quality problems in the watershed. These materials and activities are then implemented or disseminated on a jurisdictional basis. Below is a description of the educational materials and activities that were created or performed on a watershed basis and implemented on a jurisdictional basis. A more detailed description of watershed activities will be provided in the FY 2011-12 Carlsbad WURMP Annual Report.

Watershed Map- A 36"x 24" "We all Live in a Watershed" poster was developed giving information about the San Luis Rey, Carlsbad, and San Dieguito Watersheds. This educational poster includes a topographic map of the watershed, information on individual watersheds and sub-watersheds, photos of various land-uses, as well as general information about water quality. The City of Encinitas used the poster in presentations and public displays throughout the reporting year.



Watershed Collaboration- The City of Encinitas participated in public outreach events throughout the watershed in an effort to provide watershed support and extend the watershed message beyond jurisdictional boundaries. In FY 2011-12, the City participated in the following watershed outreach events:

- Coastal Cleanup Day – Sep 17, 2011
- Creek to Bay Beach Cleanup – Apr 28, 2012

Watershed Educational Materials- The City continues to distribute materials developed by the North County Stormwater Program in previous reporting periods. A large watershed poster has been displayed and given out at several public events throughout FY 11-12.

8.4 REGIONAL RESIDENTIAL EDUCATION PLAN

The City of Encinitas collaborated with other jurisdictions in the Education and Residential Sources (ERS) Workgroup to develop the Regional Residential Education Plan in FY 07-08. This plan contains recommended strategies for the development and implementation of the Regional Residential Education Program. Implementing an enhanced regional program to target residential sources of stormwater pollution encourages the development of consistent messages throughout the region and enables Copermittees to better leverage resources and utilize economies of scale. The complete Regional Residential Education Plan can be found in Appendix F-6.

The ERS Workgroup participated in Enviro Fair Day at the San Diego County Fair on June 23, 2012. Copermittees were represented at the event, with staff members throughout the day. Copermittees' Regional giveaways were bilingual stormwater coloring books, reusable Chico bags, pencils, IPM Tip Card Packets, and pet waste bag dispensers. In addition, the Household Hazardous Waste phone number was provided to the public. Fair attendance was up again for the fourth year in a row with an average of over 63,000 attendees per day.

9.0 PUBLIC PARTICIPATION

9.1 INTRODUCTION

Public participation is one of the components of the City's outreach program. The goal of the education component, discussed in Section 8, is geared primarily towards disseminating educational material to increase public knowledge of storm water issues. The goal of the public participation component is to provide opportunities for the public to become involved in the process of education and reducing pollutants in storm water and urban runoff.

Public participation activities provide opportunities for the public to interact and become involved with water pollution issues. When the public has the opportunity to become more involved, there are several positive outcomes. First, those involved become more knowledgeable about storm water issues. Second, they become educators and stewards for the Clean Water Program and the Watershed. Finally, they provide important feedback to the Clean Water Program regarding the concerns of the public and issues that may be overlooked. Ultimately, public participation help makes the education process more effective.

The constituency of Encinitas has a generally high level of awareness of water pollution issues and is actively involved in protecting the quality of our waterways. This is evident by the attendance and participation at community events and workshops and the number of complaints reported to the storm water hotline (discussed in more detail in Section 9.3.5 below and also in Section 8.2.7. Following is a description of the City's public participation approach and the opportunities that were made available in Encinitas in the FY 2011-12 reporting period.

9.2 PUBLIC PARTICIPATION APPROACH

The City's approach for the outreach program is to develop an understanding among its residents and businesses of fundamental storm water and pollution prevention concepts. These include:

- The difference between the sanitary sewer and the storm drain system (sanitary waste gets treated, but discharges into the storm drain system flow directly to our waterways and beaches, untreated).
- The economic value of our beaches and the importance of protecting them.
- An understanding of illegal discharges, i.e. sidewalk and street wash water runoff, vehicle fluid (antifreeze and oil), landscape debris, sediment, etc.
- How to report a storm water violation (Clean Water Hotline, email or website).
- The fact that we all live in a watershed and that the watershed is integral to wildlife, public health, and to the water quality of the rivers, streams, and ocean.
- Reducing pollutants of concern.
- Responsibility of citizens to participate in the cleaning and maintaining of the community (i.e. beaches and parks) and not be part of the pollution problem (littering, illegal dumping of toxic chemicals, etc.).

Within the defined reporting period of this report, the tools that have been used by the City to implement the public participation activities include:

- Workshops/Training Sessions
- City of Encinitas Environmental Advisory Commission
- Public Outreach Events
- Public Opinion Survey
- Public Reporting Methods
- Pet Waste Dispensers
- Household Hazardous Waste Collection and Used Oil Recycling
- Permanent Best Management Practices (BMP) Self Verification & Inspection Programs
- Reusable Recycled Shopping Bags

9.3 PROGRAM IMPLEMENTATION

This section describes the specific public participation tools used during the FY 2011-12 reporting period.

9.3.1 WORKSHOPS/TRAINING SESSIONS

Workshops and training sessions are effective tools for providing specific information to targeted audiences and obtaining direct feedback. These workshops/training sessions consisted of stormwater education and/or water conservation and provided an opportunity for the Clean Water Program to explain the complex issues of each target audience related to compliance with the stormwater regulations. Table 9-1 provides a summary of the FY 2011-12 workshops/training sessions conducted.

Table 9-1
City of Encinitas Workshops/Training Sessions FY 2011-12

Workshop/Training Session	Target Audience	Date	Attendance
General Plan Update – Public Health Element Workshop	Public	July 18, 2011	~50
General Plan Update – Citywide Public Workshop	Public	September 19, 2011	~100
Stormwater Quality Workgroup – Annual Development Planning Implementation Refresher (SUSMP/HMP)	City Staff	3/5/12	14
Stormwater Training to: Public Works-Wastewater Division	City Staff	3/07/2012	8
Stormwater Training to:	City Staff	3/12/12, 3/13/12, 3/14/12	38

Workshop/Training Session	Target Audience	Date	Attendance
Fire Department			
Stormwater Training to: Parks & Recreation	City Staff & Contract Landscapers	3/22/12	27
Stormwater Training to: San Dieguito Water District	City Staff	4/11/12	17
Stormwater Training to: Public Works-Streets Division	City Staff	4/26/12	16
Stormwater Training to: Marine Safety Division	City Staff	4/30/12	3
General Plan Update – Citywide Public Workshop	Public	May 7 & 14, 2012	~500
Total Attendees			**773**

9.3.2 CITY OF ENCINITAS ENVIRONMENTAL ADVISORY COMMISSION

The Environmental Advisory Commission (EAC) provides policy advice and recommendations to the City Council on issues related to environmental stewardship and sustainability. The Commission assesses the City's current environmental efforts in relation to specified areas of interest and creates and recommends strategies to enhance City activities that promote conservation and sustainable practices. The mission of the Encinitas Environmental Advisory Commission (EAC) is to make recommendations to the Encinitas City Council, raise public awareness, and build community partnerships in order to promote a shared vision of environmental sustainability throughout city government and the community. The Clean Water Program staff provides technical expertise to the Commission on matters related to water quality, pollution prevention, and stormwater regulations. During the defined reporting period, the EAC presented its third annual series of community outreach activities in partnership with other Encinitas Environment Day activities. The series, entitled "Green Spring", included twenty-seven activities and presentations (Appendix I-1); as well as nature walks & lagoon clean-ups on Saturdays at the San Elijo Lagoon Conservancy, and Cottonwood Creek Clean-ups – 3rd Saturday each month hosted by the Cottonwood Creek Conservancy. Additionally, the Environmental Commission had been asked by the City Council to provide ongoing advice on the phase-out or ban of single-use plastic and paper bags. In support if this initiative, each December the City coordinates "A Day Without a Bag," a community-wide promotion of reusable bags which includes a Mayor's press event, broad media coverage, school presentations, and the giveaway of over 4,000 reusable bags which have been donated by all local grocers and several businesses.

9.3.3 PUBLIC OUTREACH EVENTS

The Clean Water Program participated in the following outreach events during FY 2011-12:

1. Coastal Cleanup Day @ Swami's, Encinitas-September 17th, 2012; **86** volunteers
2. Cardiff Green Expo @ Seaside Beach, Cardiff –September 17-18th, 2012; approximately **200** visitors
3. City of Encinitas' 25th Anniversary Celebration – October 1, 2012; approximately **93** booth visitors
4. Plant Sale @ Home Depot – March 10, 2012; **159** booth visitors
5. Encinitas Garden Festival – April 21, 2012; **170** booth visitors
6. Creek to Bay Cleanup @ Moonlight Beach – April 28, 2012; **113** volunteers
7. Public Works Day – May 18, 2012; **79** attendees
8. Encinitas Environment Day @ Cottonwood Creek Park– June 10, 2012; **88** booth visitors
9. Enviro Day @ the San Diego County Fair – June 23, 2012; approximately **161** booth visitors

Solana Center for Environmental Innovation: Outreach to the general public and school children is also provided through the Solana Center for Environmental Innovation via workshops and presentations involving stormwater, household hazardous waste, composting, and recycling. The Solana Center works closely with the City for many of these workshops and presentations. See the tables below for a description of Solana Center's attended events and workshops.

Table 9-2
Solana Center Composting Workshops/Presentations FY 2011-12

Workshop schedule	Location	Attendance
July, 23, 2011	San Diego Botanic Garden	54
August 27, 2011	Solana Center	14
September 10, 2011	Patagonia – Encinitas	38
October 6 – November 8, 2011	Master Composter course – Solana Center	29
October 8, 2011	Whole Foods – Encinitas	55
November 5, 2011	San Diego Botanic Garden	22
November 19, 2011	Solana Center	17
January 21, 2012	San Diego Botanic Gardens	20
May 5, 2012	San Diego Botanic Gardens	32
Total Attendees		**281**

Table 9-3
Solana Center Used Oil Collection Events FY 2011-12

Encinitas Used Oil Events	Date	Participants
Kragen O'Reilly – 180 N. El Camino Real	10/29/11	43
PepBoys – 256 N. El Camino Real	4/14/12	27
Autozone – 120 Leucadia Blvd.	5/12/12	20
PepBoys – 256 N. El Camion Real	6/2/12	46
Kragen O'Reilly – 180 N. El Camino Real	6/23/12	39
Total Participants		**175**

Table 9-4
Solana Center Outreach Events FY 2011-12

Event	Date	Booth Visitors/Attendees
Encinitas Classic Car Nights	7/21/11	150
Encinitas Classic Car Nights	8/18/11	175
Solana Beach Movie Night	8/27/11	200
Encinitas Classic Car Nights	9/15/11	25
Cardiff Surf Classic	9/17-18/11	300
City of Encinitas 25th Anniversary Celebration	10/1/11	120
Encinitas Garden Tour	4/21/12	150
Encinitas Street Fair	4/29/12	125
Fiesta Del Sol – Solana Beach	6/2-3/12	275
Total Attendees		**1,520**

Table 9-5
Solana Center Automotive Presentations FY 2011-12

School/Group Name	Date of Presentation	Number of Presentations	# of Students in Attendance
San Dieguito Academy	5/31/12	1	20
Total Attendees			**20**

9.3.4 PUBLIC OPINION SURVEY

The City of Encinitas joined the Think Blue San Diego Region workgroup in distributing public opinion surveys at regional events held throughout the County. In FY 2009-10, automotive surveys were given out at Enviro Fair at the San Diego County Fair. In FY 2011-12, residents were asked to complete a pre-assessment survey in order to receive a Regional 2012 Stormwater Pollution Prevention Calendar. Post-assessment survey cards were included with the calendars to test whether stormwater knowledge had increased after viewing the calendar. The post-assessment survey is also available on the Think Blue San Diego Region website. Results from all regional surveys will be included in the FY 2011-12 Regional URMP.

9.3.5 PUBLIC REPORTING METHODS

The City has a local Clean Water Hotline that connects the caller directly to the staff in the Clean Water Program. The number is (760) 633-2787. An after-hours number (760) 633-2922 is available for after-hours emergencies and connects the caller with the City's external answering service which takes in calls and contacts the appropriate City staff to determine appropriate response actions. In 2010-11, an updated Clean Water Hotline email was established (cleanwater@encinitasca.gov) and is being promoted and disseminated through the numerous outlets and venues described in this report. There are also currently two regional storm water hotline numbers widely advertised within San Diego County: a toll-free Regional Storm Water Hotline, 1-888-846-0800, and the Think Blue Hotline, 1-888-THINK BLUE (1-888-844-6525). Both of these hotlines are staffed by the County of San Diego Monday through Friday, 8:00 a.m. - 5:00 p.m. In addition to personal service at these hotlines during regular business hours, the hotlines provide a voicemail message for 24-hour public access.

The Encinitas Clean Water Hotline has been in service for over a dozen years. In FY 2011-12, the Clean Water Program received **150 complaint** calls and emails. There were an additional **16** calls which were referred to other departments or agencies. The hotline phone number and email address is advertised in newsletters and on the City's website, in brochures, on product giveaways, and at all Clean Water Program presentations. A summary of the types of calls, follow-ups, and enforcement actions related to the hotline are presented in Appendix H-1.

The Clean Water Program has a specific website URL (**http://cwp.encinitasca.gov**) that provides information, as well as the general NPDES email address which can also be used to report stormwater violations. Each method of contact can also be used for general questions relating to stormwater.

9.3.6 PET WASTE DISPENSERS

Residents are encouraged to protect our creeks, lagoons, and ocean by cleaning up after their pets. To make this easier, 34 doggie bag dispensers are located at 10 public parks and along several trails throughout the City. Trash cans are also available in these areas. Both the trash cans and bag dispensers are maintained by the City's Parks and Recreation Department. In addition, individual Bags on Board pet waste bag dispensers were developed in FY 2007-08 and continued to be distributed at regional events during FY 2011-12 (Appendix F-5).

9.3.7 HOUSEHOLD HAZARDOUS WASTE COLLECTION AND USED OIL RECYCLING

City of Encinitas residents can bring their HHW and Electronic Waste to drop off facilities in Vista and Poway, free of charge. There is also a home pick up available for a small fee; however, the fee is waived for elderly and disabled residents. The Solana Center for Environmental Innovation conducts Electronic Waste Events every third Saturday of each month except November and December. Oil filter exchange events were organized through the Solana Center at local automotive supply stores, and free used oil containers were available for pick up from the Center to encourage oil recycling. Please refer to Section 6.4.2 and Table 9-3 in Section 9.3.3 for a detailed description of Used Oil events and collection totals.

9.3.8 PERMANENT BEST MANAGEMENT PRACTICE (BMP) SELF-VERIFICATION AND INSPECTION PROGRAMS

FY 2011-12 marked continued implementation of the Permanent BMP Self-Verification and Inspection Programs. This successful program provides a valuable opportunity for residents and business owners to be actively involved in protecting stormwater quality. Residents and business owners with treatment control BMPs on their private property are responsible for the successful operation and routine maintenance of these facilities. The City's Self-Verification and Inspection Programs aim to make residents and owners aware of their operation and maintenance obligations through formal notification campaigns and one-on-one communication. Notification campaigns generally consist of two rounds of notices mailed to the residents and business owners responsible for BMP maintenance. The initial notification packages consist of a combination of the following materials: notification/program introduction letter, Treatment Control BMP brochure, grading plan identifying the location of BMPs, and forms and self addressed stamped envelopes necessary to complete self-verifications. As part of the self-verification and inspection processes, City staff also offer one-on-one assistance with identifying BMPs, conducting BMP inspections, and determining maintenance needs. City staff is available to answer questions regarding the self-verification and inspection programs both over the phone and on-site as requested by the responsible party. As these programs have matured since 2008, the public knowledge and awareness of permanent BMPs and required operation and maintenance activities has continually improved. For more information regarding the Permanent BMP Self-Verification and Inspection Programs refer to Section 2 of this report.

10.0 FISCAL ANALYSIS

10.1 INTRODUCTION

On January 29, 2009, the San Diego Region Stormwater Copermittees submitted the *Standardized Fiscal Analysis Method and Format* as required by municipal permit Sections G, J.1.a(3)(k), and J.1.c(1)(d). The defined reporting period of this report marks the third full application of the fiscal analysis methodologies developed in the document, and the information provided in this section has been prepared consistent with the standardized approach, using the best information available at the time of report preparation. The *Standardized Fiscal Analysis Method and Format* supports a greater scope of fiscal tracking, yielding a much more complete analysis of program related expenditures across a variety of City functions and departments and/or divisions that may not have been captured in previous reporting years. For consideration, using the standardized format to capture programmatic expenditures across multiple City departments that provide an array of interrelated stormwater management services has necessitated a considerable margin of approximation for various functional areas, particularly related to staff resources (labor costs). In compliment to approximated figures, actual programmatic expenditures have been used as much as possible to present a refined fiscal analysis overview specific to the City of Encinitas.

10.2 GENERAL BUDGET INFORMATION

The Clean Water Program and associated functions and activities in the City of Encinitas are organizationally shared by two primary departments: Engineering Services and Public Works. Engineering Services is responsible for the overall administration of the Clean Water Program and develops and implements core program components including water quality monitoring; development oversight (SUSMP & HMP implementation) inspection and enforcement; and education, outreach, and training related to stormwater and water quality. Public Works performs the operations and maintenance of the municipal separate storm sewer system (MS4) including channel maintenance, sewer maintenance, street sweeping, municipal facility inventories, and municipal facility inspections. Other City departments additionally support core program functions and needs including the Planning, Finance, Fire, and Parks & Recreation departments.

The FY 2011-2012 Clean Water Program and supporting Department Budgets have been prepared in consideration of Water Quality Order No. 2007-0001 as well as other regulatory mandates placed upon the City of Encinitas. Despite significant budget constraints due to widespread economic downturns, the FY 2011-2012 budgets support the historic level of service provided by the Clean Water Program in addressing water quality concerns specific to Encinitas through response to citizen complaints, education, inspection, enforcement, monitoring, and development oversight. FY 2012-2013

budgeting represents the City's ongoing commitment to this program and the community that it serves.

10.3 FISCAL ANALYSIS METHODS

As introduced above, the information presented in this section has been prepared based upon the *Standardized Fiscal Analysis Method and Format* document that was collaboratively developed by the San Diego County Stormwater Copermittees. This document provides the Copermittees, including the City of Encinitas, with guidance and standards to analyze and report on their respective urban runoff management program expenditures, and to identify the funding sources for their programs in a uniform format. While the regionally developed methodologies greatly support reporting consistencies such as expenditure categories and reporting metrics, the *Standardized Fiscal Analysis Method and Format* does not set up stringent or prescribed accounting practices.

In order to elucidate the information presented below, it is important to identify any assumptions used to calculate expenditures related to various program elements. The following points of consideration should be noted:

- Staff Resources have been calculated as a percentage of time and associated costs applied to a specific program area.
- Staff Resources have been captured for both Engineering Services and Public Works Operations personnel.
- In order to avoid cost "overlaps" in those areas implemented across multiple departments, supporting department staff costs have not been included in the accounting below.

10.4 FISCAL ANALYSIS RESULTS

10.4.1 EXPENDITURES

The City of Encinitas Clean Water Program FY 2011-2012 Jurisdictional expenditure summary is presented in Table 10-1. In FY 2011-2012, the City's Coastal Storm Drain Monitoring; Dry Weather Monitoring; IDDE; Construction, Education, Residential, and Commercial program elements; and overall program administration were accomplished through the use of five full time Clean Water Program staff. Land Development and Construction components utilized Engineering Services staff resources from various divisions, and Municipal activities utilized Public Works personnel. Labor related costs have been captured in the summary below based upon percentages of applicable staff resources. In addition, non-labor costs including materials, supplies, and equipment have also been included.

Table 10-2 presents the Watershed expenditure summary specific to Encinitas, and Table 10-3 presents the Regional expenditure summary capturing the City of Encinitas share of regionally distributed costs.

10.4.2 FUNDING SOURCES

In FY 2003-2004, the City Council attempted to pass a Clean Water Fee, which charged $5.00 per month per water meter to the residents and businesses in the City of Encinitas. The Howard Jarvis Taxpayers Associated challenged the fee based upon Proposition 218 requirements. The City was required to add this item to the ballot in March 2006 which was defeated. As a result, the City of Encinitas must and continues to completely subsidize the Clean Water Program through the General Fund.

Table 10-1 – Jurisdictional Expenditure Summary

JURISDICTIONAL COMPONENTS		
ADMINISTRATION	$	137,693
DEVELOPMENT PLANNING	$	490,005
CONSTRUCTION	$	183,612
MUNICIPAL	$	1,638,563
INDUSTRIAL AND COMMERCIAL	$	107,162
RESIDENTIAL	$	26,790
IDDE	$	147,955
EDUCATION	$	26,790
PUBLIC PARTICIPATION	$	13,395
SPECIAL INVESTIGATIONS	$	1,365
NON-EMERGENCY FIREFIGHTING	$	13,395
Jurisdictional Total	$	2,786,727

Table 10-2 – Watershed Expenditure Summary

WATERSHED		
CARLSBAD WATERSHED	$	2,519
Watershed Total	$	2,519

Table 10-3 – Regional Expenditure Summary

REGIONAL		
CITY OF ENCINITAS - REGIONAL COST SHARE	$	58,064
Regional Total	$	58,064

TOTAL EXPENDITURES: FY 11-12	***$***	***2,847,310***

11.0 EFFECTIVENESS ASSESSMENT

11.1 INTRODUCTION

The City of Encinitas began applying baseline program effectiveness assessment methodologies soon after they were developed by the San Diego region stormwater Copermittees during the last permit cycle as described in the document titled "A Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs" dated October 16, 2003. The City has also actively participated in regional efforts to develop a standardized assessment approach and associated metrics from summer 2007 through winter 2008. The original goal of that group was to produce assessment work products that all Copermittees could use in their JURMPs to evaluate program effectiveness. Due to a variety of complications on a regional level, that standardization process could not be completed prior to the submittal of the City's JURMP, so the City prepared its own effectiveness assessment approach and measures modeled after conventionalized strategies and calibrated to evaluate "significant" program activities as required in Order No. 2007-0001.

Since the submittal of the JURMP in March 2008, little additional progress has been made on regionally standardized approaches to program effectiveness assessment. In FY 2009-2010, the Copermittees' Fiscal, Reporting, and Assessment Workgroup initiated renewed efforts to undertake the issue of standardized assessment metrics and procedures. The City of Encinitas is committed to engaging in the process of developing such regional standards and incorporating resulting work products into its own local program effectiveness assessment system. It is in consideration of the evolving and ongoing regional standardization process that the City has endeavored upon fine tuning its local effectiveness assessment approach as presented in the subsequent paragraphs and tables. Further, it is recognized that these methodologies and strategies must be adaptable as regionally developed procedures are solidified in the future.

Implementation of the City's JURMP is intended to reduce discharges of urban runoff related pollution to the MEP. The core structure of the City's stormwater program is composed of three primary drivers:

- Program Planning
- Program Implementation
- Effectiveness Assessment

The programmatic process typically proceeds from planning to implementation to assessment, although in practice all three may be in progress at the same time. The initial step is program planning, which requires identifying potential pollutant sources, establishing BMP requirements, and establishing targeted outcomes and ways to measure those outcomes. Next the program elements developed during the planning step are implemented. Program implementation is assessed each year using the methods developed in the program planning stage and reported in JURMP annual reports. The conclusions from these assessments are used during the next round of program planning to incorporate improvements to the program and refine the assessment technique.

As part of the JURMP update process, the City has identified a variety of significant activities unique to each program element and metrics (numeric and/or narrative) to assess progress toward targeted outcomes. At the end of each reporting year, the City uses selected metrics to assess the effectiveness of its program implementation. Example metrics were provided in Section 13 of the City's 2008 JURMP. The effectiveness assessment approach developed by the Copermittees during the last permit cycle includes six different levels of targeted outcomes. Each successive level represents a step up from more easily measured, activity-based outcomes to more difficult to measure, quality-based outcomes. The levels are listed below.

Level 1: Compliance with Activity-Based Permit Requirements
Level 2: Changes in Knowledge/Awareness
Level 3: Behavioral Change/BMP Implementation
Level 4: Load Reductions
Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The Municipal Permit requires the City to assess the effectiveness of each significant activity for each program component, for each program component as a whole, and for the stormwater program as a whole. Level 1, Level 5, and Level 6 outcomes are discussed in the text below. At this time the City is not able to assess Level 5 or Level 6 outcomes for individual program activities or individual programs. As has been noted in the CASQA effectiveness assessment guidance, methods for integrated assessment—assessment that combines both monitoring data and programmatic data—are still under development at regional and statewide levels (CASQA, 2007).

11.2.1 OUTCOME LEVEL ASSESSMENTS

Level 1

A requirements checklist, which includes a directory of permit compliance elements and where each is described within the JURMP Annual Report, can be found in Appendix G-1.

Levels 2 and 3

Tables 11-3 through 11-10 at the end of this section include discussions of Level 2 and Level 3 outcomes for activities identified as significant by the City of Encinitas within each program component. Note that only a Level 1 assessment applies to fiscal analysis, so a table for fiscal analysis is not included.

Level 4

The tables at the end of this section provide information for Level 4 assessments where feasible. Assessment of Level 4 outcomes is feasible for some programs that directly measure the amounts of pollutant removal, such as MS4 cleaning. For most other programs, reliable load reduction estimation methods have not yet been or cannot be developed.

Level 5

On September 10, 2008, the San Diego Regional Water Quality Control Board adopted Addendum 2 to Order No. 2007-0001, effectively extending the annual due date of the Illicit Discharge Detection and Elimination reporting requirements to December 15. It is anticipated, consistent with previous Dry Weather Monitoring reports prepared by the City of Encinitas that baseline trend analysis will be provided for a number of constituents evaluated through the Dry Weather Monitoring Program. This information is further spatially correlated with sub-basins or drainage areas within the City of Encinitas and evaluated against land-use areas and potential source areas.

Level 6

It has been determined, through ongoing development and discourse over long-term effectiveness assessment methodologies that relationships between programmatic activities and changes in receiving water quality are difficult to establish on an annual basis or a jurisdictional scale. As such, the City will point to future regionally coordinated efforts including Report of Waste Discharge (ROWD) and Long Term Effectiveness Assessment (LTEA) development to more holistically evaluate changes in receiving water quality. It is anticipated that such efforts will be further refined and supported by ongoing data gathering efforts both locally and regionally.

11.2.2 OVERALL COMPONENT ASSESSMENTS

Development Planning

The City's review process for development projects is effectively requiring higher removal efficiency treatment control BMPs. The Encinitas Stormwater Manual was in use during all of FY 2011-12 and has been well received by the public. Further, two significant program elements were in the fourth year of full implementation within the defined reporting period of this report (treatment control BMP self-verification and inspection); in the fourth year of implementation responsible parties were more responsive than ever. 80% of responsible parties submitted self-verification documentation upon request. Responsiveness of responsible parties has consistently improved over the past four years. Continued refinement of this program area will support long term effectiveness assessment measures for development planning. *(See Table 11-3)*

Construction

The City's review and approval process for construction related plans and documents is effectively verifying proposed construction specific BMPs. BMP implementation and maintenance is being effectively managed through construction site inspection activities, and validated through associated assessment measures *(See Table 11-4).* It is anticipated that in response to increased inspection frequencies and refined data gathering practices that this trend will continue. Additionally, stormwater construction permitting dynamics have changed with the adoption of the new statewide Construction General Permit Order No. 2009-0009-DWQ (CGP) in which project applicants are responsible for determining permit applicability and project specific requirements per the CGP.

Municipal

Enhanced stormwater conveyance, drainage facility, channel maintenance, and inspection and street sweeping activities were developed and implemented, equating to the removal of salient volumes of debris in FY 2011-12. Effective operations and maintenance activities are demonstrated in Table 11-5 below, and it is anticipated that this continued level of service as well as enhancements in data gathering methods will continue to support the efficacy of municipal program activities.

Industrial and Commercial

Similar to prior reporting years, Clean Water Program activities and actions related to industrial and commercial entities have exhibited positive trends within the defined reporting period. The City of Encinitas has identified inspection activities coupled with complaint response and enforcement as the significant activities by which to evaluate program effectiveness. During the defined reporting period, the City has been able to evaluate effectiveness on a number of levels (*See Table 11-6)* through the gathering of critical statistics, including a knowledge and BMP assessment scoring system presented in Figures 11-1 and 11-2. Data gathered and evaluated during the defined reporting period indicate that identified significant program activities targeting industrial and commercial sources have been effective.

Residential

Residential BMP implementation has been identified as the significant activity by which effectiveness has been assessed. Residential complaint response and enforcement constitute the core of residential BMP implementation assurance actions. Based upon an evaluation of data associated with these elements, including the number of incidents responded to and the ultimate resolution of these events, the City has demonstrated a notably effective program and level of service to the community of Encinitas.

Education

Education effectiveness is assessed for a variety of program elements as presented in the Table 11-9 below. In terms of education opportunities provided to the various community sectors and City staff and contractors, identified as the significant metric by which to evaluate education activities, the City has achieved a high level of success. These measurable successes will also be enhanced by supporting items such as the Clean Water Program logo, developed in 2009-2010, which will increase program notoriety and promote consistency of educational programs and activities.

Public Participation

The City of Encinitas provides a variety of venues and outlets in support of public participation. The City has identified a number of measures to evaluate the effective implementation of this program element. As with education, public participation translates across a number of program areas; however, the assessment measures identified in Table 11-10 are focused on success of the venues and outlets supported by the City. From the measures identified and quantified, community partnerships, event attendance, Clean Water Hotline calls, and volumes

of debris and hazardous materials collected through public participation, the City has established exceptional trends.

11.3 PROGRAM REVIEW AND MODIFICATION

While no significant changes to the effectiveness assessment approach presented in the City's March 2008 JURMP have been made since the submittal of that document, Clean Water Staff continued to meet periodically throughout the reporting period of this report to evaluate effectiveness assessment measures as they relate to specific program elements. The purpose of this effort has been to keep the issue of effectiveness assessment in the forefront of program implementation strategies, and to conduct ongoing effectiveness assessment, and augment program areas as deemed necessary. While effectiveness assessments conducted on an annual basis are helpful, a critical first step in the process is to identify significant activities and to evaluate value added benefits both to the program and to the community of Encinitas throughout the implementation period.

Table 11-3
Development Planning Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Verify High Efficiency Treatment BMPs are Approved	Internal The City's Engineering Department staff is well versed in treatment BMPs and pollutant removal efficiencies.	Percent of approved projects implementing BMPs with high or medium removal efficiencies for key pollutants of concern	100%	N/A, addressed through other significant activities for this component
Verify Proposed BMPs are Implemented	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal The City contracts with a qualified consultant to perform treatment control BMP inspections.	Percent of projects installing / implementing proposed BMPs	100%	BMP implementation is likely to have reduced pollutant loads.
		Resolution status of enforcement actions	N/A	
Verify BMPs are Properly Maintained	External N/A, knowledge is evaluated by appropriate implementation of BMPs as shown in Level 3 Internal N/A, see Municipal section.	Percent of responsible parties submitting verification documentation	80%	Additional load reduction could be achieved through improved BMP maintenance.
		Number of responsible parties that did not submit self-verification documentation	15	
		Number of sites with BMPs requiring repair or maintenance	9	
		Resolution status of repair/maintenance	8 complete; 1 pending (enforcement action in process)	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-4
Construction Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Verify Planned BMP Implementation - Review Proposed Plans and BMPs	External Projects submit plans for construction BMP implementation for their projects; the level of awareness of construction BMP requirements is fairly high. Internal Training for City staff is described in Section 8. City staff are familiar with relevant construction BMPs.	BMPs proposed for construction projects must meet minimum requirements; no significant problems have been noted.		Proper pre-project planning is likely to have reduced pollutant loading.
Verify Proposed BMPs are Implemented	External Grading projects implement BMPs as required by their permits, and contractors are familiar with the City's requirements. Internal Training for City staff is described in Section 8. City inspectors are familiar with relevant construction BMPs.	Percent of projects implementing required BMPs.	100%	Proper BMP implementation is likely to have reduced pollutant loading.
		Percent of inspection actions resulting in Corrective Action.	28%	
		Percent of inspection actions resulting in a Notice of Violation (NOV).	2%	
		Percent of inspections actions resulting in a Citation.	<1%	
		Number of dry weather monitoring exceedances traced to construction sources.	0	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-5
Municipal Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Verify Proposed BMPs are Implemented at Facilities	City staff is regularly trained on BMP implementation; see sections 4 and 8.	Percent of inspected facilities/activities in compliance with BMP requirements	100%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of sites requiring follow-up inspections	See Section 4		
		Number of dry weather monitoring exceedances traced to municipal sites	0		
Sweep Streets and Parking Facilities		N/A, streets and parking facilities are swept as determined necessary and in compliance with Municipal Stormwater Permit standards.		Amount of sediment and debris removed per length of street swept (weight or volume per curb mile).	2,270 tons/ 9,199 curb miles (0..25 tons/curb miles)
Maintain and Clean the MS4 (catch basins, inlets and open channels).		N/A, MS4 structures are maintained as often as directed by management.		Amount of sediment and debris removed (weight or volume).	558 tons
Maintain Sanitary Sewer System		N/A, the sanitary sewer system is maintained as often as directed by management.		Total volume of SSO discharge to MS4 (gallons).	Data will be included in Section 7.0 for the 12/15/12 submittal.
Maintain Municipal Treatment Control BMPs		N/A, treatment control BMPs are maintained as often as directed by management.		Amount of sediment and debris removed from storm drain filter inserts.	1.88 tons
				BMP effectiveness studies	N/A
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-6
Industrial and Commercial Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Require BMP Implementation	External Knowledge assessment scores indicated a slightly low level of understanding of relevant storm water concepts. See Figure 11-1 on the following page for a score distribution. See Section 8 for more detail on educational materials and other outreach efforts. Internal City inspectors are well versed in Stormwater compliance and minimum BMP standards.	Percent of inspected sites in compliance with BMP requirements (inspections that did NOT require follow-up actions)	73%	Proper BMP implementation is likely to have reduced pollutant loading.	
		Resolution status of inspection related enforcement actions	100%		
		Number of dry weather monitoring exceedances traced to industrial or commercial sources	Data will be included in Section 7.0 for the 12/15/11 submittal.	Number of IC/IDs eliminated through enforcement actions taken as a result of routine inspection OR complaint investigations. (NOVs & Citations)	20
		Based on the results of individual facility assessment surveys, most facilities inspected have a good general understanding of BMPs and implement BMPs as required. See Figure 11-1 and 11-2 below.			
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only	

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Figure 11-1
Knowledge Assessment Scores FY 2011-12 Inspections

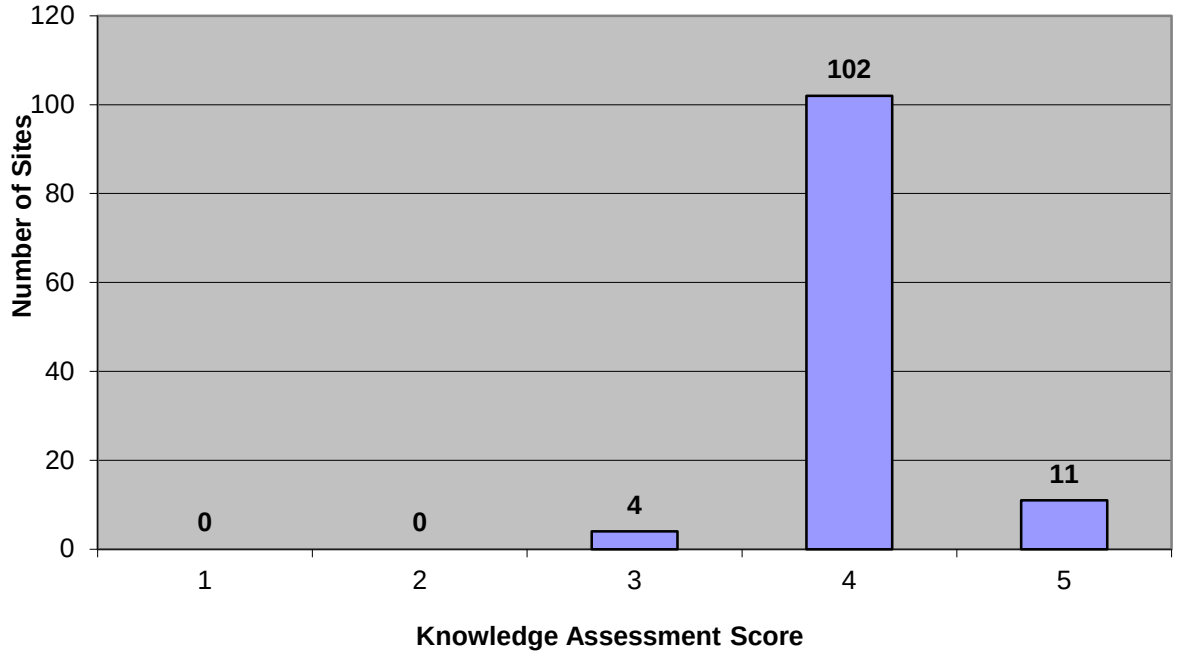


Figure 11-2
BMP Assessment Scores FY 2011-12 Inspections

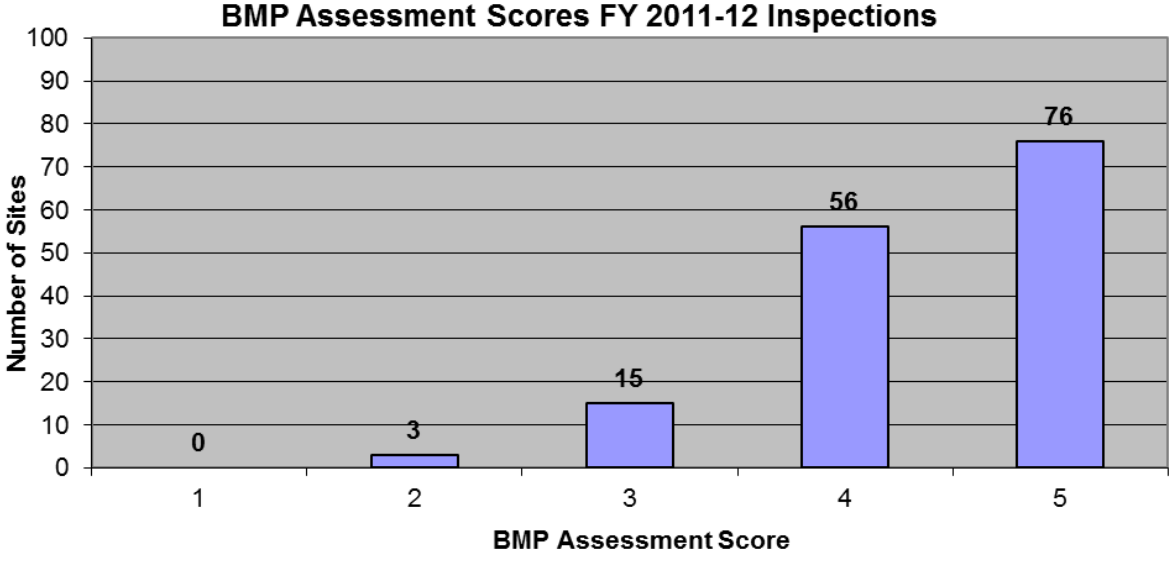


Table 11-7
Residential Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4
Require BMP Implementation	External Residents were educated in variety of ways in 2011/2012; see sections 6 and 8 for details. Internal City inspectors are well versed in Stormwater compliance and minimum BMP standards.	Number of residential incidents reported to storm water hotline	594	Resolution of residential incidents reported to the hotline likely resulted in a decrease in pollutant loading through improved BMP implementation.
		Resolution status of residential related enforcement actions	100%	
		Number of dry weather monitoring exceedances traced to residential sources	0	
Maintain an Accurate Inventory	N/A, data management only	N/A, data management only		N/A, data management only

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-8
Illicit Discharge Detection and Elimination Component Assessment Measures

Significant Activity	Level 2	Level 3	Level 4
Conduct Dry Weather Monitoring Program	Clean Water Program staff executes the City's Dry Weather Monitoring Program.	N/A, personnel conduct monitoring as directed by management.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2011.
Respond to Incidents Reported to Clean Water Hotline	Dedicated Engineering and Public Works staffs are trained to respond to reported incidents.	N/A, personnel respond to incidents as directed by management.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2011.
Respond To and Clean up SSOs	Dedicated Public Works staffs are trained to respond to reported SSO incidents.	The City conducts additional preventative inspections and maintenance in areas with a higher history of problems.	To be evaluated in Section 7 – IDDE Report to be submitted to the RWQCB no later than December 15, 2011.

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable

Table 11-9
Education Component Assessment Measures

Significant Activity	Level 2		Level 3	Level 4
Provide storm water education to the public	External The City actively educates the various audiences in its jurisdiction. See Sections 8 and 9 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for FY 2011-12.
	Estimated number of impressions made*	12,000		
	Estimated number of educational materials distributed to various community sectors	3,578		
Provide storm water education to City staff & contractors	Internal The City provides staff and contractors w/ regular stormwater training. See Sections 8 and 9 for details.		See Level 3 outcomes for other program components for information about behavior change.	Sufficient data to estimate load reductions due to educational efforts is not available for FY 2011--12.
	Number of Staff and Contractors trained	127		

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
*Impressions are based upon the number of interactions with public at education events, workshops, and presentations.

Table 11-10
Public Participation Component Assessment Measures

Significant Activity	Level 2	Level 3		Level 4	
Involve the public in activities that relate to storm water protection	External The City and City partners put on a number of opportunities for the public to participate. See section 9 for details.	Estimated number of attendees at events, workshops, and presentations	7,245	Amount of trash, recycling, and debris collected at cleanup events	242
		Number of calls and or emails received to the Clean Water Hotline*	150 + 16 referrals	Amount of HHW items collected	106,047

Notes: Level 2 - Changes in Knowledge/Awareness; Level 3 - Behavioral Change/BMP Implementation; Level 4 - Load Reductions; N/A – Not Applicable
* The sum total of calls to the Clean Water Hotline related to all Community Sectors.

12.0 SPECIAL INVESTIGATIONS

As determined necessary and appropriate, the City of Encinitas is engaged in a variety of ongoing and long-term investigations to support reasoned and informed management actions to address local water quality concerns and threats.

12.1 BACTERIA TOTAL MAXIMUM DAILY LOAD (TMDL)

In 2010, the San Diego Regional Water Quality Control Board (Regional Board) adopted Resolution No. R9-2010-0001 to incorporate into the Basin Plan the *Revised Total Maximum Daily Loads (TMDL) for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek)* (hereafter, Bacteria TMDL or TMDL). Per the Resolution adopting the Basin Plan Amendment (BPA), the TMDL was established to address exceedances of the Contact Water Recreation (REC-1) water quality objectives.

The BPA lists the San Marcos Hydrologic Area (HA) shoreline as a waterbody addressed by the TMDL. Inclusion of the San Marcos HA in the TMDL is based upon data from the receiving waters at Moonlight State Beach in Encinitas. Responsible Parties in the San Marcos HA include the Cities of Carlsbad, Encinitas, Escondido, San Marcos, the California Department of Transportation, and County of San Diego.

12.1.1 SAN MARCOS HA – BACTERIA TMDL TECHNICAL ANALYSIS

Based upon the unique dynamic of the San Marcos HA as it relates to the provisions of the Bacteria TMDL, and as the lead responsible party for the HA, the City of Encinitas coordinated an effort to identify, evaluate, and assess a variety of approaches to meet their mandated obligations defined by the Bacteria TMDL. The starting point for this effort was to evaluate existing information and data to assess the extent and magnitude of the REC-1 impairment in order to define implementation of the Bacteria TMDL in the San Marcos HA.

To assess the extent and magnitude of exceedances of the REC-1 water quality objectives (the basis for the TMDL), current and prior Clean Water Act Section 303(d) lists were evaluated. Per the 2010 303(d) list, the Pacific Ocean Shoreline at Moonlight State Beach is listed for Total Coliform based upon exceedances of the Shellfish Harvesting Beneficial Use (SHELL) water quality objectives and not the REC-1 water quality objectives[1]. As the TMDL applies only to the REC-1 beneficial use and not the SHELL beneficial use[2], prior 303(d) lists were evaluated as well. Prior 303(d) lists, including the 2002 list that the TMDL is based upon, only list the San Marcos HA as impaired for

[1] http://www.waterboards.ca.gov/water_issues/programs/tmdl/2010state_ir_reports/02492.shtml#17722
[2] Resolution No. R9-2010-0001, Pg. 4, footnote 17.

indicator bacteria without specifying the bacteria indicator and/or beneficial use (SHELL and/or REC-1) that the listing decision is based upon.

To assess impairment status of the REC-1 water quality objectives (both historic and current impairment), data were evaluated against the applicable water quality objectives. Exceedances of the objectives were compared to the allowable exceedance frequencies per the *Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List* (Listing Policy) [3].

Based upon the impairment and associated data analysis conducted as part of this effort, the following conclusions were made:

- The Pacific Ocean Shoreline at Moonlight State Beach, the basis for including the entire San Marcos HA in the Bacteria TMDL, is not impaired for REC-1 beneficial uses.
- Per the 2010 303(d) list, the listing at Moonlight Beach for total coliform is based upon the water quality objectives for the SHELL beneficial use only, and is not listed for REC-1.
- Based upon data analysis, no REC-1 impairment can be established for any period of time from 1999-2011, including the approximate period of time for which data were assessed to establish the TMDL (the 2002 303(d) List).
- Based upon data analysis, all other beach monitoring locations in the San Marcos HA (Batiquitos Lagoon Outlet, Swami's, Ponto Drive) are also not impaired for REC-1 beneficial uses.
    - Similar to Moonlight State Beach, no REC-1 impairment can be established for any period of time from 1999-2011, including the approximate period of time for which data were assessed to establish the TMDL (the 2002 303(d) List).

Defined by the conclusions of the San Marcos HA TMDL Technical Analysis summarized above and confirmed by RWQCB staff, it was determined that the Moonlight Beach segment is not currently listed for REC-1 impairments. Therefore, the San Marcos HA responsible parties are not required to submit a Bacteria Load Reduction Plan (BLRP) as long as monitoring data continues to support compliance with REC-1 water quality standards.

12.2 SAN ELIJO LAGOON RESTORATION PROJECT

For a number of years, the City of Encinitas along with numerous agencies including the Army Corps of Engineers, San Elijo Lagoon Conservancy, Caltrans, SANDAG, SDRWQCB, California Coastal Commission, Department of Fish & Game, and NCTD

[3] Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List, adopted September 2004

have been analyzing possible enhancement opportunities for the San Elijo Lagoon. Artificial constrictions have hindered the natural ability of the estuary to open to the ocean. The Interstate 5 (I-5) North Coast Freeway widening project will further impact the lagoon. A study was completed by the Army Corps of Engineers to investigate potential mitigation opportunities for the I-5 North Coast project.

The goal of the study and ultimate project is to optimize the openings at the three major transportation passageways across the San Elijo Lagoon. Related studies have looked specifically into the effects of varying channel widths at each opening: inlet and PCH Bridge, the SDNR system, and the I-5 freeway. Various alternatives have been identified based upon complex system simulations and evaluated on effects to reduce tidal muting, increase circulation, improve water quality in the lagoon, and ultimately on whether or not any improvements to the habitat distribution in the lagoon would be likely to occur.

Work on this project continued throughout the defined reporting period of this report, most significantly through the progression of the environmental review process, the development of a draft EIR/EIS, public scoping meetings, and the completion of associated technical studies.

Notably, the San Elijo Lagoon Restoration Project is a multi-agency effort, and far-reaching coordination has been critical and remains central to the long-term success of this project. In consideration of future Lagoon specific TMDL development and the emerging lagoon restoration scenarios, on May 24, 2010, staff from the City of Encinitas, San Diego Regional Water Quality Control Board (SDRWQCB), San Elijo Lagoon Conservancy (SELC), and Moffat & Nichol (Restoration Project Consultant) convened to discuss how these efforts may meet the mutual needs of the stakeholders involved. This meeting provided a good venue to connect the collective benefits of restoration efforts with water quality improvements in the San Elijo Lagoon and to better define priorities for all parties involved.

13.0 NON-EMERGENCY FIRE FIGHTING

13.1 INTRODUCTION

The City implements pollution prevention measures and BMPs to reduce or eliminate the amount of pollutants generated by fire fighting activities both at fire stations in the City and locations throughout the City. Two fire stations (No. 3 and No. 5) have treatment control BMPs in place to treat any runoff which may be discharged from washing activities. Notably, significant improvements to fire station #2 (Cardiff), including the addition of treatment control BMP facilities, is anticipated for completion within the forthcoming reporting period. The remaining stations utilize source control BMPs to minimize and control discharges related to washing activities. All fire fighting training activities which include aqueous film forming foam are conducted at a fire station outside of the City of Encinitas. In addition to implementing structural BMPs at the fire stations, all City of Encinitas Fire Department employees are trained in storm water management on an annual basis by Clean Water Staff. Following is a detailed description of the program developed by the City to reduce pollutants from non-emergency fire fighting flows.

13.2 PROGRAM FOR NON-EMERGENCY FIRE FIGHTING FLOWS

The City of Encinitas has identified a number of potential discharge sources including maintenance of fire and emergency vehicles and equipment, training exercises, and facility maintenance. It is important to recognize and make provision for the post-emergency rehabilitation of response equipment including tools, fire hoses, ladders, and other equipment utilized at the scene of an emergency, as this equipment must be restored to a response-ready state in a manner that does not delay the ability of the apparatus to be available for subsequent response actions. As such, the use of water that could contribute to storm water discharges may be used unless another practical and immediately available method is identified and will be performed in a manner that minimizes discharges to the MEP. In consideration of the non-emergency activities identified above, the City's fire personnel utilized the following BMPs to address discharge generated from such activities during FY 2010-11:

- Whenever possible, practice drills were performed in areas where runoff was contained. When practice drills were performed in an area where runoff could potentially leave the site, the site was surveyed by the officer-in-charge prior to training activities to ensure that debris would not enter the storm drain system as a result of the drill.
- As determined feasible, runoff from training drills or other non-emergency activities, was directed to landscaped areas.
- Areas that have debris that could potentially enter the storm drain system as a result of the drill activities were not used for training until the debris had been removed.
- Live fire training activities were pre-planned to allow integration of structural BMP barriers to control runoff as deemed necessary.
- Runoff from live fire training activities was contained and recovered with the City's Vac-con truck so that runoff did not discharge to the storm drain system or receiving waters.

- Good housekeeping and dry cleanup practices were utilized as part of standard facility maintenance procedures.

13.2.1 EDUCATIONAL METHODS

Details of the City's educational programs, including fire fighting personnel education, are provided in Section 8 of this document.

14.0 JURMP REVISIONS

The City's JURMP was rewritten in the spring of 2008 as required by Water Quality Order No. 2007-0001. Section 14 of the updated JURMP document includes a list of the changes made to the JURMP at that time. Any other changes made to the JURMP since the comprehensive JURMP update in the spring of 2008 would be detailed in the preceding sections of this JURMP Annual Report. Revisions may include, but would not be limited to, required inventory updates, necessary process and procedure changes, or programmatic modifications to improve efficiency and effectiveness.

15.0 CONCLUSIONS & RECOMMENDATIONS

During the 2007-2008 reporting period, the City of Encinitas updated its JURMP, which was finalized and submitted to the RWQCB on March 24, 2008. As captured in the preceding 2011-2012 JURMP Annual Report, the City of Encinitas has continued to implement and refine various program elements as determined appropriate, standardize core program components, and stay current with emerging trends and technology. Further, the City has and will continue to actively participate and collaborate with other Copermittees in the development and collective implementation of regional programs. As compliance standards evolve based upon defined timeframes in Order No. 2007-0001, the City of Encinitas will continue to augment and update programs as necessary to comply with regulatory requirements, and evaluate the overall efficacy of program elements against value added outcomes to assure focused and refined implementation protocols.

Appendix A

Development Planning

A-1 **Treatment Control BMP Inventory**

A-2 **SUSMP Priority Project Map**

A-3 **Treatment Control BMP Inspection Priority Flowchart**

A-4 **Sample Grading Certification / BMP Installation Verification Letter**

A-5 **Treatment Control BMP Operation and Maintenance Self-Verification Letters**

A-6 **Treatment Control BMP Operation and Maintenance Brochure**

A-7 **Treatment Control BMP Operation and Maintenance Self-Verification Online Form**

A-8 **Treatment Control BMP Operation and Maintenance City Inspection and Self-Verification Results and Findings**

A-9 **Treatment Control BMP Operation and Maintenance Inspection Form**

A-10 **Stormwater Pollution Control Checklist and Certification**

A-11 **Hydromodification Management Plan Checklist and Certification**

Appendix A-1: FY 11-12 Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
55	I	540 Cornish Dr	Vegetated Swale	Biofiltration Swale	9/27/2005	3/17/2008	Encinitas Other		Low
55	I	540 Cornish Dr	Vegetated Swale	Biofiltration Swale	9/27/2005	3/17/2008	Encinitas Other		Low
60	G	3275 Poppy Hills Ln	Extended Detention Basin	detention basin	1/1/2003	1/15/2008	Private		Medium
60	G	3275 Poppy Hills Ln	Rock Swale	rock-lined swale	1/1/2003	1/15/2008	Private		Medium
60	G	3275 Poppy Hills Ln	Landscaped Area	landscaped area for BMP	1/1/2003	1/15/2008	Private		Medium
60	G	3275 Poppy Hills Ln	Landscaped Area	landscaped area for BMP	1/1/2003	1/15/2008	Private		Medium
61	CN	801 Orpheus Ave	Flow-Through Planter	flow-through planter "bio-swale"	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Flow-Through Planter	flow-through planter "bio-swale"	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Pervious Pavement	gravel parking area	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Other	fuel slab reservoir	10/15/2007	6/7/2010	Encinitas Other		Low
61	CN	801 Orpheus Ave	Other	roof cover for fueling area	10/15/2007	6/7/2010	Encinitas Other		Low
87	G	354 Santa Fe Dr	Extended Detention Basin	detention basin	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Vegetated Swale	bio-swale	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
87	G	354 Santa Fe Dr	Mechanical Filter	fossil filter insert	9/28/2006	8/31/2007	Private	2007-0598464	Medium
94	I	3740 Fortuna Ranch Rd	Rock Swale	gravel swale	4/12/2010	7/16/2010	Private	2010-0170453	Low
94	I	3740 Fortuna Ranch Rd	Rock Swale	gravel swale	4/12/2010	7/16/2010	Private	2010-0170453	Low
94	I	3740 Fortuna Ranch Rd	Rock Swale	gravel swale	4/12/2010	7/16/2010	Private	2010-0170453	Low
106	G	3358 Wildflower Valley Dr	Vegetated Swale	min. 100' long priority stormwater BMP grass swale	6/19/2006	11/18/2008	Private	2008-0582295	Medium
106	G	3358 Wildflower Valley Dr	Vegetated Swale	treatment swale	6/19/2006	11/18/2008	Private	2008-0582295	Medium
153	I	111 Chesterfield Dr	Interceptor (Sewer)	traffic rated oil seperator	8/31/2006	2/13/2007	Private		Medium
153	I	111 Chesterfield Dr	Interceptor (Sewer)	traffic rated oil seperator	8/31/2006	2/13/2007	Private		Medium
153	I	111 Chesterfield Dr	Mechanical Filter	Flo-Gard FF-RF24D	8/31/2006	2/13/2007	Private		Medium
169	G	510 s el camino real	Vegetated Swale	vegetated swale	9/23/2008	7/15/2009	Private		Medium
169	G	510 S El Camino Real	Vegetated Swale	grass-lined swale	9/23/2008	7/15/2009	Private	2007-0310771	Medium
169	G	510 S El Camino Real	Mechanical Filter	Kristar flogard	9/23/2008	7/15/2009	Private	2007-0310771	Medium
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low

Note: All TC BMPs are located in the Carlsbad Watershed

Appendix A-1: FY 11-12 Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Vegetated Swale	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Infiltration Basin	grass-lined swale	10/26/2006	4/6/2009	Private	2006-0754938	Low
181	G	3342 Wildflower Valley Dr	Infiltration Basin	15' X 15' X 12" gravel	10/26/2006	4/6/2009	Private	2006-0754938	Low
183	G	3234 Olivenhain Farms Rd	Vegetated Swale	bio-swale for post BMP treatment	11/1/2006	5/13/2008	Private	2006-0764616	Low
183	G	3234 Olivenhain Farms Rd	Rock Swale	rock-lined swale	11/1/2006	5/13/2008	Private	2006-0764616	Low
183	G	3234 Olivenhain Farms Rd	Rock Swale	rock-lined swale	11/1/2006	5/13/2008	Private	2006-0764616	Low
187	G	1060 Urania Ave	Dry Well	9' deep drywell	3/22/2007	TBD	Private	2006-0898796	Medium
187	G	1060 Urania Ave	Vegetated Swale	vegetated swale	3/22/2007	TBD	Private	2006-0898796	Medium
187	G	1060 Urania Ave	Cistern/Bioretention	20'X12'X5' Cistern	3/22/2007	TBD	Private	2006-0898796	Medium
276	G	Phoebe St & Hwy 101	Retention/Infiltration Vault	stormwater collection vault	4/19/2007	6/19/2008	Private		High
276	G	Phoebe St & Hwy 101	Vortex Separator	fix-point says drain insert, polygon says veg swale, given bmp description; StormFilter chamber by Contech	4/19/2007	6/19/2008	Private		High
276	G	Phoebe St & Hwy 101	Vortex Separator	StormFilter chamber by Contech	4/19/2007	6/19/2008	Private		High
325	G	2620 Lone Jack Rd	Vegetated Swale	grass BMP treatment swale	11/28/2007	6/30/2011	Private	2008-0003721	Medium
325	G	2620 Lone Jack Rd	Vegetated Swale	grass BMP treatment swale	11/28/2007	6/30/2011	Private	2008-0003721	Medium
325	G	2620, 2622, 2624 Lone Jack Rd	Vegetated Swale	vegetated swale	11/28/2007	6/30/2011	Private	2008-0003721	Medium
325	G	2622 Lone Jack Rd	Vegetated Swale	grass BMP treatment swale	11/28/2007	6/30/2011	Private	2008-0003721	Medium
325	G	2622 Lone Jack Rd	Vegetated Swale	grass BMP treatment swale	11/28/2007	6/30/2011	Private	2008-0003721	Medium
325	G	2624 Lone Jack Rd	Vegetated Swale	grass BMP treatment swale	11/28/2007	6/30/2011	Private	2008-0003721	Medium
325	G	2624 Lone Jack Rd	Vegetated Swale	grass BMP treatment swale	11/28/2007	6/30/2011	Private	2008-0003721	Medium
372	G	1657 N Vulcan Ave	Infiltration Basin	grass swale	8/9/2007	TBD	Private	2007-0615430	Medium
385	G	1555 Crest Dr	Vegetated Swale	BMP landscape swale	8/31/2007	7/13/2009	Private	2007-0611836	Low
385	G	1555 Crest Dr	Rock Swale	gravel/sand filter	8/31/2007	7/13/2009	Private	2007-0611836	Low
386	G	3535 Manchester Ave	Retention/Infiltration Vault	detention system	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Mechanical Filter	Bio-Clean continuous basket	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Vegetated Swale	flow-based system for BMP	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 manchester Ave	Mechanical Filter	Bio-Clean continuous basket	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Retention/Infiltration Vault	detention system	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Retention/Infiltration Vault	stormtech detention	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Mechanical Filter	biofilter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium

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Appendix A-1: FY 11-12 Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
386	G	3535 Manchester Ave	Mechanical Filter	Biofilter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Mechanical Filter	Katchall curb outlet filter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
386	G	3535 Manchester Ave	Mechanical Filter	biofilter	6/18/2007	4/9/2009	Private - HOA	2009-0176383	Medium
388	G	1435 Lake Dr	Vegetated Swale	6'W X 20'L bioswale	12/17/2007	TBD	Private		Medium
388	G	1435 Lake Dr	Vegetated Swale	6' X 28'L bioswale	12/17/2007	TBD	Private		Medium
388	G	1435 Lake Dr	Vegetated Swale	203' long grass-lined swale	12/17/2007	TBD	Private		Medium
414	G	4455 Manchester Ave	Vegetated Swale	grassy swale	5/10/2007	2/20/2008	Private	2007-0317169	Medium
414	G	4455 Manchester Ave	Vegetated Swale	grassy swale	5/10/2007	2/20/2008	Private	2007-0317169	Medium
414	G	4455 Manchester Ave	Mechanical Filter	flogard FB-24 storm drain filter by Kristar	5/10/2007	2/20/2008	Private	2007-0317169	Medium
414	G	4455 Manchester Ave	Vortex Separator	StormFliter per Contech stormwater solutions	5/10/2007	2/20/2008	Private	2007-0317169	Medium
414	G	4455 Manchester Ave	Mechanical Filter	flogard FB-24 storm drain filter by Kristar	5/10/2007	2/20/2008	Private	2007-0317169	Medium
414	G	SWC of Encinitas BLVD & Manchester AVE	Mechanical Filter	Install (SF 1) 48" precast storm filter	5/10/2007	2/20/2008	Private		Medium
437	G	222 El Camino Real	Vortex Separator	StormScreen unit	8/31/2007	5/22/2008	Private	2007-0571994	Medium
462	G	215 Second St	Landscaped Area	bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Landscaped Area	bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Landscaped Area	bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Dry Well	flow well stormwater leaching system	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Dry Well	flow well stormwater leaching system	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	215 Second St	Turf Block Swale	grasscrete	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	90 N Coast Hwy 101	Turf Block Swale	3' wide grass crete bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	90 N Coast Hwy 101	Interceptor (sewer)	Jensen sand and oil trap model JP50050	7/6/2007	4/6/2009	Private - HOA		Medium
462	G	90 N Coast Hwy 101	Landscaped Area	3' wide grass crete bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	90 N Coast Hwy 101	Landscaped Area	3' wide grass crete bmp swale	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	90 N Coast Hwy 101	Mechanical Filter	kristar inlet filter	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
462	G	90 N Coast Hwy 101	Mechanical Filter	kristar inlet filter	7/6/2007	4/6/2009	Private - HOA	2007-0447115	Medium
482	G	1864 Crest Dr	Rock Swale	4' wide rock lined treatment swale w/ rip-rap entrance	3/28/2008	3/31/2011	Private	2007-0495449	Low
482	G	1864 Crest Dr	Extended Detention Basin	detention basin	3/28/2008	3/31/2011	Private	2007-0495449	Low
482	G	1864 Crest Dr	Rock Swale	4' wide rock lined treatment swale w/ rip-rap entrance	3/28/2008	3/31/2011	Private	2007-0495449	Low
482	G	1864 Crest Dr	Turf Block Swale	6' wide turf block reinforced grass swale	3/28/2008	3/31/2011	Private		Low
483	G	540 La Costa Ave	Interceptor (Sewer)	wastewater sump	9/10/2007	7/28/2010	Private	2007-0637421	Medium
483	G	540 La Costa Ave	Vegetated Swale	bio-swale	9/10/2007	7/28/2010	Private	2007-0637421	Medium
483	G	540 La Costa Ave	Mechanical Filter	filter insert	9/10/2007	7/28/2010	Private	2007-0637421	Medium
483	G	540 La Costa Ave	Mechanical Filter	filter insert	9/10/2007	7/28/2010	Private	2007-0637421	Medium
562	G	1302 Encinitas Blvd	Vegetated Swale	4' wide landscaped swale	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	Infiltration Basin	infiltration basin	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	Vegetated Swale	8' wide treatment swale with 6' wide bottom	8/21/2007	8/4/2008	Private		Medium
562	G	1302 Encinitas Blvd	Mechanical Filter	flogard lopro hydrocarbon absorbant filter	8/21/2007	8/4/2008	Private		Medium

Note: All TC BMPs are located in the Carlsbad Watershed

Appendix A-1: FY 11-12 Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Rock Swale	rock swale	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	65 l.f. gravel detention / dispersion pit	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	3/29/2011	Private		Medium
570	G	489 Latigo Row	Infiltration Basin	filter drain	11/20/2007	3/29/2011	Private		Medium
692	G	1435 Rainbow Ridge	Vegetated Swale	6' BMP treatment swale	3/27/2008	TBD	Private	2008-0029728	TBD
704	G	230 Quail Gardens Dr	Pervious Pavement	pavers	4/17/2008	TBD	San Diego County		Low
704	G	230 Quail Gardens Dr	Vegetated Swale	vegetated BMP swale and 2 energy dissipators	4/17/2008	TBD	Private	2008-0162733	Low
705	G	3354 Wildflower Valley Dr	Vegetated Swale	vegetated swale	1/14/2008	TBD	Private		Low
705	G	3354 Wildflower Valley Dr	Vegetated Swale	vegetated swale	1/14/2008	TBD	Private		Low
705	G	3354 Wildflower Valley Dr	Vegetated Swale	vegetated swale	1/14/2008	TBD	Private		Low
705	G	3354 Wildflower Valley Dr	Rock Swale	rock-lined swale	1/14/2008	TBD	Private	2008-0106026	Low
713	G	3003 Wildflower Dr	Infiltration Basin	dispersion trench	4/25/2008	4/29/2010	Private	2008-0192767	Low
713	G	3003 Wildflower Dr	Landscaped Area	landscaped area	4/25/2008	4/29/2010	Private	2008-0192767	Low
713	G	3003 Wildflower Dr	Infiltration Basin	dispersion trench	4/25/2008	4/29/2010	Private	2008-0192767	Low
713	G	3003 Wildflower Dr	Infiltration Basin	dispersion trench	4/25/2008	4/29/2010	Private	2008-0192767	Low
716	G	662 Encinitas Blvd	Pervious Pavement	grasspave2 by Invisible Structures, Inc.	6/2/2008	TBD	Private	2008-0243901	TBD
716	G	662 Encinitas Blvd	Vegetated Swale	3' wide grass lined treatment swale	6/2/2008	TBD	Private	2008-0243901	TBD
716	G	662 Encinitas Blvd	Other	Drain Inserts	6/2/2008	TBD	Private	2008-0243901	TBD
716	G	662 Encinitas Blvd	Vortex Separator	StormFilter catch basin by Contech	6/2/2008	TBD	Private	2008-0243901	TBD
718	G	687 South Coast Hwy 101	Advanced Mechanical Filter	6' X 12' precast StormFilter by Contech	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Interceptor (Sewer)	320 gal. sand-oil interceptor	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
718	G	687 South Coast Hwy 101	Mechanical Filter	Kristar hydrocarbon filter	8/28/2008	2/10/2011	Private	2008-0440635	High
789	G	2005 San Elijo Ave	Interceptor (Sewer)	grease interceptor	1/9/2008	3/23/2009	Private	2008-0609543	Low
789	G	2005 San Elijo Ave	Pervious Pavement	porous concrete	1/9/2008	3/23/2009	Private	2008-0609543	Low
883	G	1058 Hymettus Ave	Pervious Pavement	modular concrete-reinforced turf area	10/22/2008	TBD	Private		TBD
883	G	1058 Hymettus Ave	Pervious Pavement	modular reinforced turf area	10/22/2008	TBD	Private	2008-0563838	TBD
883	G	1058 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	TBD	Private	2008-0563838	TBD
883	G	1058 Hymettus Ave	Infiltration Basin	15' X 8' X 5' infiltration basin	10/22/2008	TBD	Private	2008-0563838	TBD
883	G	1058 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	TBD	Private	2008-0563838	TBD

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Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
883	G	1058 Hymettus Ave	Pervious Pavement	modular concrete-reinforced turf area	10/22/2008	TBD	Private		TBD
883	G	1058 Hymettus Ave	Pervious Pavement	modular concrete-reinforced turf area	10/22/2008	TBD	Private		TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	TBD	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	TBD	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Pervious Pavement	modular concrete-reinforced turf area	10/22/2008	TBD	Private		TBD
883	G	1076 Hymettus Ave	Infiltration Basin	15' X 8' X 5' infiltration basin	10/22/2008	TBD	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	TBD	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	TBD	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	TBD	Private	2008-0563838	TBD
883	G	1076 Hymettus Ave	Vegetated Swale	bmp swale	10/22/2008	TBD	Private	2008-0563838	TBD
912	G	416 N Rancho Santa Fe Rd	Rock Swale	gravel swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Media Filter	2' diameter, 6' deep gravel pit with open bottom for BMP use	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Infiltration Basin	2.5' wide of 6" cobbles over 12" thick pea gravel	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Infiltration Basin	10' X 25' gravel	1/16/2009	9/24/2009	Private	2008-0609456	Medium
912	G	416 N Rancho Santa Fe Rd	Infiltration Basin	gravel	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Rock Swale	gravel swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Rock Swale	gravel swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
912	G	416 N Rancho Santa Fe Rd	Vegetated Swale	2' wide grass swale	1/16/2009	9/24/2009	Private	2008-0609546	Medium
943	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	1/14/2009	TBD	Private	2009-0016310	Medium
943	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	1/14/2009	TBD	Private	2009-0016310	Medium
943	G	211 Saxony Rd	Vegetated Swale	vegetated swale	1/14/2009	TBD	Private	2009-0016310	Medium
943	G	211 Saxony Rd	Flow-Through Planter	6' X 12' Filterra unit	1/14/2009	TBD	Private	2009-0016310	Medium
947	G	1423 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1423 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1423 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1435 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1435 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1447 Bella Vista Ct	Landscaped Area	planter area	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1447 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale w/ some rock-lined portions	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1447 Bella Vista Ct	Mechanical Filter	Kristar Lo-pro drain filter	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1459 Bella Vista Ct	Vegetated Swale	BMP bioinfiltration swale w/ some rock-lined portions	5/26/2009	11/17/2010	Private	2009-0134165	Medium
947	G	1459 Bella Vista Ct	Mechanical Filter	Kristar Lo-pro drain filter	5/26/2009	11/17/2010	Private	2009-0134165	Medium
963	G	1002 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	515430	TBD
963	G	1002 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1003 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1006 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1006 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD

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Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
963	G	1007 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1010 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1010 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1011 Scarley way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1011 Scarley way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1011 Scarley way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1013 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1013 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1013 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1014 Scarlet way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1014 Scarlet way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1017 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1017 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1017 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1017 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1021 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1021 Scarlet Way	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1150 Melba Road	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1150 Melba Road	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1150 Melba Road	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1150 Melba Road	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1150 Melba Road	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1150 Melba Road	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	1150 Melba Road	Vegetated Swale	Vegetated Swale	10/8/2009	TBD	Private	2009-515430	TBD
963	G	923 Bluejack Rd	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	923 Bluejack Rd	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	927 Bluejack Rd	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	931 Bluejack Rd	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	932 Bluejack Rd	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	932 Bluejack Rd	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	935 Bluejack Rd	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	936 Bluejack Rd	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	939 Bluejack Rd	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
963	G	940 Bluejack Rd	Bioretention Swale	Private BMP Area	10/8/2009	TBD	Private	2009-515430	TBD
983	G	1320 Encinitas Blvd	Vortex Separator	Contech Stormfilter	10/28/2008	TBD	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	TBD	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	TBD	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	TBD	Private	2008-0522122	Medium
983	G	1320 Encinitas Blvd	Vegetated Swale	landscape BMP	10/28/2008	TBD	Private	2008-0522122	Medium
983	G	1340 Encinitas Blvd	Other		10/28/2008	TBD	Private		Medium

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Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
1092	EBP	820 Birmingham Dr	Mechanical Filter	12" trench with hydro carbon filter and steel grate	8/6/2007	6/26/2009	Private	2008-0075668	Medium
1092	EBP	820 Birmingham Dr	Mechanical Filter	12" trench with hydro carbon filter and steel grate	8/6/2007	6/26/2009	Private	2008-0075668	Medium
1092	EBP	820 Birmingham Dr	Mechanical Filter	12" trench with hydro carbon filter and steel grate	8/6/2007	6/26/2009	Private	2008-0075668	Medium
1092	EBP	820 Birmingham Dr	Mechanical Filter	12" trench with hydro carbon filter and steel grate	8/6/2007	6/26/2009	Private	2008-0075668	Medium
1365	G	311, 310, 314 and 318 Hana Ct	Rock Swale	gravel swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1365	G	311, 310, 314 and 318 Hana Ct	Rock Swale	gravel swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1365	G	311, 315, 319, 323, and 327 Hana Ct	Vegetated Swale	vegetated swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1365	G	315 and 311 Hana Ct	Rock Swale	rock swale	3/25/2004	8/16/2006	Private	2004-0215063	Medium
1389	G	302 Requeza St	Extended Detention Basin	stormwater detention treatment basin	1/5/2004	8/2/2005	Private	2003-1503915	High
1457	G	200 Saxony Rd	Vegetated Swale	grass-lined swale	5/6/2004	4/6/2006	Private		Low
1469	G	1401 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1401 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1401 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1401 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1414 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1414 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1414 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1428 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1428 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	1442 Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1469	G	Bella Azul Ct	Vegetated Swale	grass swale	11/17/2005	1/14/2011	Private	2004-0874708	Low
1519	G	200 Saxony Rd	Landscaped Area	turf catch basin approach basin	3/1/2004	7/12/2005	Private		Medium
1519	G	200 Saxony Rd	Landscaped Area	turf catch basin approach apron	3/1/2004	7/12/2005	Private		Medium
1519	G	200 Saxony Rd	Mechanical Filter	flogard+plus model 'FGP-36CI' catch basin filter insert	3/1/2004	7/12/2005	Private		Medium
1519	G	200 Saxony Rd	Mechanical Filter	flogard+plus model 'FGP-36CI' catch basin filter insert	3/1/2004	7/12/2005	Private		Medium
1532	G	1316, 1318 Summit Ave	Vegetated Swale	grass swale and storm water "cleansing area" (detention basin)	4/28/2004	11/14/2007	Private		Low
1532	G	1320 Summit Ave	Vegetated Swale	landscape swale	4/28/2004	11/14/2007	Private		Low
1532	G	1320 Summit Ave	Vegetated Swale	landscape swale	4/28/2004	11/14/2007	Private		Low
1563	G	3701 Fortuna Ranch Rd	Vegetated Swale	grass swale	10/11/2004	6/11/2008	Private		Low
1563	G	3701 Fortuna Ranch Rd	Vegetated Swale	grass swale	10/11/2004	6/11/2008	Private		Low
1600	G	1588-1590 Leucadia Blvd	Interceptor (Sewer)	grease trap	6/14/2004	7/6/2005	Private		Medium
5814	G	2108 Oxford Ave	Vegetated Swale	grass swale	12/4/2002	4/1/2004	Private		Low
5814	G	2108 Oxford Ave	Landscaped Area	landscaped area	12/4/2002	4/1/2004	Private		Low

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5814	G	2112 Oxford Ave	Vegetated Swale	grass swale	12/4/2002	4/1/2004	Private		Low
5814	G	2112 Oxford Ave	Landscaped Area	landscaped area	12/4/2002	4/1/2004	Private		Low
6402	G	311 Princehouse Ln	Vegetated Swale	grass swale (275 ft by 4 ft)	7/18/2005	12/8/2006	Private	2004-0576710	Medium
6442	G	3616 Manchaster Ave	Mechanical Filter	Fossil Filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchaster Ave	Mechanical Filter	Fossil Filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchaster Ave	Mechanical Filter	Fossil Filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchaster Ave	Mechanical Filter	fossil filter by Kristar	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Extended Detention Basin	Football field is a detention basin with a filtration sytem under it There are two 2000 gallon sand-oil interceptors	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Sand/Oil Separator (stormwater)	2000-gal Jenson Sand-Oil Interceptor	9/17/2004	10/17/2006	Private		High
6442	G	3616 Manchester Ave	Sand/Oil Separator (stormwater)	2000-gal Jenson Sand-Oil Interceptor	9/17/2004	10/17/2006	Private		High
6813	G	155 Saxony Rd	Vegetated Swale	grass swale/infiltration basin	9/5/2003	7/23/2009	Private		Low
6813	G	155 Saxony Rd	Vegetated Swale	grass swale	9/5/2003	7/23/2009	Private		Low
6813	G	155 Saxony Rd	Other	drain inlet with seepage pit	9/5/2003	7/23/2009	Private		Low
7005	G	503 Ocean Bluff Wy	Vegetated Swale	vegetated swale around the home	9/4/2002	4/30/2007	Private		Medium
7005	G	503 Ocean Bluff Wy	Vegetated Swale	vegetated swale around the home	9/4/2002	4/30/2007	Private		Medium
7005	G	507 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	509 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	509 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	510 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	513 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	513 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	517 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	517 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	518 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	521 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	521 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	525 Ocean Bluff Wy	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	526 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	532 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	532 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	558 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7005	G	558 Camino De Orchidia	Vegetated Swale	stormwater treatment swale around home	9/4/2002	4/30/2007	Private		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscaped area	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscaped area	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscaped area	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Landscaped Area	landscaped area	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Mechanical Filter	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium

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7054	G	645 Via Cantebria	Mechanical Filter	fossil filter insert	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Mechanical Filter	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium
7054	G	645 Via Cantebria	Mechanical Filter	fossil filter	4/24/2003	5/18/2005	Private - HOA		Medium
7300	G	740 Garden View Ct	Vegetated Swale	grass swale for stormwater treatment	2/22/2002	12/22/2008	Private		Low
7300	G	740 Garden View Ct	Landscaped Area	planter area	2/22/2002	12/22/2008	Private		Low
7300	G	760 Garden View Ct	Landscaped Area	planter area	2/22/2002	12/22/2008	Private		Low
7300	G	760 Garden View Ct	Vegetated Swale	grass swale for stormwater treatment	2/22/2002	12/22/2008	Private		Low
7305	G	131 Princehouse Ln	Rock Swale	3-ft wide gravel swale	1/10/2003	4/7/2004	Private		Low
7305	G	131 Princehouse Ln	Infiltration Basin	3-ft diameter absorption pit, 4-ft deep w/ 3/4" rock	1/10/2003	4/7/2004	Private		Low
7374	I	95 N Vulcan Ave	Pervious Pavement	grass pavers	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Pervious Pavement	pervious pavement parking lot	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Pervious Pavement	pervious pavement walkway	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Rock Swale	rock lined swale	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Pervious Pavement	pervious pavement walkway	1/30/2003	10/16/2006	Encinitas Parks		Medium
7374	I	95 N Vulcan Ave	Extended Detention Basin	detention basin	1/30/2003	10/16/2006	Encinitas Street Maintenance		Medium
7425	G	195 La Mesa	Landscaped Area	runoff to street and enclosed rock trench across the back	12/16/2002	3/9/2004	Private		Low
7425	G	195 La Mesa Ave	Landscaped Area	landscaped area	12/16/2002	3/9/2004	Private		Low
7425	G	195 La Mesa Ave	Landscaped Area	landscaped area	12/16/2002	3/9/2004	Private		Low
7588	G	1200 Garden View Rd	Vegetated Swale	grass lined swale	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Vegetated Swale	vegetated swale	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Vegetated Swale	grassy swale	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4120-M Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-M Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7588	G	1200 Garden View Rd	Mechanical Filter	4130-S Filter	12/9/2002	4/1/2004	Private	2002-1125937	Medium
7604	G	111 Chesterfield Dr	Infiltration Basin	crushed rock infiltration for offsite runoff	10/23/2003	7/3/2008	Private		Low
7628	G	199 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	199 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	207 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	207 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	207 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	221 La Costa Ave	Vegetated Swale	landscaped area for filtration	5/2/2003	11/4/2008	Private	2006-0214323	Medium
7628	G	235 La Costa Ave	Vegetated Swale	grass swale	5/2/2003	11/4/2008	Private	2006-0214323	Medium

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Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
7702	G	301 Chopin Way	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	315 Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	315 Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	322, 336 Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	329 Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	Rubenstein Ave and Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	Rubenstein Ave and Chopin Wy	Vegetated Swale	vegetated swale	8/6/2003	1/23/2006	Private		Medium
7702	G	Rubenstein Ave and Chopin Wy	Retention/Infiltration Vault	stormwater detention vault	8/6/2003	1/23/2006	Private		Medium
7729	I	Vulcan Ave and E St	Flow-Through Planter		1/15/2010	TBD	Encinitas Parks		Medium
7729	I	Vulcan Ave and E St	Flow-Through Planter		1/15/2010	TBD	Encinitas Parks		Medium
7729	I	Vulcan Ave and E St	Flow-Through Planter		1/15/2010	TBD	Encinitas Parks		Medium
7729	I	Vulcan Ave and E St	Flow-Through Planter		1/15/2010	TBD	Encinitas Parks		Medium
7729	I	Vulcan Ave and E St	Dry Well		1/15/2010	TBD	Encinitas Wastewater		Medium
7729	I	Vulcan Ave and E St	Dry Well		1/15/2010	TBD	Encinitas Wastewater		Medium
7729	I	Vulcan Ave and E St	Dry Well		1/15/2010	TBD	Encinitas Wastewater		Medium
7729	I	Vulcan Ave and E St	Flow-Through Planter		1/15/2010	TBD	Encinitas Parks		Medium
7732	G	175 La Costa Ave	Other	DG-lined swale	12/30/2003	5/15/2006	Private		Medium
7732	G	175 La Costa Ave	Extended Detention Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	183 La Costa Ave	Infiltration Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	191 La Costa Ave	Infiltration Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7732	G	191 La Costa Ave	Infiltration Basin	detention basin	12/30/2003	5/15/2006	Private		Medium
7771	G	1550 S El Camino Real	Extended Detention Basin	desiltation basin	10/28/2003	2/4/2008	Private		Low
7771	G	1550 S El Camino Real	Pervious Pavement	pervious pavemnet "gravel pave" manufactured by Invisible Structures	10/28/2003	2/4/2008	Private		Low
7771	G	1550 S El Camino Real	Pervious Pavement	pervious pavemnet "gravel pave" manufactured by Invisible Structures	10/28/2003	2/4/2008	Private		Low
7771	G		Other	Dissipator per sdrsd d-40	10/28/2003	2/4/2008	Private		Low
7771	G		Landscaped Area	Landscaped area for storm water cleaning	10/28/2003	2/4/2008	Private		Low
7771	G		Pervious Pavement	Pervious pavement "Gravel Pave" as manufactured by invisible structures	10/28/2003	2/4/2008	Private		Low
7780	G	133 Rosebay Dr	Infiltration Basin	rock-lined infiltration trench	8/4/2003	4/29/2005	Private		Low
7780	G	133 Rosebay Dr	Bioretention Basin	terraced stormwater drainage area	8/4/2003	4/29/2005	Private		Low
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium

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Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
7791	G	1766 N Coast Hwy 101	Bioretention Basin	bioinfiltration area	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Vegetated Swale	vegetated swale	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Infiltration Basin	vegetated detention basin	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Vegetated Swale	vegetated swale	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Infiltration Basin	vegetated detention basin	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Interceptor (Sewer)	grease interceptor	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Sand/Oil Separator (stormwater)	sand/oil interceptor	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Mechanical Filter	fossil filter insert	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7791	G	1766 N Coast Hwy 101	Mechanical Filter	fossil filter insert	8/4/2004	12/30/2008	Private	2004-0733519	Medium
7800	G	3542 Jasmine Crest	Vegetated Swale	vegetated swale (drains to bioretention)	3/13/2003	11/19/2009	Private		Low
7800	G	3542 Jasmine Crest	Vegetated Swale	vegetated swale (drains to bioretention)	3/13/2003	11/19/2009	Private		Low
7800	G	3542 Jasmine Crest	Bioretention Basin	bioretention area	3/13/2003	11/19/2009	Private		Low
7800	G	3542 Jasmine Crest	Bioretention Basin	bioretention area	3/13/2003	11/19/2009	Private		Low
7828	G	1200 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1200 Crestview Dr	Mechanical Filter	catch basin filter insert	11/13/2003	12/21/2006	Private		Medium
7828	G	1207 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1207 Crestview Dr	Mechanical Filter	catch basin filter insert	11/13/2003	12/21/2006	Private		Medium
7828	G	1208 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1216 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1219 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1223 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1223 Crestview Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7828	G	1945 Lake Dr	Infiltration Basin	rock-lined infiltration basin	11/13/2003	12/21/2006	Private		Medium
7847	G	2300 Eighth St	Infiltration Basin	filtration/desiltation pond	8/12/2003	7/23/2009	Private		Low
7852	G	3411 Via Monte Verde	Vegetated Swale	grass lined vegation cleansing area	1/1/2003	10/24/2005	Private		Medium
7852	G	3411 Via Monte Verde	Vegetated Swale	grass lined vegetation area	1/1/2003	10/24/2005	Private		Medium
7852	G	3411 Via Monte Verde	Vegetated Swale	landscaped area for BMP	1/1/2003	10/24/2005	Private		Medium
7852	G	3430 Via Monte verde	Infiltration Basin	rip rap lined infiltration basin (does not conform to plan)	1/1/2003	10/24/2005	Private		Medium
7852	G	3445 Via Monte Verde	Vegetated Swale	landscape area for BMP	1/1/2003	10/24/2005	Private		Medium
7852	G	3445 Via Monte Verde	Vegetated Swale	grass lined vegetation area	1/1/2003	10/24/2005	Private		Medium
7852	G		Other	Rip rap energy dissipator	1/1/2003	10/24/2005	Private		Medium
7852	G		Other	Rip rap energy dissipator	1/1/2003	10/24/2005	Private		Medium
7852	G		Other	Rip rap energy dissipator	1/1/2003	10/24/2005	Private		Medium
7852	G		Other	Rip rap energy dissipator	1/1/2003	10/24/2005	Private		Medium
7893	G	Christine Pl	Retention/Infiltration Vault	'Stormchamber' infiltration units (4)	1/27/2004	TBD	Private	2003-1457627	Medium
7893	G	Christine Pl	Mechanical Filter	Flogard Plus filter insert	1/27/2004	TBD	Private	2003-1457627	Medium
7893	G	Christine Pl	Mechanical Filter	Fflogard Plus filter insert	1/27/2004	TBD	Private	2003-1457627	Medium
9023	G	427 Bristol Ave	Pervious Pavement	pathway filtration	10/20/2004	10/5/2006	Private		Low

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Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
9034	G	1464 Summit Ave	Infiltration Basin	detention filtration basin	12/21/2004	12/3/2007	Private		Medium
9034	G	1470 Summit Ave	Other	DG swale	12/21/2004	12/3/2007	Private		Medium
9057	G	192 Pacific View Ln	Vegetated Swale	7.8 ft wide terraced treatment swale	1/26/2005	1/22/2007	Private		Medium
9071	G	3317 Poppy Hills Ln	Vegetated Swale	vegetated swale	11/9/2004	7/3/2006	Private	2004-0955312	Low
9071	G	3317 Poppy Hills Ln	Rock Swale	rock swale	11/9/2004	7/3/2006	Private	2004-0955312	Low
9106	G	vacant lot N Vulcan Ave	Vegetated Swale	vegetated swale	12/21/2006	TBD	Private		TBD
9106	G	vacant lot N Vulcan Ave	Infiltration Basin	vegetated infiltration basin w/ gravel pit	12/21/2006	TBD	Private		TBD
9117	I	1902 Paxton Wy	Turf Block Swale	GravelPave swale	8/11/2005	TBD	Private	2004-1183355	TBD
9117	I	1905 Paxton Wy	Turf Block Swale	GravelPave swale	8/11/2005	TBD	Private	2004-1183355	TBD
9117	I	1908 Paxton Wy	Turf Block Swale	gravel pave swale	8/11/2005	TBD	Private	2004-1183355	TBD
9117	I	1908 Paxton Wy	Turf Block Swale	Gravel Pave Swale	8/11/2005	TBD	Private	2004-1183355	TBD
9117	I	1916 Paxton Wy	Turf Block Swale	Gravel Pave Swale	8/11/2005	TBD	Private	2004-1183355	TBD
9117	I	1920 Paxton Wy	Turf Block Swale	GravelPave swale	8/11/2005	TBD	Private	2004-1183355	TBD
9134	G	2153 Whisper Wind Ln	Vegetated Swale	grass swale	11/23/2004	4/6/2006	Private		Low
9134	G	2153 Whisper Wind Ln	Infiltration Basin	rip-rap infiltration	11/23/2004	4/6/2006	Private		Low
9150	G	3113 Camino Del Rancho	Bioretention Basin	flat area for stormwater treatment covered with grass	3/24/2005	9/11/2007	Private		Medium
9150	G	3113 Camino Del Rancho	Rock Swale	Rock lined swale	3/24/2005	9/11/2007	Private		Medium
9150	G	3113 Camino Del Rancho	Rock Swale	rock lined swale	3/24/2005	9/11/2007	Private		Medium
9180	G	1610 Neptune Ave	Landscaped Area	landscaped area and planters	7/20/2006	5/21/2009	Private		Low
9253	G	701 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	703 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	715 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	717 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	719 S Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9253	G	721 N Vulcan Ave	Vegetated Swale	vegetated swale	4/19/2005	5/17/2007	Private		Low
9262	G	860 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	860 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	860 Bracero Rd	Retention/Infiltration Vault	Trenched insert for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	860 Bracero Rd	Retention/Infiltration Vault	Trenched insert for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	860 Bracero Rd	Retention/Infiltration Vault	Trenched insert for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	860 Bracero Rd	Retention/Infiltration Vault	Trenched insert for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	860 Bracero Rd	Mechanical Filter	trench drain with skimmer box	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	874 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	874 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	874, 896 & 900 Bracero Rd	Vegetated Swale	7' wide grass lined treatment channel	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	886 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium

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9262	G	886 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	886 Bracero Rd	Mechanical Filter	trench drain with skimmer box	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	890 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	890 Bracero Rd	Mechanical Filter	trench drain with skimmer box	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	896 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	900 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	900 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	900 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	904 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	904 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	904 Bracero Rd	Landscaped Area	landscaped area for BMP	12/1/2005	TBD	Private	2005-0972175	Medium
9262	G	904 Bracero Rd	Mechanical Filter	trench drain with skimmer box	12/1/2005	TBD	Private	2005-0972175	Medium
9278	G	490 Latigo Row	Extended Detention Basin	detention area	12/27/2005	TBD	Private		Medium
9278	G	490, 494 Latigo Row	Turf Block Swale	turf block swale with gravel (no turf)	12/27/2005	TBD	Private		Medium
9278	G	494 Latigo Row	Extended Detention Basin	detention area	12/27/2005	TBD	Private		Medium
9283	G	1440 Hygeia Ave	Infiltration Basin	infiltration basin	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9283	G	265 Sanford St	Infiltration Basin	infiltration basin	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9283	G	267 Sanford St	Infiltration Basin	infiltration basin	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9283	G	267 Sanford St & 1440 Hygeia Ave	Rock Swale	rock swale	1/17/2006	3/26/2007	Private	2005-0861753	Medium
9289	G	2914 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Rd	Other	turf reinforced mat drainage swale	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914 Lone Jack Rd	Other	turf reinforced mat drainage swale	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2914, 2934 Lone Jack Rd	Other	Turf reinforced drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Rd	Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2932 Lone Jack Rd	Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2934 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2944 Lone Jack Rd	Landscaped Area	landscaped area	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9289	G	2944 Lone Jack Rd	Vegetated Swale	turk reinforced mat drainage channel	7/28/2005	6/26/2007	Private	2005-0742142	Medium
9294	G	477 N El Camino Real	Advanced Mechanical Filter	ADS water quality unit	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Vegetated Swale	grass-lined channel for BMP	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Advanced Mechanical Filter	ADS water quality unit	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High

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9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9294	G	477 N El Camino Real	Mechanical Filter	fossil filter insert	12/7/2005	12/3/2007	Private	2007-0114120	High
9301	G	187 Halcyon Rd	Landscaped Area	landscaped area for BMP	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9301	G	187 Halcyon Rd	Vegetated Swale	grass lined ditch	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9301	G	187 Halcyon Rd	Vegetated Swale	grass lined ditch	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9301	G	189 Halcyon Rd	Turf Block Swale	Grasscrete	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9301	G	189 Halcyon Rd	Landscaped Area	landscaped area for BMP	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9301	G	189 Halcyon Rd	Landscaped Area	landscaped area for BMP	8/3/2005	4/14/2009	Private	2005-0679467	Medium
9303	G	869 Brittany Rd	Landscaped Area	landscaped area	6/7/2005	TBD	Private	2005-0496885	Low
9303	G	869 Brittany Rd	Extended Detention Basin	40' +/- detention area	6/7/2005	TBD	Private	2005-0496885	Low
9303	G	869, 875, 881, 887 Brittany Rd	Vegetated Swale	landscape filtration strip	6/7/2005	TBD	Private	2005-0496885	Low
9303	G	875 Brittany Rd	Landscaped Area	landscaped area	6/7/2005	TBD	Private	2005-0496885	Low
9303	G	875 Brittany Rd	Landscaped Area	landscaped area	6/7/2005	TBD	Private	2005-0496885	Low
9318	G	1154 Evergreen Dr	Landscaped Area	landscape area BMP	8/16/2005	2/16/2007	Private		Medium
9318	G	1154 Evergreen Dr	Landscaped Area	2' wide grass pavement strip	8/16/2005	2/16/2007	Private		Medium
9318	G	1154 Evergreen Dr	Landscaped Area	fix-subtype does not match, given bmp description; 2' wide grass pavement strip	8/16/2005	2/16/2007	Private		Medium
9318	G	1154, 1158 Evergreen Dr	Rock Swale	gravel swale (GravePave)	8/16/2005	2/16/2007	Private		Medium
9318	G	1154, 1158 Evergreen Dr	Rock Swale	gravel swale (GravePave)	8/16/2005	2/16/2007	Private		Medium
9318	G	1154, 1158 Evergreen Dr	Rock Swale	gravel swale (GravePave)	8/16/2005	2/16/2007	Private		Medium
9318	G	1158 Evergreen Dr	Vegetated Swale	2' wide grass pavement strip	8/16/2005	2/16/2007	Private		Medium
9318	G	1158 Evergreen Dr	Vegetated Swale	2' wide grass pavement swale	8/16/2005	2/16/2007	Private		Medium
9318	G	1160, 1164, 1168, 1172, 1169, 1165 Kava Ct	Vegetated Swale	vegetated swale	8/16/2005	2/16/2007	Private		Medium
9318	G	1169 & 1165 Kava Ct	Rock Swale	gravel swale	8/16/2005	2/16/2007	Private		Medium
9318	G	1176 & 1173 Kava Ct	Rock Swale	6.5 ft wide gravel swale w/ 3" river rock	8/16/2005	2/16/2007	Private		Medium
9336	G	1904 Sheridan Rd	Vegetated Swale	grass swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1904 Sheridan Rd	Turf Block Swale	Gravel Pave Swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1904, 1938 Sheridan Rd	Turf Block Swale	Gravel Pave swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1938 Sheridan Rd	Turf Block Swale	Gravel Pave swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1938 Stewart Wy	Vegetated Swale	grass swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1938 Stewart Wy	Vegetated Swale	grass swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1938 Stewart Wy	Vegetated Swale	grass swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1946 Sheridan Rd	Rock Swale	Gravel Pave swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1946 Sheridan Rd	Rock Swale	Gravel Pave swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1946 Sheridan Rd	Rock Swale	Gravel Pave swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1946 Sheridan Rd	Vegetated Swale	grass swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1946 Sheridan Rd	Vegetated Swale	grass swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1950 Stewart Wy	Vegetated Swale	grass swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	1957 Stewart Wy	Vegetated Swale	grass swale	8/4/2005	TBD	Private	2005-0503915	TBD

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Appendix A-1: FY 11-12 Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
9336	G	1957 Stewart Wy and 1946 Sheridan Rd	Vegetated Swale	grass swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	292 Andrew Ave	Vegetated Swale	grass swale	8/4/2005	TBD	Private	2005-0503915	TBD
9336	G	292 Andrew Ave	Turf Block Swale	Gravel Pave Swale	8/4/2005	TBD	Private	2005-0503915	TBD
9367	G	781 Garden View Ct	Vegetated Swale	grass lined swale	7/10/2006	1/14/2009	Private		Medium
9367	G	781 Garden View Ct	Landscaped Area	landscape area for BMP	7/10/2006	1/14/2009	Private		Medium
9367	G	781 Garden View Ct	Landscaped Area	landscape area for BMP	7/10/2006	1/14/2009	Private		Medium
9370	G	406 La Costa Ave	Pervious Pavement	Orco block pavers	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	Vegetated Swale	4-ft wide grass swale	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	Other	4 ft X 4ft X 2.5 ft Jenson precast sump station	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	Other	4 ft diameter dual pump lift station	1/30/2006	8/14/2007	Private	2006-0071959	High
9370	G	406 La Costa Ave	Other	4 ft diameter dual pump lift station	1/30/2006	8/14/2007	Private	2006-0071959	High
9419	G	871 Neptune Ave	Turf Block Swale	Grasscrete grass block	8/30/2005	2/6/2008	Private		Low
9419	G	871 Neptune Ave	Landscaped Area	landscaped area	8/30/2005	2/6/2008	Private		Low
9419	G	871 Neptune Ave	Landscaped Area	landscaped area	8/30/2005	2/6/2008	Private		Low
9419	G	871 Neptune Ave	Landscaped Area	landscaped area	8/30/2005	2/6/2008	Private		Low
9459	G	211 Saxony Rd	Infiltration Basin	landscaped area (detention basin)	6/12/2006	9/10/2007	Private - HOA		Medium
9459	G	211 Saxony Rd	Pervious Pavement	Grass Pave	6/12/2006	9/10/2007	Private - HOA		Medium
9481	G	518 Quail Pointe Lane	Other	Pre-Treatment for Bioretention	5/17/2007	TBD	Private	2007-0353916	High
9481	G	518 Quail Pointe Lane	Other	Pre-Treatment for Bioretention	5/17/2007	TBD	Private	2007-0353916	High
9481	G	518 Quail Pointe Lane	Bioretention Basin	Infiltration Basin	5/17/2007	TBD	Private	2007-0353916	High
9481	G	545 Quail Point Ln	Advanced Mechanical Filter	StormFilter by Stormwater Management Inc.	5/17/2007	TBD	Private	2007-0353916	High
9481	G	545 Quail Point Ln	Other	Stormgate	5/17/2007	TBD	Private	2007-0353916	High
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	7/16/2010	Private	2007-0598500	Low
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	7/16/2010	Private	2007-0598500	Low
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	7/16/2010	Private	2007-0598500	Low
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	7/16/2010	Private	2007-0598500	Low
9561	G	303 Santa Fe Dr	Landscaped Area	landscaped area	9/18/2007	7/16/2010	Private	2007-0598500	Low
9561	G	303 Santa Fe Drive	Other	Private overflow concrete catch basin	9/18/2007	7/16/2010	Private		Low
9561	G	303 Santa Fe Drive	Other	Private overflow concrete catch basin	9/18/2007	7/16/2010	Private		Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Dry Well	Dry Well Storm Water Retention	5/25/2006	2/6/2008	Private		Low
9580	G	3451 Dove Hollow Ln	Vegetated Swale	vegetated swale	5/25/2006	2/6/2008	Private		Low
9590	G	721 Vulcan Ave	Bioretention Basin	bioretiention basin	6/23/2006	2/8/2012	Private	2010-0501734	High
9590	G	721 Vulcan Ave	Rock Swale	rock swale	6/23/2006	2/8/2012	Private	2010-0501734	High
9590	G	721 Vulcan Ave	Rock Swale	rock swale	6/23/2006	2/8/2012	Private	2010-0501734	High
9590	G	721 Vulcan Ave	Vegetated Swale	vegetated swale	6/23/2006	2/8/2012	Private	2010-0501734	High
10061	G	3403 Via Monte Verde	Bioretention Basin	Bioretention Basin	3/24/2010	TBD	Private	2012-0399728	TBD
10115	G	350 Cole Ranch Rd	Vegetated Swale	vegetated swale	7/23/2009	3/13/2012	Private	2009-0420175	Low

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Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
10115	G	350 Cole Ranch Rd	Vegetated Swale	vegetated swale	7/23/2009	3/13/2012	Private	2009-0420175	Low
10115	G	350 Cole Ranch Rd	Vegetated Swale	vegetated swale	7/23/2009	3/13/2012	Private	2009-0420175	Low
10115	G	350 Cole Ranch Rd	Vegetated Swale	vegetated swale	7/23/2009	3/13/2012	Private	2009-0420175	Low
10115	G	350 Cole Ranch Rd	Vegetated Swale	vegetated swale	7/23/2009	3/13/2012	Private	2009-0420175	Low
10115	G	350 Cole Ranch Rd	Vegetated Swale	vegetated swale	7/23/2009	3/13/2012	Private	2009-0420175	Low
10115	G	350 Cole Ranch Rd	Extended Detention Basin	detention basin	7/23/2009	3/13/2012	Private	2009-0420175	Low
10115	G	350 Cole Ranch Rd	Turf Block Swale	turf block swale	7/23/2009	3/13/2012	Private	2009-0420175	Low
10115	G	350 Cole Ranch Rd	Turf Block Swale	turf block swale	7/23/2009	3/13/2012	Private	2009-0420175	Low
10115	G	350 Cole Ranch Rd	Turf Block Swale	turf block swale	7/23/2009	3/13/2012	Private	2009-0420175	Low
10115	G	350 Cole Ranch Rd	Turf Block Swale	turf block swale	7/23/2009	3/13/2012	Private	2009-0420175	Low
10187	G	1603 Crest Dr	Landscaped Area	turf area BMP	5/27/2009	4/13/2010	Private	2009-0280381	Low
10187	G	1603 Crest Dr	Rock Swale	2' wide BMP gravel/sand filter	5/27/2009	4/13/2010	Private	2009-0280381	Low
10211	G	211 Saxony Rd	Flow-Through Planter	Filterra Unit	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Flow-Through Planter	Filterra Unit	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Extended Detention Basin	underground detention system	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Landscaped Area	BMP landscape pre-treatment area	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Vortex Separator	Kristar DVS-36C Seperator	2/11/2010	7/26/2011	Private	2010-0629962	Medium
10211	G	211 Saxony Rd	Mechanical Filter	filter fossil filter drain insert	2/11/2010	7/26/2011	Private	TBD	Medium
10305	G	354 Santa Fe Dr	Mechanical Filter	Fossil filter	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Vegetated Swale	Bioswale	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Extended Detention Basin	water quality basin	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Advanced Mechanical Filter	StormFilter	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Advanced Mechanical Filter	StormFilter	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Advanced Mechanical Filter	StormFilter	2/3/2010	5/18/2011	Private	2010-0516652	High
10305	G	354 Santa Fe Dr	Advanced Mechanical Filter	StormFilter	2/3/2010	5/18/2011	Private	2010-0516652	High
10349	G	1220 S El Camino Real	Rock Swale	Rock Lined BMP Swale	1/5/2011	TBD	Private	2011-0006436	TBD
10349	G	1328 S El Camino Real	Rock Swale	Rock Lined BMP Swale	1/5/2011	TBD	Private	2011-0006436	TBD
10349	G	1328 S El Camino Real	Rock Swale	Rock Lined BMP Swale	1/5/2011	TBD	Private	2011-0006436	TBD

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Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
10375	G	1010 N El Camino Real	Flow-Through Planter	Filterra Unit	10/7/2010	2/15/2012	Private	2010-0533381	TBD
10375	G	1010 N El Camino Real	Infiltration Basin	7'X7'X2' Infiltration Bed	10/7/2010	2/15/2012	Private	2010-0533381	TBD
10375	G	1010 N El Camino Real	Infiltration Basin	7'X8'X2' Infiltration Bed	10/7/2010	2/15/2012	Private	2010-0533381	TBD
10375	G	1010 N El Camino Real	Infiltration Basin	8'X8'X2' Infiltration Bed	10/7/2010	2/15/2012	Private	2010-0533381	TBD
10404	SG	3211 Wildflower Valley Dr	Pervious Pavement	pervious pavers	6/23/2010	11/30/2010	Private	2010-0313801	Medium
10404	SG	3211 Wildflower Valley Dr	Media Filter	sand pit	6/23/2010	11/30/2010	Private	2010-0313801	Medium
10404	SG	3211 Wildflower Valley Dr	Rock Swale	gravel swale	6/23/2010	11/30/2010	Private	2010-0313801	Medium
10404	SG	3211 Wildflower Valley Dr	Media Filter	sand and gravel pit	6/23/2010	11/30/2010	Private	2010-0313801	Medium
10404	SG	3211 Wildflower Valley Dr	Media Filter	gravel pit	6/23/2010	11/30/2010	Private	2010-0313801	Medium
10474	G	1524 Caudor St	Rock Swale	5' Wide Rock Swale	2/7/2011	TBD	Private	2011-0020824	TBD
10474	G	1524 Caudor St	Vegetated Swale	Vegetated Swale	2/7/2011	TBD	Private	2011-0020824	TBD
10474	G	1524 Caudor St	Vegetated Swale	Vegetated Swale	2/7/2011	TBD	Private	2011-0020824	TBD
10474	G	1524 Caudor St	Bioretention Swale	Bioretention Structure	2/7/2011	TBD	Private	2011-0020824	TBD
10501	G	3177 Wildflower Summit	Bioretention Basin	Bioretention Basin	10/7/2010	TBD	Private	2010-0533421	TBD
10501	G	3177 Wildflower Summit	Bioretention Basin	Bioretention Basin	10/7/2010	TBD	Private	2010-0533421	TBD
10501	G	3177 Wildflower Summit	Bioretention Basin	Bioretention Basin	10/7/2010	TBD	Private	2010-0533421	TBD
10501	G	3177 Wildflower Summit	Rock Swale	Cobble Swale	10/7/2010	TBD	Private	2010-0533421	TBD
10501	G	3177 Wildflower Summit	Rock Swale	Cobble Swale	10/7/2010	TBD	Private	2010-0533421	TBD
10501	G	3177 Wildflower Summit	Rock Swale	Cobble Swale	10/7/2010	TBD	Private	2010-0533421	TBD
10501	G	3177 Wildflower Summit	Rock Swale	Cobble Swale	10/7/2010	TBD	Private	2010-0533421	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD

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Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Landscaped Area	Standard BMP Landscape Area	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Landscaped Area	Standard BMP Landscape Area	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Landscaped Area	Standard BMP Landscape Area	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Landscaped Area	Standard BMP Landscape Area	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Landscaped Area	Standard BMP Landscape Area	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Landscaped Area	Standard BMP Landscape Area	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Bioretention Basin	Bioretention Planter Island	11/10/2010	TBD	Private	2010-0339027	TBD
10523	G	415-485 Santa Fe Dr	Pervious Pavement	Pervious Concrete	11/10/2010	TBD	Private	2010-0339027	TBD
10536	I	1492 Hymettus Ave	Vegetated Swale	Vegetated Swale	4/6/2011	TBD	Private - HOA	2011-0062689	TBD
10536	I	1492 Hymettus Ave	Vegetated Swale	Vegetated Swale	4/6/2011	TBD	Private - HOA	2011-0062689	TBD
10536	G	1496 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1496 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1496 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1497 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1497 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	I	1497 Halia Ct	Turf Block Swale	Turf Block Swale	4/6/2011	TBD	Private - HOA	2011-0062689	TBD
10536	G	1500 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	2011-0062689	TBD
10536	G	1500 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1501 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1501 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1501 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1501 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1504 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1504 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1505 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1505 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1505 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1508 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1508 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1509 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1512 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1512 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD

Note: All TC BMPs are located in the Carlsbad Watershed

Appendix A-1: FY 11-12 Treatment Control BMP Inventory

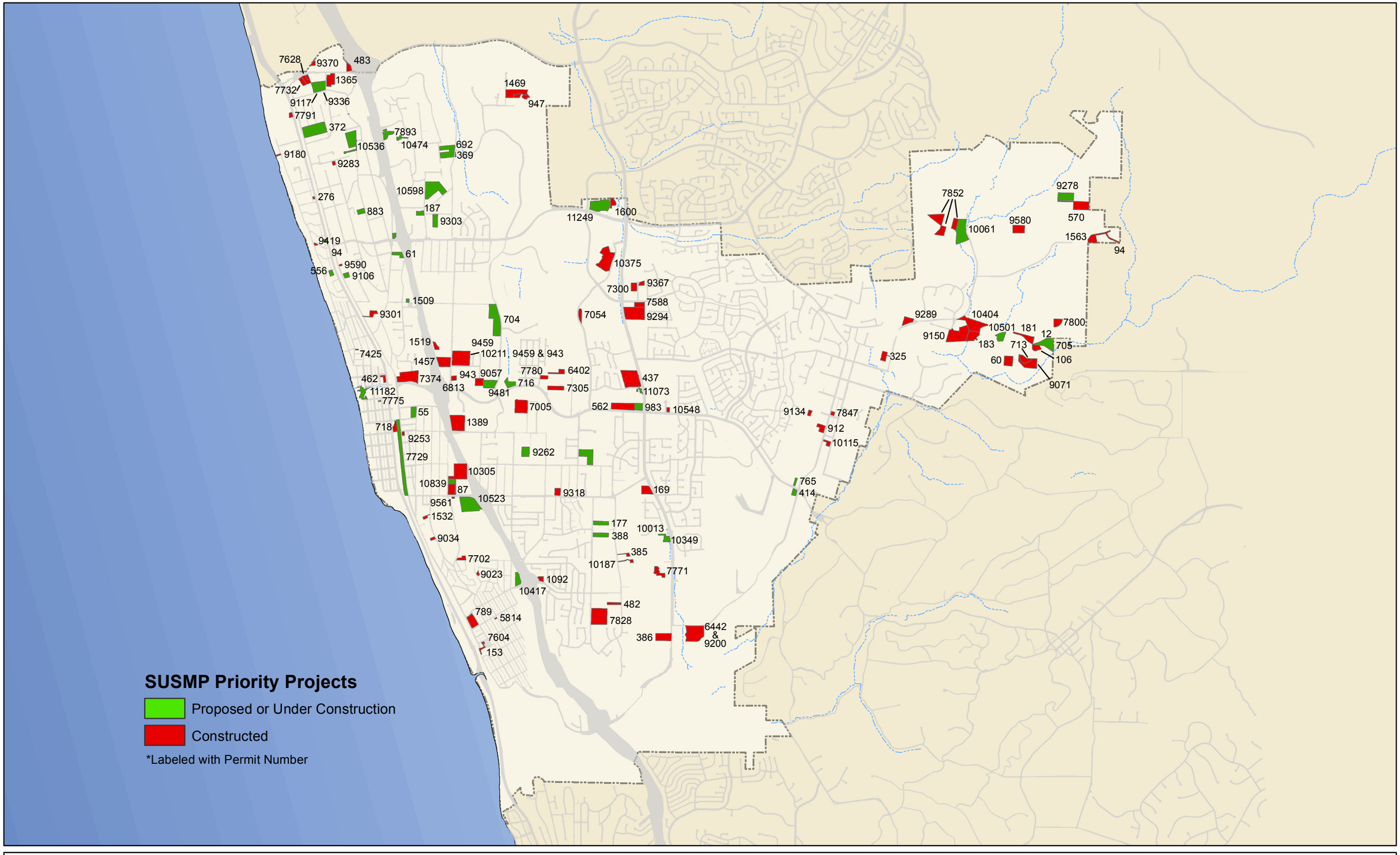
Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
10536	G	1512 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1513 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1516 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1516 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1520 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	2011-0062689	TBD
10536	G	1520 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1520 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1521 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1524 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1524 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1525 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1528 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1528 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1529 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1533 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10536	G	1533 Halia Ct	Bioretention Basin	Bioretention	1/11/2011	TBD	Private - HOA	62689	TBD
10548	G	1502 Encinitas Blvd	Bioretention Swale	Bioretention Basin	1/27/2011	5/31/2011	Private	2011-0055467	Low
10548	G	1502 Encinitas Blvd	Bioretention Basin	Bioretention Basin	1/27/2011	5/31/2011	Private	2011-0055467	Low
10548	G	1502 Encinitas Blvd	Bioretention Basin	Bioretention Basin	1/27/2011	5/31/2011	Private	2011-0055467	Low
10548	G	1502 Encinitas Blvd	Bioretention Basin	Bioretention Basin	1/27/2011	5/31/2011	Private	2011-0055467	Low
10598	G	adjacent to Normandy Rd	Turf Block Swale	Turf Block BMP Swale	12/12/2011	TBD	Private - HOA	2011-0640472	TBD
10598	G	adjacent to Urania Ave	Flow-Through Planter	Roadside Treatment Swale	12/12/2011	TBD	Private - HOA	2011-0640472	TBD
10598	G	adjacent to Urania Ave	Flow-Through Planter	Roadside Treatment Swale	12/12/2011	TBD	Private - HOA	2011-0640472	TBD
10598	G	adjacent to Urania Ave	Flow-Through Planter	Roadside Treatment Swale	12/12/2011	TBD	Private - HOA	2011-0640472	TBD
10598	G	Dolphin Cir and Urania Ave	Bioretention Basin	Bioretention Basin (lined)	12/12/2011	TBD	Private - HOA	2011-0640472	TBD
10598	G	Tuscany Ct	Bioretention Basin	Bioretention Basin (lined)	12/12/2011	TBD	Private - HOA	2011-0640472	TBD
10598	G	Urania Ave and Sandy Ct	Bioretention Basin	Bioretention Basin (lined)	12/12/2011	TBD	Private - HOA	2011-0640472	TBD
10839	G	354 Santa Fe Dr	Flow-Through Planter	Filterra unit	12/20/2011	TBD	Private	2011-0626811	TBD
10839	G	354 Santa Fe Dr	Flow-Through Planter	Filterra unit	12/20/2011	TBD	Private	2011-0626811	TBD
10839	G	354 Santa Fe Dr	Bioretention Swale	bio-swale	12/20/2011	TBD	Private	2011-0626811	TBD
10839	G	354 Santa Fe Dr	Pervious Pavement	grass-pave	12/20/2011	TBD	Private	2011-0626811	TBD
10839	G	354 Santa Fe Dr	Other	green roof	12/20/2011	TBD	Private	2011-0626811	TBD
11073	G	194 N El Camino Real	Bioretention Basin	Bioretention Basin	3/28/2012	TBD	Private	2012-0192859	TBD
11073	G	194 N El Camino Real	Bioretention Basin	Bioretention Basin	3/28/2012	TBD	Private	2012-0192859	TBD
11073	G	194 N El Camino Real	Interceptor (sewer)	Grease Interceptor, existing	3/28/2012	TBD	Private	2012-0192859	TBD
11112	G	905 Orpheus Ave	Mechanical Filter	Hydrocarbon Filter by Kristar	2/6/2012	TBD	Private	2012-77290	TBD
11112	G	905 Orpheus Ave	Interceptor (sewer)	320 gal Sand/Oil Seperator by Jensen	2/6/2012	TBD	Private	2012-77290	TBD
11112	G	905 Orpheus Ave	Landscaped Area	Landscaped BMP Area	2/6/2012	TBD	Private	2012-77290	TBD
11112	G	905 Orpheus Ave	Landscaped Area	Landscaped BMP Area	2/6/2012	TBD	Private	2012-77290	TBD
11112	G	905 Orpheus Ave	Landscaped Area	Landscaped BMP Area	2/6/2012	TBD	Private	2012-77290	TBD
11112	G	905 Orpheus Ave	Pervious Pavement	PErvious Pavers Aquabric by Orco	2/6/2012	TBD	Private	2012-77290	TBD

Note: All TC BMPs are located in the Carlsbad Watershed

Appendix A-1: FY 11-12 Treatment Control BMP Inventory

Permit No.	Permit Type	Location	BMP Type	BMP Description	Approval Date	Construction Date	Maintained By	Maintenance Covenant No.	Inspection Priority
11112	G	905 Orpheus Ave	Pervious Pavement	PErvious Pavers Aquabric by Orco	2/6/2012	TBD	Private	2012-77290	TBD
11112	G	905 Orpheus Ave	Pervious Pavement	PErvious Pavers Aquabric by Orco	2/6/2012	TBD	Private	2012-77290	TBD
11147	G	934 N Coast Hwy 101	Pervious Pavement	Orco Aquabric	4/17/2012	TBD	Private	2012-0239482	TBD
11147	G	934 N Coast Hwy 101	Media Filter	DG BMP Area	4/17/2012	TBD	Private	2012-0239482	TBD
11147	G	934 N Coast Hwy 101	Sand/Oil Separator (stormwater)	320 gal san/oil seperator by Jensen Precast	4/17/2012	TBD	Private	2012-0239482	TBD
11147	G	934 N Coast Hwy 101	Interceptor (sewer)	750 gal Grease Interceptor by Jensen Precast	4/17/2012	TBD	Private	2012-0239482	TBD
11147	G	934 N Coast Hwy 101	Mechanical Filter	Hydrocarbon Filter by Kristar	4/17/2012	TBD	Private	2012-0239482	TBD
11182	G	Moonlight Beach	Media Filter	3' wide permanent BMP strip	4/18/2012	TBD	Encinitas Parks		TBD
11182	G	Moonlight Beach	Media Filter	3' wide permanent BMP strip	4/18/2012	TBD	Encinitas Parks		TBD
11182	G	Moonlight Beach	Bioretention Basin	Rain Garden	4/18/2012	TBD	Encinitas Parks		TBD
11182	G	Moonlight Beach	Bioretention Basin	Rain Garden	4/18/2012	TBD	Encinitas Parks		TBD
11182	G	Moonlight Beach	Bioretention Basin	Rain Garden	4/18/2012	TBD	Encinitas Parks		TBD
11182	G	Moonlight Beach	Bioretention Basin	Rain Garden	4/18/2012	TBD	Encinitas Parks		TBD
11182	G	Moonlight Beach	Bioretention Basin	Rain Garden	4/18/2012	TBD	Encinitas Parks		TBD
11182	G	Moonlight Beach	Bioretention Basin	Rain Garden	4/18/2012	TBD	Encinitas Parks		TBD
11182	G	Moonlight Beach	Rock Swale	Cobble Lined Swale	4/18/2012	TBD	Encinitas Parks		TBD
11249	G	1550 Leucadia Blvd	Mechanical Filter	Inlet filter by Bio-Clean Model BC-RGISB-22-24	6/6/2012	TBD	Private	2012-0333149	TBD
11249	G	1550 Leucadia Blvd	Mechanical Filter	Inlet filter by Bio-Clean Model BC-RGISB-22-24	6/6/2012	TBD	Private	2012-0333149	TBD

Note: All TC BMPs are located in the Carlsbad Watershed



Appendix A-2

SUSMP Priority Projects with Treatment Control BMPs

DISCLAIMER: **This map should not be used for Engineering, Survey, or Site-Specific Analysis.**
Every reasonable effort has been made to assure the accuracy of the data provided; nevertheless, some information may not be accurate. The City of Encinitas assumes no liability or responsibility arising from the use of or reliance upon this information.

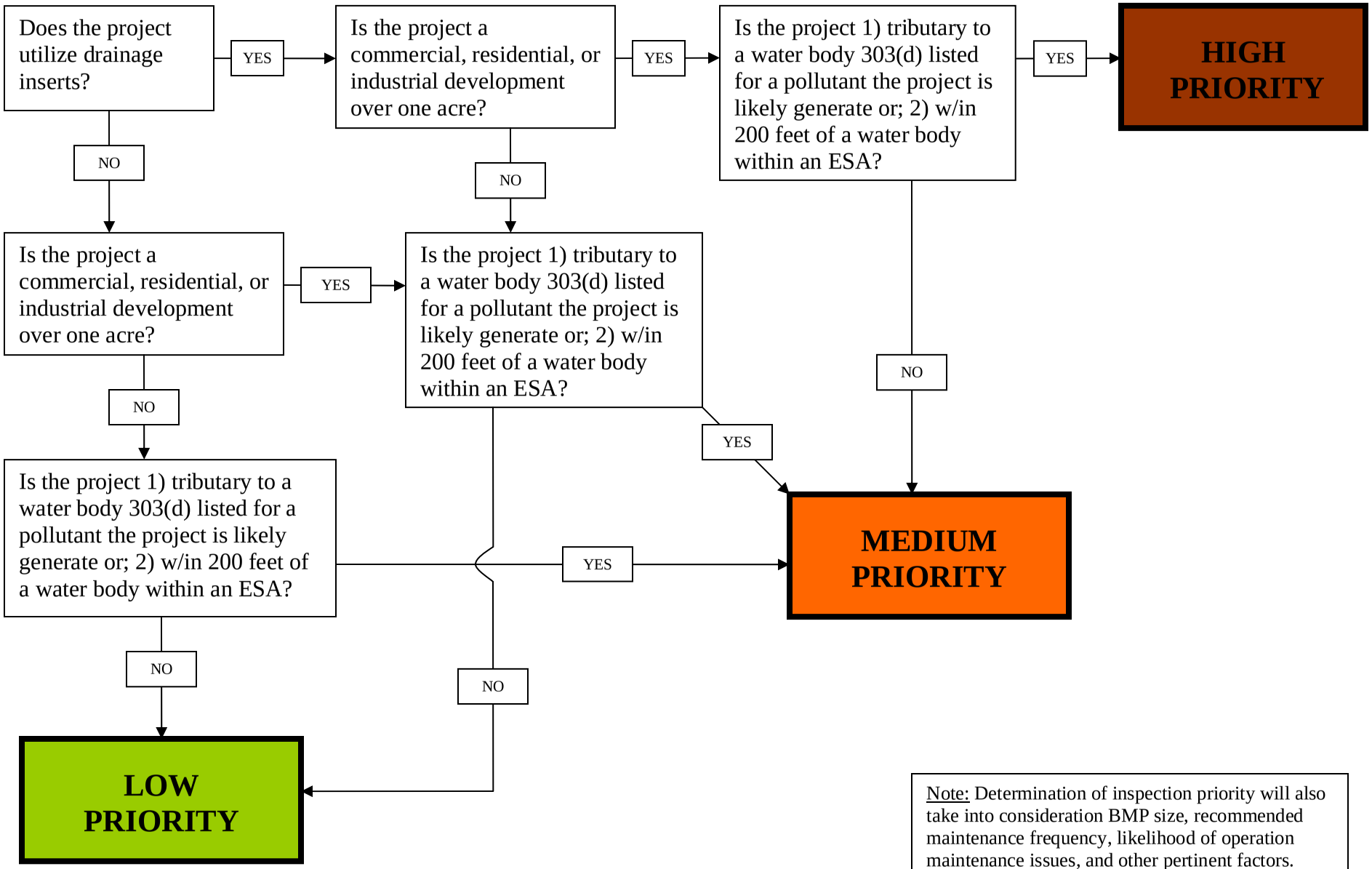
- Map Coordinates: Stateplane NAD83 Feet, CA Zone 6

N

0 6,400 Feet

1 inch = 3,700 feet

Treatment Control BMP Inspection Priority



Note: Determination of inspection priority will also take into consideration BMP size, recommended maintenance frequency, likelihood of operation maintenance issues, and other pertinent factors.

SAMPLE

Date: _____

City of Encinitas
Engineering Services Permits
505 South Vulcan Ave.
Encinitas, CA 92024

Re: **Engineer's Final Grading Certification for Project No. 99-001 TM and Grading Permit Number XXXX - G.**

The grading under permit number XXXX has been performed in substantial conformance with the approved grading plan or as shown on the attached 'As Graded' plan.

Final grading inspection has demonstrated that lot drainage conforms with the approved grading plan and that swales drain at a minimum of 1% to the street and/or an appropriate drainage system.

All the Low Impact Development, Source Control and Treatment Control Best Management Practices as shown on the drawing and required by the Best Management Practice Manual Part II were constructed and are operational, together with the required maintenance covenant(s).

Engineer of Record _____ (signed & sealed)

Dated _____

Verification by the Engineering Inspector of this fact is done by the Inspector's signature hereon and will take place only after the above is signed and stamped and will not relieve the Engineer of Record of the ultimate responsibility:

Engineering Inspector: _____

Dated:_____

The above information shall be on the Engineer of Record's letterhead and shall be signed and sealed by the Engineer of Record.

Appendix A-5a

City of Encinitas

OFFICIAL CITY BUSINESS

Response Required By: 8/31/11

July 28, 2011

TO: *Owner Name*
Contact Person
Street Address
City, State, ZIP

RE: Treatment Control Best Management Practices (BMP) Operation & Maintenance Verification

Please find included with this letter property specific information and detailed instructions on how to fulfill your annual treatment control BMP operation and maintenance verification obligations.

As you may be aware, in an effort to improve the quality of runoff flowing into our storm drain system and out to the ocean and coastal lagoons, priority development projects within the City of Encinitas are required to construct treatment control BMP facilities to control and treat water runoff.

To ensure the long term effectiveness and efficiency of these facilities, the City of Encinitas, as required by the State Water Resources Control Board, must annually verify that these features are being properly managed and maintained by responsible property owners.

For more information regarding the Treatment Control BMP Operation and Maintenance Program, please refer to the enclosed brochure or call the City of Encinitas Clean Water Hotline at (760) 633-2787 for assistance. Your cooperation in this effort is greatly appreciated.

Sincerely,

Erik Steenblock
Clean Water Program Manager

Enclosures: BMP Operation and Maintenance Verification Instructions
Treatment Control BMP Program Brochure

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

CITY OF ENCINITAS

Treatment Control BMP Operation & Maintenance Verification Instructions

REMINDER: Annual inspection and maintenance verification of Treatment Control BMP(s) located on your property is due no later than **August 31, 2011**

City of Encinitas records indicate that the treatment control BMP(s) on your property at **Insert Property Location here** include:

List BMPs here

To fulfill inspection and maintenance obligations, please complete the following steps:

1) **Visually inspect all Treatment Control BMPs** for signs of malfunction or disrepair (i.e. excessive sediment or debris, overgrown vegetation, restricted water flow).
2) **Maintain/repair any damage to the BMP(s)**. Necessary maintenance may include removing accumulated sediment, trash, or other debris; stabilizing eroded areas; replanting vegetation; trimming / mowing overgrown vegetation; or cleaning out closed or blocked inlets and outlets, etc.
4) **Take current photos of all BMPs on the property**.
5) **Complete the Operation and Maintenance Self-Verification Online Form** and submit photos and related maintenance documentation as necessary. The online form can be found at the following website: **http://cleanwaterBMP.cityofencinitas.org**. To access the form, enter your property identification number (PIN) in the field provided on the main webpage.

Your PIN is:	*Insert PIN here*

Annual inspection, routine maintenance, and effective operation of permanent treatment control BMPs are required per City of Encinitas Municipal Code (EMC) Section 20.08, the San Diego Municipal Stormwater Permit, as well as property related legal agreements and/or covenants. Please be advised that failure to complete annual inspection and maintenance activities and provide adequate verification information may constitute a violation of City ordinance (EMC Section 20.08) or breach of property related agreements or covenants.

If hardcopy submittal is preferred, a paper copy of the O & M Verification From may be picked up at City Hall (505 S Vulcan Ave), or please email cleanwater@cityofencinitas.org and an electronic copy of the O & M Verification Form will be emailed to you.

CITY OF ENCINITAS
Clean Water Program
ENGINEERING SERVICES

Appendix A-5b

City of Encinitas

OFFICIAL CITY BUSINESS

PAST DUE
NOTICE

September 9, 2011

TO: *Owner Name*
Contact Person
Street Address
City, State, ZIP

RE: Treatment Control Best Management Practices (BMP) Operation & Maintenance Verification

The intent of this letter is to inform you that your annual treatment control BMP operation and maintenance verification is **PAST DUE** as of August 31, 2011. In a letter dated July 28, 2011, the City of Encinitas requested submittal of documentation showing that you have completed your BMP evaluation and maintenance activities.

The City of Encinitas is extending you an additional opportunity to complete your BMP evaluation, conduct necessary maintenance activities, and submit the required self-verification information no later than September 30, 2011.

Please find included with this letter property specific information and detailed instructions on how to fulfill your annual treatment control BMP operation and maintenance verification obligations.

Please be advised that failure to complete annual inspection and maintenance activities and provide adequate verification information constitutes a violation of City ordinance (EMC Section 20.08) and breach of property related agreements or covenants, for which the City may opt to pursue further enforcement action.

If self-verification obligations are not completed, a formal Notice of Violation will be issued and City staff will be required to conduct a site inspection to assess the BMPs on your property. Inspections will consist of a site visit by City staff and documentation of BMP features consistent with the original grading permit or other approved property specific permits or plans. Formal inspection actions will take place beginning October 1, 2010.

For more information regarding the Treatment Control BMP Operation and Maintenance Program, please call the City of Encinitas Clean Water Hotline at (760) 633-2787 for assistance. Your cooperation in this effort is greatly appreciated.

Sincerely,

Erik Steenblock
Clean Water Program Manager

CITY OF ENCINITAS
Clean Water Program
ENGINEERING SERVICES

Enclosures: BMP Operation and Maintenance Verification Instructions

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

CITY OF ENCINITAS

Treatment Control BMP Operation & Maintenance Verification Instructions

PAST DUE NOTICE: If annual evaluation and maintenance verification of your Treatment Control BMPs is not completed by **Sept 30, 2011**, as required by State mandates, City staff will conduct an inspection of the BMPs on your property on or after October 1, 2011. Additionally, the City may opt to pursue further enforcement action in accordance with EMC Section 20.08.

City of Encinitas records indicate that the treatment control BMP(s) on your property at **Insert Property Location here** include:

List BMPs here

To fulfill inspection and maintenance obligations, please complete the following steps:

1) **Visually inspect all Treatment Control BMPs** for signs of malfunction or disrepair (i.e. excessive sediment or debris, overgrown vegetation, restricted water flow).
2) **Maintain/repair any damage to the BMP(s)**. Necessary maintenance may include removing accumulated sediment, trash, or other debris; stabilizing eroded areas; replanting vegetation; trimming / mowing overgrown vegetation; or cleaning out closed or blocked inlets and outlets, etc.
4) **Take current photos of all BMPs on the property**.
5) **Complete the Operation and Maintenance Self-Verification Online Form** and submit photos and related maintenance documentation as necessary. The online form can be found at the following website: **http://cleanwaterBMP.cityofencinitas.org**. To access the form, enter your property identification number (PIN) in the field provided on the main webpage.

Your PIN is:	*Insert PIN here*

Annual inspection, routine maintenance, and effective operation of permanent treatment control BMPs are required per City of Encinitas Municipal Code (EMC) Section 20.08, the San Diego Municipal Stormwater Permit, as well as property related legal agreements and/or covenants. Please be advised that failure to complete annual inspection and maintenance activities and provide adequate verification information may constitute a violation of City ordinance (EMC Section 20.08) or breach of property related agreements or covenants.

If hardcopy submittal is preferred, a paper copy of the O & M Verification From may be picked up at City Hall (505 S Vulcan Ave), or please email cleanwater@cityofencinitas.org and an electronic copy of the O & M Verification Form will be emailed to you.

CITY OF ENCINITAS
Clean Water Program
ENGINEERING SERVICES

City of Encinitas

OFFICIAL CITY BUSINESS

ADVISORY NOTICE

October 27, 2011

TO: *Owner Name*
Contact Person
Street Address
City, State, ZIP

RE: Failure to Inspect Treatment Control Best Management Practices (BMPs)

Please be advised that as of the date of this letter, the City of Encinitas has not received requested self-inspection and maintenance verification documentation specific to **[xx location]**. On July 26, 2011 and September 9, 2011 the City issued letters to the owner / responsible party associated with this property address, identifying specific Treatment Control Best Management Practices that require self-inspection and as needed maintenance no later than September 30, 2011.

This information has been requested to fulfill your obligation to self-inspect and maintain as needed treatment control BMP drainage features that are installed on your property to reduce the quantity and improve the quality of water runoff from the site.

Failure to respond to this request for information may constitute a violation of Encinitas Municipal Code Section 20.08.140 which is summarized below. The full text of the Storm Water Municipal Code may be accessed on the City's website at http://cwp.cityofencinitas.org.

> **EMC Section 20.08.140 - Minimum Best Management Practices**, which states that *Treatment Control BMPs must be inspected by the Discharger or responsible party before the start of the rainy season and following actual rain events.*

To address this Advisory Notice, City staff will schedule a site inspection to assess the BMPs on your property. The City inspection will consist of a site visit by City staff and documentation of BMP features consistent with the original grading permit or other approved property specific permits or plans.

If you would prefer to complete your self-verification in lieu of a City staff inspection, please notify City staff via email or phone and complete the online self-verification form as soon as possible. Self-verification inspection and maintenance instructions are enclosed.

For more information regarding the Treatment Control BMP Operation and Maintenance Program, please call the City of Encinitas Clean Water Hotline at (760) 633-2787 or email cleanwater@encinitasca.gov for assistance. Your cooperation in this effort is greatly appreciated.

Sincerely,

Erik Steenblock
Clean Water Program Manager

CITY OF ENCINITAS
Clean Water Program
ENGINEERING SERVICES

Enclosures: BMP Operation and Maintenance Verification Instructions

Tel 760/633-2600 FAX 760/633-2627, 505 South Vulcan Avenue, Encinitas, CA 92024 TDD 760/633-2700

CITY OF ENCINITAS

Treatment Control BMP Operation & Maintenance Verification Instructions

City of Encinitas records indicate that the treatment control BMP(s) on your property at **Insert Property Location here** include:

List BMPs here

To fulfill inspection and maintenance obligations, please complete the following steps:

1) **Visually inspect all Treatment Control BMPs** for signs of malfunction or disrepair (i.e. excessive sediment or debris, overgrown vegetation, restricted water flow).
2) **Maintain/repair any damage to the BMP(s)**. Necessary maintenance may include removing accumulated sediment, trash, or other debris; stabilizing eroded areas; replanting vegetation; trimming / mowing overgrown vegetation; or cleaning out closed or blocked inlets and outlets, etc.
4) **Take current photos of all BMPs on the property**.
5) **Complete the Operation and Maintenance Self-Verification Online Form** and submit photos and related maintenance documentation as necessary. The online form can be found at the following website: **http://cleanwaterBMP.cityofencinitas.org**. To access the form, enter your property identification number (PIN) in the field provided on the main webpage.

Your PIN is:	*Insert PIN here*

Annual inspection, routine maintenance, and effective operation of permanent treatment control BMPs are required per City of Encinitas Municipal Code (EMC) Section 20.08, the San Diego Municipal Stormwater Permit, as well as property related legal agreements and/or covenants. Please be advised that failure to complete annual inspection and maintenance activities and provide adequate verification information may constitute a violation of City ordinance (EMC Section 20.08) or breach of property related agreements or covenants.

If hardcopy submittal is preferred, a paper copy of the O & M Verification From may be picked up at City Hall (505 S Vulcan Ave), or please email cleanwater@encinitasca.gov and an electronic copy of the O & M Verification Form will be emailed to you.

CITY OF ENCINITAS
Clean Water Program
ENGINEERING SERVICES

Appendix A-6

Frequently Asked Questions

1. Why does the City of Encinitas require that Treatment Control BMPs be maintained?

Proper operation and regular maintenance of permanent stormwater treatment control BMPs ensures that the facility reduces the amount of pollutants that end up in our creeks, lagoons, and beaches. These BMPs help to improve water quality and minimize human and environmental health risks. The San Diego Region Municipal Stormwater Permit (issued by the San Diego Regional Water Quality Control (RWQCB)) requires that the City annually verify that treatment control BMPs installed on private property are adequately maintained.

2. What should I do if I am unsure how to complete my self-inspection form or cannot locate the treatment control BMPs on my property?

Contact Clean Water Program staff as soon as possible. We can provide assistance in understanding the self-verification form, identifying the location of BMP(s) on your property, and determining operation and maintenance needs of your BMP(s). Staff can be reached via phone: 760-633-2787, or email: cleanwater@cityofencinitas.org

3. What happens during the City's inspection of Treatment Control BMPs on my property?

If requested or as required due to repudiation, a City inspector will visit the property to validate the existence, proper maintenance, and function of treatment control BMPs. Inspection actions will be documented with an inspection report form and photos of specific BMPs. If access is limited or located on private property, the City inspector will call the responsible party to schedule an inspection.

FAQs continued…

4. What happens if I don't certify that my Treatment Control BMP(s) have been maintained?

The City is responsible for ensuring the proper maintenance and function of treatment facilities. Failure of a responsible party to provide adequate inspection and maintenance information, upon request, may constitute a violation of the City ordinance as well as property related agreements or covenants. The RWQCB requires the City to verify the proper function of treatment control BMPs through the Municipal Stormwater Permit. It is the goal of the City to minimize the burden on property owners to fulfill these requirements. The Treatment Control BMP Self Verification online form has been developed to provide property owners with a simple mechanism to validate the proper maintenance and function of these facilities, and to help the City meet State mandated requirements.

City of Encinitas
Clean Water Program
505 S. Vulcan Avenue
Encinitas, CA 92024

For questions relating to
Treatment Control BMPs,
please call: 760-633-2787
or e-mail: cleanwater@cityofencinitas.org

Printed on recycled paper

CITY OF ENCINITAS
Clean Water Program
ENGINEERING SERVICES

Operation and Maintenance Guide

for your

Treatment Control Best Management Practices (BMPs)



Thanks for helping us keep our creeks, lagoons, and ocean clean!

Appendix A-6

What is a Treatment Control BMP?

Treatment Control BMPs are drainage devices, structures, or areas designed to remove pollutants from storm water runoff, or minimize the quantity of runoff ultimately discharged from a development site. These facilities are required to be incorporated into permitted development or redevelopment projects and serve a functional purpose to improve the quality of water that flows to our local creeks, lagoons, and beaches. They are also frequently referred to as Stormwater Best Management Practices or BMPs.

The following BMPs are commonly incorporated into development projects throughout the City of Encinitas:

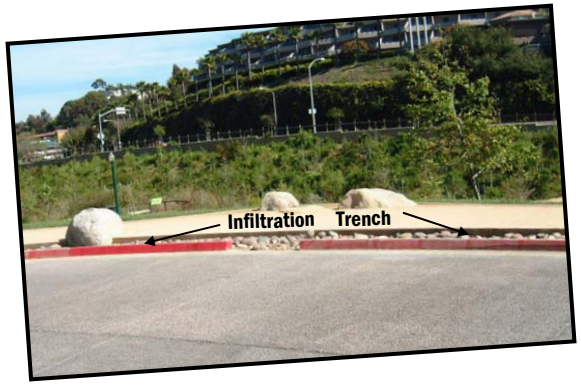
Vegetated Swales / Grassy Swales are open, shallow channels or depressions with vegetation or grass covering the side slopes and bottom that collect, infiltrate, and slowly convey runoff water. Rock lined swales are also commonly used.



Bioretention Areas consist of a planted or vegetated depression area designed to pond during a rain event. It is common to find multiple bioretention areas located throughout a development area.



Infiltration Trenches or **Basins** temporarily store runoff in shallow basins or linear depressions lined with sandy soil or gravel to enhance infiltration of water into the ground.



Storm Drain Filter Inserts are manufactured filters or fabric placed in a storm drain inlet to remove sediment, debris, oil, or other pollutants.



Other BMPs include Rock-Lined Swales, Terraced Swales, Detention Basins, Subsurface Infiltration Systems, Constructed Wetlands, Media Filters, Storm Water Storage Systems, and Vortex Separators.

Please note that each of the BMPs may vary in design size, shape, or materials from the descriptions above. City staff is available to help you determine the location of BMPs located on your property.

For more information on Treatment Control BMPs, refer to the City's Storm Water Best Management Practices Manual, Part II which can be accessed via the Clean Water Program webpage:

http://cwp.ci.encinitas.ca.us

How to locate Treatment Control BMPs on your property:

1. Refer to your approved grading or improvement plans. The plans will show the location of Treatment Control BMPs.
2. Walk your property to look for defined drainage areas such as channels, depressions, or basins.
3. Typical treatment control BMPs may look similar to traditional landscaped areas. Look for areas that have been graded in a concave, swale, or linear shape to capture and infiltrate storm water.
4. Structural treatment control devices such as an inlet filter may be located within a curb inlet or underground. *Please contact the City of Encinitas if you have a structural control located on your property with limited access.

Minimum Operation and Maintenance Requirements:

As stated on approved grading or improvement plans and in the City's Stormwater Management and Discharge Control Ordinance (Municipal Code Chapter 20.08), stormwater treatment control BMPs are required to be maintained in perpetuity by a designated responsible party. The responsible party is most commonly the property owner or a Home Owners' Association (HOA).

Minimum Operation and Maintenance tasks:

- ☑ On an annual basis, or as needed, visually inspect all Treatment Controls for signs of malfunction or disrepair.
- ☑ Maintain/repair any damage to the BMP. Necessary maintenance may include removing accumulated sediment, stabilizing eroded areas, replanting dead vegetation, trimming / mowing overgrown vegetation, cleaning out closed or blocked inlets and outlets, etc.
- ☑ Remove any accumulated trash and debris.
- ☑ Take photos of all BMPs on the property.
- ☑ Complete the online Operation and Maintenance Self-Verification Form, if requested, or provide access to Clean Water Program staff to conduct a BMP inspection.

City of Encinitas

CITY OF ENCINITAS
Clean Water Program

Welcome to the City of Encinitas Stormwater Treatment Control BMP Annual Operation and Maintenance Verification Website

This web portal will allow you to:

- Review treatment control BMP information associated with your property.
- Document your required annual BMP evaluation and Maintenance activities.

Login below to complete the **Operation and Maintenance Self-Verification Form** or to view your BMP and property related information:







PIN #:

Login

Background:

Development projects constructed within the City of Encinitas are commonly required to construct stormwater treatment BMPs (Best Management Practices). The treatment control BMPs provide a critical function for downstream creek and ocean water quality. Proper operation and routine maintenance of these BMPs is necessary to achieve maximum water quality benefits.

Annual evaluation, maintenance, and operation of permanent treatment control BMPs are required per City of Encinitas Municipal Code (EMC) Section 20.08, the San Diego Municipal Stormwater Permit, as well as property related legal agreements.

To fulfill evaluation and maintenance obligations, please complete the following steps:

- Visually inspect all Treatment Control BMP(s).
- Maintain/repair any damage to the BMP(s).
- Take photos of all BMP(s) and document any third-party maintenance.
- Complete the **Operation and Maintenance Self-Verification Form** by entering your "PIN" in the box above. Your PIN can be found on the notification letter you received in the mail.

For more detailed instructions review the Operation & Maintenance Brochure.

ALL EVALUATIONS, MAINTENANCE ACTVITIES, AND ONLINE VERIFICATION MUST BE COMPLETED NO LATER THAN:
AUGUST 31, 2011

Have Questions? Visit our Frequently Asked Questions Page.

If you have any additional questions regarding the Treatment Control BMP Operation and Maintenance Program, please call the Clean Water Hotline at 760-633-2787 or email cleanwater@cityofencinitas.org for assistance.

If you are having trouble using this website to submit your Self-Verification documentation, please contact the City of Encinitas webmaster at: 760-633-2668 or via email at: webmaster@cityofencinitas.org for assistance.

Please be advised that failure to complete annual evaluation and maintenance activities and provide adequate verification information may constitute a violation of EMC Section 20.08 or breach of property related covenants.

Reference Tools

View the Operation & Maintenance Brochure

Surfrider's Ocean Friendly Gardens Program

City's Municipal Stormwater Code

San Diego Stormwater Permit

Phone: (760) 633-2600 | TDD: (760) 633-2700 | Fax: (760) 633-2627 | 505 S. Vulcan Avenue, Encinitas, CA 92024-3633
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City of Encinitas

CITY OF ENCINITAS Clean Water Program

Stormwater Treatment Control Best Management Practices Operation and Maintenance Self Verification

This online form will allow you to **review** the property and contact information related to the Treatment Control BMPs located on your property and **verify** that all BMP evaluation and maintenance activities have been completed as necessary.

REMINDER: Annual evaluation and maintenance verification of Treatment Control BMP(s) located on your property is due no later than August 31, 2011.

Property Information

[redacted]
Encinitas, CA 92024
Permit 1563-G

Treatment Control BMPs on Your Property

2 Grassy / Vegetated Swale

Step 1 — Review / Update Contact Information

[redacted]
Encinitas, CA 92024
[redacted]
No Email on file

If the above information is incorrect or needs to be updated, please provide current information in the boxes below:

Name:

Street:

City:

State:

ZIP: *Email:

Phone:

* If you would like email confirmation that y our submittal has been received, a valid email address must be provided.

Step 2 Self-Verification of BMPs

The following section should be completed based on the results of your evaluation of the treatment control BMP(s) on your property. If any maintenance or repair of the BMP(s) was conducted as a result of the evaluation, describe the work completed in the comment box provided below.

Date Evaluated: (mm/dd/yyyy)

Self Evaluation Results (check the box that applies):

- (●) A. All BMP(s) were evaluated and are in good working order. No maintenance required.
- ( ) B. All BMP(s) were evaluated. All or some BMP(s) required maintenance. Describe below.
- ( ) C. Other results, describe below

If you checked B or C please describe maintenance conducted or other results below

If you checked B or C, please indicate the date maintenance was completed below.

Maintenance Date: (mm/dd/yyyy)

Step 3 Upload Photos

Supporting photographic documentation of each BMP is required to be submitted along with your Self-Verification. Photos should be taken during your evaluation of the BMPs or after completion of any maintenance activities. Upload current photos of each of the BMPs on your property using the boxes provided below. If you have more than five photos, submit any additional photos to the Clean Water Program via email: cleanwater@cityofencinitas.org Please note that email attachments cannot be larger than 5 MB.

Step 4 Upload Maintenance Documentation

If a third-party was hired to complete your annual BMP evaluation and maintenance activities, provide documentation showing that the work was completed. Documentation may include receipt for services or invoices which detail the work completed. Documentation must be in PDF or JPG format. If you have more than three documents to upload, or documents that are not in PDF or JPG format, provide them to the Clean Water Program via email: cleanwater@cityofencinitas.org Please note that email attachments cannot be larger than 5 MB.

Step 5 **Certification**

By checking the box below, you are certifying that all the information you have entered in Steps 1 – 3 above is true and correct to the best of your knowledge, that all annually required treatment control BMP evaluation and maintenance activities have been satisfactorily completed, and that all treatment control BMPs are in good working order.

☐ "I hereby certify that all treatment control BMPs on my property were evaluated, maintained, and repaired as necessary and are in good working order."

Submit

For questions relating to Treatment Control BMPs, please call: 760-633-2787 or e-mail: cleanwater@cityofencinitas.org

If you are having trouble using this website to submit your Self-Verification documentation, please contact the City of Encinitas webmaster at 760-633-2668 or via email at webmaster@cityofencinitas.org

Phone: (760) 633-2600 | TDD: (760) 633-2700 | Fax: (760) 633-2627 | 505 S. Vulcan Avenue, Encinitas, CA 92024-3633
Site Map | Contact Us | Feedback Form | Site Policy | Email: webmaster@ci.encinitas.ca.us | Copyright © 2010

Appendix A-8: FY 2011-12 Treatment Control BMP City Inspction and Self-Verification Results and Findings

Permit No.	Permit Type	Location	Inspection Type	Inspection Findings	Inspection Date	City Action	Maintenance Conducted
55	I	540 Cornish Dr - Encinitas Library	City Inspection	BMP(s) needed maintenance	5/1/2012	inspection conducted	none necessary
60	G	3275 Poppy Hills Ln	Self-Verification	non-responsive owner, unable to conduct inspection		advisory notice sent: failure to inspect	
61	CN	801 Orhpeus Ave - Fire Station #3)	City Inspection	all BMPs in good condition	9/29/2011	inspection conducted	none necessary
87	G	354 Santa Fe Dr	City Inspection	all BMPs in good condition	8/31/2011	inspection conducted	none necessary
94	I	3740 Fortuna Ranch Rd	Self-Verification	all BMPs in good condition	8/31/2011	information validated	none necessary
106	G	3358 Wildflower Valley Dr	Self-Verification	no response, changed owner		change of ownership, GIS info updated. mail to new owner in FY 12-13.	N/A
153	I	111 Chesterfield Dr	Self-Verification	all BMPs in good condition	6/23/2011	information validated	none necessary
169	G	510 S El Camino Real	Self-Verification	all BMPs in good condition	8/18/2011	information validated	none necessary
181	G	3342 Wildflower Valley Dr	City Inspection	all BMPs in good condition	10/11/2011	inspection conducted	none necessary
183	G	3234 Olivenhain Farms Rd	Self-Verification	all BMPs in good condition	9/28/2011	information validated	none necessary
276	G	1222 N Coast Highway 101	City Inspection	all BMPs in good condition	9/20/2011	inspection conducted	none necessary
385	G	1555 Crest Dr	City Inspection	all BMPs in good condition	9/23/2011	inspection conducted	none necessary
386	G	3535 Manchester Ave	City Inspection	all BMPs in good condition	9/8/2011	inspection conducted	none necessary
414	L	4455 Manchester Ave	Self-Verification	non-responsive owner		place on FY 12-13 inspection list	
437	G	222 N El Camino Real	Self-Verification	BMP(s) needed maintenance	9/27/2011	requested maintenance docs for Contec unit	unit cleaned, docs provided
462	G	90 N Coast Highway 101	Self-Verification	BMP(s) needed maintenance	9/27/2011	information validated	1 pouch replaced at Inlet No. 16, inlets cleaned
482	G	1864 Crest Dr	Self-Verification	all BMPs in good condition	8/7/2011	information validated	none necessary
483	G	540 La Costa Ave	City Inspection	BMP(s) needed maintenance	8/31/2011	requested maintenance doc for sand/oil interceptor	sand/oil interceptors cleaned, docs provided

Appendix A-8: FY 2011-12 Treatment Control BMP City Inspction and Self-Verification Results and Findings

Permit No.	Permit Type	Location	Inspection Type	Inspection Findings	Inspection Date	City Action	Maintenance Conducted
562	G	1302 Encinitas Blvd	City Inspection	BMP(s) needed maintenance	3/12/2012	NOV/warning citation issued on 2/1/2012	changed filter inserts, cleaned out channel grate and inflitertaion basin
570	G	489 Latigo Row	City Inspection	non-responsive owner, unable to conduct inspection		inspection attempted	
704	G	300 Quail Gardens Dr	Self-Verification	all BMPs in good condition	9/6/2011	information validated	none necessary
705	G	3354 Wildflower Valley Dr	Self-Verification	all BMPs in good condition	7/30/2011	information validated	none necessary
713	G	3003 Wildflower Dr	Self-Verification	all BMPs in good condition	8/21/2011	information validated	none necessary
718	G	687 S Coast Highway 101	City Inspection	all BMPs in good condition	9/21/2011	inspection conducted	none necessary
789	G	2005 San Elijo Ave	City Inspection	BMP(s) needed maintenance	9/22/2011	inspection conducted, maintenance requested	1) removed debris/water from catch basin, 2) clean perv pave
912	G	416 Rancho Santa Fe Rd	City Inspection	all BMPs in good condition	8/4/2011	inspection conducted	none necessary
943	G	211 Saxony Rd	City Inspection	all BMPs in good condition	7/25/2011	inspection conducted	none necessary
983	G	1320 Encinitas Blvd	Self-Verification	non-responsive owner		advisory notice sent: failure to inspect	
1092	EBP	820 Birmingham Dr	Self-Verification	all BMPs in good condition	8/11/2011	information validated	none necessary
1092	EBP	820 Birmingham Dr	City Inspection	all BMPs in good condition	1/10/2012	information validated	cleaned prior to inspection
1365	G	310 Hana Ct	Self-Verification	all BMPs in good condition	8/7/2011	information validated	none necessary
1365	G	311 Hana Ct	Self-Verification	all BMPs in good condition	9/21/2011	information validated	none necessary
1365	G	314 Hana Ct	Self-Verification	non-responsive owner		advisory notice sent: failure to inspect	
1365	G	315 Hana Ct	Self-Verification	all BMPs in good condition	8/31/2011	information validated	none necessary
1365	G	318 Hana Ct	Self-Verification	all BMPs in good condition	7/31/2011	information validated	none necessary
1365	G	319 Hana Ct	Self-Verification	all BMPs in good condition	9/10/2011	information validated	none necessary
1365	G	323 Hana Ct	Self-Verification	all BMPs in good condition	7/30/2011	information validated	none necessary
1365	G	327 Hana Ct	Self-Verification	all BMPs in good condition	11/18/2011	information validated	none necessary
1389	G	302 Requeza St	City Inspection	all BMPs in good condition	9/8/2011	inspection conducted	none necessary
1457	G	200 Saxony Rd	Self-Verification	all BMPs in good condition	8/29/2011	information validated	none necessary
1469	G	1401 Bella Azul Ct	Self-Verification	all BMPs in good condition	10/12/2011	information validated	none necessary

Appendix A-8: FY 2011-12 Treatment Control BMP City Inspction and Self-Verification Results and Findings

Permit No.	Permit Type	Location	Inspection Type	Inspection Findings	Inspection Date	City Action	Maintenance Conducted
1469	G	1414 Bella Azul	Both	BMP(s) needed maintenance	11/3/2011	issued NOV/warning citation, required corrective actions	removed, reinstalled gravel base, vegation still
1469	G	1428 Bella Azul Ct	Self-Verification	all BMPs in good condition	8/29/2011	information validated	none necessary
1469	G	1442 Bella Azul Ct	Self-Verification	all BMPs in good condition	9/14/2011	information validated	none necessary
1532	G	1316 Summit Ave	Self-Verification	all BMPs in good condition	11/28/2011	information validated	none necessary
1532	G	1318 Summit Ave	Self-Verification	no response, changed owner		change of ownership, GIS info updated. mail new owner in FY 12-13.	N/A
1532	G	1320 Summit Ave	Self-Verification	all BMPs in good condition	7/31/2011	information validated	none necessary
1563	G	3701 Fortuna Ranch Rd	Self-Verification	all BMPs in good condition		information validated	none necessary
5814	G	2108 Oxford Ave	City Inspection	all BMPs in good condition	8/2/2011	inspection conducted	none necessary
5814	G	2112 Oxford Ave	City Inspection	all BMPs in good condition	8/2/2011	inspection conducted	none necessary
6402	G	311 Princehouse Ln	Self-Verification	BMP(s) needed maintenance	9/30/2011	information validated	grass swale mowed
6442	G	3616 Manchester Ave	City Inspection	all BMPs in good condition	9/8/2011	inspection conducted	inspection conducted by RP, no maint necessary
6813	G	155 Saxony Rd	City Inspection	all BMPs in good condition	8/4/2011	inspection conducted	none necessary
7005	G	503 Ocean Bluff Way	City Inspection	non-responsive owner, unable to conduct inspection		inspection attempted	
7005	L	507 Ocean Bluff Way	City Inspection	non-responsive owner, unable to conduct inspection		inspection attempted	
7005	G	509 Ocean Bluff Way	City Inspection	non-responsive owner, unable to conduct inspection		inspection attempted	
7005	G	510 Camino De Orchidia	City Inspection	all BMPs in good condition	1/11/2012	inspection conducted	none necessary
7005	G	513 Ocean Bluff Way 1	City Inspection	all BMPs in good condition	1/11/2012	inspection conducted	none necessary
7005	G	517 Ocean Bluff Way	City Inspection	non-responsive owner, unable to conduct inspection		inspection attempted	
7005	G	518 Camino De Orchidia	City Inspection	non-responsive owner, unable to conduct inspection		inspection attempted	
7005	G	521 Ocean Bluff Way	City Inspection	all BMPs in good condition	1/11/2012	inspection conducted	none necessaru
7005	G	526 Camino De Orchidia	City Inspection	non-responsive owner, unable to conduct inspection		inspection attempted	

Appendix A-8: FY 2011-12 Treatment Control BMP City Inspction and Self-Verification Results and Findings

Permit No.	Permit Type	Location	Inspection Type	Inspection Findings	Inspection Date	City Action	Maintenance Conducted
7005	G	532 Camino De Orchidia	City Inspection	non-responsive owner, unable to conduct inspection		inspection attempted	
7005	G	558 Camino De Orchidia	City Inspection	non-responsive owner, unable to conduct inspection		inspection attempted	
7054	G	645 Via Cantebria	Self-Verification	non-responsive owner		several attempts to contact	
7300	G	760 Garden View Ct	Self-Verification	all BMPs in good condition	9/12/2011	information validated	none necessary
7305	G	131 Princehouse Ln	Self-Verification	all BMPs in good condition	8/26/2011	information validated	none necessary
7374	I	Cottonwood Creek Park	City Inspection	all BMPs in good condition	9/29/2011	inspection conducted	perv concrete swept monthly
7588	G	1200 Garden View Rd	City Inspection	BMP(s) needed maintenance	10/13/2011	requested maint docs for sand/oil interceptor	sand/oil interceptor cleaned
7628	G	199 La Costa Ave	City Inspection	all BMPs in good condition	5/9/2012	inspection conducted	none necessary
7628	G	207 La Costa Ave	City Inspection	all BMPs in good condition	5/9/2012	inspection conducted	none necessary
7628	G	215 La Costa Ave	City Inspection	all BMPs in good condition	5/9/2012	inspection conducted	none necessary
7628	G	223 La Costa Ave	City Inspection	all BMPs in good condition	5/9/2012	inspection conducted	none necessary
7628	G	235 La Costa Ave	City Inspection	all BMPs in good condition	5/9/2012	inspection conducted	none necessary
7702	G	301 Chopin Way	City Inspection	inspection not conducted		follow-up in FY 12-13	
7702	G	315 Chopin Way	City Inspection	property vacant, no forwarding address		review contact info	
7702	G	322 Chopin Way	City Inspection	inspection not conducted		follow-up in FY12-13	
7702	G	329 Chopin Way	City Inspection	inspection not conducted		follow-up in FY 12-13	
7702	G	336 Chopin Way	City Inspection	inspection not conducted		follow-up in FY 12-13	
7729	I	Vulcan Ave and E St - Parking Lot B	City Inspection	all BMPs in good condition	9/28/2011	inspection conducted	none necessary
7732	G	175 La Costa Ave	City Inspection	all BMPs in good condition	10/11/2011	inspection conducted	none necessary
7732	G	183 La Costa Ave	City Inspection	all BMPs in good condition	8/12/2011	inspection conducted	none necessary
7732	G	191 La Costa Ave	City Inspection	all BMPs in good condition	10/11/2011	inspection conducted	none necessary
7771	G	1550 S El Camino Real	Self-Verification	BMP(s) needed maintenance	10/31/2011	information validated	annual cleaning conducted
7780	G	121 Rosebay Dr	Self-Verification	all BMPs in good condition	7/14/2011	information validated	none necessary

Appendix A-8: FY 2011-12 Treatment Control BMP City Inspction and Self-Verification Results and Findings

Permit No.	Permit Type	Location	Inspection Type	Inspection Findings	Inspection Date	City Action	Maintenance Conducted
7791	G	1766 N Coast Highway 101	City Inspection	all BMPs in good condition	5/9/2012	inspection conducted	none necessary
7800	G	3542 Jasmine Crest	City Inspection	non-responsive owner, unable to conduct inspection	5/2/2012	place on FY 12-13 inspection list	N/A
7828	G	1200 Crestview Dr	Self-Verification	all BMPs in good condition	9/26/2011	information validated	none necessary
7828	G	1207 Crestview Dr	Self-Verification	all BMPs in good condition	8/30/2011	information validated	none necessary
7828	G	1208 Crestview Dr	Self-Verification	all BMPs in good condition	8/3/2011	information validated	none necessary
7828	G	1216 Crestview Dr	Self-Verification	all BMPs in good condition	8/31/2011	information validated	none necessary
7828	G	1219 Crestview Dr	Self-Verification	all BMPs in good condition	8/21/2011	information validated	none necessary
7828	G	1223 Crestview Dr	Self-Verification	all BMPs in good condition	9/20/2011	information validated	none necessary
7828	G	1945 Lake Dr	Self-Verification	all BMPs in good condition	9/12/2011	information validated	none necessary
7847	G	2300 8th St	Self-Verification	BMP(s) needed maintenance	11/1/2011	information validated	removed debris
7852	G	3411 Via Monte Verde	City Inspection	all BMPs in good condition	7/26/2011	inspection conducted	none necessary
7852	G	3430 Via Monte Verde	City Inspection	inspection not conducted		follow-up in FY 12-13	
7852	G	3445 Via Monte Verde	City Inspection	non-responsive owner, unable to conduct inspection		several attempts to inspect	
7893	G	1502 Christine Place	Self-Verification	BMP(s) needed maintenance	10/3/2011	information validated	none necessary
9023	G	427 Bristol Ave	Self-Verification	BMP(s) needed maintenance	7/30/2011	information validated	silt removed
9034	G	1462 Summit Ave	City Inspection	all BMPs in good condition	10/11/2011	inspection conducted	none necessary
9034	G	1464 Summit Ave	City Inspection	all BMPs in good condition	10/11/2011	inspection conducted	none necessary
9034	G	1470 Summit Ave	City Inspection	all BMPs in good condition	10/11/2011	inspection conducted	none necessary
9057	G	192 Pacific View Ln	Self-Verification	all BMPs in good condition	8/1/2011	information validated	none necessary
9071	G	3317 Poppy Hills Ln	City Inspection	all BMPs in good condition	9/30/2011	inspection conducted	none necessary
9134	G	2153 Whisper Wind Ln	Self-Verification	all BMPs in good condition	8/6/2011	information validated	none necessary
9150	G	3113 Camino Del Rancho	Self-Verification	all BMPs in good condition	8/4/2011	information validated	none necessary
9180	G	1610 Neptune Ave	Self-Verification	all BMPs in good condition	8/30/2011	information validated	none necessary
9200	G	3616 Manchester Ave	City Inspection	all BMPs in good condition	9/8/2011	inspection conducted	none necessary
9253	G	701 S Vulcan Ave	Self-Verification	all BMPs in good condition	8/10/2011	information validated	none necessary
9253	G	703 S Vulcan Ave	Self-Verification	non-responsive owner		advisory notice sent: failure to inspect	
9253	G	715 S Vulcan Ave	Self-Verification	non-responsive owner		advisory notice sent: failure to inspect	

Appendix A-8: FY 2011-12 Treatment Control BMP City Inspction and Self-Verification Results and Findings

Permit No.	Permit Type	Location	Inspection Type	Inspection Findings	Inspection Date	City Action	Maintenance Conducted
9253	G	717 S Vulcan Ave	Self-Verification	non-responsive owner		advisory notice sent: failure to inspect	
9253	G	719 S Vulcan Ave	Self-Verification	non-responsive owner		advisory notice sent: failure to inspect	
9253	G	721 S Vulcan Ave	Self-Verification	all BMPs in good condition	9/25/2011	information validated	none necessary
9278	G	490 Latigo Row	Self-Verification	all BMPs in good condition	8/10/2011	information validated	none necessary
9283	G	1440 Hygeia Avenue	Self-Verification	all BMPs in good condition	1/25/2012	information validated	none necessary
9283	G	265 Sanford St	Both	all BMPs in good condition	12/6/2011	inspection conducted	none necessary
9283	G	267 Sanford Street	Self-Verification	all BMPs in good condition	8/24/2011	Check with building dept re: veg swale converted to rock.	none necessary
9289	G	2914 Lone Jack Rd	City Inspection	all BMPs in good condition	10/19/2011	inspection conducted	none necessary
9289	G	2932 Lone Jack Rd	City Inspection	all BMPs in good condition	10/19/2011	inspection conducted	none necessary
9289	G	2934 Lone Jack Rd	City Inspection	all BMPs in good condition	10/19/2011	inspection conducted	none necessary
9289	G	2944 Lone Jack Rd	City Inspection	all BMPs in good condition	8/9/2011	inspection conducted	none necessary
9294	G	477 N El Camino Real	City Inspection	BMP(s) needed maintenance	9/6/2011	requested maintenace docs for 2 ADS units	ADS units cleaned, docs provided
9301	G	187 Halcyon Rd	Self-Verification	all BMPs in good condition	8/15/2011	information validated	none necessary
9301	G	189 Halcyon Rd	Self-Verification	all BMPs in good condition	9/29/2011	information validated	none necessary
9303	G	887 Brittany Rd	Self-Verification	all BMPs in good condition	8/1/2011	information validated	none necessary
9303	G	887 Brittany Rd	Both	all BMPs in good condition	7/26/2011	inspection conducted	none necessary
9318	G	1154 Evergreen Dr	Self-Verification	all BMPs in good condition	8/30/2011	information validated	none necessary
9318	G	1158 Evergreen Dr	Self-Verification	all BMPs in good condition	8/24/2011	information validated	none necessary
9318	G	1160 Kava Ct	Self-Verification	all BMPs in good condition	7/31/2011	information validated	none necessary
9318	G	1164 Kava Ct	Self-Verification	all BMPs in good condition	8/14/2011	information validated	none necessary
9318	G	1165 Kava Ct	Self-Verification	all BMPs in good condition	8/4/2011	information validated	none necessary
9318	G	1168 Kava Ct	Self-Verification	non-responsive owner		advisory notice sent: failure to inspect	
9318	G	1169 Kava Ct	Self-Verification	change of owner		determine new owner for FY 12-11 inspection	
9318	G	1172 Kava Ct	Self-Verification	all BMPs in good condition	8/27/2011	information validated	none necessary
9318	G	1173 Kava Ct	Self-Verification	all BMPs in good condition	8/16/2011	information validated	none necessary

Appendix A-8: FY 2011-12 Treatment Control BMP City Inspction and Self-Verification Results and Findings

Permit No.	Permit Type	Location	Inspection Type	Inspection Findings	Inspection Date	City Action	Maintenance Conducted
9318	G	1176 Kava Ct	Self-Verification	all BMPs in good condition	9/13/2011	information validated	none necessary
9367	G	781 Garden View Ct	City Inspection	all BMPs in good condition	10/13/2011	inspection conducted	none necessary
9370	G	406 La Costa Ave	City Inspection	all BMPs in good condition	8/2/2011	inspection conducted	none necessary
9419	G	871 Neptune Ave	Self-Verification	all BMPs in good condition	9/10/2011	information validated	none necessary
9481	I	545 Quail Pointe Ln	Self-Verification	BMP(s) needed maintenance	11/1/2011	requested verification that cartridges were inspected and maintained if needed	unit cleaned, docs provided
9561	G	303 Santa Fe Dr	Self-Verification	all BMPs in good condition	8/21/2011	information validated	none necessary
9580	G	3451 Dove Hollow Road	City Inspection	all BMPs in good condition	9/22/2011	inspection conducted	none necessary
10187	G	1603 Crest Dr	Self-Verification	BMP(s) needed maintenance	10/8/2011	information validated	removal of leaves/dirt from drain boxes
10404	G	3211 Wildflower Valley Dr	City Inspection	all BMPs in good condition	10/11/2011	inspection conducted	none necessary
10548	G	1502 Encinitas Blvd	City Inspection	BMP(s) needed maintenance	10/21/2011	inspection conducted, reinstallation to meet plan necessary	reinstalled per direction of City inspector and City design engineer

CITY OF ENCINITAS

INSPECTION REPORT

Storm Water Quality Inspection for Treatment Control BMPs

505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2787 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

GENERAL INFORMATION

Permit No/Type _____ Property Address _____ Gate Code _____

Inspection Type: ☐ Annual ☐ Complaint Ownership: ☐ HOA ☐ Homeowner ☐ Commercial

Project Type: ☐ Private ☐ City of Encinitas SUSMP Status: ☐ Priority ☐ Standard

Inspection Priority: ☐ High ☐ Medium ☐ Low ☐ Unk Property Access: ☐ Open ☐ Limited ☐ None

TREATMENT CONTROL BMP EVALUATION

BMP Type	Location	Observations	Comments / Corrective Actions
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	
	☐ not visible from street	☐ good condition ☐ needs maintenance ☐ missing	

Photo(s) Taken: ☐ Yes ☐ No

Additional Comments:

CORRECTIVE ACTIONS ☐ None ☐ Maintenance/Repair ☐ Other _____

_____

_____

_____ Completion Due Date _____

The corrective actions listed above are required pursuant to Encinitas Municipal Code Section 20.08.140. Failure to comply with minimum Best Management Practices (BMP) Standards may result in further enforcement action by the City of Encinitas.

_____

Inspector (Print) **Signature** **Date**

_____

Responsible Party (Print) **Signature** **Date** **Contact Number**

☐ Responsible Party not present. Copy of inspection report provided to Responsible Party on _____

FOLLOW UP INSPECTION

☐ All Corrective Actions completed ☐ Corrective Actions not complete—Enforcement Action required

_____

Inspector Sign-Off **Date**

COPY DISTRIBUTION White – Responsible Party Yellow – City Inspector Pink – File REVISED 9/1/09

CITY OF ENCINITAS
CLEAN WATER PROGRAM
505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2787 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

STORMWATER TREATMENT CONTROL BMP MAINTENANCE AND INSPECTION PROGRAM

Stormwater Treatment Control BMPs are required to be incorporated into permitted development or redevelopment projects and serve a functional purpose to improve the quality of water that flows to our local creeks, lagoons, and beaches. Common Treatment Control BMPs include Vegetated Swales, Bioinfiltration Areas, Infiltration Basins or Trenches, and Storm Drain Filter Inserts.

As stated on approved grading or improvement plans and in the City's Stormwater Management and Discharge Control Ordinance (Municipal Code Chapter 20.08), stormwater treatment control BMPs are required to be maintained in perpetuity by a designated responsible party. The responsible party is most commonly the property owner, business owner or a Home Owners' Association (HOA).

Minimum Operation and Maintenance tasks:

☑ **On an annual basis prior to the wet season, or more frequently as needed, visually inspect all Treatment Controls for signs of malfunction or disrepair (i.e. overgrown vegetation, restricted water flow, excessive sediment and debris).**

☑ **Maintain/repair any damage to the BMP. Necessary maintenance may include removing accumulated sediment, stabilizing eroded areas, replanting dead vegetation, trimming / mowing overgrown vegetation, cleaning out closed or blocked inlets and outlets, removing trash or other debris, etc.**

DEFINITIONS

Treatment Control Best Management Practice (BMP) means any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media absorption or any other physical, biological, or chemical process. Also frequently referred to as Stormwater Best Management Practices or BMPs.

Storm Water Conveyance System means private and public drainage facilities within the City of Encinitas by which Storm Water may be conveyed to waters of the United States, including but not limited to, streets, roads, catch basins, natural and artificial channels, natural and artificial drainage features, aqueducts, canyons, stream beds, gullies, curbs, gutters, ditches, and storm drains.

Wet Season means October 1 thru April 30 of each year.

EMC 20.08.140.F. • INSPECTION, MAINTENANCE, REPAIR AND UPGRADING OF BMPS

Treatment Control BMPs must be inspected by the Discharger or responsible party before the start of the wet season and following actual rain events. These BMPs must be maintained so that they continue to function as designed. Treatment BMPs which fail must be repaired as soon as it is safe to do so. If the failure of a structural or nonstructural BMP indicates that the BMPs in use are inappropriate or inadequate to the circumstances, the BMPs must be modified or upgraded to prevent any further failure in the same or similar circumstances. All sediment and debris in catch basins must be removed prior to the wet season and disposed of in a manner which prevents it from entering the Storm Water Conveyance System or the Receiving Waters.

EMC 20.08.080 • COMPLIANCE WITH BEST MANAGEMENT PRACTICES

No Discharger shall fail to implement, install, use, or maintain Best Management Practices established by the City Engineer pursuant to this Chapter.

EMC 20.08.160.A. • REGULATORY INSPECTIONS

The City Engineer or his designee may inspect the premises of any Discharger at reasonable times and in a reasonable manner to carry out the purposes of this Chapter. If a Discharger refuses to allow entry for an inspection, an inspection warrant shall be obtained prior to inspection.

EMC 20.08.040 • ILLEGAL DISCHARGES

A. Discharge of Storm Water. No person shall discharge Storm Water directly or indirectly into the Storm Water Conveyance System or Receiving Waters, unless discharged in compliance with this Chapter.

B. Discharge of Non-storm water Prohibited. No person shall discharge non-storm water directly or indirectly into the Storm Water Conveyance System or Receiving Waters.

Case / Permit No.:_____

CITY OF ENCINITAS
STORMWATER QUALITY CHECKLIST AND CERTIFICATION

SW

All development projects proposed within the City of Encinitas are required to implement stormwater quality measures in accordance with the *Encinitas Stormwater Manual*. The intent of these requirements is to promote practices and project designs that improve the quality of runoff and protect our local ocean, creeks, and lagoons from the harmful effects of polluted runoff. The *Encinitas Stormwater Manual* meets State-mandated requirements established by Regional Water Quality Control Board Order No. R9-2007-0001 (San Diego Region Municipal Stormwater Permit). For a more detailed description of the City's stormwater requirements, refer to the *Encinitas Stormwater Manual* on the City website (www.CityofEncinitas.org). The manual provides detailed, step-by-step guidelines on how to plan for, design, construct, and maintain stormwater treatment features. Other City stormwater-related resources available on the City's website include:

1. Municipal Code Chapter 20.08: Stormwater Management
2. Municipal Code Chapter 23.24: Grading, Erosion, and Sediment Control

This checklist is designed to guide applicants in the determination of the stormwater quality designation of the project and the design of appropriate stormwater quality features. Projects may be designated as 1) **Priority**, 2) **Standard**, or 3) **Exempt** projects. At a minimum, all projects are required to provide designs and employ practices that minimize the potential for discharge of pollutants into the City's storm drainage system or local receiving waters, as outlined in the *Requirements for All Development Projects* below.

Requirements for ALL Development Projects

All development projects (including Exempt Projects) must include a minimum set of control measures to reduce the discharge of stormwater pollutants to the maximum extent practicable. All projects must include:

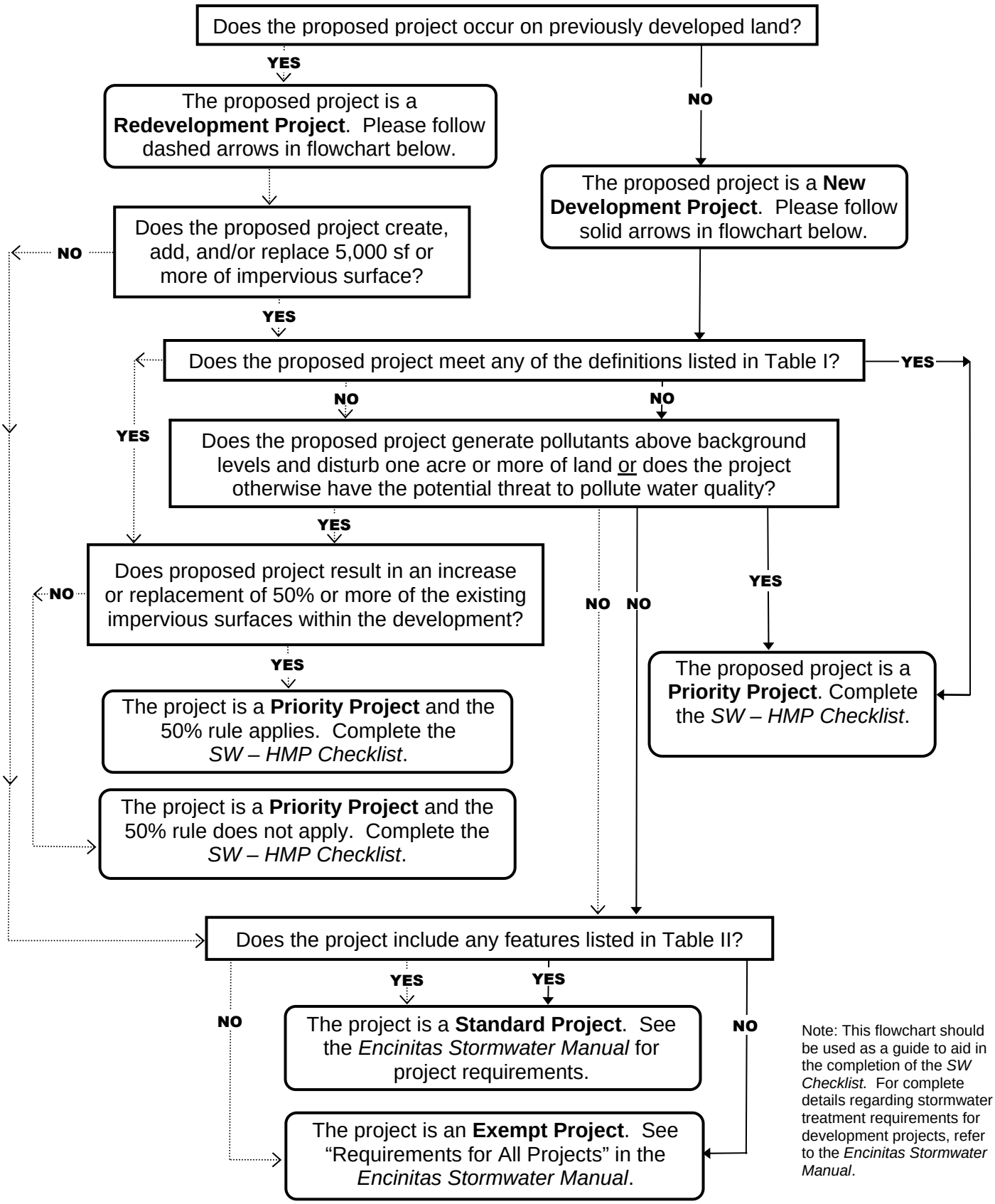
- ☑ Implementation of Best Management Practices (BMPs) to control potential pollutant sources.
- ☑ Inclusion of Low Impact Development (LID) features that minimize the water quality impacts of the project.
- ☑ Compliance with requirements for construction-phase controls on sediment and other pollutants.

In addition, all projects must design and install drainage features so that runoff from impervious areas (such as rooftops, parking lots, and driveways) drains through pervious or vegetated areas for treatment before draining to public or private streets or storm drainage systems. No Directly Connected Impervious Area (DCIA) will be allowed on any development project (Encinitas Municipal Code Section 23.24.120). For more information about prohibited DCIA practices and the stormwater runoff requirements for all projects, refer to the *Encinitas Stormwater Manual*.

Beyond the minimum *Requirements for All Development Projects* listed above, the stormwater quality measures required for a particular project differ based upon the nature of the proposed development. Step 1 (Tables I and II below) is designed to assist you in determining the appropriate stormwater quality designation for your project. An overview of the method for determining the designation is included in the flowchart on the next page.

Case / Permit No.:_____

FLOWCHART: DETERMINATION OF THE APPROPRIATE STORMWATER QUALITY DESIGNATION FOR DEVELOPMENT PROJECTS



Note: This flowchart should be used as a guide to aid in the completion of the *SW Checklist.* For complete details regarding stormwater treatment requirements for development projects, refer to the *Encinitas Stormwater Manual*.

STEP 1: DETERMINE STORMWATER QUALITY DESIGNATION

Step 1 is designed to assist you in determining the appropriate stormwater quality designation for your project.

Step 1A: Determine Development Type and Priority Project Category Applicability

The first step in assessing the appropriate stormwater designation for your project is to determine whether it is a New Development Project or a Significant Redevelopment Project according to the definitions below.

New Development Projects are defined as projects proposing new impervious area on a previously undeveloped parcel.

Significant Redevelopment Projects are projects on previously developed land that create, add, and/or replace 5,000 square feet (s.f.) or more of impervious surface. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Redevelopment does not include interior remodels, roof or exterior surface replacement; trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots and existing roadways; new sidewalk construction, pedestrian ramps, or bike lane on existing roads; or routine replacement of damaged pavement, such as pothole repair. However, other requirements, including incorporation of appropriate source controls, still apply. If your redevelopment project is exempt, the project is still obligated to meet the *Requirements for All Development Projects*, to the extent practicable. The City of Encinitas will make the final determination as to whether a proposed project is exempt from the requirements detailed in the *Encinitas Stormwater Manual*.

If your project meets one of the two definitions of development listed above, use Table I to determine if your project is a Priority Development Project.

Table I: Determine if Project is a Priority Development Project

Review each category A through J to determine whether the project meets the definition of one or more of the Priority Project categories. If any response in Table I is "Yes", the project is a **Priority Development Project**; *please continue to Step 2.* If all responses are "No", *please continue to Step 1B*.

Does the project meet the definition of one or more of the following categories?			
A	**Housing subdivisions of 10 or more dwelling units**. Examples: single-family homes, multi-family homes, condominiums, and apartments.	Yes ❑	No ❑
B	**Commercial—greater than one acre of development**. Any development other than heavy industry or residential. Examples: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; airfields; and other light industrial facilities.	Yes ❑	No ❑
C	**Heavy industry—greater than one acre of development**. Examples: manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, etc.).	Yes ❑	No ❑
D	**Restaurants**. Any facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirements and hydromodification requirements.	Yes ❑	No ❑

Table I (cont.): Does the project meet the definition of one or more of the following categories?			
E	**Hillside development greater than 5,000 square feet.** Any development that creates 5,000 square feet of impervious surface and is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.	Yes ❑	No ❑
F	**Environmentally Sensitive Areas (ESAs).** All development located within or directly adjacent to or discharging directly to an ESA (where discharges from the development or redevelopment will enter receiving waters within the ESA), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition. "Directly adjacent" means situated within 200 feet of the ESA. "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.	Yes ❑	No ❑
G	**Parking lots** 5,000 square feet or more or with 15 or more parking spaces and potentially exposed to urban runoff.	Yes ❑	No ❑
H	**Streets, roads, driveways, highways, and freeways**. Any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles. If a project is determined to be a Priority Project based solely on the driveway surface area, the project will only be subject to stormwater treatment requirements and will not be required to meet Hydromodification Mitigation Plan (HMP) regulations. Refer to the *SW-HMP Checklist* for more details.	Yes ❑	No ❑
I	**Retail Gasoline Outlets (RGOs)** that are: (a) 5,000 square feet or more of development or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.	Yes ❑	No ❑
J	**Automotive repair shops**. A facility categorized in any one of Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532-7534, or 7536-7539.	Yes ❑	No ❑

If the answer to one or more of the categories in Table I is "Yes", the project is a considered **Priority Development Project** for stormwater quality. The project will be required to install Source Control measures, Low-Impact Design (LID) features, and Stormwater Treatment Facilities that meet specific criteria. Proceed to Step 2 and refer to the *SW—HMP Checklist* to determine whether your project is required to meet hydromodification regulations. If all answers in Table I are "No", proceed to Step 1B.

Step 1B: Determine Project's Water Quality Sensitivity

Development projects have the potential to contribute pollutants that could threaten local and downstream water quality. Review the following project categories and determine whether your project meets either one of these definitions.

Pollutant Generating Project Which Disturbs One Acre or More of Land. Projects that generate pollutants at levels greater than background levels and disturb one acre or more of land are considered Priority Development Projects. In most cases linear pathway projects that are for infrequent vehicle use (such as emergency or maintenance access) or for pedestrian or bicycle use are not considered pollutant generating above background levels if they are built with pervious surfaces or if they allow runoff to sheet flow to surrounding pervious surfaces.

All Development Projects with Potential Threat to Pollute. Some projects not meeting the definitions listed in Table I may still be designated as Priority Projects if they are found to cause a threat to water quality through excess pollution potential. The City of Encinitas has the discretion to designate a project not listed within Table I as being a Priority Project based on the project's potential impacts to stormwater quality.

If your project meets either of the categories described above, the project is a **Priority Development Project** for stormwater quality and the project will be required to install Source Control measures, LID features, and Stormwater Treatment Facilities. The City Engineer will make the final determination as to whether your project meets one of the definitions. Proceed to Step 2 and refer to the *SW—HMP Checklist* to determine whether your project is required to meet hydromodification regulations.

If your project does not meet one of the two categories listed above, proceed to Step 1C to determine whether your project includes any features that are consistent with the Standard Project classification.

Step 1C: Determine Standard Project Feature Applicability

Table II: Determine if Project is a Standard Project

To use Table II, review A through J to determine whether the proposed project includes any feature that would qualify the project as a Standard Project. If the response to any feature in A through J below is "Yes", the project is designated as a **Standard Project**. If all responses are "No", the project is an **Exempt Project**. After completion of Table II, *please proceed to Step 2.*

Does the project include any features qualifying it as a Standard Project?			
A	**New Impervious Surface Areas totaling 500 square feet or more** combined, and including any cumulative development over the five-year period preceding the time of application. Impervious areas include improvements such as rooftops, roads, parking lots, driveways, patios, pool decks, paths, etc.	Yes ❑	No ❑
B	**Reconstruction of any Existing Impervious Surface Areas** such as rooftops, roads, parking lots, driveways, paths, and sidewalks in excess of 500 square feet, including any cumulative development over the five-year period preceding the time of application.	Yes ❑	No ❑
C	**Permanent Structures** within 100 feet of any natural water body.	Yes ❑	No ❑
D	**Trash Storage Areas**.	Yes ❑	No ❑
E	**Loading and/ or Unloading Areas** for liquids and/or solid materials.	Yes ❑	No ❑
F	**Vehicle or Equipment Fueling, Washing, and/or Maintenance Areas**.	Yes ❑	No ❑
G	**General NPDES Permit Required** for storm water discharges associated with industrial activities (except for construction permits)	Yes ❑	No ❑
H	**Commercial and/ or Industrial Waste** handling or storage, excluding typical office or household waste.	Yes ❑	No ❑
I	**Grading** or ground disturbance proposed during construction.	Yes ❑	No ❑
J	**Storm Drains** including new storm drains as well as alteration to existing storm drains that reduce natural storm water treatment.	Yes ❑	No ❑

If the answer to one or more of the features in Table II is "Yes", the project is a **Standard Project** for stormwater quality. The project will be required to install Source Control measures, Low-Impact Design Features, and some Stormwater Treatment Facilities. Proceed to Step 2 and use Chapter 4 of the *Encinitas Stormwater Manual* as a general guide when designing stormwater treatment facilities that will meet Standard Development Project requirements.

The City of Encinitas will make the final determination as to whether a proposed project is exempt from the requirements detailed in the *Encinitas Stormwater Manual*. If the answers to all categories in Tables I and II are "No", and the project has been determined by the City of Encinitas not to be a pollutant generating project or have the potential to pollute, the project is an **Exempt Project** for stormwater quality but is still required to meet the *Requirements for All Development Projects*. Please proceed to Step 2.

STEP 2: DETERMINE PROJECT SUBMITTAL REQUIREMENTS

Requirements for Exempt, Standard, and Priority Projects are discussed in turn below. Engineering Services Department staff are available to answer any specific questions regarding the stormwater quality requirements.

Please check the box adjacent to the project type determined in Step 1.

- ❑ **Exempt Project:** See Step 2A below.
- ❑ **Standard Project**: See Step 2B below.
- ❑ **Priority Project**: See Step 2C below.

Step 2A: Determining Stormwater Quality Measures for an Exempt Project.

Exempt projects are not required to install new Stormwater Treatment Facilities but shall utilize existing on-site landscape and pervious areas to avoid Directly Connected Impervious Areas (DCIA) as outlined in the *Requirements for All Development Projects* section above and in the *Encinitas Stormwater Manual.* In addition, Exempt Projects, like all other projects, are required to comply with requirements for construction-phase controls on sediment and other pollutants. *Please proceed to Step 3.*

Step 2B: Determining Stormwater Quality Measures for a Standard Project.

Standard Projects are obligated to conform to the *Requirements for All Development Projects* outlined in the previous section as well to as integrate some BMP or LID features into the project proposal. BMP and LID features should be designed using Chapter 4 of the *Encinitas Stormwater Manual* as a general guide and then depicted on the plans for the permit. In addition, based on the types of BMPs or LIDs proposed, the City may require that a maintenance agreement be developed. *Please proceed to Step 3.*

Step 2C: Determine Stormwater Quality Measures for a Priority Project.

Priority Projects will be required to install Source Control measures, Low-Impact Design (LID) features, and Stormwater Treatment Facilities that meet specific criteria and may be required to meet HMP regulations. To determine whether your project needs to meet hydromodification regulations please complete the *SW—HMP Checklist*. The ***Encinitas Stormwater Manual*** includes detailed guidance for the planning and design of acceptable storm water quality features and for developing your project submittal package.

The 50% Rule for Significant Redevelopment Projects Only: The requirements for Priority Redevelopment Projects differ depending upon the amount of redevelopment proposed. If the proposed project results in an increase and/or replacement of 50% or more of the previously existing impervious surfaces onsite, then the entire development must be included in the stormwater treatment design. If less than 50% of the previously existing impervious surfaces will be affected by the proposed project, then only the affected previously existing areas and the newly proposed project must be included in the stormwater treatment design.

After completing the steps outlined in the *Encinitas Stormwater Manual*, Priority Projects shall provide required documentation to the City detailing the project's compliance with Priority Project standards. All documentation shall be reviewed and approved by the City of Encinitas prior to issuance of a grading or improvement permit or prior to the issuance of any discretionary permit, at the direction of the City Engineer. At a minimum, the items below are required for stormwater facility documentation of Priority Projects. The City Engineer may pose additional requirements for certain projects. Upon review of the submittal requirements in Step 2C, *please proceed to Step 3.*

Case / Permit No.:_____

PRIORITY PROJECT SUBMITTAL MINIMUM REQUIREMENTS

Priority Projects shall provide to the City all of the following documentation detailing the project's compliance.

I) STORMWATER QUALITY SECTION OF DRAINAGE STUDY: A Stormwater Quality discussion shall be included as a separate section within the project drainage study and shall include a **narrative** as well as an **exhibit**. Minimum requirements for the narrative and exhibit are discussed in items (a) and (b) below.

a) STORMWATER QUALITY NARRATIVE: The stormwater quality narrative in the drainage study shall discuss, at a minimum, the items listed below.

1) Tabulation of the square footage of proposed pervious areas, impervious areas, and areas draining to an IMP. Also, a tabulation of the square footage of self-treating areas, self retaining areas, and areas draining to self-retaining areas, as applicable. (Step 3)

2) Calculations of the required sizing for self-retaining and Integrated Management Practice (IMP) areas and calculations documenting the sufficiency of the facilities provided. (Step 3)

3) A table of pollutant sources identified and the source control measure(s) used to reduce pollutants to the maximum extent practicable. See worksheet in Appendix A of the *Encinitas Stormwater Manual*. (Step 4)

b) STORMWATER QUALITY EXHIBIT: The Stormwater Quality Section of the drainage study shall contain one exhibit including all of the items listed below. The Stormwater Quality Exhibit must be in conformance with the Site Plan. The Stormwater Quality Exhibit shall include the Site Plan features screened into the background for ease of confirming agreement between the Exhibit and the Site Plan.

1) Division of entire site into distinct drainage management areas (DMAs), with each drainage management area assigned a unique identifier (e.g., 1, 2, 3 or A, B, C). (Step 1)

2) Square footage and types of surfacing (e.g., roof, landscape, pavement) included in each DMA and the total DMA square footage. (Step 1)

3) Hydrologic soil group and depth to groundwater (as applicable) for each DMA. (Step 1)

4) Each DMA labeled as self-treating, self-retaining, draining to a self-retaining area, or draining to an IMP. (Step 2)

5) Potential pollutant source areas, including refuse areas, outdoor work and storage areas, etc. listed in Appendix A and corresponding required source controls. (Step 4)

II) SITE PLAN: At a minimum, the Site Plan shall include the items listed below. A copy of the Site Plan shall be included in the Stormwater Quality Section of the drainage study.

1) Existing and proposed drainage network and connections to drainage off-site. (Step 3)

2) Depiction of site design characteristics that minimize disturbance as well as building features and pavement selections that minimize the proposed imperviousness of the site. (Step 3)

3) Proposed design of each IMP feature and any Permanent Source Control features. (Step 3)

4) Title sheet standard notes for each of pollutant sources identified specifying the source control measure(s) to be used to reduce pollutants to the maximum extent practicable. See worksheet in Appendix. (Step 4)

5) Existing natural hydrologic features such as depressions, watercourses, floodplains, and relatively undisturbed areas, as well as significant natural resources. (Step 1)

6) The City of Encinitas Standard Storm Water Quality Notes shall be added to the site plan.

7) Certification by a civil engineer, architect, or landscape architect on the title sheet. (Step 6)

III) MAINTENANCE AGREEMENT: In order to provide for the perpetual maintenance of the stormwater treatment facilities, the City will prepare for the property owner a Maintenance Agreement that shall record against the property. The items listed below shall be provided to the City for inclusion in the Maintenance Agreement.

1) Discussion of general maintenance needs for infiltration, treatment, and flow-control facilities. (Step 5)

2) The means by which facility maintenance will be financed and maintained into perpetuity. (Step 5)

3) Statement accepting responsibility for interim operation and maintenance of facilities. (Step 5)

4) Plat and legal description of the property.

Case / Permit No.:_____

STEP 3: STORMWATER PROJECT CERTIFICATION

The property owner of any project (Priority, Standard, or Exempt) shall complete the following Owner's Certification. In addition, any agent completing this form on behalf of a client shall complete the Agent's Certification below.

Owner's Certification:

I hereby acknowledge that my project is subject to the stormwater quality regulations of the City of Encinitas and certify that my project will provide satisfactory stormwater quality measures both during the construction process and afterwards.

If my project is designated as a Priority or a Standard Project, I further acknowledge my understanding that the permanent stormwater treatment features must remain in place, be inspected at least once annually, and be maintained in good working order. Removal or modification of these features without prior City authorization is prohibited.

I certify that I have reviewed the information contained in this form and verified that it is both complete and correct.

_____ _____

Owner 1 Signature Date Owner 2 Signature Date

_____ _____

Printed Name of Owner 1 Printed Name of Owner 2

Agent's Certification:

I hereby certify that this project will be designed in conformance with the stormwater quality regulations of the City of Encinitas.

I certify that I have reviewed the information contained in this form and verified that it is both complete and correct.

_____

Agent Signature Date

_____

Printed Name of Agent

_____

Working Capacity of Agent (architect, engineer)

_____

Company Name Place Professional Seal Above

Case / Permit No.:_____

CITY OF ENCINITAS
HYDROMODIFICATION MANAGEMENT PLAN (HMP)
CHECKLIST AND CERTIFICATION

SW-HMP

All development projects proposed within the City of Encinitas are required to implement stormwater quality measures in accordance with the *Encinitas Stormwater Manual*. If your project is a Priority Project, as determined by the *SW Checklist*, you may also be required to mitigate for potential hydromodification impacts to downstream water bodies. Hydromodification refers to changes in the magnitude and frequency of stream flows as a result of urbanization and the resulting impacts on receiving channels. Potential impacts to receiving channels include erosion, sedimentation, and degradation of in-stream habitat.

If you have completed the *SW Checklist* and determined that your project is a Priority Project, use the following HMP Decision Matrix to determine whether your project must also comply with the San Diego region hydromodification requirements. If your project is subject to HMP requirements, the HMP Decision Matrix will also assist you in determining the flow range which the project must adhere to.

For a detailed description of each step of the HMP Decision Matrix, refer to **Section 1** of the ***Encinitas Stormwater Manual*** and the ***County of San Diego Hydromodification Management Plan***.

As identified in Figure 1-1, projects may be exempt from HMP criteria if they meet one of the following conditions:

- If the project is not a Priority Development Project (i.e. if the project is determined to be a Standard Project or an Exempt Project after completing the *SW Checklist*.)
- If the proposed project does not increase the impervious area or peak flows to any discharge location.
- If the proposed project discharges runoff directly to an exempt receiving water such as the Pacific Ocean or a lagoon.
- If the proposed project discharges to a stabilized conveyance system that extends to the Pacific Ocean, San Diego Bay, a tidally-influenced area, an exempt river reach or reservoir.
- If the contributing watershed area to which the project discharges has an impervious area percentage greater than 70 percent
- If an urban infill project discharges to an existing hardened or rehabilitated conveyance system that extends beyond the "domain of analysis," the potential for cumulative impacts in the watershed are low, and the ultimate receiving channel has a Low susceptibility to erosion as defined in the SCCWRP[1] channel assessment tool.
- If the project includes the construction of a new impervious private driveway and the project has been determined to be a Priority Project solely due to the surface area of that driveway being greater than 5,000 square feet.

[1] Southern California Coastal Water Research Project

Figure 1-1 HMP Applicability Determination is the first component of the HMP Decision Matrix and can be used for all projects. For redevelopment projects, flow controls are required only if the redevelopment project increases impervious area or peak flow rates above pre-project conditions.

If your project is determined to be exempt from HMP applicability, proceed to Page 7 of this checklist. If your project is determined to require hydromodification controls, complete the remainder of the HMP Decision Matrix (Figures 1-2 through 1-5) to determine the flow range your project must adhere to.

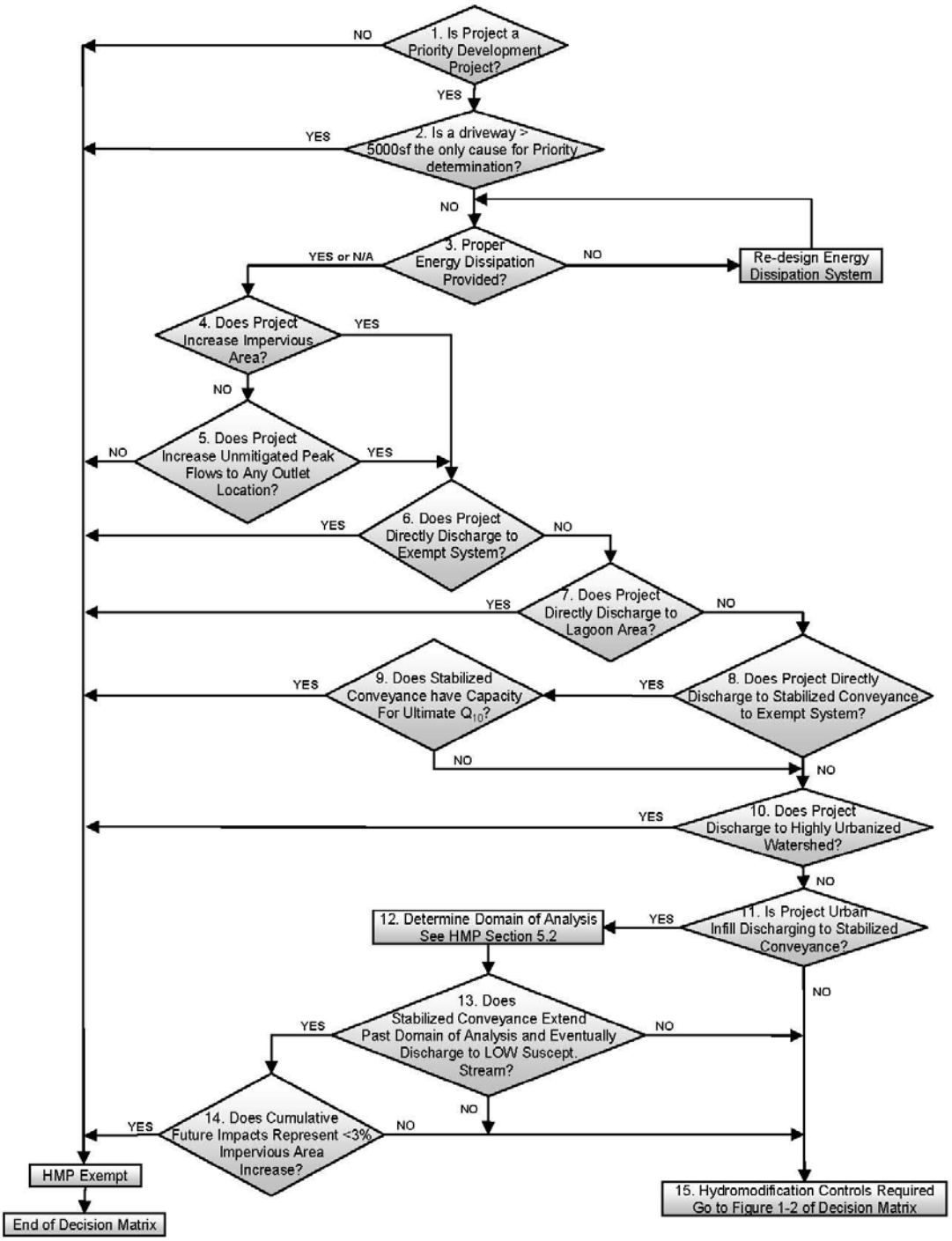


FIGURE 1-1. HMP Applicability Determination

*For a detailed description of each step of the HMP Decision Matrix, refer to **Section 1** of the **Encinitas Stormwater Manual** and the **County of San Diego Hydromodification Management Plan**.*

Case / Permit No.:_____

Please check the box adjacent to the HMP applicability determined by Figure 1-1.

- ❑ **HMP Exempt**. List the Exemption below and proceed to Page 7.

  Exemption: _____

- ❑ **Hydromodification Controls Required**. Continue with the HMP Decision Matrix (Figures 1-2 through 1-5).

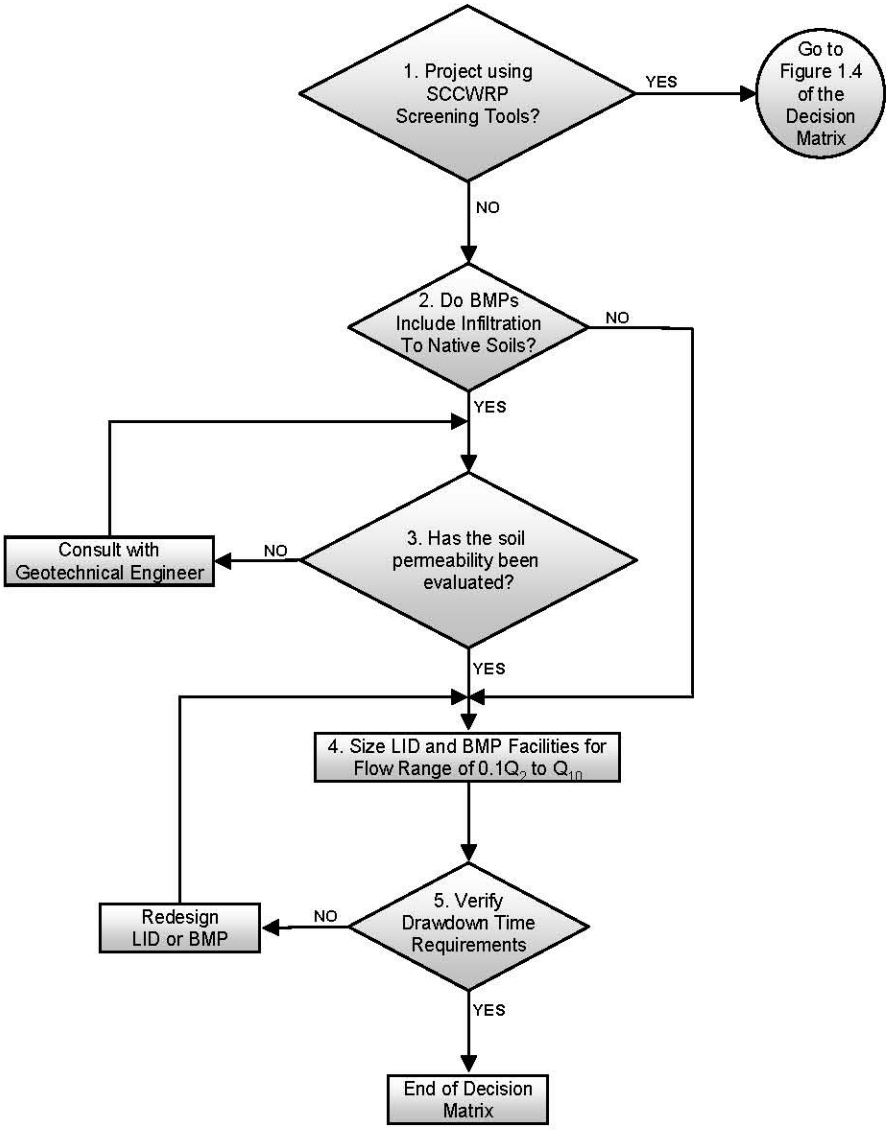


FIGURE 1-2. Mitigation Criteria and Implementation

*For a detailed description of each step of the HMP Decision Matrix, refer to **Section 1** of the **Encinitas Stormwater Manual** and the **County of San Diego Hydromodification Management Plan**.*

Case / Permit No.:_____

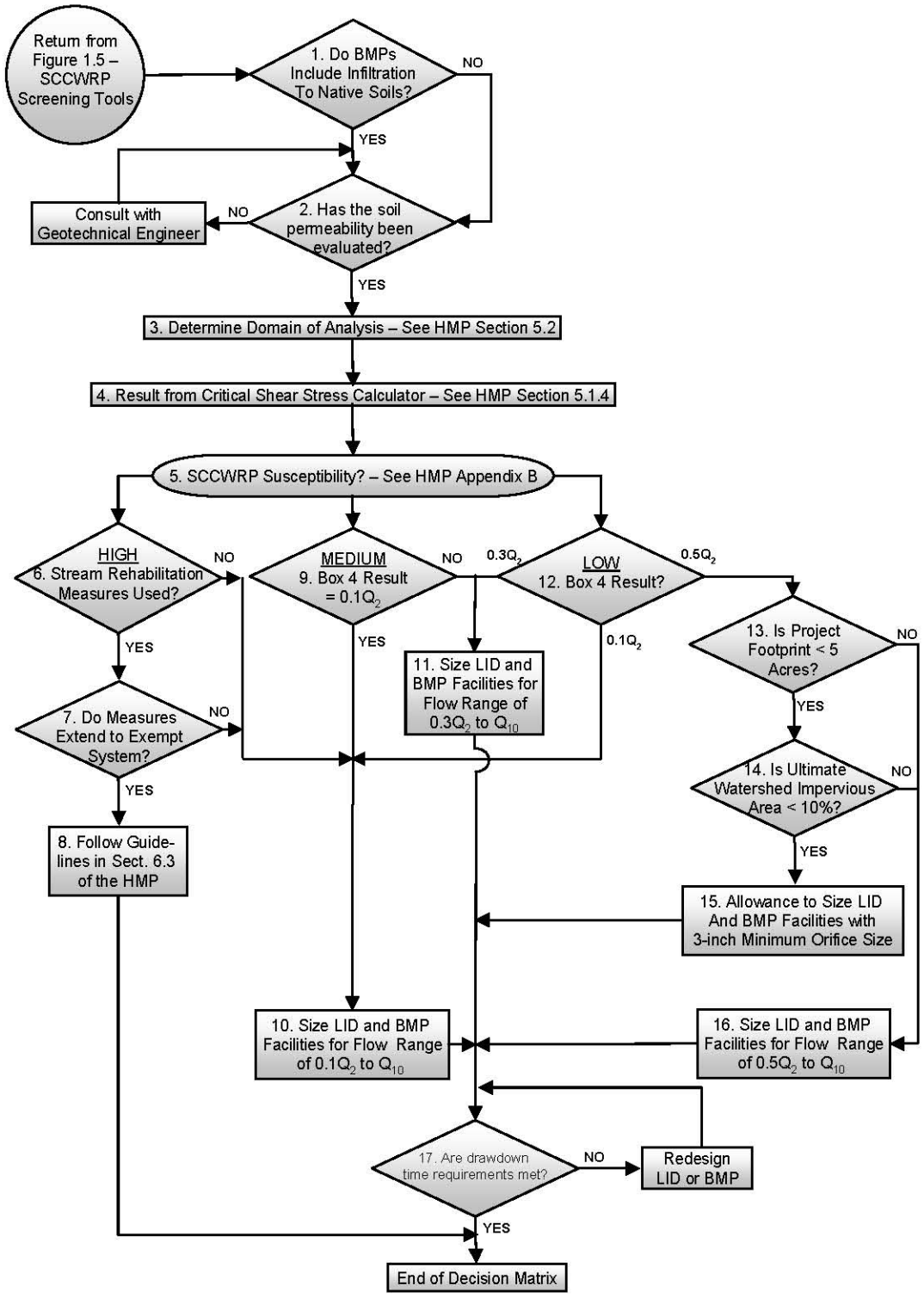


FIGURE 1-3. Mitigation Criteria and Implementation

*For a detailed description of each step of the HMP Decision Matrix, refer to **Section 1** of the **Encinitas Stormwater Manual** and the **County of San Diego Hydromodification Management Plan**.*

Case / Permit No.:_____

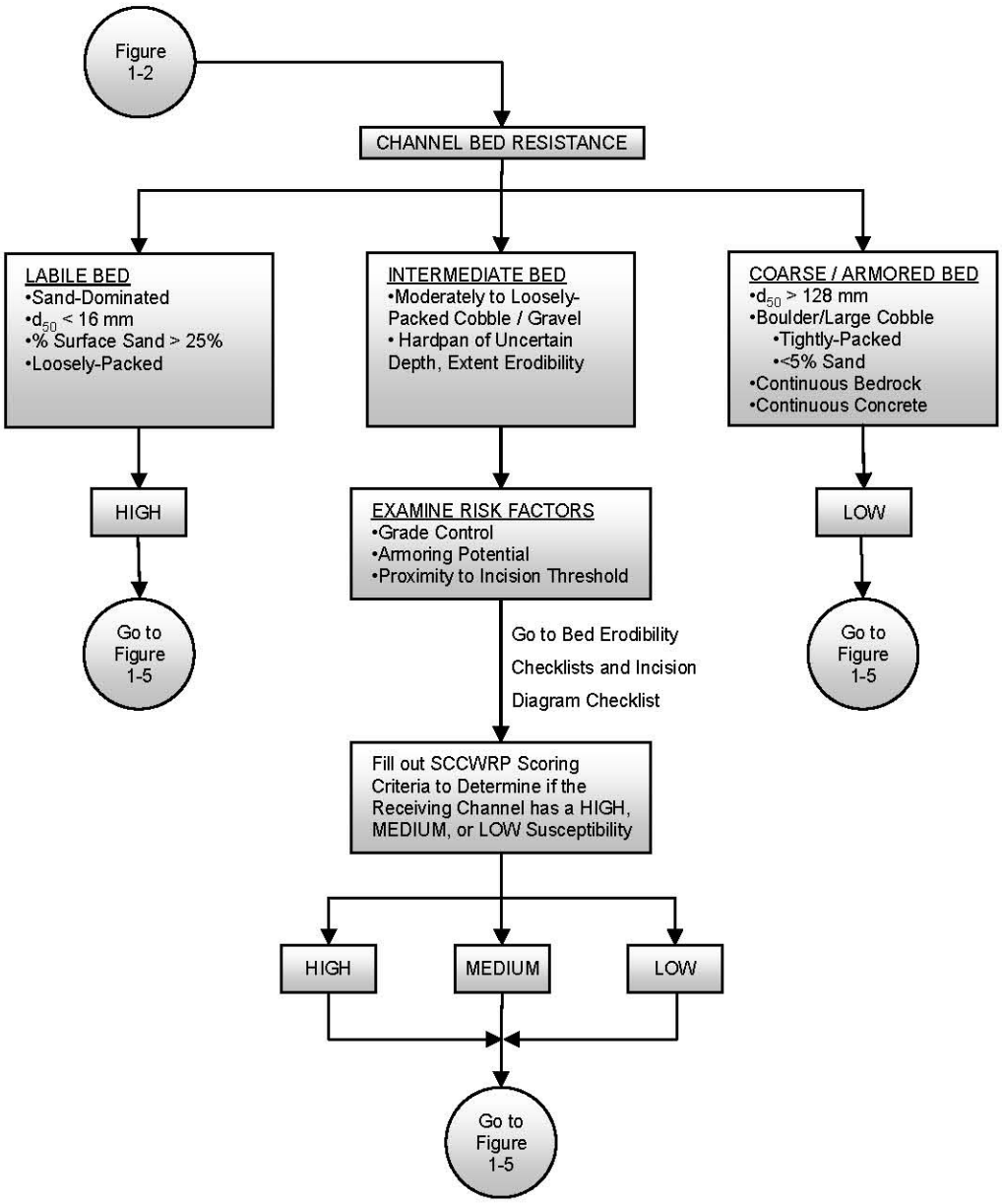


FIGURE 1-4. SCCWRP Vertical Susceptibility. *For a description of how to complete this decision matrix refer to Appendix B of the County of San Diego Hydromodification Management Plan.*

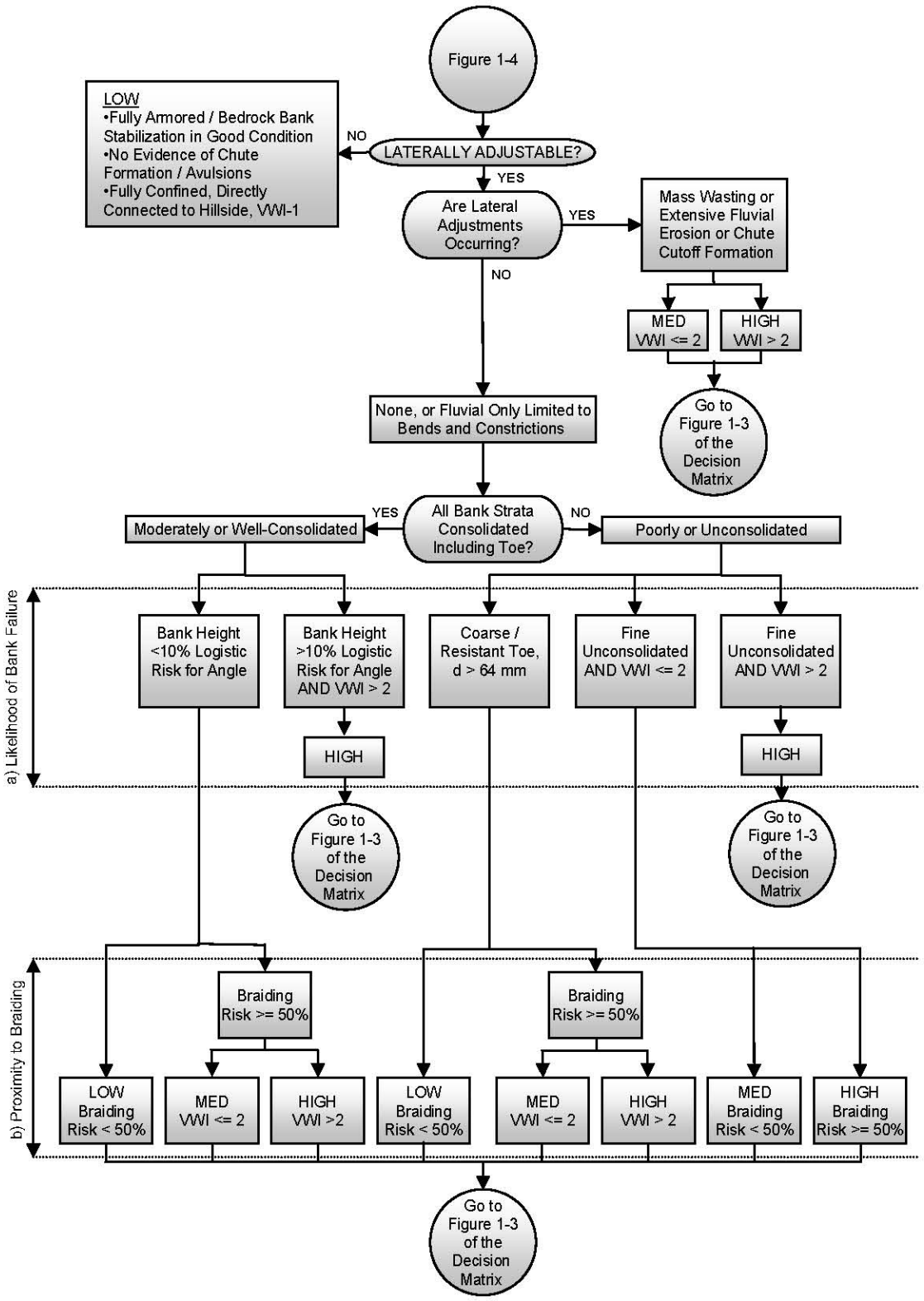


FIGURE 1-5. SCCWRP Lateral Channel Susceptibility. *For a description of how to complete this decision matrix refer to Appendix B of the County of San Diego Hydromodification Management Plan.*

Appendix A-11

Case / Permit No.:_____

HYDROMODIFICATION DETERMINATION AND CERTIFICATION

Please check the box adjacent to the Flow Range in which your stormwater treatment facilities must be sized to control, as determined through Figures 1-2 to 1-5.

- ❑ **Flow Range: $0.1Q_2 – Q_{10}$**
- ❑ **Flow Range: $0.3Q_2 – Q_{10}$**
- ❑ **Flow Range: $0.5Q_2 – Q_{10}$**
- ❑ **HMP Exempt, Not Applicable** (List Exemption Below)
  Exemption: _____

The project engineer and property owner shall complete the following certification.

Engineer's Certification:

I hereby certify that the project, Case/Permit No.:_____, ***IS / IS NOT (circle one)*** subject to the hydromodification regulations of the City of Encinitas. If the project is subject to hydromodification regulations, I certify that the project will provide satisfactory permanent flow control measures.

I hereby certify that this project will be designed in conformance with the stormwater quality regulations of the City of Encinitas.

I certify that I have reviewed the information contained in this form and verified that it is both complete and correct.

_____
Engineer's Signature Date

_____
Printed Name of Engineer

_____
Company Name Place Professional Seal Above

Owner's Certification:

I hereby acknowledge that the project, Case/Permit No.:_____, ***IS / IS NOT (circle one)*** subject to the hydromodification regulations of the City of Encinitas. If the project is subject to hydromodification regulations, I certify that the project will provide satisfactory permanent flow control measures.

I further acknowledge my understanding that permanent flow control features must remain in place, be inspected at least once annually, and be maintained in good working order. Removal or modification of these features without prior City authorization is prohibited.

_____ _____
Owner 1 Signature Date Owner 2 Signature Date

_____ _____
Printed Name of Owner 1 Printed Name of Owner 2

Case / Permit No.:_____

SUPPLEMENTAL SUBMITTAL REQUIREMENTS FOR PROJECTS SUBJECT TO HMP

Priority Projects required to meet hydromodification mitigation standards shall provide to the City all of the following documentation detailing the project's compliance. This documentation is **in addition to** the minimum submittal requirements for Priority Projects.

A **narrative** presenting the following information:

1) If the project is exempt from HMP requirements, a discussion demonstrating which exemption is being claimed and why the project qualifies must be included.

2) If the project is not exempt from HMP requirements, provide the input parameters for the BMP Sizing Calculator or detail the calculations that were used to determine the size of the treatment facility(ies).

3) If the project is not exempt from HMP requirements, document the stormwater facility(ies) dimensions as determined by the BMP Sizing Calculator or the calculations completed above.

A **map** showing the following details:

1) Location of the project.

2) Delineation of the watershed within which the project is located.

3) Location of the discharge point(s) of stormwater from the project.

4) The Domain of Analysis (as defined in Chapter 1 of the ESM).

5) The downstream hydrologic system (both the engineered stormwater system and the natural system--channels, lagoons, etc).

Note: The City Engineer may pose additional submittal requirements for certain projects.

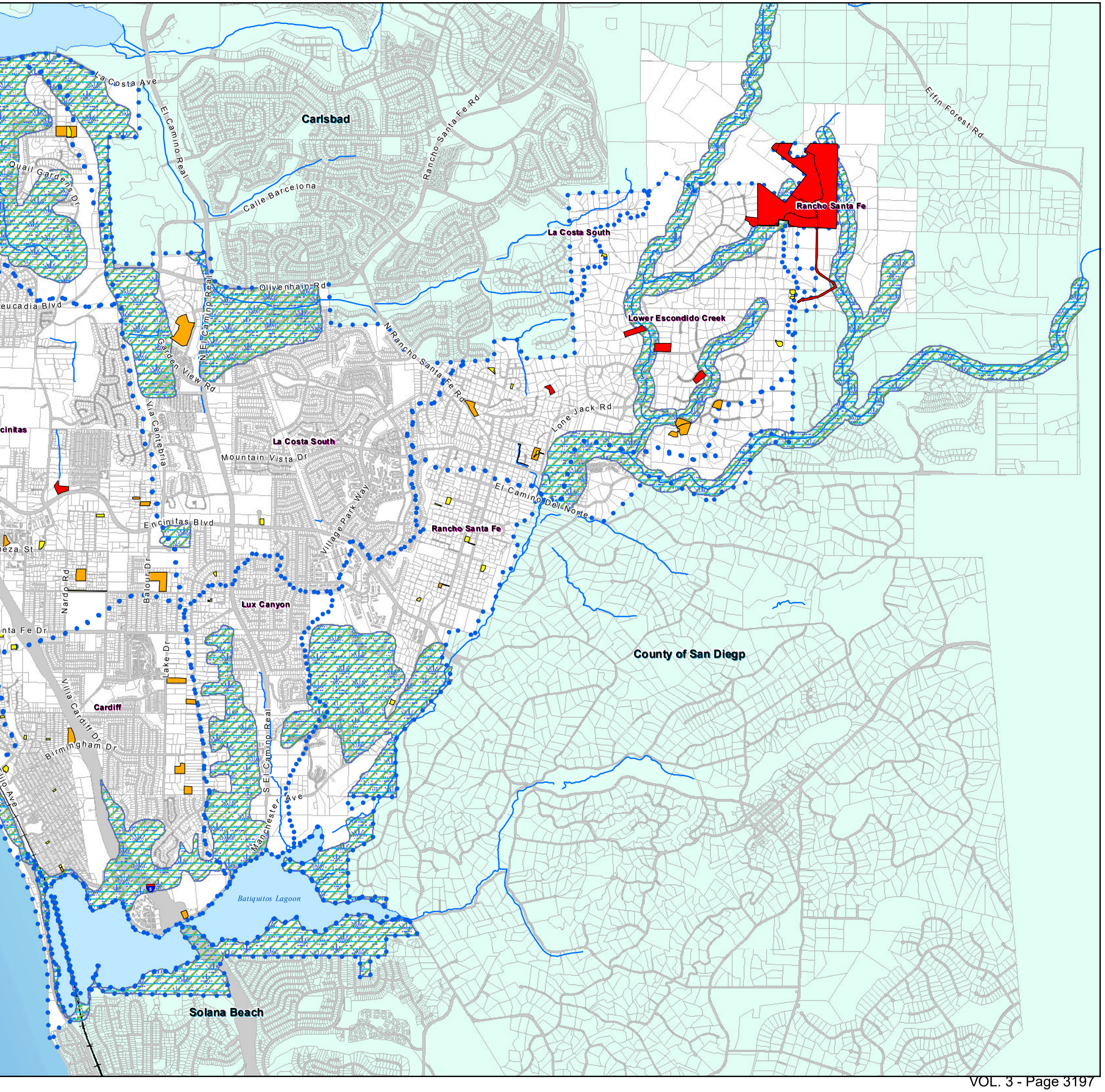
Appendix B

Construction

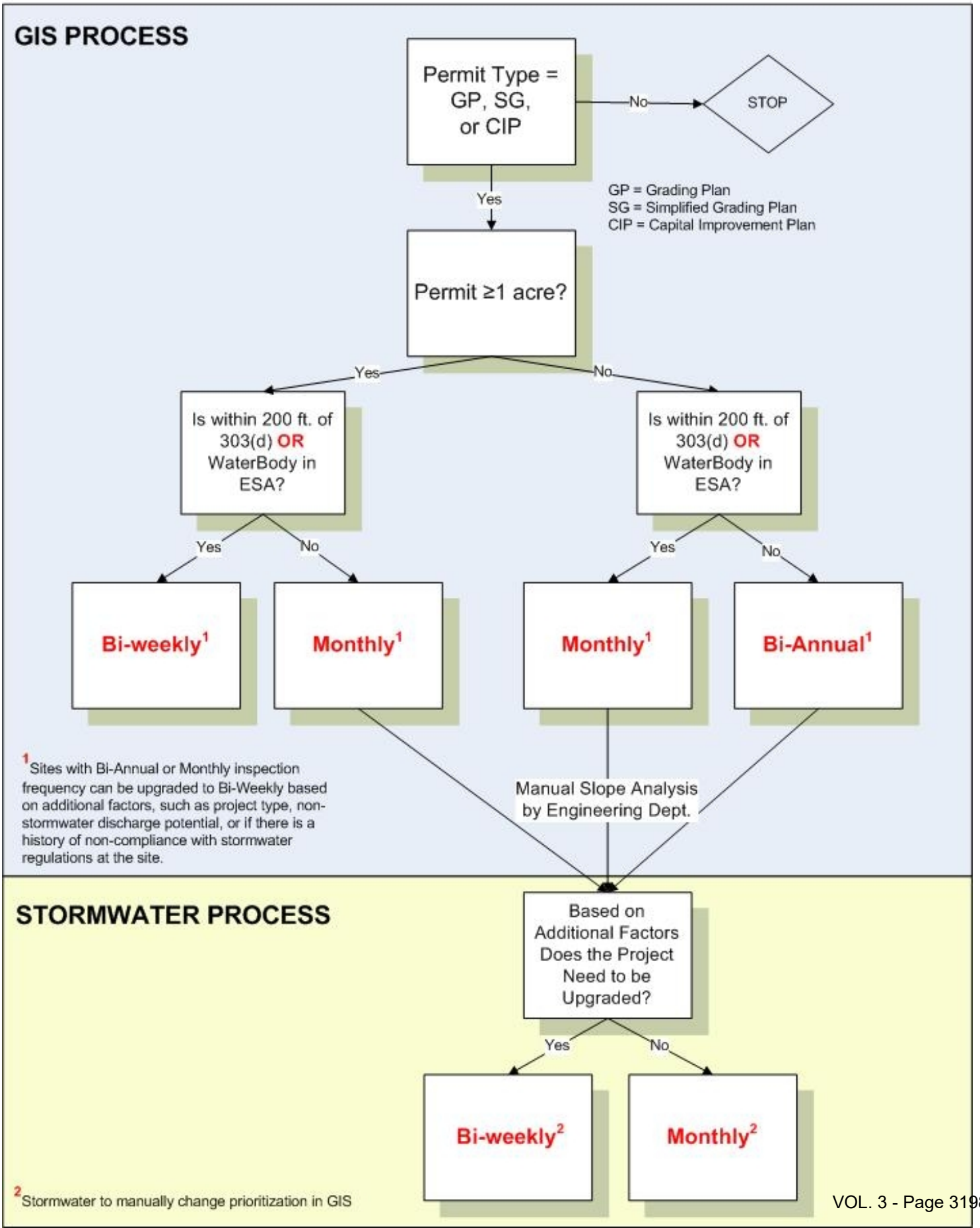
B-1	**Construction Inventory**
B-2	**Prioritized Construction Sites Map**
B-3	**Flow Chart for Inspection Frequencies**
B-4	**Construction Inspection Form**
B-5	**Erosion Control Letter**
B-6	**Construction Enforcement Actions**

Permit #	Permit Type	Site Address	Site Street Name	Inspection priority	Total Number of Weeks Active During the Wet Season	Total Number of Inspections Conducted During the Wet Season	Total Number of Inspections Conducted During the Dry Season	Total Number of Inspections from July 1, 2011-June 30, 2012
369	GI	1415	RAINBOW RIDGE	Biweekly	0	1	0	1
583	SG	2898	LONE JACK ROAD	Biweekly	0	1	0	1
692	GI	1435	RAINBOW RIDGE	Biweekly	0	1	0	1
716	GI	662	ENCINITAS BLVD. @ QUAIL GARDENS	Biweekly	0	1	0	1
1453	GI	1069	DOUBLE LL RANCH ROAD	Biweekly	0	1	0	1
6857/6242	GI		RANCHO SUMMIT ESTATES	Biweekly	0	1	0	1
10351	GI		RANCHO SUMMIT DR	Biweekly	0	1	0	1
10425	SG	409	BRIDOON TERRACE	Biweekly	0	2	0	2
10470	CN		S COAST HWY BY SAN ELIJO LAGOON	Biweekly	0	0	0	0
10584	GI	3214	FORTUNA RANCH RD	Biweekly	0	1	0	1
10801	SG	3273	RIM ROCK CIRCLE	Biweekly	0	0	0	0
245	GI	3351	LILAC SUMMIT	Monthly	16	3	0	3
325	GI		LONE JACK ROAD	Monthly	0	0	0	0
372	GI	1657	N. VULCAN AVE.	Monthly	0	1	0	1
388	GI	1435	LAKE DR.	Monthly	0	0	0	0
419	SG	1972	CREST DRIVE	Monthly	0	1	0	1
883	GI	1058/1076	HYMETTUS	Monthly	30	7	0	7
886	GI	1084 & 1086	NEPTUNE AVE	Monthly	0	1	0	1
926	SG	234	RANCHO SANTA FE RD.	Monthly	0	1	0	1
949	GI	1007-1021	HERMES AVE	Monthly	30	7	0	7
963	GI	1150	MELBA RD/931- BLUEJACK RD	Monthly	30	7	0	7
1000	GI	272	SEEMAN DRIVE	Monthly	0	1	0	1
7601	GI	1255	BIRMINGHAM	Monthly	4	1	0	1
7893	GI	600	CHRISTINE PLACE	Monthly	0	2	0	2
8091	GI	2145	13TH STREET	Monthly	10	3	0	3
9106	GI	Vulcan Townhomes	NORTH VULCAN AVE	Monthly	0	1	0	1
9117	GI	236/268	ANDREW	Monthly	0	1	0	1
9262	GI	840	BRACERO RD	Monthly	0	1	0	1
9303	GI	875/887	BRITTANY	Monthly	0	1	0	1
9336	GI	290	ANDREW AVENUE	Monthly	14	4	0	4
10042	GI	1450	BLUE HERON AVENUE	Monthly	0	1	0	1
10087	GI	237	SEEMAN DR.	Monthly	0	1	0	1
10090	GI	3183	WILDFLOWER/NARCISSUS SUMMIT	Monthly	30	7	0	7
10323	GI	950	SAXONY RD	Monthly	12	3	0	3
10375	GI	1010	N EL CAMINO REAL	Monthly	0	2	0	2
10417	GI	618	BIRMINGHAM DRIVE	Monthly	30	7	0	7
10501	GI	3177	WILDFLOWER SUMMIT	Monthly	30	7	0	7
10516	GI	556	UNION STREET	Monthly	0	1	0	1
10528	GI	422	REQUEZA STREET/QUENTIN COURT	Monthly	30	7	0	7
10536	GI	1492	HYMETTUS	Monthly	30	8	0	8
10672	SG	1534	CREST DRIVE	Monthly	30	7	0	7
10828	SG	3168	WILDFLOWER SUMMIT	Monthly	30	7	0	7
10889	GI	2551	SAN ELIJO AVE	Monthly	28	5	0	5
CCE04F	TE	3050	MANCHESTER AVE	Monthly	25	6	0	6
80	SI	CMS10B/CMS10E	MELBA SAFE ROUTE TO SCHOOL	Biannual	30	1	1	2
185	GI	1423	RAINBOW RIDGE	Biannual	25	1	0	1
215	GI	424	BRIGHTON AVE	Biannual	30	1	0	1
366	GI	742-744	DEWITT	Biannual	0	0	0	0
528	GI	402	SECOND ST (AKA 207 C STREET)	Biannual	30	2	0	2
556	GI	135	DAPHNE ST	Biannual	30	2	0	2
578	GI	1531	SAN ELIJO AVE	Biannual	30	2	0	2
675	GI	1719	SAN ELIJO AVE	Biannual	25	1	0	1
844	GI	27	EAST "E" STREET	Biannual	0	1	0	1
944	GI	1501	NEPTUNE AVE	Biannual	30	2	0	2
948	SG	411	SANTA FE DRIVE	Biannual	30	0	0	0
1001	GI	342	HILLCREST DRIVE	Biannual	8	0	0	0
1010	GI	1865	N VULCAN AVE	Biannual	0	1	0	1
7505	GI	379	FULVIA STREET	Biannual	30	0	0	0
9482	GI	1635	GASCONY	Biannual	0	0	1	1
9590	GI	721	N VULCAN AVE	Biannual	18	0	0	0
10045	GI	1660	BRAHMS	Biannual	27	2	0	2
10068	GI	119, 125,&133	MOZART	Biannual	8	0	0	0
10116	GI	2209	SERENO VIEW LANE	Biannual	30	1	0	1
10117	GI	1060	HYGEIA AVE	Biannual	30	0	0	0
10153	GI	1521	NEPTUNE AVE	Biannual	8	1	0	1

Permit #	Permit Type	Site Address	Site Street Name	Inspection priority	Total Number of Weeks Active During the Wet Season	Total Number of Inspections Conducted During the Wet Season	Total Number of Inspections Conducted During the Dry Season	Total Number of Inspections from July 1, 2011-June 30, 2012
10309	GI	2358	NEWCASTLE AVE	Biannual	0	0	0	0
10315	GI	794	NEPTUNE AVE	Biannual	30	1	0	1
10332	GI	1200-1214	N COAST HWY 101 @ PHOEBE ST	Biannual	30	2	0	2
10360	GI	1729	SAN ELIJO AVE	Biannual	7	0	0	0
10413	GI	747	DORIS DR	Biannual	0	0	0	0
10430	SG	1022	SAXONY RD	Biannual	30	2	0	2
10433	GI	680	WESTLAKE STREET	Biannual	30	2	0	2
10437	GI	1491	NEPTUNE AVE	Biannual	0	1	0	1
10467	SG	4149	MANCHESTER AVE	Biannual	0	0	0	0
10474	GI	1520	CAUDOR STREET	Biannual	30	2	0	2
10500	GI	151	LA VETA	Biannual	8	1	0	1
10518	II	586	RANCHO SANTA FE RD	Biannual	30	0	0	0
10525	GI	416-461	SANTA FE DR	Biannual	30	2	0	2
10526	GI	1361	AHLRICH AVE	Biannual	30	2	0	2
10543	SG	1745	EOLUS AVENUE	Biannual	0	0	0	0
10548	GI	1502	ENCINITAS BLVD	Biannual	4	0	0	0
10598	GI		URANIA AVENUE (& NORMANDY)	Biannual	30	1	0	1
10642	GI	441	RANCHO SANTA FE RD	Biannual	18	2	0	2
10654	GI	1525	SUMMIT AVE	Biannual	0	0	0	0
10658	GI		JASON ST AT N COAST HWY 101	Biannual	26	1	0	1
10686	GI	3529	FORTUNA RANCH ROAD	Biannual	30	2	0	2
10750	GI	165	KILKENNY DRIVE	Biannual	30	2	0	2
10756	SG	445	FOURTH STREET	Biannual	30	2	0	2
10757	SG	610	OCEAN VIEW AVE	Biannual	30	2	0	2
10774	SG	2622	LONE JACK ROAD	Biannual	30	2	0	2
10799	GI	820	ORPHEUS AVENUE	Biannual	30	2	0	2
10808	GI	816	NEPTUNE AVE	Biannual	26	2	0	2
10830	GI	2156	CAMBRIDGE AVENUE	Biannual	30	2	0	2
10839	GI	354	SANTA FE DRIVE	Biannual	18	1	0	1
10852	GI	357	ROSEMARY LANE	Biannual	30	2	0	2
10853	GI	1255	SAN DIEGUITO DRIVE	Biannual	30	2	0	2
10867	GI	1065	VALLEYSIDE LANE	Biannual	30	1	0	1
10907	GI	706	CORNISH DRIVE	Biannual	30	2	0	2
10917	SG	1105	SECOND ST. @ J STREET	Biannual	26	2	0	2
10924	GI	1833	SOMMERSET	Biannual	18	1	0	1
10931	GI	1034	CORNISH DRIVE	Biannual	18	1	0	1
10938	SG	3401	ADAMS RUN	Biannual	26	2	0	2
10947	SG	3453	TOSCANO COURT	Biannual	24	2	0	2
10979	GI	133	AVENIDA ESPERANZA	Biannual	18	1	0	1
11018	SG	189	N. VULCAN AVENUE	Biannual	22	1	0	1
11020	GI	1159	LARKSONG LANG	Biannual	14	2	0	2
11048	GI	1500-1520	NEPTUNE AVE	Biannual	12	1	0	1
11112	GI	905	ORPHEUS AVENUE	Biannual	11	1	0	1
11118	SG	1446	BLUE HERON AVENUE	Biannual	8	1	0	1
11130	SG	521	CAMINO ELDORADO	Biannual	6	1	0	1
CMD06E	CN		CARDIFF TRAFFIC CALMING	Biannual	16	1	0	1
			FY 2010-11 Total Inspections		**NA**	**200**	**2**	**202**


La Costa Ave
El Camino Real
Carlsbad
Rancho Santa Fe Rd
Elfin Forest Rd
Quail Gardens Dr
Calle Barcelona
Rancho Santa Fe
La Costa South
Olivenhain Rd
eucadia Blvd
N El Camino Real
Garden View Rd
Lower Escondido Creek
N Rancho Santa Fe Rd
Lone Jack Rd
cinitas
La Costa South
Via Centebria
Mountain Vista Dr
El Camino Del Norte
Village Park Way
Encinitas Blvd
Rancho Santa Fe
eza St
Nardo Rd
Balour Dr
Lux Canyon
nta Fe Dr
Lake Dr
County of San Diegp
Villa Cardiff Dr
Cardiff
Birmingham Dr
S El Camino Real
Manchester Ave
Batiquitos Lagoon
Solana Beach

GIS Script Process for Determining Construction Project Inspection Frequencies



CITY OF ENCINITAS

INSPECTION REPORT

Storm Water Quality Inspection for Construction Activities

505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2770 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

Property Address: _____ Inspection Date: _____

Contact Person: _____ Permit No: _____

Phone Number: _____ Project Size: _____

Site Status: ❒ Active ❒ Inactive ❒ First Inspection ❒ Final Sign-Off Date__/__/__

Inspection Frequency: ❒ Bi-Weekly ❒ Monthly ❒ Bi-Annual ❒ Post Rain Event ❒ Complaint Assessment

State General Construction Permit? ❒ Yes ❒ No WDID # _____

Is Project SWPPP on Site? ❒ Yes ❒ No

Qualified SWPPP Practitioner (QSP) Name: _____ Phone Number: _____

MINIMUM BEST MANAGEMENT PRACTICE (BMP) REQUIREMENTS		BMP INSTALLATION REQUIRED	BMP REQUIRES MAINTENANCE	OTHER CORRECTIVE ACTIONS REQUIRED
A. Erosion Control BMPs				
1	**Slope / Soil Stabilization**			
2	**Silt Fencing**			
3	**Check Dams / Rip Rap**			
4	**Fiber Rolls**			
5	**Permanent Landscaping**			
6	**Preserving Existing Vegetation**			
7	**Diversion Channel for Run-On**			
8	**Other:**			
B. Sediment Control BMPs				
1	**Storm Drain Inlet Protection**			
2	**Detention Basin / Desilting Basin**			
3	**Perimeter Protection**			
4	**Stabilized Construction Entrance / Exit**			
5	**Other:**			
C. Materials Management BMPs				
1	**Stockpile Management**			
2	**Material Washout Area**			
3	**Equipment Storage**			
4	**Trash, Litter, Debris Management**			
5	**Designated Washout Area(s)**			
6	**Sanitary Waste Area Management**			
7	**Fuel / Chemical Storage**			
8	**Other:**			

Corrective Actions: ❒ Correct Work (*See Comments*) ❒ No Corrective Actions Required

❒ Referred to the Clean Water Program ❒ Stop Work/NOV

Comments:_____

_____

_____

_____

Corrective Actions identified above must be addressed, to the satisfaction of the City Inspector, within _____ days from the date above OR prior to the next predicted rain event. Failure to comply by this date may result in further enforcement action by the City of Encinitas.

Inspector (Signature) _____ Date ___/___/___

Received By (Signature) _____ Date ___/___/___

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CITY OF ENCINITAS

CLEAN WATER PROGRAM

505 South Vulcan Avenue, Encinitas, CA 92024 ◆ 760-633-2770 ◆ FAX 760-633-2818 ◆ TDD 760-633-2700

CONSTRUCTION SITE STORMWATER MANAGEMENT AND DISCHARGE CONTROL

All construction projects in the City of Encinitas are required to implement minimum Best Management Practices (BMPs) as necessary to comply with the current State General Municipal Stormwater Permit, State General Construction Permit, the City's Watercourse Protection, Stormwater Management and Discharge Control Ordinance (EMC 20.08), and the Grading Ordinance (EMC 23.24). Construction is a dynamic operation where changes are expected. Stormwater BMPs for construction sites are usually temporary measures that require frequent maintenance to maintain effectiveness and may require relocation, revision, and re-installation, particularly as project grading progresses. If minimum BMPs are infeasible or deemed inadequate at any specific site, the City will require the implementation of equivalent or alternative BMPs in order to minimize and/or eliminate non-stormwater discharge.

DEFINITIONS

Best Management Practices or "BMPs" means schedules of activities, pollution treatment practices or devices, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, operation and maintenance procedures, and other management practices or devices to prevent or reduce the discharge of pollutants directly or indirectly to Storm Water, Receiving Waters, or the Storm Water Conveyance System.

Illegal Discharge is any discharge to the Storm Water Conveyance System that is not composed entirely of Storm Water.

Inactive Construction Site means that construction activities have ceased for a period of 7 or more consecutive calendar days. At any time of the year, an inactive site must be fully protected from erosions and discharges of sediment.

State General Construction Storm Water Permit means State Water Resources Control Board Water Quality Order No. 2009-0009-DWQ, Waste Discharge Requirements for Discharges of Storm Water Associated with Construction Activities, and any amendments thereto.

Storm Water Conveyance System means private and public drainage facilities within the City of Encinitas by which Storm Water may be conveyed to waters of the United States, including but not limited to, streets, roads, catch basins, natural and artificial channels, natural and artificial drainage features, aqueducts, canyons, stream beds, gullies, curbs, gutters, ditches, and storm drains.

Wet Season means October 1 thru April 30 of each year.

EMC 20.08.040 • ILLEGAL DISCHARGES

A. Discharge of Storm Water. No person shall discharge Storm Water directly or indirectly into the Storm Water Conveyance System or Receiving Waters, unless discharged in compliance with this Chapter.

B. Discharge of Non-storm water Prohibited. No person shall discharge non-storm water directly or indirectly into the Storm Water Conveyance System or Receiving Waters.

EMC 20.08.050 • NOTIFICATION AND MITIGATION OF ILLEGAL DISCHARGES

A Discharger shall immediately notify the City Engineer of an Illegal Discharge and take immediate action to control and contain the Illegal Discharge. The Discharger shall also mitigate any damage caused by the Illegal Discharge.

EMC 20.08.070 • LITTERING & SWEEPING

No person shall throw, deposit, leave, maintain, keep or permit to be thrown, deposited, placed, left or maintained, any refuse, pet waste, rubbish, garbage, or other discarded or abandoned objects, in or upon any street, alley, parking lot, sidewalk, curb, gutter, storm drain, catch basin, conduit, or other drainage structure or lot except in receptacles maintained for the regular disposal of garbage. Impervious surfaces which drain directly or indirectly into the Storm Water Conveyance System shall be kept free of dirt and debris by regular sweeping. The sweepings shall be placed in garbage receptacles and shall not be allowed to enter the Storm Water Conveyance System.

EMC 20.08.080 • COMPLIANCE WITH BEST MANAGEMENT PRACTICES

No Discharger shall fail to implement, install, use, or maintain Best Management Practices established by the City Engineer pursuant to this Chapter.

City of Encinitas

September 12, 2011

RE: **REQUIRED SEDIMENT AND EROSION CONTROL**

City of Encinitas Permit Holder:

Please be advised that starting October 1, 2011 and continuing through April 30, 2012, the City will enter into the official wet season as defined by the State Water Resources Control Board. As such, all construction projects (active or inactive) are required to implement sediment and erosion control Best Management Practices (BMPs) to prevent the discharge of sediment and non-stormwater into the stormwater conveyance system and local water bodies.

Ultimately, for permit holders within the City of Encinitas, the wet season brings with it a responsibility for erosion and sediment control as outlined in sections 23.24.370, 23.24.380 and 23.24.390 of the City of Encinitas' Municipal Code. For your reference, a copy of these Municipal Code sections has been enclosed with this letter. The full text of the Municipal Code can also be accessed on the City's website at:

http://www.ci.encinitas.ca.us/Government/PublicD/MunicipalCode/

In addition, please be advised that your construction project may be subject to requirements as defined by State Water Resources Control Board Order No. 2009-0009-DWQ, General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (State General Construction Permit). To determine permit applicability and project specific requirements, you may find a complete copy of the General Construction Permit at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Please feel free to address any questions regarding this required work to your City of Encinitas Engineering Inspector.

Sincerely,

Greg Shields, P.E.
Sr. Civil Engineer
Field Operations

Cc: City of Encinitas Engineering Inspectors

Encl: North County Storm Water Program Construction Brochure
City of Encinitas Municipal Code Sections 23.24.370, 23.24.380, and 23.24.390

505 South Vulcan Avenue, Encinitas, CA 92024, TEL: 760/633-2600 FAX: 760/633-2627 TDD: 760/633-2700

Appendix B-6 Construction Enforcement Actions for Routine Inspections in FY 2011-12

Date	Site Address	Violation	Correct Work	NOV	Stop Work	Citation Warning	Citation Fine	Citation Number	Cost Recovery
10/4/2011	1531 San Elijo Ave	BMP Installation and Maintenance Required	1						
10/5/2011	1255 San Dieguito Dr	BMP Installation Required	1						
10/5/2011	1719 San Elijo Ave	BMP Installation Required	1						
10/5/2011	1761 Hayon Dr	BMP Installation Required	1						
10/7/2011	1022 Saxony Rd	BMP Installation and Maintenance Required	1						
10/7/2011	950 Saxony Rd	BMP Installation Required	1						
10/10/2011	3351 Lilac Summit	BMP Installation Required	1						
10/10/2011	3529 Fortuna Ranch Rd	BMP Installation Required	1						
10/11/2011	207 C St	BMP Installation Required	1						
10/11/2011	422 Requeza St	BMP Installation Required	1						
10/16/2011	357 Rosemary Ln	BMP Installation and Maintenance Required	1						
10/18/2011	1534 Crest Dr	BMP Installation Required	1						
10/19/2011	3183 Wildflower Summit	BMP Installation and Maintenance Required	1						
11/2/2011	820 Orpheus	BMP Installation Required	1						
11/10/2011	290 Andrew Ave	BMP Installation Required	1						
11/14/2011	1150 Melba Rd	BMP Requires Maintenance	1						
11/14/2011	422 Requeza St	BMP Requires Maintenance	1						
11/27/2011	1007-1021 Hermes Ave	BMP Requires Maintenance	1						
11/30/2011	1492 Hymettus Ave	BMP Requires Maintenance	1						
12/5/2011	618 Birmingham Dr	BMP Installation Required	1						
12/6/2011	422 Requeza St	BMP Requires Maintenance	1						
12/7/2011	3183 Wildflower Summit	BMP Installation Required	1						
12/7/2011	3453 Toscano Ct	BMP Installation Required	1						
12/8/2011	2551 San Elijo Ave	BMP Installation Required	1						
12/12/2011	1492 Hymettus Ave	BMP Requires Maintenance	1						
12/14/2011	290 Andrew Ave	BMP Installation Required	1						
12/27/2011	3177 Wildflower Summit	BMP Requires Maintenance	1						
12/28/2011	1534 Crest Dr	BMP Requires Maintenance	1						
1/18/2012	1150 Melba Rd	BMP Installation Required	1						
1/18/2012	422 Requeza St	BMP Requires Maintenance	1						
1/18/2012	618 Birmingham Dr	BMP Installation and Maintenance Required	1						
1/20/2012	3177 Wildflower Summit	BMP Requires Maintenance	1						
1/20/2012	3183 Wildflower Summit	BMP Installation Required	1						
1/25/2012	3168 Wildflower Summit	BMP Installation and Maintenance Required	1						
2/15/2012	1150 Melba Rd	BMP Requires Maintenance	1						
2/27/2012	2551 San Elijo Ave	BMP Requires Maintenance	1						
2/29/2012	1492 Hymettus Ave	BMP Requires Maintenance	1						
3/6/2012	165 Kilkenny Dr	BMP Requires Maintenance	1						
3/7/2012	2622 Lone Jack Rd	BMP Requires Maintenance	1						
3/7/2012	680 Westlake	BMP Requires Maintenance	1						
3/12/2012	3453 Toscano Ct	BMP Requires Maintenance	1						
3/12/2012	3529 Fortuna Ranch Rd	BMP Requires Maintenance	1						
3/13/2012	1022 Saxony Rd	BMP Requires Maintenance	1						
3/14/2012	1255 San Dieguito Dr	BMP Installation Required	1						

Appendix B-6 Construction Enforcement Actions for Routine Inspections in FY 2011-12

Date	Site Address	Violation	Correct Work	NOV	Stop Work	Citation Warning	Citation Fine	Citation Number	Cost Recovery
3/14/2012	905 Orpheus Ave	BMP Installation Required	1						
3/14/2012	Urania Ave/ Normandy Rd	BMP Installation Required	1						
3/23/2012	1492 Hymettus Ave	BMP Installation and Other Corrective Actions Requ	1						
3/28/2012	2551 San Elijo Ave	BMP Installation Required	1						
3/29/2012	618 Birmingham Dr	BMP Requires Maintenance	1						
4/2/2012	521 Camino El Dorado	BMP Installation Required	1						
4/3/2012	1446 Blue Heron Ave	BMP Installation Required	1						
4/5/2012	133 Avenida Esperanza	BMP Requires Maintenance	1						
4/6/2012	1520 Caudor	BMP Requires Maintenance	1						
4/20/2012	680 Westlake	BMP Installation and Maintenance Required	1						
4/25/2012	2551 San Elijo Ave	BMP Installation Required	1						
5/1/2012	1635 Gascony Rd	BMP Requires Maintenance	1						
10/13/2012	1520 Caudor	BMP Installation Required	1						
		FY 2011-12 Total	**57**	**0**	**0**	**0**	**0**	**0**	**0**

Appendix C

Municipal

C-1 **Municipal Inventory**

C-2 **Municipal Activities Report**

C-3 **Municipal BMP Map**

C-4 **Special Events Permit P2 Questionnaire**

C-5 **Approved Special Events**

C-6 **Routine Inspections Summary**

	Facility Name	Address	Land Use/Activities	Tributary to a 303(d) Impaired Water Body	Inspection Priority	Sub-basin
1	"A" TANK SITE	601 SANTA FE DR	Tank storage site/municipal yard	NOT TRIBUTARY	High Priority	Encinitas
2	BEACON'S BEACH	948 NEPTUNE AVE	Beach access/parking lot	NOT TRIBUTARY	High Priority	Leucadia
3	CALLE MAGDALENA PUBLIC WORKS FACILITY	160 CALLE MAGDALENA	Administrative offices/municipal yard/vehicle maintenance/materials storage	NOT TRIBUTARY	High Priority	Encinitas
4	CARDIFF SPORTS PARK	1661 LAKE DR	Recreational facilities/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Cardiff
5	CARDIFF SPORTS PARK EXPANSION	1623 LAKE DR	Recreational facilities/landscaped areas	NOT TRIBUTARY	High Priority	Cardiff
6	COTTONWOOD CREEK PARK	95 N. VULCAN AVE	Park/landscaped areas/parking lot	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
7	ENCINITAS RANCH GOLF COURSE	1275 QUAIL GARDENS DR	Golf course	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
8	ENCINITAS VIEWPOINT PARK	56 E D STREET	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
9	GLEN PARK	2149 ORINDA DR	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Cardiff
10	GRANDVIEW BEACH	1700 NEPTUNE AVE.	Beach access/parking lot	NOT TRIBUTARY	High Priority	Leucadia
11	H STREET VIEWPOINT	498 H STREET	Vista point	NOT TRIBUTARY	High Priority	Encinitas
12	HAWK VIEW PARK	1309 BLUE HERON DRIVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
13	J STREET VIEWPOINT	398 J STREET	Vista point/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
14	LAS VERDES PARK	1390 PASEO DE LAS VERDES	Park/landscaped areas	TRIBUTARY TO COTTONWOOD CREEK	High Priority	Encinitas
15	LEO MULLEN SPORTS PARK	951 VIA CANTEBRIA	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	La Costa South
16	LEUCADIA OAKS PARK	1511 N. VULCAN AVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
17	LEUCADIA ROADSIDE PARK	860 N COAST HIGHWAY 101	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
18	LITTLE OAKS EQUESTRIAN PARK	2879 LONE JACK RD	Park/horse corral/landscaped areas	NOT TRIBUTARY	High Priority	Lower Escondido Creek
19	MILDRED MACPHERSON PARK	1045 S VULCAN AVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Encinitas
20	MOONLIGHT BEACH	400 B STREET	Beach access/park/landscaped area/parking lot	TRIBUTARY TO PACIFIC OCEAN SHORELINE	High Priority	Encinitas
21	MS4	CITY WIDE	MS4	TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
22	OAKCREST PARK	1219 ENCINITAS BLVD	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Encinitas
23	ORPHEUS PARK	482 ORPHEUS AVE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Leucadia
24	PAUL ECKE SPORTS PARK	278 SAXONY RD.	Park/landscaped areas/parking lot	NOT TRIBUTARY	High Priority	Encinitas
25	REQUEZA STREET FACILITY	397 REQUEZA ST	Municipal yard/sediment/materials storage	NOT TRIBUTARY	High Priority	Encinitas
26	ROADS, STREETS AND HIGHWAYS	CITY WIDE		TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
27	WASTEWATER COLLECTION FACILITY	2695 MANCHESTER AVE	Administrative offices/Municipal yard	NOT TRIBUTARY	High Priority	Cardiff
28	SCOTT VALLEY PARK	1602 WILLOWHAVEN	Park/landscaped areas	TRIBUTARY TO ENCINITAS CREEK	High Priority	La Costa South
29	SPECIAL EVENTS	CITY WIDE	Recreational facilities, parks, landscaped areas, roads, streets and highways	MAY BE TRIBUTARY TO COTTONWOOD CREEK, ENCINITAS CREEK,ESCONDIDO CREEK, PACIFIC OCEAN SHORELINE AND SAN ELIJO LAGOON	High Priority	All Sub-basins
30	SUN VISTA PARK	2011 AVENIDA LA POSTA	Park/landscaped areas	NOT TRIBUTARY	High Priority	La Costa South
31	SWAMI'S BEACH	1298 S COAST HIGHWAY 101	Beach access/parking lot	NOT TRIBUTARY	High Priority	Encinitas
32	WIRO PARK	2232 EL CAM DEL NORTE	Park/landscaped areas	NOT TRIBUTARY	High Priority	Lower Escondido Creek/Ranch Santa Fe
33	CARDIFF PUMP STATION	2690 MANCHESTER AVE	Pump station	NOT TRIBUTARY	Low Priority	Cardiff
34	CIVIC CENTER	505 S VULCAN AVE.	Administrative offices/parking lot	NOT TRIBUTARY	Low Priority	Encinitas
35	ENCINITAS COMMUNITY & SENIOR CENTER	1140 OAKCREST PARK DR	Administrative offices/parking lot	NOT TRIBUTARY	Low Priority	La Costa South
36	D STREET BEACH	450 D STREET	Beach access and vista point	TRIBUTARY TO PACIFIC OCEAN SHORELINE	Low Priority	Encinitas
37	FIRE STATION #1	415 2ND ST	Fire station	NOT TRIBUTARY	Low Priority	Encinitas
38	FIRE STATION #2	1867 MACKINNON	Fire station	NOT TRIBUTARY	Low Priority	Cardiff
39	FIRE STATION #3	801 ORPHEUS AVE	Fire station	NOT TRIBUTARY	Low Priority	Leucadia
40	FIRE STATION #4	2011 VILLAGE PARK	Fire station	NOT TRIBUTARY	Low Priority	La Costa South
41	FIRE STATION #5	540 BALOUR DR	Fire station	NOT TRIBUTARY	Low Priority	Encinitas
42	FIRE STATION #6	770 RANCHO SANTA FE RD	Fire station	NOT TRIBUTARY	Low Priority	Encinitas
43	HALL PROPERTY	425 SANTA FE DR.	Undeveloped park site	NOT TRIBUTARY	Low Priority	Cardiff
44	HIGHWAY 101 PUMP STATION	S. COAST HIGHWAY 101	Pump station	NOT TRIBUTARY	Low Priority	Cardff
45	I STREET VIEWPOINT	498 I STREET	Vista point	NOT TRIBUTARY	Low Priority	Encinitas
46	INDIAN HEAD CANYON	SAXONY ROAD/QUAIL HOLLOW DR	Undeveloped park site	NOT TRIBUTARY	Low Priority	Leucadia
47	MOONLIGHT BEACH PUMP STATION	305 THIRD ST.	Pump station	TRIBUTARY TO COTTONWOOD CREEK	Low Priority	Encinitas
48	OLIVENHAIN PUMP STATION	MANCHESTER/I-5	Pump Station	NOT TRIBUTARY	Low Priority	Cardiff
49	PHOEBE PUMP STATION	1200 block of N. Coast Highway 101	Pump Station	NOT TRIBUTARY	Low Priority	Leucadia
50	SAN DIEGUITO WATER DISTRICT*		Pump Station	NOT TRIBUTARY	Low Priority	La Costa South/Encinitas
51	SAN DIEGUITO WATER DISTRICT*		Water reservoir/water storage	NOT TRIBUTARY	Low Priority	La Costa South/Encinitas
52	SAN DIEGUITO WATER DISTRICT*		Water reservoir/water storage	NOT TRIBUTARY	Low Priority	Encinitas
53	SAN DIEGUITO WATER DISTRICT*		Water recycling reservoir	NOT TRIBUTARY	Low Priority	Encinitas
54	SAN DIEGUITO WATER DISTRICT*		Pressure regulating station/no activities on site	NOT TRIBUTARY	Low Priority	Encinitas
55	SAN DIEGUITO WATER DISTRICT*		Pressure regulating station/no activities on site	NOT TRIBUTARY	Low Priority	Cardiff
56	SWAMIS BLUFFS PARCELS	1400 S. COAST HIGHWAY 101	Undeveloped site	NOT TRIBUTARY	Low Priority	Encinitas
57	STANDARD PACIFIC PARK	OLYMPUS / PIRAEUS	Undeveloped site	NOT TRIBUTARY	Low Priority	Leucadia
58	STONESTEPS BEACH	350 SOUTH EL PORTAL	Beach access and vista point	NOT TRIBUTARY	Low Priority	Leucadia
59	UV TREATMENT FACILITY	305 THIRD ST.	UV Treatment Facility	TRIBUTARY TO COTTONWOOD CREEK	Low Priority	Encinitas

***Note: The San Dieguito Water District's facility addresses have been omitted for security purposes.**

Appendix C-2

FY 2011-12 Municipal Activities Report

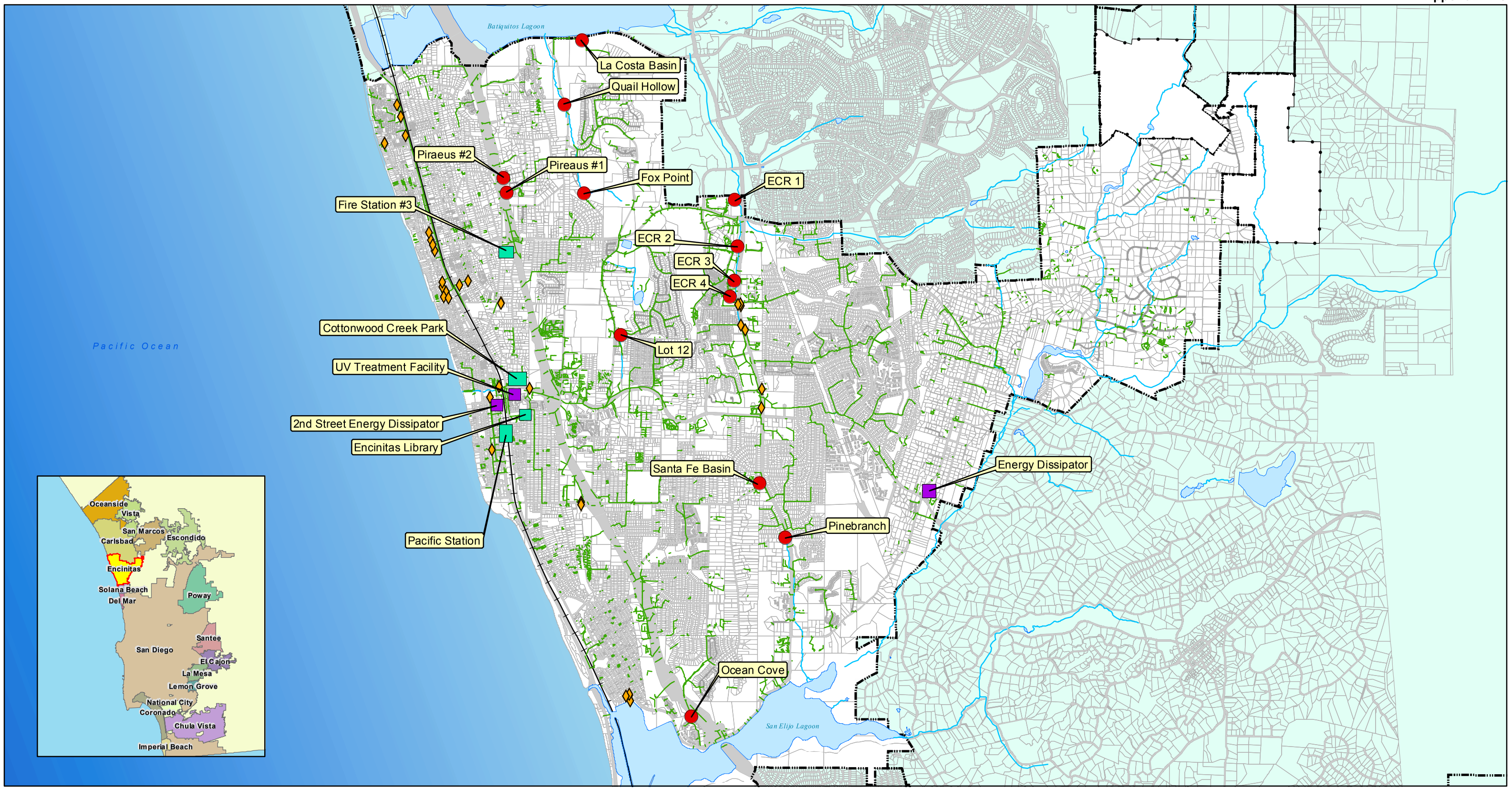
Item No.	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2011-12 Annual Result
1.	Report on updates to the municipal inventory and prioritization (J.3.a.(3)(c)i).	July 1, 2011-June 30, 2012		See Appendix C-1
2.	Confirmation that the designated BMPs were implemented, or required to be implemented for: municipal areas and activities (J.3.a.(3)(c)ii).	July 1, 2011-June 30, 2012		See Sections 4.2.3, 4.3.3, 4.4.3, 4.5.3 and 4.6.3
3.	Confirmation that the designated BMPs were implemented, or required to be implemented for: special events (J.3.a.(3)(c)ii).	July 1, 2011-June 30, 2012		See Section 4.7.3
4.	A description of inspections and maintenance conducted for municipal treatment controls-Municipal Filter Inserts (J.3.a.(3)(c)iii).	July 1, 2011-June 30, 2012		See Section 4.4.4.1
5.	A description of inspections and maintenance conducted for municipal treatment controls-UV Treatment Facility (J.3.a.(3)(c)iii).	July 1, 2011-June 30, 2012		See Section 4.4.4.1
6.	Identification of the total number of catch basins and inlets (J.3.a.(3)(c)iv).	July 1, 2011-June 30, 2012		1,781
7.	Identification of the number of catch basins and inlets **inspected** (J.3.a.(3)(c)iv).	July 1, 2011-June 30, 2012		2,337
8.	Identification of the number of catch basins and inlets found with accumulated waste exceeding 33% of design capacity ((J.3.a.(3)(c)iv).	July 1, 2011-June 30, 2012	*All inlets and catch basins within the City are inspected on an annual basis, which is sufficient in ensuring the catch basins do not reach one-third of capacity and that self-cleaning facilities remain free of trash and debris.	0*
9.	Identification of the number of catch basins and inlets **cleaned** (J.3.a.(3)(c)iv).	July 1, 2011-June 30, 2012		2,337
10.	Identification of total distance (miles) of the MS4 (J.3.a.(3)(c)v).	July 1, 2011-June 30, 2012		65 miles of pipe
11.	Identification of distance of the MS4 **inspected** (J.3.a.(3)(c)v)**.**	July 1, 2011-June 30, 2012		85 miles of pipe
12.	Idenitification of distance of the MS4 found with accumulated waste exceeding cleaning criteria (J.3.a.(3)(c)v).	July 1, 2011-June 30, 2012		0
13.	Identification of distance of the MS4 **cleaned** (J.3.a.(3)(c)v)**.**	July 1, 2011-June 30, 2012		0.96 miles of pipe

Appendix C-2
FY 2011-12 Municipal Activities Report

Item No.	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2011-12 Annual Result
14.	Identification of total distance (miles) of open channels (J.3.a.(3)(c)vi).	July 1, 2011-June 30, 2012		2 miles
15.	Identification of distance of open channels **inspected** (J.3.a.(3)(c)vi).	July 1, 2011-June 30, 2012		4 miles
16.	Identification of distance of open channels found with anthropogenic litter (J.3.a.(3)(c)vi).	July 1, 2011-June 30, 2012		.54 miles
17.	Identification of distance of open channels **cleaned** (J.3.a.(3)(c)vi).	July 1, 2011-June 30, 2012		.54 miles
18.	Amount of waste and litter (tons) removed from catch basins (J.3.a.(3)(c)vii).	July 1, 2011-June 30, 2012	* The combined total amount of waste and litter removed from catch basins and inlets is 316 tons. 177.5 yards of waste and litter x 1.77 = 314 tons. An additionial 1.88 tons was removed from the municipal filter inserts discussed in Item No. 4.	316 tons *
19.	Amount of waste and litter (tons) removed from inlets (J.3.a.(3)(c)vii).	July 1, 2011-June 30, 2012	* The combined total amount of waste and litter removed from catch basins and inlets is 316 tons. 177.5 yards of waste and litter x 1.77 = 314 tons. An additionial 1.88 tons was removed from the municipal filter inserts discussed in Item No. 4.	316 tons *
20.	Amount of waste and litter (tons) removed from the MS4 (J.3.a.(3)(c)vii).	July 1, 2011-June 30, 2012	* The total amount of waste and litter removed from the MS4 is 558 tons. This is the sum total of the waste and litter removed from catchbasins and inlets (316 tons) and the open channels (242 tons).	558 tons*
21.	Amount of waste and litter (tons) removed from the open channels (J.3.a.(3)(c)vii).	July 1, 2011-June 30, 2012	* The combined total amount of waste and litter removed from open channels is 242 tons. 175 cubic yards of waste and litter x 1.38 = 242 tons.	242 tons*
22.	Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification of the finding (J.3.a.(3)(c)viii).	July 1, 2011-June 30, 2012		None
23.	Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented or required to be implemented for municipal areas and activities (J.3.a.(3)(c)ix).	July 1, 2011-June 30, 2012		See Section 4.3.3.1

Item No.	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2011-12 Annual Result
24.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating the **highest** volumes of trash and/or debris (J.3.a.(3)(c)x).	July 1, 2011-June 30, 2012		75 curb miles
25.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)x).	July 1, 2011-June 30, 2012	See Section 4.2.4	Weekly
26.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating **moderate** volumes of trash and/or debris (J.3.a.(3)(c)xi).	July 1, 2011-June 30, 2012		92 curb miles
27.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)xi).	July 1, 2011-June 30, 2012	See Section 4.2.4	Twice a month
28.	Identification of total distance of curb-miles of improved roads, streets and highways identified as consistently generating **low** volumes of trash and/or debris (J.3.a.(3)(c)xii).	July 1, 2011-June 30, 2012		280 curb miles
29.	Identification of frequency of sweeping conducted for such roads, streets and highways (J.3.a.(3)(c)xii).	July 1, 2011-June 30, 2012	See Section 4.2.4	Monthly
30.	Identification of the total distance of curb-miles swept (J.3.a.(3)(c)xiii).	July 1, 2011-June 30, 2012		9,199 miles
31.	Identification of the number of municipal parking lots (J.3.a.(3)(c)xiv).	July 1, 2011-June 30, 2012		11
32.	Identification of the number of municipal parking lots swept (J.3.a.(3)(c)xiv).	July 1, 2011-June 30, 2012		11
33.	Identification of the frequency of sweeping (J.3.a.(3)(c)xiv).	July 1, 2011-June 30, 2012	All beach parking lots are swept once per week April through September and once per month October through March.	See Section 4.2.4
34.	Amount of material (tons) collected from street and parking lot sweeping (J.3.a.(3)(c)xv).	July 1, 2011-June 30, 2012		2,270 tons
35.	A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4 (J.3.a.(3)(c)xvi).	July 1, 2011-June 30, 2012		See Section 4.5.4.1
36.	Identification of the number of fixed municipal sites requiring inspections (J.3.a.(3)(c)xvii).	July 1, 2011-June 30, 2012	Refer to Appendix C-1 list of all High Priority Municipal Facilities	29

	Municipal Permit Reporting Requirements Order No. R9-2007-0001, Pg. 67-68	Reporting Dates	Comments	FY 2011-12 Annual Result
37.	Identification of the number of municipal sites inspected (J.3.a.(3)(c)xvii).	July 1, 2011-June 30, 2012		29
38.	Identification of the frequency of inspections (J.3.a.(3)(c)xvii).	July 1, 2011-June 30, 2012		Annual
39.	A description of the general results of the inspections (J.3.a.(3)(c)xviii).	July 1, 2011-June 30, 2012		See Appendix C-6
40.	Confirmation that the inspections conducted addressed all the required inspection steps and follow-ups to determine full compliance (J.3.a.(3)(c)xix).	July 1, 2011-June 30, 2012	All inspections conducted meet BMP requirements	See Appendix C-6
41.	The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken (J.3.a.(3)(c)xx).	July 1, 2011-June 30, 2012	*In FY 2011-12, there were no corrective actions as a result of the routine annual inspections at all high priority municipal facilities. Details for all routine municipal inspections can be found in Appendix C-6. The Clean Water Program hotline also received a total of 10 municipal complaints during the reporting period. A total of 10 complaints were investigated which resulted in 7 violations, 1 NOV, 0 citations, 8 education actions and 4 follow-up inspections. A complete summary of all municipal complaints can be found in Appendix H-1.	1*
42.	A description of notable activities conducted to manage urban runoff from municipal areas and activities (J.3.a.(3)(c)xxi).	July 1, 2011-June 30, 2012		See Sections 4.2.4, 4.3.4, 4.4.4, 4.5.4, 4.6.4 and 4.7.4



FY 2011-2012 Encinitas Municipal BMP Locations

Storm Drain Inlet Filters
Detention Basin
Structural BMP
Multiple BMPs

Storm Drains
Streams
Roads

This map was produced by the City of Encinitas GIS and is designed for internal use only. The map is based on the best data available at the time of production and is not guaranteed to survey accuracy. City of Encinitas, SanGIS, SANDAG and other data are represented.

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Coordinate System:
California State Plane Feet, Zone 6
Datum: NAD83

Date of Map Production: September, 2012

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0 2,500 5,000 Feet

POLLUTION PREVENTION
(Does not apply to Special Ceremonies)

Storm drains are not connected to the City's sewer system. All pollutants allowed to enter the storm drain system flow directly to our beaches, ocean, lagoons, and other waterways without being treated. The City of Encinitas is required by the San Diego Regional Water Quality Control Board to report on pollution prevention measures taken at special events held throughout the City.

In the area provided on the next page or on a separate sheet of paper, please complete the following questions and describe methods of pollution prevention that will be implemented at your proposed event.

1. Describe how trash, recycling, and debris will be managed (i.e. extra bins, temporary fencing, etc.)

2. If your event will include food production, describe how excess oil and grease will be disposed of. These materials cannot be dumped into the streets or storm drain system.

3. Please identify any other potential pollutant generating sources or activities that may take place (i.e. portable toilets).

For questions, please call the City's Clean Water Program at (760) 633-2787.

	Event	Event Date	Time	Location	Estimated Attendance
1	Cardiff 100 year birthday celebration	7/2/11	8am-10pm	Glen Park	3000
2	Summer Fun on the 101	7/8 and 7/9/11	6-11:30pm	Leucadia Roadside Park	500
3	City of Encinitas Summer Sunday Concerts by the Sea	7/10, 7/24, 8/7, 8/21/2011	3-5pm	MLB	3000
4	Solana Beach Triathlon	7/24/11	7-10am	Hwy 101 South of Las Olas	1400
5	Dog Days of Summer	8/13/11	10am-3pm	Downtown Cardiff	5000
6	LeucadiArt Walk	8/28/11	8am-6pm	Hwy 101 between Glaucus and Marcheta	3000
7	25th Anniversary Celebration-Lima Bean Cook Off	10/1/11	12-4pm	San Dieguito Heritage Museum	5000
8	Bike MS Bay to Bay Tour	10/22-10/23/11	1pm-5pm & 7am-10am	Hwy 101 & Third Street	600
9	Safe Trick or Treat	10/31/11	5-8pm	HWY 101-Lumberyard/Courtyard	1000
10	FE (Family Enrichment) Garage Sale	11/19/11	8:00am-12:00pm	Encinitas Community Center, 1140 Oakcrest Park Drive	400
11	Fall Festival Street Fair	11/20/11	5:00am-5:30pm	South Coast HWY 101(D to J St.)	40,000
12	Kringle Mingle	12/2/11	4:00pm-8:00pm	2005 San Elijo Avenue, Cardiff	500
13	Holiday Parade	12/3/11	3:30-9:30pm	South Coast HWY 101(D to J St.)	50,000
14	101 Tree Ceremony/Dedication Planting	12/7/11	3:00-4:30pm	N Coast Hwy 101	75-200
15	Pedestrian Undercrossing Ground Breaking Event	1/18/12	12:00-1:00pm	HWY 101 & K Street	50
16	DEMA Farmer's Market	2/1/12 (Every Wednesday)	4 pm to 7 pm (Oct-April), 5 pm to 8 pm (May-Sept)	Parking Lot B; SW corner of E St. & Vulcan Ave	400
17	Cardiff Kook Run	2/5/12	7:00-10:30am	Moonlight Beach to HWY101Cardiff State Beach	100
18	Teen Safe Driving 5K	2/25/12	7am-12pm	MLB then north 1-5 miles and back to MLB	300
19	ELL Opening Day March 3	3/3/12	8:00am-8:00pm	YMCA-ECKE Fields	500
20	Bike Road-EO March 10	3/10/12	8:00am-1:00pm	City Hall Parking Lot	75
21	SDYS Opening Day	3/10/12	8:00am-7:00pm	Cardiff Sports Park	300
22	NCC HS SOFTBALL GAMES	3/17/12	9:00am-5:00pm	Cardiff Sports Park	100
23	SDYS Youth Softball Tournament	3/30-4/1/12	8:00am-9:00pm	Cardiff Sports Park	300
24	Burn Institute Boot Drive	4/3/12	7:00am-9:00pm	Encinitas Blvd & ECR also Leucadia Blvd & ECR	10
25	Easter Egg Hunt 2012	4/7/12	5:00am-3:00pm	YMCA-Saxony Road	5,000+
26	Easter Service	4/8/12	6:00am-1:00pm	Moonlight Beach	500
27	Paper Schredding E-Waste Collection Event	4/14/12	9:00am-1:00pm	Civic Center Parking Lot	300
28	Ragnar Relay So Cal 2012	4/20-4/21/12	5:30am-Noon (4/21)	Streets of Encinitas (Quail Gardens Dr., Encinitas Blvd., Calle Magdalena, HWY 101)	7,200
29	Tour De Cure	4/21/12	5:00am-4:00pm	4 routes-Chesterfield, S. Coast HWY 101	1,500
30	Encinitas Garden Festival April 21	4/21/12	8:00am-5:00pm	Capri Elementary & surrounding neighborhood	1,500
31	Street Fair April 28 & 29	4/28/12 & 4/29/12	5:00am-6:00pm	HWY 101 from D Street to J Street	80,000 (40,000 per day)
32	Taste of Cardiff	5/17/12	5:00pm-8:00pm	San Eljo Avenue south to HWY 101 (Las Olas)	1500
33	San Diego Century Bicycle Tour	5/19/12	6:00am-5:00pm	Manchester from MCC to RSF Rd. & HWY 101 to Chesterfield to Manchester	1,500
34	Encinitas 5K	5/19/12	8:00am-11:00am	Moonlight Beach, 2nd, 3rd, & 4th Streets	3,000
35	MLB Paddle & Swim	5/19 & 5/20/12	8:00am-11:00am	Moonlight Beach	400
36	Moonlight Beach Paddle & Swim	5/19/12 & 5/20/12	8:00am-11:00am & 8:30am-9:30am	400 B Street, Encinitas, CA 92024: Moonlight Beach	500
37	Encinitas Sprint Triathalon	5/20/12	6:40am-3:00pm	Moonlight Beach	1,800
38	10th Annual Ohana Scholarship Picnic	5/20/12	8:00am-5:00pm	Oak Crest Park	60+
39	Memorial Day Tournament	5/25-5/28/12	8:00am-9:00pm	Cardiff Sports Park	2,000
40	Law Enforcement Torch Run	5/30/12	6:00am-9:00am	2655 So Coast HWY 101 Cardiff >Northbound to La Costa Avenue	20
41	Encinitas Wine Festival	6/2/12	11:00am-9:30pm	San Diego Botancial Gardens @ the Hamilton Gardens	700
42	Pet Health Expo 2012	6/3/12	9:00am-1:00pm	City Hall Courtyard & Parking Lot	500
43	EE DAY (Encinitas Environment Day)	6/10/12	8:00am-6:00pm	Cottonwood Creek Park, Encinitas	3,000
44	Switchfoot Bro-AM	6/16/12	7:00am-5:00pm	Moonlight Beach	7,000
45	Classic Car Nights	6/21, 7/19, 8/16 & 9/13/12	5:30pm-7:30pm	South Coast HWY 101(D to K St.)	3,000
46	Encinitas Foodie Fest	6/23/12	11:00am-5:00pm	Pacific Station Encinitas	3,000
47	Summer Fun on the 101	6/29/12 & 6/30/12	6:00pm-11:00pm (6/29) Noon-10:00pm (6/30)	Coast HWY 101 (Leucadia)	400
48	Summer Sunday Concerts	7/8/12, 7/22/12, 8/5/12, & 8/19/12	7:00am-7:00pm	Moonlight Beach	2,000+

Appendix C-6 Routine Municipal Inspection Summary **FY 2011 - 2012**

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
1	**154622**	5/8/12	"A" Tank Site		No Corrective Actions Required			
2	**154961**	5/22/12	Encinitas Ranch Golf Course Maintenance		No Corrective Actions Required			
3	**154991**	5/9/12	City of Encinitas Public Works Yard		No Corrective Actions Required			
4	**154992**	5/9/12	Requeza Yard		No Corrective Actions Required			
5	**154993**	5/15/12	Wastewater Collection Facility		No Corrective Actions Required			
6	**154994**	6/6/12	Beacon's Beach		No Corrective Actions Required			
7	**154995**	6/11/12	Cardiff Sports Park		No Corrective Actions Required			
8	**154996**	6/11/12	Cardiff Sports Park Express		No Corrective Actions Required			
9	**154997**	6/11/12	Cottonwood Creek Park		No Corrective Actions Required			
10	**154998**	6/5/12	Grandview Beach		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
11	**154999**	5/29/12	H Street Viewpoint		No Corrective Actions Required			
12	**155000**	6/7/12	Hawk View Park		No Corrective Actions Required			
13	**155004**	6/6/12	Encinitas Viewpoint Park		No Corrective Actions Required			
14	**155005**	5/21/12	Las Verdes Park		No Corrective Actions Required			
15	**155006**	6/15/12	Glen Park		No Corrective Actions Required			
16	**155007**	5/29/12	J Street Viewpoint		No Corrective Actions Required			
17	**155008**	6/7/12	Leucadia Oaks Park		No Corrective Actions Required			
18	**155009**	6/6/12	Leucadia Roadside Park		No Corrective Actions Required			
19	**155010**	6/12/12	Little Oaks Equestrian Park		No Corrective Actions Required			
20	**155011**	5/30/12	Leo Mullen Sports Park		No Corrective Actions Required			
21	**155012**	5/31/12	Mildred Macpherson Park		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
22	**155013**	6/6/12	Moonlight Beach		No Corrective Actions Required			
23	**155014**	6/6/12	Oakcrest Park		No Corrective Actions Required			
24	**155015**	6/15/12	Orpheus Park		No Corrective Actions Required			
25	**155016**	6/1/12	Paul Ecke Sports Park		No Corrective Actions Required			
26	**155017**	5/21/12	Scott Valley Park		No Corrective Actions Required			
27	**155018**	6/6/12	Sun Vista Park		No Corrective Actions Required			
28	**155019**	5/29/12	Swami's Beach		No Corrective Actions Required			
29	**155020**	6/6/12	Wiro Park		No Corrective Actions Required			

Total: 29

Total NOVs: 0

Appendix D

Industrial and Commercial

D-1 **Stationary Commercial Inventory**

D-2 **Industrial Inventory**

D-3 **Industrial and Commercial Inspection Form**

D-4 **Inspection Summary Form**

D-5 **Routine Inspections Summary Table**

D-6 **Mobile Commercial Inventory**

D-7 **Commercial Business Notification Letter**

D-8 **Mobile Business Notification Letter**

Appendix D-1
Commercial Inventory - Stationary Facilities

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
Field Description ▼	Name used to identify facility in database.	Street number of facility.	Suite/Unit	Name of street facility is located.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.									Is facility a tributary to 303(d) listed receiving water and generating pollutants for which the water body is impaired?	Does the facility pose a high threat to water quality?
1	Dirty Dogs	2107		San Elijo Ave	Cardiff	CA	92007	Escondido Creek	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	High
2	Moonlight Pet Sitting	152	21	N Coast Highway 101	Encinitas	CA	92024	San Marcos	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
3	Companion Pet Care Professionals	1466		Encinitas Blvd	Encinitas	CA	92024	San Marcos	753	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
4	Santa Fe Animal Clinic	301	A	Santa Fe Dr	Cardiff	CA	92007	San Marcos	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
5	California Backyard Birds	1283		Encinitas Blvd	Encinitas	CA	92024	San Marcos	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
6	Dog Behavior 101	2142	F	Montgomery Ave	Cardiff	CA	92007	Escondido Creek	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	High
7	Puppy Love Pet Grooming	191	211	N El Camino Real	Encinitas	CA	92024	San Marcos	753	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
8	Rancho Los Amigos Equestrian Ctr.	3049		Camino Del Rancho	Encinitas	CA	92024	Escondido Creek	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
9	Way To Walk Dog Walkers	1659		Neptune Ave	Encinitas	CA	92024	San Marcos	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
10	Sit And Stay Awhile Pet Care	251		Calle De Madera	Encinitas	CA	92024	San Marcos	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
11	Kamp Kanine, L L C	389		Requeza St	Encinitas	CA	92024	San Marcos	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	High
12	Cool Breeze Farms	244		N Coast Highway 101	Encinitas	CA	92024	San Marcos	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
13	Susan Robertson Dog Training	155		Saxony Rd	Encinitas	CA	92024	San Marcos	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
14	The Animal Keeper	155		Saxony Rd	Encinitas	CA	92024	San Marcos	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	High
15	The Drake Center For Animal Health	195		N El Camino Real	Encinitas	CA	92024	San Marcos	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
16	The Contented K - 9	1711		Old Mill Ct	Encinitas	CA	92024	San Marcos	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
17	A & J Ultimate Petsitting Service	210	12	A St	Encinitas	CA	92024	San Marcos	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
18	S N Stables, L L C	3211		Wildflower Valley Dr	Encinitas	CA	92024	Escondido Creek	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	High
19	Underdog Pet Sitting	2439		Caminito Ocean Cove	Cardiff	CA	92007	Escondido Creek	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
20	V C A North Coast Animal Hospital	414		Encinitas Blvd	Encinitas	CA	92024	San Marcos	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
21	North Co. Coastal Canine Care	1549		San Elijo Ave	Cardiff	CA	92007	Escondido Creek	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
22	Cardiff Animal Hospital, Inc.	2159		San Elijo Ave	Cardiff	CA	92007	Escondido Creek	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
23	Charmaine's Pet Sit	685		Sweet Pea Pl	Encinitas	CA	92024	San Marcos	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
24	Platinum K 9	632		S Willowspring Dr	Encinitas	CA	92024	Escondido Creek	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
25	Pet Care By Erin Schwartz	1137		Pacifica Pl	Encinitas	CA	92024	San Marcos	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	High
26	Surf Dogg	2009		Sheridan Rd	Encinitas	CA	92024	San Marcos	742	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
27	Holiday Pet Hotel	551		Union St	Encinitas	CA	92024	San Marcos	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
28	Grateful Dog	802		N Coast Highway 101	Encinitas	CA	92024	San Marcos	753	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
29	Dove Hollow Dressage Center, Inc.	1084		Double Ll Ranch Rd	Encinitas	CA	92024	Escondido Creek	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
30	Underwater Environment	442		Rancho Santa Fe Rd	Encinitas	CA	92024	Escondido Creek	5999	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
31	North Coast Equestrian Park, Inc.	1877		Olivenhain Rd	Encinitas	CA	92024	San Marcos	752	Animal	Yes	Yes	No	Yes	No	No	No	No	No	No	Low
32	Fender Mender	326		N El Camino Real	Encinitas	CA	92024	San Marcos	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
33	Custom Cycle Creations, Inc.	324	B	N El Camino Real	Encinitas	CA	92024	San Marcos	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
34	Bradley Allen Autobody Painting	204		N Coast Highway 101	Encinitas	CA	92024	San Marcos	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
35	California Body & Paint	320		N El Camino Real	Encinitas	CA	92024	San Marcos	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
36	Rancho Auto Body	591	A	Westlake St	Encinitas	CA	92024	San Marcos	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
37	Fender Mender	328	B	N El Camino Real	Encinitas	CA	92024	San Marcos	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
38	Car Rejuvenation	222		Rancho Santa Fe Rd	Encinitas	CA	92024	Escondido Creek	7532	Auto Body Repair/Painting	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
39	Happy Auto Sales	148		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5521	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
40	Duru Inc./San Dieguito Towing/Dba Road One	1205		S Coast Highway 101	Encinitas	CA	92024	San Marcos	7549	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
41	F. I. C. Smog	322	C	N El Camino Real	Encinitas	CA	92024	San Marcos	7549	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
42	Ace Cars And Vans	1244		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5521	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
43	A+ Smog Test Only Center	449		Second St	Encinitas	CA	92024	San Marcos	7549	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
44	Encinitas Buggy Bath Carwash	207		N El Camino Real	Encinitas	CA	92024	San Marcos	7542	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
45	Encinitas Smog Test Only Center	682		S Coast Highway 101	Encinitas	CA	92024	San Marcos	7549	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
46	Bassett Auto Sales	1445		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5521	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
47	Raysugo, L L C	127		S El Camino Real	Encinitas	CA	92024	San Marcos	7538	Auto Other	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
48	790 First Street, L L C -D B A Sofspra	790		S Coast Highway 101	Encinitas	CA	92024	San Marcos	7542	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
49	Speedy Lube & Tune & Brake, Inc. Dba	225		N El Camino Real	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
50	Jiffy Lube #1764	221		N El Camino Real	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
51	O'Reilly Auto Parts #3154	180		N El Camino Real	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
52	All Car Center	140		N Coast Highway 101	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
53	Cardiff Classics Inc.	1049		S Coast Highway 101	Encinitas	CA	92024	San Marcos	7549	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
54	El Camino Tire & Brake	330		N El Camino Real	Encinitas	CA	92024	San Marcos	5531	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	High
55	Pep Boys/ Manny, Moe & Jack #701	256		N El Camino Real	Encinitas	CA	92024	San Marcos	5531	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
56	Certified Transmission Encinitas	322	F	N El Camino Real	Encinitas	CA	92024	San Marcos	7537	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
57	Encinitas Automotive, Inc.	322	A	N El Camino Real	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
58	Valvoline Instant Oil Change	127	B	S El Camino Real	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
59	Hazar, Inc. D B A Precision Tune Auto Care	318	A	N El Camino Real	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
60	Coastal Foreign Auto Service	320	A	N El Camino Real	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
61	Cameron Ventures, Inc./Dba "Midas"	328		N El Camino Real	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
62	Furgerson's Garage	807		Second St	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
63	Harris Radiator Works, Inc.	274		N Coast Highway 101	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
64	Encinitas Car Wash	293		N El Camino Real	Encinitas	CA	92024	San Marcos	7542	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
65	C P A Group, Inc./Dba Encinitas Foreign & Domestic	901		Second St	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
66	Rays Automotive Service	1051		S Coast Highway 101	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
67	Brad's Foreign & Domestic	565	200C	Westlake St	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
68	Dan's Precision Alignment Center	565	200F	Westlake St	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
69	Encinitas Japanese Car Specialists, Inc.	328	A	N El Camino Real	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
70	K & B Auto Service & Repair	320	D	N El Camino Real	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
71	Moonlight Motors, Inc.	215		Melrose Ave	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
72	Rover Repairs, Inc./Dba California Rover	386		Encinitas Blvd	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low

Appendix D-1
Commercial Inventory - Stationary Facilities

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
Field Description ▼	Name used to identify facility in database.	Street number of facility.	Suite/Unit	Name of street facility is located.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.									Is facility a tributary to 303(d) listed receiving water and generating pollutants for which the water body is impaired?	Does the facility pose a high threat to water quality?
73	Discount Tire Company	107		N El Camino Real	Encinitas	CA	92024	San Marcos	5531	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
74	Evans Tire & Service Center # 41	206		N El Camino Real	Encinitas	CA	92024	San Marcos	5531	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
75	Encinitas Ford	1424		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5511	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
76	Auto Parts Pros, L L C	523	100	Encinitas Blvd	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
77	Keith's Automotive	215		W G St	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
78	Paul's Auto Electric	325		Melrose Ave	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
79	Scott's Automotive	1508		N Coast Highway 101	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
80	Auto Zone #5657	120		Leucadia Blvd	Encinitas	CA	92024	San Marcos	5531	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
81	Transmasters Transmissions	184	C	N Coast Highway 101	Encinitas	CA	92024	San Marcos	7537	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
82	Olson's Hand Car Wash	127		S El Camino Real	Encinitas	CA	92024	San Marcos	7542	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
83	Studio St. John	110		N Coast Highway 101	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
84	Hugo's European Car Service, Inc.	110		N Coast Highway 101	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
85	Charlie's Foreign Car 197	751		Second St	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
86	An Luxury Imports Of San Diego, Inc. DBA BMW Dealership	1302		Encinitas Blvd	Encinitas	CA	92024	San Marcos	7538	Auto Repair/Maintenance	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
87	San Diego Botanical Gardens	230		Quail Gardens Dr	Encinitas	CA	92024	San Marcos	8422	Botanical Garden	Yes	No	No	Yes	No	No	Yes	No	No	No	Low
88	Home Depot, The #660	1001		N El Camino Real	Encinitas	CA	92024	San Marcos	5211	Building Material	No	No	No	No	No	No	No	Yes	Yes	No	Low
89	B G J Restaurants, Inc. DBA El Callejon	345	C	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
90	El Pollo Loco #3431	1002		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
91	Steakhouse 66,Inc./D B A Firefly Grill And Winebar	251	B	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
92	The 3rd. Corner Wine Shop & Bistro	897	F104	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
93	The Quick Fix	144		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
94	C H L N, Inc. D B A: The Chart House	2588		S Coast Highway 101	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
95	Beach House Restaurant	2530		S Coast Highway 101	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
96	Wendy's Restaurant	102		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
97	Le Papagayo	1002		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
98	Beachside Bar & Grill	806		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
99	Juanita's Taco Shop	290		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
100	Taco Bell, #25497	1502		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
101	Mozy	698		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
102	Manhattan's Giant Pizza	143		W D St	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
103	El Torito Restaurant	1068		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
104	Henry's Farmers Market # 123 DBA SPROUTS	1327		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
105	N. Carrillo Corp. DBA Tomiko	87		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
106	Little Caesars Pizza	118		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
107	Yogis Beach Bar & Restaurant	2633		S Coast Highway 101	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
108	Leucadia Pizza, Inc. D B A -Leucadia Pizzeria	315	V	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
109	Barracuda Grill	641		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
110	Angelos Burgers	608		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
111	Encinitas Ale House	1044		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
112	Daley Double	546		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
113	Java Hut Coffee Co.	1001		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
114	Vons Food & Drug #2144	262		N El Camino Real	Encinitas	CA	92024	San Marcos	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
115	Firenze Trattoria	162	G10	S Rancho Santa Fe Rd	Encinitas	CA	92024	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
116	Vigilucci's Trattoria Italiana	505		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
117	Kl's Juice Bar & Restaurant	2591		S Coast Highway 101	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
118	Kraken	2531		S Coast Highway 101	Cardiff	CA	92007	Escondido Creek	5813	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
119	Las Olas, Inc.	2655		S Coast Highway 101	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Low
120	Ogata Japanese Cuisine	615		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
121	Pantry 22, L L C/Dba East Village	628		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
122	Leucadia Sushi Bar	996	E	N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
123	Foodie Amor, Inc.	1010		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
124	Chipotle Mexican Grill # 222	268		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
125	Islands Restaurant, L P	1588		Leucadia Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
126	Target T - 1029	1010		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
127	Borrelli's Pizza Inc.	285	106	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
128	The Original Pancake House	160	D10	S Rancho Santa Fe Rd	Encinitas	CA	92024	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
129	Rubio's Fresh Mexican Grill #7	252	4	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
130	Pizzicato	252	5	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
131	Super Donuts #2	252	2	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
132	Pei Wei Asian Diner	1560	A	Leucadia Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
133	Sushi Do	1031	101	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
134	Baker & Olive, L L C	165	A	S El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
135	Rico's Taco Shop	165	L	S El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
136	Swami's Cafe	1476		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
137	Bety's	1464		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
138	Figaro's Pizza	1458		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
139	7-Eleven 2111-17475 C	1446		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
140	Golden Bowl Restaurant	1337		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
141	Starbucks Coffee #6546	1560	B	Leucadia Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
142	L & L Hawaiian Barbeque Encinitas	215	G	S El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
143	Roxy Restaurant	517		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
144	Kaito Restaurant	130	A	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High

Appendix D-1
Commercial Inventory - Stationary Facilities

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
Field Description ▼	Name used to identify facility in database.	Street number of facility.	Suite/Unit	Name of street facility is located.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.									Is facility a tributary to 303(d) listed receiving water and generating pollutants for which the water body is impaired?	Does the facility pose a high threat to water quality?
145	Santa Fe Cafe	120	A	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
146	Thai Society	1070	B	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
147	Lumberyard Tavern & Grill	967	101	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
148	Roberts Enterprises, L L C DBA Flippin Pizza	215	H	S El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
149	Savory Restaurant	267	A	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
150	Sushi Bar Blue Fin	257	D	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
151	Fulanos	145		Leucadia Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
152	Trattoria Gusto	429		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
153	Super Donut #1	465		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
154	Chihuahua Taco Shop	471		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
155	El Q' E R O	564		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
156	Town Center Juice Stop	1042	C	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
157	Verma's Toasty, Inc./Quizno's #7305	1042	A	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
158	Subway #27567	1560	C	Leucadia Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
159	Gordy's Bakery	441		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
160	Leucadia Donut Shop	1604		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
161	Chins Szechwan Encinitas, Inc.	625		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
162	Today's Pizza And Salad	481		Santa Fe Dr	Cardiff	CA	92007	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
163	Coco's #881	407		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
164	Honey Baked Ham	459		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
165	Roberto's Mexican Food	1900	D	N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
166	Dennys 6828	135		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
167	Passage To India, Inc.	257	K	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
168	Roberto's	274	B	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
169	K C's Tandoor	1070	A	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
170	Isabelle Briens, Inc.	127	A	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
171	The Kebab Shop Encinitas, Inc.	127	E	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
172	Chronic Tacos	127	C	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
173	Froots	127	J	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
174	7-Eleven Store, #21805A-2111	2240	A	Encinitas Blvd	Encinitas	CA	92024	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
175	Blue Ribbon Artisan Pizzeria	897	102	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
176	The Kairos Group, Inc. DBA Chuao	937	C109	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
177	Five Guys Operations, L L C	130	C	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
178	Jamba Juice Co. #760	272	A	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
179	Rizing Steele, Inc. DBA Naked Cafe	288	C	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
180	Wahoo's Fish Taco	1006	C	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
181	Einstein Bros. Bagels #2309	1006	B	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
182	Mandarin City	815		Birmingham Dr	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
183	Vines And Roses, A Wine Bar	166	B	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
184	Peet's Operating Company, Inc.	119	G	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
185	Giant New York Pizza & Pasta	191	110	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
186	Chicks Natural	191	107	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
187	Garden State Bagels	191	106	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
188	Panda Express #500	1084	E	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
189	Mexico Viejo Mexican Food	1465	E	Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
190	Mister Sushi	111	A	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
191	N-The Tube Dog	90	214	N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
192	Lofty Bean	90	214	N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
193	Beach Tea House 101	1076		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
194	Sub Palace Leucadia	810		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
195	Swamis Cafe	1163	A	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
196	Dairy Queen Encinitas	1465	B	Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
197	Kentucky Fried Chicken	266		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
198	Encinitas Donut Shop	580		Santa Fe Dr	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
199	7 - Eleven # 13620	592		Santa Fe Dr	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
200	Jorge's Mexicatessen	417	B	Santa Fe Dr	Cardiff	CA	92007	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
201	Sake House-Yumeya	1246		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
202	Fountain Of Youth Juice	168		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
203	El Torito Market	948	A	N Coast Highway 101	Encinitas	CA	92024	San Marcos	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
204	Noodles & Company	260	C	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
205	Cotixan Mexican Food	219		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
206	Spartan Holdings, Inc. DBA Pacific Q Billiards	1454		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5813	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
207	Garcia's Mexican Cuisine & Creative Catering	1486		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
208	Calypso	576		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
209	Leucadia Liquor	640		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
210	Action Food & Beverage Company, L L C (HapiFish)	190		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
211	Captain Kenos	158		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
212	Vignette Patisserie	158		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
213	Darshan Bakery And Cafe	949		Second St	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
214	Mama Houli & Sister T	423		La Mesa Ave	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
215	Encinitas Oggi's, Inc.	305		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
216	Del Taco	130		Calle Magdalena	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low

Appendix D-1
Commercial Inventory - Stationary Facilities

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
Field Description ▼	Name used to identify facility in database.	Street number of facility.	Suite/Unit	Name of street facility is located.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.									Is facility a tributary to 303(d) listed receiving water and generating pollutants for which the water body is impaired?	Does the facility pose a high threat to water quality?
217	Chili's Grill & Bar #448	1004		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
218	J. S. Foods/Dba Burger King	242		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
219	Fish 101	1468		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
220	Kealani's	137		W D St	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
221	Filiberto's Mexican Food	476		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
222	Berry Happy, Inc. Dba/Berry Happy	480		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
223	Raul's Mexican Food	490		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
224	Mc Donald's / Encinitas Town Center	1064		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
225	Stater Bros. Markets #158	1048		N El Camino Real	Encinitas	CA	92024	San Marcos	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
226	El Nopalito Market	560		Santa Fe Dr	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
227	Papa John's Pizza #1596	337		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
228	Round Table Pizza	1321		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
229	Prescription For Java	477		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
230	Jamroc 101 Caribbean Grill	101		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
231	Encinitas Ranch Cafe & Golf School	1275		Quail Gardens Dr	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
232	Bull Taco., L L C	2050		S Coast Highway 101	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
233	Sunny Sub., L L C	252	1	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
234	Subman	113	E	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
235	Bird House Grill	250	A	N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
236	Trattoria I. Trulli	830	A	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
237	Starbucks Coffee #5391	947	D101	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
238	St. Germaine's Cafe	1010	112	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
239	Miyabi Japanese Steakhouse & Sushi	211	C	S El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
240	Jorges Mexicatesen	267	E	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
241	Starbucks Coffee #588	258	B2	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
242	Rosanna's Pasta	270	I	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
243	Surf Brothers Teriyaki	274	A	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
244	Del Mar Swirls, (Store # 2)	204	G	N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
245	Champagne French Bakery Cafe'	162	E10	S Rancho Santa Fe Rd	Encinitas	CA	92024	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
246	Just Peachy	1354		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
247	Potato Shack Cafe	120		W I St	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
248	Honey's Bistro & Bakery	632		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
249	Surfdog, Inc. DBA Java Hut	1126		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
250	Quickie Food Store	233		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
251	Summers @ Besta Wan	148		Aberdeen Dr	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
252	Beach City Cafe	102		Aberdeen Dr	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
253	V G Donuts & Bakery	106		Aberdeen Dr	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
254	Vons # 2859	453		Santa Fe Dr	Cardiff	CA	92007	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
255	Robbie's Road House Grill	530		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
256	Pipes Cafe	121		Liverpool Dr	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
257	Greek American Family Restaurant	392		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
258	Java Express	325		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
259	Chinatown Restaurant	118		Leucadia Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
260	Kims Vietnamese Chinese Restaurant	745	103	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
261	Lotus Cafe	765	101	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
262	Subway Sandwiches & Salads #18383	765	104	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
263	Pannikin Coffee & Tea	510	A	N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
264	St Tropez Bistro.Com	947	D103	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
265	Harvest Ranch Market	162	E50	S Rancho Santa Fe Rd	Encinitas	CA	92024	Escondido Creek	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
266	7- Eleven 18087/Moonlight Partners, Inc.	105		W D St	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
267	The 101 Diner	552		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
268	E Street Cafe	130		W E St	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
269	Siamese Basil Restaurant	527		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
270	Wine Steals Cardiff	1953	100	San Elijo Ave	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
271	Brett's B B Q	1505		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
272	Restaurant Leadership Grioup, L L C DBA Jack in the Box	1439		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
273	Stadium Sports Bar & Restaurant	149		S El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
274	Trader Joe's #25	115		N El Camino Real	Encinitas	CA	92024	San Marcos	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
275	Elizabethan Desserts	155		Quail Gardens Dr	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
276	Thai Pan Express	138		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
277	Mr. Peabodys	136		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
278	Kona Koffee Hut	230		Quail Gardens Dr	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
279	Trattoria Positano	2171		San Elijo Ave	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
280	Cicciotti's Trattoria Italiana	1933		San Elijo Ave	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
281	Nfarooqi Enterprises, L L C DBA Jack in the Box	1967		San Elijo Ave	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
282	A & M Investment, Inc./Dba East Coast Pizza	2015		San Elijo Ave	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
283	Rimel-Zenbu Cardiff, L L C	2005		San Elijo Ave	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
284	Sambazon Acai Cafe	2031		San Elijo Ave	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
285	Cardiff Seaside Market, Inc.	2087		San Elijo Ave	Cardiff	CA	92007	Escondido Creek	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
286	Bar Leucadian, Inc.	1542		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5813	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
287	M & N Foods	1137		Regal Rd	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
288	Kotija Jr. Taco Shop	852		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low

Appendix D-1
Commercial Inventory - Stationary Facilities

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
Field Description ▼	Name used to identify facility in database.	Street number of facility.	Suite/Unit	Name of street facility is located.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.									Is facility a tributary to 303(d) listed receiving water and generating pollutants for which the water body is impaired?	Does the facility pose a high threat to water quality?
289	A Little Moore	1030		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
290	Healthy Creations	376		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
291	D Street Bar And Grill	485		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
292	Encinitas Cafe	531		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
293	1st. Street Bar	656		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5813	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
294	Giovanni's Sandwich Shop	764		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
295	Boscinita's, Inc.	294		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
296	Garden Fresh Restaurant Corp DBA Soup Plantation	109		N El Camino Real	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
297	Ralphs Grocery Company #168	125		N El Camino Real	Encinitas	CA	92024	San Marcos	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
298	Premier Food Services, Management Group, Inc.	3333		Manchester Ave	Cardiff	CA	92007	Escondido Creek	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
299	Bubby's	937	C106	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	High
300	Mrs. Gooch's Natural Food Market, Inc. DBA Whole Foods	687	101	S Coast Highway 101	Encinitas	CA	92024	San Marcos	5411	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
301	Global Grind Coffee	540		Cornish Dr	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
302	Solace And The Moonlight Lounge	25		E E St	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
303	Karinas Taco Shop	916		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5812	Eating/Drinking Establishment	Yes	Yes	No	No	Yes	No	No	No	Yes	No	Low
304	C N G Inc.	160		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	Yes	Low
305	Shell 210	510		Santa Fe Dr	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
306	Cardiff Valero	820		Birmingham Dr	Cardiff	CA	92007	Escondido Creek	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	High
307	Rosanos 76	236		N El Camino Real	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
308	Dream Petroleum, Inc.	633		Birmingham Dr	Cardiff	CA	92007	Escondido Creek	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
309	Chevron Stations Inc. #1967	805		Birmingham Dr	Cardiff	CA	92007	Escondido Creek	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
310	Kihack Management L L C	350		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
311	Barry W. O' Brien Inc.	310		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
312	Cardiff 76	3085		Manchester Ave	Cardiff	CA	92007	Escondido Creek	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
313	Encinitas Promenade Gas & Oil Change	1580		Leucadia Blvd	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
314	Encinitas Gasoline & Auto Service	1355		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
315	Valero Of Encinitas	325		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
316	7-Eleven Store, #24335D-2111	1988		Village Park Way	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
317	7 Eleven Food Store 25766B	2211		San Elijo Ave	Cardiff	CA	92007	Escondido Creek	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	High
318	Chevron Stations, Inc #1943 / 95664	540		La Costa Ave	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	High
319	Arco Nanak Petro	1766		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
320	7 - Eleven # 13627	102		Leucadia Blvd	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	Low
321	Leucadia Shell	865		Orpheus Ave	Encinitas	CA	92024	San Marcos	5541	Gas Station	No	No	Yes	No	Yes	Yes	No	No	No	No	High
322	Encinitas Ranch Golf Course	1275		Quail Gardens Dr	Encinitas	CA	92024	San Marcos	7997	Golf Course	No	No	No	Yes	No	No	Yes	No	No	No	High
323	Encinitas Ranch Golf Course Maintenance	1253		Paseo De Las Flores	Encinitas	CA	92024	San Marcos	7997	Golf Course	No	No	No	Yes	No	No	Yes	No	No	No	Low
324	Encinitas Landfill- Closed	2099		Encinitas Blvd	Encinitas	CA	92024	Escondido Creek	4953	Industrial	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Low
325	San Dieguito Transportation	1142		Bonita Dr	Encinitas	CA	92024	Escondido Creek	4151	Industrial	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	High
326	San Elijo Joint Powers Authority	2695		Manchester Ave	Cardiff	CA	92007	Escondido Creek	9511	Industrial	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	High
327	Glorious Gardens Landscape Design	495		Leucadia Blvd	Encinitas	CA	92024	San Marcos	781	Landscaping	No	No	No	Yes	No	No	Yes	No	No	No	High
328	R. C. P. Block & Brick, Inc.	577		N Vulcan Ave	Encinitas	CA	92024	San Marcos	5211	Masonry	No	No	No	No	No	No	No	Yes	No	No	Low
329	Lattin	804		Capri Rd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
330	Hydro Scape Products, Inc.	750		S Coast Highway 101	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
331	Wilma Romero	870		Devonshire Dr	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
332	Emerald M. Growers, Inc.	834		Leucadia Blvd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
333	Barrels And Branches: Garden & Gift	1452		Santa Fe Dr	Encinitas	CA	92024	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
334	Dramm & Echter, Inc.	1150		Quail Gardens Dr	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
335	Cordova Gardens	902		Encinitas Blvd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
336	Miguel Estevez Flowers	708		Del Rio Ave	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
337	Weidner's Gardens, Inc.	695		Normandy Rd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
338	W. F. Muhlethaler	350		Seeman Dr	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
339	Bird Rock Tropicals	221		Princehouse Ln	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
340	Franco's Flowers	842		Leucadia Blvd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
341	Specimen House, Inc.	782		Leucadia Blvd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
342	Leucadia Floral & Plant	1114	1	N Coast Highway 101	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
343	La Costa Farms	1911		Saxony Rd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
344	Raspy	335		Santa Fe Dr	Encinitas	CA	92024	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
345	Weston Nut Farm	1751		Noma Ln	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
346	Coral Tree Farm & Nursery	598		Park Ln	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
347	Tierra Verde Resources, Inc.	1545		Lake Dr	Encinitas	CA	92024	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
348	K D Palms	1545		Lake Dr	Encinitas	CA	92024	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
349	Orchid Barron	804		Cathy Ln	Cardiff	CA	92007	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
350	Williamson Produce	3111		Manchester Ave	Cardiff	CA	92007	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
351	A & M Farms	1534		Crest Dr	Encinitas	CA	92024	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
352	The Palm Source	1329		Lake Dr	Encinitas	CA	92024	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
353	May Greenhouses, Inc.	241		Andrew Ave	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
354	Anne & Drews Flower Patch	184		N Coast Highway 101	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
355	Twigs By Teri	155		Quail Gardens Dr	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
356	Sunshine Gardens	155		Quail Gardens Dr	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
357	Gish Foliage	1255		Lake Dr	Encinitas	CA	92024	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
358	The Orchid Place	829		Bracero Rd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
359	Armstrong Garden Centers	701		N El Camino Real	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
360	Cardiff Palm Trees 2	333		Liszt Ave	Cardiff	CA	92007	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low

Appendix D-1
Commercial Inventory - Stationary Facilities

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
											Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
Field Description ▼	Name used to identify facility in database.	Street number of facility.	Suite/Unit	Name of street facility is located.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.									Is facility a tributary to 303(d) listed receiving water and generating pollutants for which the water body is impaired?	Does the facility pose a high threat to water quality?
361	Wilkens Palm Tree Nursery	1470		Mackinnon Ave	Cardiff	CA	92007	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
362	Greens & Things, Inc.	950		Brittany Ave	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
363	Rancho Verde	1616		Lake Dr	Cardiff	CA	92007	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
364	California Greenhouses, Inc.	1753		Lake Dr	Encinitas	CA	92024	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
365	Horace Anderson Greenhouses	375		La Costa Ave	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
366	Cal Pacific Plant Farm	1122		Orpheus Ave	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
367	Pacifica Flowers Inc.	514		La Costa Ave	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
368	Erwin Mojonnier Ent.	2009		Sheridan Rd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
369	Sunny Whlse. Flowers	2009		Sheridan Rd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
370	Walt Hoehn	1752		Eolus Ave	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
371	Encinitas Greenhouses	351		Union St	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
372	Two Together L L C, Dba The Palm Company	395		Sunset Dr	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
373	Seedling Express	440		Saxony Rd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
374	Lopez Flowers	440		Saxony Rd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
375	La Cascada Growers	440		Saxony Rd	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
376	J & S Green Houses	748		Requeza St	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
377	Tayama Greenhouse	710		Requeza St	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
378	Go Green Agriculture	712		Clark Ave	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
379	Abels Flowers & Plants	712		Clark Ave	Encinitas	CA	92024	San Marcos	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
380	Brown's Plants, Inc.	1264		Lake Dr	Cardiff	CA	92007	Escondido Creek	5193	Nursery	No	No	No	Yes	No	No	Yes	Yes	No	No	Low
381	rePLANET	262		N El Camino Real	Encinitas	CA	92024	San Marcos	5093	Other	Yes	Yes	Yes	No	No	Yes	No	No	Yes	No	High
382	Frazee Paint	270	C	N El Camino Real	Encinitas	CA	92024	San Marcos	5231	Painting	No	No	No	No	No	No	No	No	No	No	Low
383	Vista Paint Corporation	133		N El Camino Real	Encinitas	CA	92024	San Marcos	5231	Painting	No	No	No	No	No	No	No	No	No	No	Low
384	The Sherwin-Williams Company #8557	208		N El Camino Real	Encinitas	CA	92024	San Marcos	5231	Painting	No	No	No	No	No	No	No	No	No	No	Low
385	Morgera Pools	2040		Coolngreen Ln	Encinitas	CA	92024	San Marcos	1799	Pool	No	No	No	No	No	No	No	No	No	No	Low
386	Del Rancho Pools	1315		Encinitas Blvd	Encinitas	CA	92024	San Marcos	1799	Pool	No	No	No	No	No	No	No	No	No	No	Low
387	Leslie's Swimming Pool Supplies #506	270	G	N El Camino Real	Encinitas	CA	92024	San Marcos	1799	Pool	No	No	No	No	No	No	No	No	No	No	Low

Appendix D-2
Industrial Inventory FY 11-12

No. ▼	Facility Name	Address	Street	City	State	Zip	Hydrologic Area	SIC Code	Activity Description	Potential Pollutants									Tributary to 303(d)	Priority
										Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash		
Field Description ▶	Name used to identify facility in database.	Street number of facility.	Name of street facility is located on.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	Standard Industrial Classification code of facility determined by US Department of Labor - OSHA.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.									Is facility a tributary to 303(d) listed receiving water and generating pollutants for which the water body is impaired?	Does the facility pose a high threat to water quality?
1	Encinitas Landfill	2099	Encinitas Blvd	Encinitas	CA	92024	4904.610000	4953	Industrial - Closed Landfill	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	High
2	San Dieguito Transportation	1142	Bonita Dr	Encinitas	CA	92024	4904.610000	4151	Industrial - Vehicle Storage	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	High
3	San Elijo Joint Powers Authority	2695	Manchester Ave	Cardiff	CA	92007	4904.610000	9511	Industrial - Wastewater Treatment	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	High

Appendix D-3 Commercial & Industrial Inspection Form FY 11-12

CITY OF ENCINITAS
STORM WATER QUALITY INSPECTION REPORT
Clean Water Hotline: 760-633-2787 Email: cleanwater@encinitasca.gov
http://cwp.encinitasca.gov

Type of Inspection:	☐ Annual (Date):	☐ Complaint Investigation (Date):	
Business Name:		Size: Sq.Ft.	SIC Code:
Street Address:		Mailing Address:	
Contact Person(s):		Property Manager (PM):	
Business Phone/Fax:		PM Phone/Fax:	
Business Email:		PM Email :	
Does facility have a current Encinitas business certificate?	☐Yes ☐No #:	Exp:	

A. Training **Number of Employees:**

1. Are employees trained? ☐Yes ☐No a. Training log at facility? ☐Yes ☐No Last time trained:

B. Liquid Storage (Oil, Grease, Antifreeze) ☐NA

2. ☐Trap- Last Maintained(LM): ☐Interceptor- LM: By: Every ____ months

3. ☐Bin- LM: ☐Clarifier- LM: By: Every ____ months

a. Is there secondary containment? ☐Yes ☐No b. Overhead Coverage? ☐Yes ☐No

4. Are other outdoor items adequately stored/covered? ☐Yes ☐No ☐NA

5. Does facility have a spill kit? ☐Yes ☐No a. Posted spill response plan? ☐Yes ☐No

C. Cleaning Activities

6. Are outdoor cleaning activities conducted at facility?: ☐Y ☐N

Washing Floor Mats: ☐Y ☐N Vehicle Washing/Fueling: ☐Y ☐N Hosing Off / Power Washing Site: ☐Y ☐N

a. Is wash water contained and disposed of properly? ☐Y ☐N

D. Waste Management	Yes	No	N/A	Comments
7. Are the storm drains and site free of litter and debris?				
8. Downspouts directed away from areas of potential pollutants?				

9. Does trash/recycling storage area meet the following requirements?:

Receptacle Lids Closed: ☐Y ☐N Clean/Well Maintained: ☐Y ☐N Are bins not overflowing?: ☐Y ☐N

10. Does the facility properly maintain the following landscape/maintenance issues:

Erosion Control: ☐Y ☐N Over-irrigation Runoff: ☐Y ☐N Reclaimed Water Use: ☐Y ☐N Stockpiles: ☐Y ☐N

E. Other Storm Water Management

11. Is the site free of any evidence of illicit connections and illegal discharges? ☐Yes ☐No

F. Corrective Actions Needed? ☐Yes ☐No If yes, see Inspection Summary

G. Follow Up Inspection? ☐Yes ☐No Date: _____ If yes, see Inspection Summary

H. Education or Best Management Practice (BMP) Information Distributed:

☐Training log ☐Auto Brochure Eng/Span ☐Oil storage and transport information ☐Spill Response Guide

☐10 Simple Ways ☐Yard and Garden Care Eng/Span ☐Doorhanger ☐Business card ☐Verbal Education

☐BMP Minimum requirements Stationary ☐BMP Minimum requirements Mobile ☐Cookin' Guide ☐Other:

Inspector Name: **Signature:** **Date:**

Notes:

FOR OFFICE USE ONLY

ASSESSMENT (circle appropriate level - "5" is highest level)	
Level of knowledge regarding stormwater issues: 1 2 3 4 5	WO#:
Level of cleanliness, BMP implementation, orderliness of site: 1 2 3 4 5	Follow Up WO#

Revised 12/11

CITY OF ENCINITAS

Commercial & Industrial

STORMWATER QUALITY INSPECTION SUMMARY

(760) 633-2787 ◆ FAX (760) 633-2818 ◆ npdesmail@cityofencinitas.org

ISSUED TO: _____

CONTACT PERSON: _____

SITE ADDRESS: _____

PHONE #: _____

❒ **NO CORRECTIVE ACTIONS REQUIRED**

REQUIRED CORRECTIVE ACTIONS

ALL REQUIRED CORRECTIVE ACTIONS IDENTIFIED BELOW MUST BE COMPLETED AND REPORTED TO THE CITY BY THE FOLLOWING DATE: ____/___/____

❒ **Obtain Spill Kit**

❒ **Post Spill Response Plan**

❒ **Provide and Document Employee Training**

❒ **Provide Secondary Containment for Storage of Fluid/Liquid**

❒ **Provide Coverage for Outdoor Storage of Fluid/Liquid Waste**

❒ **Provide Coverage for Exposed Equipment and/or Parts**

❒ **Clean Litter and Debris From Site, Trash Areas, and/or Storm Drain**

❒ **Clean/Maintain Outdoor Storage Areas**

Other Corrective Actions/Comments:

_____

_____

_____

_____

The corrective actions listed above are required pursuant to Encinitas Municipal Code Section 20.08.110. Failure to comply with minimum Best Management Practice (BMP) Standards may result in further enforcement action by the City of Encinitas.

Inspector (Signature) **Date**

Responsible Party (Signature) **Date**

FOLLOW UP INSPECTION

❒ **All Corrective Actions Completed**

❒ **Corrective Actions Not Complete – Enforcement Action Required**

Inspector Sign-Off **Date**

Appendix D-5 Routine Commercial Inspections Summary **FY 2011 - 2012**

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
1	**137386**	11/14/11	CHIPOTLE		No Corrective Actions Required			
2	**137387**	9/6/11	LEUCADIA TOWING		No Corrective Actions Required	No. Completed: 11/8/2011		
3	**137391**	11/7/11	YOGI'S BEACH BAR		No Corrective Actions Required			
4	**137405**	11/4/11	BLUE RIBBON ARTISAN PIZZERIA		No Corrective Actions Required			
5	**137431**	11/7/11	LAS OLAS MEXICAN RESTAURANT		No Corrective Actions Required			
6	**137438**	11/18/11	THIRD CORNER WINE SHOP & BISTRO		No Corrective Actions Required	No. Completed: 12/2/2011		
7	**137453**	1/5/12	WENDY'S #3015		No Corrective Actions Required			
8	**138481**	1/9/12	CHIN'S SCHEZWAN		No Corrective Actions Required			
9	**138482**	1/9/12	COCO'S #881		No Corrective Actions Required			
10	**138491**	1/5/12	THE QUICK FIX		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
11	**138521**	1/5/12	LITTLE CAESAR'S		Clean & Maintain Recycle Area			
12	**138540**	1/5/12	SHELL OIL dba CNG Inc.		No Corrective Actions Required			
13	**138792**	1/24/12	BETY'S TRADITIONAL MEXICAN FOOD		Secondary Containment (tray), Overhead Coverage for oil or store inside, Keep Trash Area Clean, Keep Trash Lids Closed.			
14	**138815**	1/24/12	GARCIA'S		No Corrective Actions Required			
15	**150912**	2/14/12	THE KEBAB SHOP		No Corrective Actions Required			
16	**154549**	4/16/12	The 101 Diner		No Corrective Actions Required			
17	**154550**	4/16/12	Q'ero		No Corrective Actions Required	No. Completed: 4/16/2012		
18	**154652**	4/6/12	Chart House		No Corrective Actions Required			
19	**154653**	3/23/12	Leucadia Pizzeria		1) Provide coverage for oil storage 2) Business owner to contact Property Mgmt. regarding landscape erosion	No. Completed: 4/2/2012		
20	**154655**	2/13/12	Trader Joe's #25		Keep trash areas clean at all times			
21	**154656**	3/19/12	Jersey Mike's Subs		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
22	**154711**	4/6/12	Las Olas Mexican Restaurant		No Corrective Actions Required			
23	**154714**	4/6/12	KI's Juice Bar & Restaurant		No Corrective Actions Required			
24	**154729**	4/6/12	Kraken		No Corrective Actions Required			
25	**154768**	3/23/12	El Callejon		No Corrective Actions Required			
26	**154773**	4/6/12	Barracuda Fresh Grill & Wine Bar		No Corrective Actions Required			
27	**154806**	4/12/12	Stadium Sports Bar & Restaurant		No Corrective Actions Required			
28	**154808**	4/12/12	Flippin Pizza New York Style		No Corrective Actions Required			
29	**154809**	4/17/12	Firenze Trattoria		No Corrective Actions Required			
30	**154810**	4/17/12	7-11 Store #25766B		No Corrective Actions Required			
31	**154811**	4/17/12	Dirty Dogs		No Corrective Actions Required			
32	**154812**	4/17/12	Rimel-Zenbu Cardiff, LLC Restaurants		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
33	**154813**	5/9/12	7-11		Regularly clean trash area			
34	**154814**	5/9/12	The Animal Keeper		No Corrective Actions Required			
35	**154815**	5/9/12	Manhattan Giant Pizza		No Corrective Actions Required			
36	**154816**	5/9/12	Dan's Precision Alignment Center		No Corrective Actions Required			
37	**154820**	5/9/12	Brad's Foreign & Domestic		No Corrective Actions Required			
38	**154821**	5/14/12	Ray's Automotive		Cover outdoor parts; old transmission outside			
39	**154822**	5/18/12	SN Stables		No Corrective Actions Required			
40	**154823**	5/15/12	Williamson Produce		No Corrective Actions Required			
41	**154824**	2/10/12	Juanita's Taco Shop		No Corrective Actions Required			
42	**154825**	2/7/12	Dog Behavior	By MEADOW, CHAMOMILE: 9/19/2012 12:54:41 PM Notes: Appears to be a residence; left business card. No pollution potential. Specialist received a phone call same day confirming no business.	No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
43	**154826**	2/9/12	Leucadia Liquor		No Corrective Actions Required			
44	**154827**	2/10/12	Mozy Cafe		No Corrective Actions Required			
45	**154828**	1/30/12	Tierra Verde Resources		No Corrective Actions Required			
46	**154829**	1/30/12	KD Palms		No Corrective Actions Required			
47	**154830**	4/2/12	Ogata Japanese Restaurant		No Corrective Actions Required			
48	**154831**	4/2/12	Trattoria I Trulli		No Corrective Actions Required			
49	**154832**	5/7/12	Today's Pizza & Salad		No Corrective Actions Required			
50	**154833**	4/12/12	L & L Hawaiian BBQ	By MEADOW, CHAMOMILE: 9/19/2012 3:26:37 PM *Business is closed for renovation; no discharges observed.	No Corrective Actions Required			
51	**154835**	2/13/12	The Lofty Bean		No Corrective Actions Required			
52	**154836**	2/13/12	N-the Tube Dog	By MEADOW, CHAMOMILE: 9/19/2012 4:02:14 PM OUT OF BUSINESS	No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
53	**154837**	2/13/12	Studio St. John	By MEADOW, CHAMOMILE: 9/19/2012 4:09:36 PM OUT OF BUSINESS	No Corrective Actions Required			
54	**154840**	1/12/12	Round Table Pizza	By MEADOW, CHAMOMILE: 9/19/2012 5:33:19 PM Education "Other" was a Training Log.	No Corrective Actions Required			
55	**154841**	1/24/12	7-11 Store #21805A-2111		No Corrective Actions Required			
56	**154842**	1/19/12	7-11 Store #2111-17475C		No Corrective Actions Required			
57	**154843**	1/27/12	Wilkens Palm Tree Nursery		No Corrective Actions Required			
58	**154844**	1/26/12	California Greenhouses, Inc.		No Corrective Actions Required			
59	**154847**	1/25/12	Chevron Extra Mile		No Corrective Actions Required			
60	**154848**	1/25/12	Gish Foliage		No Corrective Actions Required			
61	**154849**	1/19/12	Golden Bowl Restaurant		No Corrective Actions Required			
62	**154850**	1/19/12	Encinitas Ford		Clean litter and debris from storm drain			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
63	**154851**	2/14/12	Pizzicato		No Corrective Actions Required			
64	**154852**	1/12/12	Sprouts Farmer's Market		1) Provide Employee Training LOG, 2) Clean litter and debris around site and storm drain & 3) Provide grease trap servicing information; who and when	No. Completed: 2/23/2012		
65	**154855**	2/22/12	Blue Finn Sushi Bar		No Corrective Actions Required			
66	**154862**	2/22/12	Passage to India		No Corrective Actions Required			
67	**154863**	2/22/12	Noodles & Company		No Corrective Actions Required			
68	**154868**	2/21/12	Encinitas Buggy Bath Carwash		No Corrective Actions Required			
69	**154869**	2/21/12	Firefly Grill & Wine Bar		No Corrective Actions Required			
70	**154874**	5/16/12	Premier Food Services, Management Inc.		No Corrective Actions Required			
71	**154876**	2/13/12	Chronic Tacos		No Corrective Actions Required			
72	**154879**	2/16/12	The Palm Source		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
73	**154880**	3/6/12	Healthy Creations	By MEADOW, CHAMOMILE: 9/21/2012 3:41:48 PM Notes: Property Management contacted to replace or remove dumpster.	No Corrective Actions Required			
74	**154881**	3/6/12	Borrelli's Pizza Inc.		No Corrective Actions Required			
75	**154882**	3/6/12	The Naked Cafe		No Corrective Actions Required			
76	**154883**	3/6/12	Town Center Juice Stop		No Corrective Actions Required			
77	**154884**	3/29/12	Angelo's Burgers		No Corrective Actions Required			
78	**154885**	3/29/12	Beachside Grill		No Corrective Actions Required			
79	**154886**	3/29/12	The Lumberyard Tavern		No Corrective Actions Required			
80	**154887**	4/2/12	Kona Koffee Hut		No Corrective Actions Required			
81	**154888**	4/2/12	Bubby's		No Corrective Actions Required			
82	**154889**	4/6/12	The Beach House		1) Obtain proper spill kit, i.e. kitty litter & 2) Clean trash areas	No. Completed: 5/2/2012		
83	**154891**	5/2/12	Raspy Growers		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
84	**154892**	5/7/12	Barrels & Branches		No Corrective Actions Required			
85	**154893**	5/7/12	Encinitas Donut Shop		No Corrective Actions Required			
86	**154897**	4/2/12	Daley Double		No Corrective Actions Required			
87	**154898**	3/6/12	El Camino Tire & Brake	By MEADOW, CHAMOMILE: 9/24/2012 11:46:00 AM OUT OF BUSINESS	No Corrective Actions Required			
88	**154899**	3/5/12	Roberto's Taco Shop		No Corrective Actions Required			
89	**154900**	2/28/12	Leslie's Swimming Pool Supplies		No Corrective Actions Required			
90	**154901**	2/28/12	Frazee Paint		No Corrective Actions Required			
91	**154902**	2/28/12	Rosanna's Pasta		No Corrective Actions Required			
92	**154903**	2/28/12	Re-Planet		No Corrective Actions Required			
93	**154904**	2/28/12	Starbucks Coffee #588		No Corrective Actions Required			
94	**154907**	1/26/12	Brown's Plants		No Corrective Actions Required			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
95	**154908**	2/24/12	VONS #2144		No Corrective Actions Required			
96	**154909**	3/21/12	Leucadia Shell		No Corrective Actions Required			
97	**154912**	3/7/12	Java Hut Coffee Co.		No Corrective Actions Required			
98	**154915**	3/13/12	El Torito Restaurant	By MEADOW, CHAMOMILE: 9/24/2012 2:54:40 PM OUT OF BUSINESS	No Corrective Actions Required			
99	**154917**	1/10/12	Cardiff Valero		1) Provide Employee training documentation, & 2) Provide secondary containment of liquid	No. Completed: 2/24/2012		
100	**154923**	2/14/12	Santa Fe Cafe		No Corrective Actions Required			
101	**154926**	2/22/12	Savory Restaurant		1) Obtain Spill Kit, 2) Clean litter and debris from site, & 3) Close dumpster lids	No. Completed: 4/5/2012		
102	**154932**	1/19/12	Figaro's Pizza		1) Obtain spill kit, 2) Post Spill Response Plan, 3) Provide Employee training documentation, 4) Provide secondary containment, 5) Provide coverage of outdoor storage, & 6) Clean litter and debris from trash areas	Yes	No. Completed: 4/4/2012	
103	**154945**	2/9/12	El Torito Market		1) Provide secondary containment for grease bin	No. Completed: 4/5/2012		

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
104	**154947**	1/24/12	Taco Bell		1) Spill kit & 2) Provide secondary containment	No. Completed: 4/4/2012		
105	**154949**	3/22/12	Elizabethan Desserts		No Corrective Actions Required			
106	**154950**	3/22/12	Kamp Kanine		No Corrective Actions Required			
107	**154951**	2/8/12	Fish 101		1) Obtain Spill Kit & 2) Provide overhead coverage of liquid storage	No. Completed: 3/23/2012		
108	**154953**	3/28/12	Lotus Cafe		No Corrective Actions Required			
109	**154954**	2/14/12	Thai Pan Cuisine		No Corrective Actions Required			
110	**154956**	2/16/12	Le Papagayo		1) Obtain Spill Kit & 2) Clean outside of oil storage	No. Completed: 4/4/2012		
111	**154960**	5/22/12	Encinitas Ranch Golf Course		No Corrective Actions Required			
112	**154962**	3/28/12	Thai Society		1) Obtain Spill Kit & 2) Provide coverage for outside storage (Biodriven)			
113	**154963**	3/13/12	El Pollo Loco #3431		1) Obtain Spill Kit, 2) Post Spill Response Plan, 3) Provide secondary containment, 4) Provide coverage for outdoor storage, & 5) Clean trash & litter			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date
114	**154964**	2/24/12	Jorge's Mexicatesen		1) Obtain Spill Kit, 2) Post Spill Response Plan, 3) Provide employee training documentation, & 4) Clean trash area			
115	**154966**	2/14/12	Five Guys Operations, LLC		1) Provide employee training documentation, 2) Provide secondary containment, & 3) Provide coverage for outside storage			
116	**154980**	5/14/12	Calypso Cafe		1) Provide secondary containment (Biodriven), 2) Provide coverage for outdoor storage, 3) Post spill response plan			
117	**154986**	3/22/12	K.C. Tandoor		1) Provide overhead coverage for outside storage			
118	**154987**	3/28/12	Giovanni's Sandwich Shop	By MEADOW, CHAMOMILE: 9/25/2012 10:36:28 AM Business is now closed. No follow-up required. CM	1) Obtain Spill Kit & Post Response Plan & 2) Provide secondary containment			
119	**154988**	3/27/12	Vigilucci's		1) Clean litter and debris from storm drain, 2) Call for oil service (Biodriven), 3) How often is oil removed?			
120	**154989**	2/23/12	Union Kitchen & Tap		1) Obtain Spill Kit, 2) Post Spill Response, 3) Provide employee training and documentation, & 4) Clean litter & debris around trash area and smoking area, 5) Sweep (dry/clean)			
121	**154990**	3/29/12	Encinitas Ale House		1) Provide secondary containment & 2) Provide coverage = BIODRIVEN			

	WOID	INSP DATE	Facility Name	Comments	Corrective Action	Corrective Actions Still Needed Follow Up #1	Corrective Actions Still Needed Additional Follow Ups	NOV Date

Total: 121

Total NOVs: 0

Appendix D-6
Mobile Commercial Inventory FY 11-12

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	Activity Description	Potential Pollutants								
										Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash
Field Description ▶	Name used to identify facility in database.	Street number of facility.	Suite or Unit	Name of street where facility is located.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.								
1	A - 1 Patio & Remodeling Experts	1280		Santa Fe Dr	Encinitas	CA	92024	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
2	A G Housekeeping Service	110	6	Hillcrest Dr	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
3	A Plus Pool And Spa Service	1190	247	Encinitas Blvd	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
4	Absolute Fountain Service	730		Third St	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
5	Accountable Plumbing	2434		Oxford Ave	Cardiff	CA	92007	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
6	Alba Genesis Services	541		Guidero Way	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
7	Alberta Santiago	1020		Aloha Dr	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
8	Alfonso Rey Landscape Maintenance	351		Sprucewood Dr	Encinitas	CA	92024	Escondido Creek	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
9	All Aspects Glass Company	152	51	N Coast Highway 101	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
10	All In Carpet Cleaing	720		Devonshire Dr	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
11	Alonzo	755		Regal Rd	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
12	Anguiano Landscape	471		Cole Ranch Rd	Encinitas	CA	92024	Escondido Creek	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
13	Anonymous Window Cleaning	1727		Legaye Dr	Cardiff	CA	92007	Escondido Creek	Mobile- Handyman	No	No	No	No	No	No	No	No	No
14	Aqua Tech Pool Care, L L C	233		Delphinium St	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
15	Aquatic Perfection	1590		Avenida De Los Lirios	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
16	Archibald Sheet Metal	125		A St	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
17	Arnulfo Medina Landscaping	1408	A	Hermes Ave	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
18	B B'S Auto Detail Wheel Polishing	606		Stratford Dr	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
19	B L T Construction, Inc.	1923		Lahoud Dr	Cardiff	CA	92007	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
20	B T D Construction	1397		Hermes Ave	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
21	Bart Forry Home Repairs	704	C12	Regal Rd	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
22	Belman Handyman	738		Snapdragon St	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
23	Benny's Gardening	1010		Balour Dr	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
24	Berger Pool And Spa	1105		Pacifica Pl	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
25	Bernardo Landscaping	1105		Regal Rd	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
26	Best Cleaning	1260		Loch Lomond Dr	Cardiff	CA	92007	Escondido Creek	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
27	Better Homes Construction	231		Countryhaven Rd	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
28	Bishop Pool Service And Repair	744		Foxglove St	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
29	Black Diamond Landscapes	1822		Orchard Wood Rd	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
30	Blue Coast Taxi	928		Brass Way	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
31	Blue Water Of La Jolla	2008		Wandering Rd	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
32	Bob's Carpet Care, Inc.	336		Sanford St	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
33	Bouche Construction	1115		Balour Dr	Encinitas	CA	92024	Escondido Creek	Mobile- Handyman	No	No	No	No	No	No	No	No	No
34	Bradley Landscape Development, Inc.	607		N Vulcan Ave	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
35	Bright Visions Window Washing	616		Lynwood Dr	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
36	Britta's Pet - Sitting	1706		N Willowspring Dr	Encinitas	CA	92024	San Marcos	Mobile- Animal	Yes	Yes	No	Yes	No	No	No	No	No
37	C D Pools	1265		Rubenstein Ave	Cardiff	CA	92007	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
38	C. A. A. Landscaping & House Cleaning	404	279	Encinitas Blvd	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
39	Caliber Drywall	1253	3	N Vulcan Ave	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
40	Calray Electric, Inc.	375		Arroyo Dr	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
41	Cardiff Cleaningworks	375		Dublin Dr	Cardiff	CA	92007	Escondido Creek	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
42	Cardiff Limousine	844		Bonita Dr	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
43	Cardiff Maintenance	2233		Lagoon View Dr	Cardiff	CA	92007	Escondido Creek	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
44	Carrillo Tree Maintenance	794		Clark Ave	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
45	Claudia's Housekeeping Services	1338		Mackinnon Ave	Cardiff	CA	92007	Escondido Creek	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
46	Clean & Clear Windows	244	D	Second St	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
47	Coast Mobile Oil Service	925	102	N Vulcan Ave	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
48	Coastal Carpet Cleaning	1252		Hygeia Ave	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
49	Coastal Construction Group	742		Neptune Ave	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
50	Coco's Landscape And Maintenance	1744		Knollfield Way	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
51	Color Solutions Auto Two	126		Triton Cir	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
52	Crown Pool And Landscape	2126		Via Tiempo	Cardiff	CA	92007	Escondido Creek	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
53	D V Environmental Group	1829		Forestdale Dr	Encinitas	CA	92024	Escondido Creek	Mobile- Handyman	No	No	No	No	No	No	No	No	No

Appendix D-6
Mobile Commercial Inventory FY 11-12

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	Activity Description	Potential Pollutants								
										Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash
Field Description ▶	Name used to identify facility in database.	Street number of facility.	Suite or Unit	Name of street where facility is located.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.								
54	D. Bell Construction, Inc.	1539		Caudor St	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
55	Designs By The Sea	1511		Calle Tulipanes	Encinitas	CA	92024	Escondido Creek	Mobile- Handyman	No	No	No	No	No	No	No	No	No
56	Dirt - Busters	808	J1	Regal Rd	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
57	Doctor Playground, Inc.	123	46	Jasper St	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
58	Dogs Are Awesome Pet Sitting Services	1305	B	Mackinnon Ave	Cardiff	CA	92007	Escondido Creek	Mobile- Animal	Yes	Yes	No	Yes	No	No	No	No	No
59	Drenie's Housecleaning	1421	B	San Elijo Ave	Cardiff	CA	92007	Escondido Creek	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
60	Ed's Handyman Service	1372		Hymettus Ave	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
61	El Monte Landscape	2048		Willowood Ln	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
62	Elite Auto Trim	4265		Manchester Ave	Encinitas	CA	92024	Escondido Creek	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
63	Encinitas 9, L L C	422		Requeza St	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
64	Encinitas Drain	737		Nardo Rd	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
65	Encinitas Janitorial Service	699	109	N Vulcan Ave	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
66	Enrique Landscaping	1020		Aloha Dr	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
67	Eric Jason Cashion, Dba: Siding Solutions	168		Coop Ct	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
68	Falling Waters Landscape, Inc.	774		Lotus Blossom St	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
69	Favorite Maid	404	258	Encinitas Blvd	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
70	Felix Sanchez Gardening Service	880		Del Rio Ave	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
71	Fernando Landscaping & Gardening	755		Regal Rd	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
72	Finishing Touch Moulding, Inc.	921		Hymettus Ave	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
73	Four Corners Catering	1515		Vivaldi St	Cardiff	CA	92007	Escondido Creek	Mobile- Eating/Drinking	Yes	Yes	No	No	Yes	No	No	No	Yes
74	G L S Installations	1537		Burgundy Rd	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
75	Galapacifica Landscape	924	73	Encinitas Blvd	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
76	Green Building Squared, Inc.	1572		Caudor St	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
77	Greg Stone Landscape Architects	69		Mcneill Ave	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
78	Gresham Landscaping & Consulting	1734		Noma Ln	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
79	Handyman	226		Meadow Vista Way	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
80	Harbinger Electric	129	A	W Glaucus St	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
81	Hayes Construction And Design, Inc.	560	2	N Coast Highway 101	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
82	Heavenly Views Window Cleaning	460		Saxony Rd	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
83	In Motion Motors	3675		Copper Crest Rd	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
84	J A Landscape	2068		Bulrush Ln	Cardiff	CA	92007	Escondido Creek	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
85	J C'S Taxi Service	919		Brass Way	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
86	J M D Landscape, Inc.	187		N Vulcan Ave	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
87	J Z Framing, Inc.	134		S Jayton Ln	Encinitas	CA	92024	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
88	J. Bryant Concepts	565		Requeza St	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
89	J. Morales Tree Service	130		Village Run West	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
90	James Kandiguranis Pools	1853	4	N Vulcan Ave	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
91	Jason Cardoza General Maintenance	884		Del Riego Ave	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
92	Jason's Handyman Service	139		Countrywood Ln	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
93	Jeremy Spath Landscape Design	390		La Veta Ave	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
94	Jesus Fuentes	2039		Shadow Grove Way	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
95	John Hanna & Associates	1753		Swallowtail Rd	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
96	Just Us Cleaning And House Sitting	1066		Guildford Ct	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
97	K L R Bobcat And Hauling Services	1924		Country Grove Ln	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
98	Kamin's Cleaning Services	170	11	Phoebe St	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
99	Kelly G R N Native Landscape Living Co.	911	A	Third St	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
100	Kessing Painting,Inc.	261		Caliban Ct	Encinitas	CA	92024	San Marcos	Mobile- Painting	No	No	No	No	No	No	No	No	No
101	L C I Walls & Ceilings	234		Fraxinella St	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
102	L. L. M. Landscape, Inc.	675		Requeza St	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
103	Langtree Woodworking	301		Horizon Dr	Encinitas	CA	92024	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
104	Leisure Friends,	368		N El Camino Real	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
105	Liquid Pool And Spa Service	16		E I St	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
106	Lucas' Cab	117	21	Rosebay Dr	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No

Appendix D-6
Mobile Commercial Inventory FY 11-12

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	Activity Description	Potential Pollutants								
										Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash
Field Description ▶	Name used to identify facility in database.	Street number of facility.	Suite or Unit	Name of street where facility is located.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.								
107	Lupita Housekeeping	800	205	Encinitas Blvd	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
108	M A C Design & Development	471		Chesterfield Dr	Cardiff	CA	92007	Escondido Creek	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
109	M H S - Works	1008		Cottage Way	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
110	M R B Construction	1265		N Vulcan Ave	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
111	Madrigal Handyman Service	513		S Willowspring Dr	Encinitas	CA	92024	Escondido Creek	Mobile- Handyman	No	No	No	No	No	No	No	No	No
112	Mallory's Pool Maintenance	2104	B	Manchester Ave	Cardiff	CA	92007	Escondido Creek	Mobile- Pool	No	No	No	No	No	No	No	No	No
113	Maurice's Handyman Services	1190	167	Encinitas Blvd	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
114	Mayer Pool Service & Repair	1553		Plumtree Dr	Encinitas	CA	92024	Escondido Creek	Mobile- Pool	No	No	No	No	No	No	No	No	No
115	Mc Garry Mobile Detailing Systems	2134	116	Carol View Dr	Cardiff	CA	92007	Escondido Creek	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
116	Mercedes West Auto Wholesale	2026		Oxford Ave	Cardiff	CA	92007	Escondido Creek	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
117	Michael Buys Quality Builders	1802		Belle Grove Rd	Encinitas	CA	92024	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
118	Mijangos Landscaping	1608		Charro St	Encinitas	CA	92024	Escondido Creek	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
119	Mike Hidalgo, Inc.	119		Europa St	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
120	Miller Tire & Wheels, Inc.	248		La Veta Ave	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
121	Mitchell Aquarium Service	591	A	Hygeia Ave	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
122	Mobile Detailing Specialists	2340		Carol View Dr	Cardiff	CA	92007	Escondido Creek	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
123	Nature Concepts Landscaping	1124		Nardo Rd	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
124	North County Handy Man	1270		Avenida Miguel	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
125	North County Hauling Service	1117		Woodlake Dr	Cardiff	CA	92007	Escondido Creek	Mobile- Handyman	No	No	No	No	No	No	No	No	No
126	North County Paintless Dent Removal	147		Countrywood Ln	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
127	Pacific Coast Glazing, Inc.	908		Nolbey St	Cardiff	CA	92007	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
128	Pacific Coast Maintenance	981	8	N Vulcan Ave	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
129	Pacific Coast Pool Service	1439		Linda Sue Ln	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
130	Pacific Custom Builders	146		W Glaucus St	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
131	Pascal Steel Corporation	555	4	Second St	Encinitas	CA	92024	San Marcos	Mobile	No	No	No	No	No	No	No	No	No
132	Patrice Alexander	2437		Oxford Ave	Cardiff	CA	92007	Escondido Creek	Mobile- Handyman	No	No	No	No	No	No	No	No	No
133	Paul Beeson H H P	1572		Caudor St	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
134	Phil's Handyman Service	1726		Old Mill Rd	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
135	Professiional Cleaning & Errands	1099		Regal Rd	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
136	Prola Landscape Design	1333		San Elijo Ave	Cardiff	CA	92007	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
137	Pure Sustainable Home, Inc.	147		Coop Ct	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
138	R S B Homes, Inc.	2235	111	Encinitas Blvd	Encinitas	CA	92024	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
139	R. A. Booker Builders, Inc.	3451		Toscano Ct	Encinitas	CA	92024	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
140	R. K. Enterprises	658		Santa Fe Dr	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
141	Rajan Brown Landscape Design & Consulting	281		Fraxinella St	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
142	Ranch And Sea Pool Care	1686		Falcon Hill Ct	Cardiff	CA	92007	Escondido Creek	Mobile- Pool	No	No	No	No	No	No	No	No	No
143	Rancho Santa Fe Pool Service	2039		Willowood Ln	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
144	Remoca General Contractors	818		Summerhill Ct	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
145	Reva Hydro Jetting	1056		Lark Song Ln	Encinitas	CA	92024	Escondido Creek	Mobile- Handyman	No	No	No	No	No	No	No	No	No
146	Richard Thaisz Construction	1403		Caminito Septimo	Cardiff	CA	92007	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
147	Robert R. Lovci	1236		Rubenstein Ave	Cardiff	CA	92007	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
148	Robertson Relief Vet Services	785		Fieldstone Ln	Encinitas	CA	92024	San Marcos	Mobile- Animal	Yes	Yes	No	Yes	No	No	No	No	No
149	Romeo Godinez Handyman	1159		Gardena Rd	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
150	Romero's Carpet Cleaning	1190	146	Encinitas Blvd	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
151	Ruby Construction Corporation	1420		Rubenstein Ave	Cardiff	CA	92007	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
152	Rusk Landscape	2156		Mountain Vista Dr	Encinitas	CA	92024	Escondido Creek	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No
153	Russell Handy Painting	2056		Bulrush Ln	Cardiff	CA	92007	Escondido Creek	Mobile- Painting	No	No	No	No	No	No	No	No	No
154	Sahba Javedani	624		Faith Ave	Cardiff	CA	92007	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
155	San Diego Stone Care	731		Snapdragon St	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
156	Seacoast Plumbing	1334		Caminito Septimo	Cardiff	CA	92007	Escondido Creek	Mobile- Handyman	No	No	No	No	No	No	No	No	No
157	Seaside Janitorial Service	1019 1/2		Hermes Ave	Encinitas	CA	92024	San Marcos	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
158	Shawn's Painting Services	721		Arden Dr	Encinitas	CA	92024	San Marcos	Mobile- Painting	No	No	No	No	No	No	No	No	No
159	Silva's Landscaping	1105		Regal Rd	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No

Appendix D-6
Mobile Commercial Inventory FY 11-12

No. ▼	Facility Name	Address	Suite	Street	City	State	Zip	Hydrologic Area	Activity Description	Potential Pollutants								
										Bacteria	Gross Pollutants	Metals	Nutrients	Oil/Grease	Organics	Pesticides	Sediment	Trash
Field Description ▶	Name used to identify facility in database.	Street number of facility.	Suite or Unit	Name of street where facility is located.	City where facility is located.	This is a default to CA.	Zip code where facility is located.	This field requires both the Hydrological unit and Hydrologic area where facility is located.	A narrative description which best reflects the principle products or services provided by the facility.	Potential pollutants that may be generated by the facility. A facility can be identified as having more than one pollutant.								
160	Simple Vision	1814		Autumn Pl	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
161	So - Cal Shade Sails	1009		Hurstdale Ave	Cardiff	CA	92007	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
162	Sparkle Window Cleaning	2427		Newcastle Ave	Cardiff	CA	92007	Escondido Creek	Mobile- Handyman	No	No	No	No	No	No	No	No	No
163	Spectrum Builders	699	84	N Vulcan Ave	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
164	Steffen Enterprises, Inc.	1008		Saxony Rd	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
165	Sun Cal Solar Incorporated	745		Winding Way	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
166	Sunland Ranch	3675		Copper Crest Rd	Encinitas	CA	92024	San Marcos	Mobile- Animal	Yes	Yes	No	Yes	No	No	No	No	No
167	Terry's Cleaning Service	2157		Pleasant Grove Rd	Encinitas	CA	92024	Escondido Creek	Mobile- Janitorial/Cleaning	Yes	No	No	Yes	No	No	No	No	No
168	The London Window Cleaner	285		Rodney Ave	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
169	The Pool Pros	2061	123	Village Park Way	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
170	The Poolman	349		N Vulcan Ave	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
171	Tom Plumb	469		Summer View Cir	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
172	Tom Wolf Ltd.	1459		Big Canyon Ter	Cardiff	CA	92007	Escondido Creek	Mobile- Handyman	No	No	No	No	No	No	No	No	No
173	Trinity Express	1457		Pegaso St	Encinitas	CA	92024	Escondido Creek	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
174	Turn Key Construction Handyman Services	444	87	N El Camino Real	Encinitas	CA	92024	San Marcos	Mobile- Handyman	No	No	No	No	No	No	No	No	No
175	Van Veen Team	1145		Aloha Dr	Encinitas	CA	92024	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
176	Village Property Systems, Inc.	131		Aberdeen Dr	Cardiff	CA	92007	Escondido Creek	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
177	W O A Builders, Inc.	110		Requeza St	Encinitas	CA	92024	San Marcos	Mobile- Contractor	No	No	No	No	No	No	No	Yes	No
178	Wallace Courier	523		Samuel Ct	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
179	Whalen Performance	1726		Avenida Melodia	Encinitas	CA	92024	San Marcos	Mobile- Auto	No	No	Yes	No	Yes	Yes	No	No	No
180	Wilson Pools Plus	185		Village Run East	Encinitas	CA	92024	San Marcos	Mobile- Pool	No	No	No	No	No	No	No	No	No
181	Zachary Jones Landscaping	704	C3	Regal Rd	Encinitas	CA	92024	San Marcos	Mobile- Landscaping	No	No	No	Yes	No	No	Yes	Yes	No

CITY OF ENCINITAS

Clean Water Program



Minimum Required STORMWATER BEST MANAGEMENT PRACTICES *for Commercial Facilities*



YOUR BUSINESS CAN MAKE A DIFFERENCE!



What is a stormwater Best Management Practice (BMP)?

The term "Best Management Practice" (BMP) refers to a combination of effective and economical practices, techniques, and/or activities that can help prevent or reduce stormwater runoff pollution. It's simple: only rain goes in the storm drain.

How do stormwater BMPs apply to your business?

The City of Encinitas has established minimum stormwater BMP requirements for all commercial businesses in the City. These minimum BMP standards are summarized below for your information and awareness. Please note that some facilities may require additional BMPs as determined by the City, based upon activities or materials specific to that location. *(Encinitas Municipal Code chapter 20.08)*

FOR MORE INFORMATION:

See http://bmp.projectcleanwater.org for more information on Best Management Practices relating to specific commercial business activities.

To report stormwater pollution in the City of Encinitas, please call the Clean Water Hotline: (760) 633-2787

For any questions regarding the City's Clean Water Program or the information presented above, email: npdesmail@cityofencinitas.org

Printed on recycled paper.

BMP CATEGORIES:

Employee Education and Training

Education and training is an essential and cost effective pollution prevention method. It is important to provide and document employee training. A training log should be kept at the facility to ensure that all employees are properly trained in stormwater pollution prevention practices. At a minimum, all employees should be trained on the following:

- Knowledge of Best Management Practices (BMPs) for every activity performed on the job. (Please visit *http://bmp.projectcleanwater.org* for activity specific practices)
- Proper spill prevention and response procedures (containment, control, cleanup - do NOT hose it down)
- The location and proper use of clearly labeled spill kit and spill response guide.
- The location of all stormwater drains and inlets, and the knowledge that they all lead to the ocean.

Indoor/Outdoor Liquid Storage

Commonly stored liquids including grease, oil, and other fluids that may be kept in a container inside or outside may pose a potential threat to water quality if they can overflow, get knocked over, or leak. Properly storing these fluids is a key component to effective pollution prevention at any business. The following practices comply with minimum BMP standards for liquid storage — and will help to keep them out of the stormwater system.

- Keep containers that store fluid or liquid inside an additional container to provide secondary containment
- Provide overhead coverage for outdoor storage of fluid or liquid waste
- Schedule regular waste pick-ups to prevent spills and overflows from storage containers
- Perform regular maintenance and cleaning of storage areas

Good Housekeeping

Routine maintenance and clean-up is essential to minimizing stormwater pollution from your business. When cleaning up outdoors, it is important to keep debris and contaminants from running into the storm drain system. The following good practices should be applied to all cleanup and maintenance activities to prevent storm drain pollution:

- Dry cleaning methods (i.e. using a broom to sweep instead of a hose) will reduce water usage and lessen the potential to pollute. Also, using a mop and bucket will eliminate runoff; the wash water can then be disposed of in the sink or toilet (NOT the storm drain)
- Wash water from activities such as hosing off sidewalks and patios, vehicle washing, and cleaning floor mats should be directed toward or done over pervious areas (i.e. lawn, dirt, flower bed, shrubs, and planted areas).
- If using water as a clean-up method and it cannot be re-directed to a vegetated area, proper storm drain protection (i.e. sand bags) must be utilized to capture all washwater.

Trash/Recycling Storage and Management

Properly maintained trash, recycling, and debris containment areas are an easy way to protect the environment. Simple steps like keeping trash dumpster lids closed and immediate cleanup of spilled materials (solid or liquid) will go a long way. The following practices must also be applied to better manage trash, debris and other waste materials:

- Ensure the site, trash/recycling areas, and storm drains are free of litter and debris.
- Trash containers and dumpsters must be in good condition and free of holes.
- All receptacles must have closed lids or be placed in a covered area.





Common urban runoff contaminants include: oil and grease from cars; pesticides, herbicides and fertilizers from lawns and landscaped areas; soapy water from carpet cleaning and vehicle washing; sediment from construction projects; loose trash such as cigarette butts and soda bottles; and many other sources associated with everyday activities. There are many simple things that everyone can do to help prevent stormwater pollution.

-Project Clean Water



CITY OF ENCINITAS

Clean Water Program



Minimum Required STORMWATER BEST MANAGEMENT PRACTICES *for Mobile Business Activities*



YOUR BUSINESS CAN MAKE A DIFFERENCE!

What is a stormwater Best Management Practice (BMP)?

The term "Best Management Practice" (BMP) refers to a combination of effective and economical practices, techniques, and/or activities that can help prevent or reduce stormwater runoff pollution. It's simple: only rain goes in the storm drain.



How do stormwater BMPs apply to your business?

The City of Encinitas has established minimum stormwater BMP requirements for all commercial businesses in the City. These minimum BMP standards are summarized below for your information and awareness. Please note that some businesses may require additional BMPs as determined by the City, based upon activities or materials specific to that location. *(Encinitas Municipal Code chapter 20.08)*

FOR MORE INFORMATION:

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Printed on recycled paper.

BMP CATEGORIES:

Employee Education and Training

Education and training is an essential and cost effective pollution prevention method. It is important to provide and document employee training. At a minimum, all employees should be trained on the following:

- Knowledge of Best Management Practices (BMPs) specific to mobile business activities. Please visit *http://bmp.projectcleanwater.org* for activity specific BMPs related to your business.
- Knowledge of the storm drainage system, and how to locate drains and inlets that must be protected.
- How to use appropriate and easily accessible supplies to properly control and eliminate any discharge to the storm drain system.
- Proper spill control and cleanup procedures.

Proper Waste Handling (solid, liquid, and hazardous wastes)

Before starting any job, consider the types of waste that may be generated including wash water, chemical compounds, residual construction or repair materials, paints, oil and grease, and loose trash and debris. It is important to properly control, contain, and transport these materials to prevent spills and discharge from entering the storm drain system. The following steps will help to manage waste generated from your mobile business activity:

- Do not dispose of ANY waste material in the storm drain system.
- Liquid non-hazardous wastes may be disposed of in the sanitary sewer (i.e. sinks, toilets) if appropriate, or placed in sealed containers and disposed of properly.
- Solid wastes should be removed from the worksite in waste containers with a lid and disposed of at appropriate waste sites.
- Inspect and label all hazardous material waste containers prior to removal. For details in the management, transport, and disposal of specific waste, contact the County of San Diego Hazardous Materials Division at (619) 338-2231.

Equipment Cleanup

Equipment cleanup activities should always be conducted away from storm drain inlets, and performed in a manner to prevent the release of any material into the street, curb, gutter, alley or any other conveyance facility. To ensure compliance with minimum BMP standards for equipment cleanup activities, follow these simple practices:

- Equipment cleanup should be conducted in a container such as a bucket, tub or basin to control liquids and prevent runoff.
- Alternatively, conduct equipment and material cleanup activities in an area contained by a berm or plastic liner to collect and contain all fluids.
- Dispose of waste water into a sanitary sewer drain (i.e. sink, toilet) as appropriate or into a vegetated area (i.e. lawn, flower bed, dirt area).





Common urban runoff contaminants include: oil and grease from cars; pesticides, herbicides and fertilizers from lawns and landscaped areas; soapy water from carpet cleaning and vehicle washing; sediment from construction projects; loose trash such as cigarette butts and soda bottles; and many other sources associated with everyday activities. There are many simple things that everyone can do to help prevent stormwater pollution.

-Project Clean Water



Appendix E

Residential

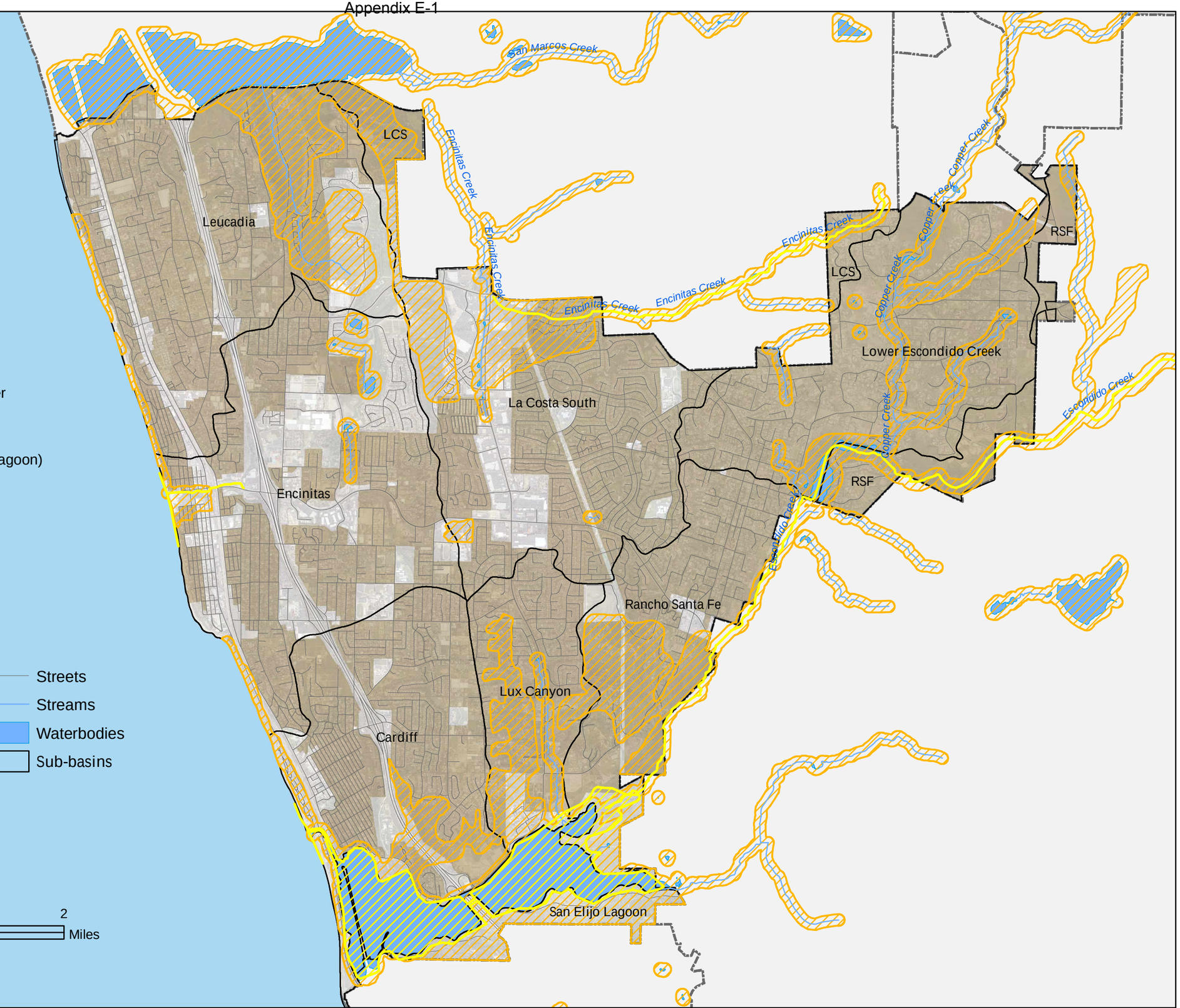
E-1 Map of High Threat to Water Quality Residential Areas

City of Encinitas

High Threat to Water Quality Residential Areas

High Threat to Water Quality Residential Areas in the City of Encinitas include:

- All residential areas within 500ft of any 303(d) listed water body or lagoon
- All residential areas within, directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an ESA
- The residential area to the west of Interstate 5 within the Cardiff sub-basin (drains to San Elijo Lagoon)
- The residential area south of Sylvia St, west of Second Street, and north of K Street (drains to Cottonwood Creek and Moonlight Beach)



Residential Areas
303(d) listed streams
303(d) listed waterbodies
Environmentally Sensitive Areas
Streets
Streams
Waterbodies
Sub-basins

0 0.5 1 2 Miles

Appendix F

Education

F-1 **Regional Mobile Business Outreach and Education Plan**

F-2 **NCSWP Construction Brochure**

F-3 **City of Encinitas Brochures (English/Spanish)**

F-4 **Encinitas Environmental Services Guide**

F-5 **Giveaway items for FY 11-12**

F-6 **Regional Residential Education Plan**

Regional URMP Attachment 5.0

Regional Mobile Business Outreach and Education Strategy

FINAL - March 20, 2008

Submitted by the San Diego Stormwater Copermittees in partial fulfillment of the requirements of San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (the San Diego Municipal Stormwater Permit)

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1.0 INTRODUCTION

This document describes a **Regional Mobile Business Outreach and Education Program** to be collaboratively conducted by the Copermittees of NPDES Order No. R9-2007-0001 (Permit). It was developed by the Mobile Business Subcommittee of the Copermittees' Outreach Workgroup. Permit section D.3.b.(4)(a) requires that each Copermittee develop and implement a program to reduce the discharge of pollutants from mobile businesses to the MEP. Section D.3.b.(4)(b) further states "if they choose to, the Copermittees may cooperate in developing and implementing their programs for mobile businesses, including sharing of mobile business inventories, BMP requirements, enforcement action information, and education." Because mobile businesses inherently provide services at offsite locations crossing jurisdictional lines, the Copermittees have chosen to collaborate on a regional mobile business outreach and education strategy. It addresses the following elements:

- Inventory Development and Maintenance;
- Establishment of Minimum BMP Requirements; and
- Outreach and Education (Including Business Notifications).

Compliance and enforcement responsibilities for mobile businesses will continue to reside with individual jurisdictions, and are therefore not addressed as shared regional tasks under this Strategy.

2.0 SOURCE CHARACTERIZATION

Mobile businesses provide services at offsite locations rather than from fixed bases of operation. Services may be provided at, but are not limited to, residential, industrial, municipal, and commercial areas. Permit Section D.3.b.(1), identifies 12 categories of mobile business types that will be addressed as part of this regional Strategy. Table 1 identifies these businesses types and the potential pollutants associated with each. Additional characterization and description of these sources will be conducted during the development and implementation of the regional program elements described in Section 2.0

Table 1 – Identification of Mobile Business Types and Associated Pollutants-of-Concern

Source Type	Bacteria	Metals	Pesticides	Sediment	Trash	Nutrients	Organics	Oil/Grease
1. Auto Repair, Maintenance, Fueling, Cleaning		X		X	X		X	X
2. Equipment repair, maintenance, fueling, or cleaning		X		X	X		X	X
3. Mobile automobile or other vehicle washing		X		X	X		X	X
4. Pest control services		X	X				X	
5. Mobile carpet, drape or furniture cleaning							X	
6. Cement mixing or cutting				X		X	X	
7. Masonry				X		X	X	
8. Painting and coating		X			X		X	
9. Landscaping	X	X	X	X		X	X	
10. Pool and fountain cleaning		X		X		X	X	
11. Portable sanitary services	X				X	X	X	
12. Power washing services	X	X	X	X	X	X	X	X

3.0 REGIONAL PROGRAM ELEMENTS

The Regional Mobile Business Outreach and Education Program will consist of several elements to be developed and implemented by June 2010.

3.1 Inventory Development and Maintenance

Permit section D.3.b.(1) requires that each Copermittee keep as part of its commercial sources inventory a listing of mobile businesses known to operate within its jurisdiction, and section D.3.b.(4)(b) encourages Copermittees to share these inventories. In addition to sharing inventory information, the Copermittees have determined that the collaborative development of a shared regional inventory would promote consistency in the regulation of mobile businesses, and would promote cost-efficiency by eliminating redundancy between individual inventories and avoiding duplicative notifications. The Copermittees

intend to utilize a consultant to compile this inventory. It is expected to be completed by June 2009. Prior to the completion of a shared inventory, the Copermittees will continue to meet the requirements of section D.3.b.(4)(b) by individually maintaining and updating as necessary their existing jurisdictional mobile business inventories. These will be used as a starting point for the development of a consolidated inventory. The consultant will also be tasked with researching other information sources such as unlicensed mobile businesses operating within the County, as well as with managing updates to the inventory in subsequent years.

3.2 Establishment of Minimum BMP Requirements

Permit section D.3.b.(4)(a)i requires that Copermittees develop and implement minimum standards and BMPs to be required for each of the various types of mobile businesses. The Copermittees also intend to collaborate in the development of a minimum set of BMP standards for each type of mobile business addressed through the regional effort. Existing resources such as jurisdictional minimum BMPs, the Project Clean Water Clean Water Tool Box (http://www.projectcleanwater.org/bmp/) and the Think Blue website (http://www.sandiego.gov/thinkblue) will be reviewed by the Copermittees in developing these common standards. A consultant may also be utilized for BMP development support. This task is expected to be completed by June 2009.

3.3 Outreach and Education Strategy

Permit section D.3.b.(4)(a)iv requires that Copermittees develop and implement an outreach and education strategy for mobile businesses. A variety of educational methods and approaches will likely be utilized in complying with this requirement. These will be determined by the Copermittees during the development of this task. The centerpiece of the Copermittees' education strategy will be business notifications. This element is described further below.

3.4 Business Notifications

Permit section D.3.b.(4)(a)iii requires that, within the first three years of implementation of the updated JURMP, each Copermittee must notify the owner/operator of each

inventoried mobile business their minimum standards and BMP requirements and local ordinances. The Copermittees will collaboratively develop and implement a regional notification strategy to inform mobile businesses of their obligation to comply with the local ordinances of the jurisdictions where they operate. In addition to assisting in the development of this strategy, the consultant will be tasked with notifying businesses and tracking when and how they were notified. Potential notification options include mailing, emailing, workshops, and website posting. This task will be completed no later than March 24, 2011, but is targeted for completion by March 2010.

3.5 Implementation Schedule

Implementation of the Regional Mobile Business Outreach and Education Program will begin during FY 08/09, with all major tasks targeted for completion by the end of FY 2009/10. The consultant may also be retained for future management of the inventory and other tasks as needed. Major milestones are summarized below.

FY 2008/09

- Consultant selection by Subcommittee
- Completion and maintenance of regional inventory by consultant
- Development of regional minimum BMPs

FY 2009/10

- Notification of businesses by consultant (by January 2010)
- Final report including status of notifications submitted to Copermittees

4.0 INDIVIDUAL COPERMITTEE RESPONSIBILITIES

Although many of the specific requirements of Permit section D.3.b.(4)(a) will be collaboratively addressed through the completion and implementation of the Regional Mobile Business Outreach and Education Program, the responsibility for ensuring individual Permit compliance ultimately remains with each Copermittee. These responsibilities are briefly discussed below.

4.1 Inspections and Enforcement

Permit section D.3.b.(4)(a)ii requires that Copermittees develop and implement an enforcement strategy which specifically addresses the unique characteristics of mobile businesses operating within their jurisdictions. Section D.3.b.(4)(a)v further requires that Copermittees conduct inspections of mobile businesses as needed (e.g., on a complaint basis). The Regional Mobile Business Outreach and Education program will not address inspections or enforcement of mobile businesses; these responsibilities are retained individually by each Copermittee.

4.2 Education and Outreach

Copermittees are expected to participate as requested in the development of the Education and Outreach Strategy described in Section 3.3 above. Individual Copermittees may also have specific needs or requirements not addressed through this effort. Each jurisdiction retains the responsibility for developing additional education programs or strategies in accordance with their own needs, and as necessary to ensure their own Permit compliance.

4.3 Inventory Updates

As described in Section 3.1 above, individual Copermittee mobile business inventories will initially be used as a starting point for the development of a consolidated regional inventory. Copermittees are expected to make their inventories available as requested, and to provide updated information as determined necessary for future updates.

4.4 BMP Requirements

Copermittees are expected to make their jurisdictional BMPs and requirements available as requested during the development of regional standards and program content. The Regional Mobile Business Outreach and Education Program will emphasize standardized, common content. In the event that an individual Copermittee determines that their specific requirements are not adequately addressed by the Regional Program, they will be responsible for completing additional notifications or other needed measures.

Water Quality Regulations for Construction Sites

Dear Contractor,

The North County Storm Water Program (NCSWP) is a collective of jurisdictions in northern San Diego County working together to protect our watersheds. We believe that reducing pollution is critical to maintaining our communities' way of life.

It is our hope that this brochure will help you identify activities that are recognized to cause water pollution and implement appropriate Best Management Practices (BMPs) to minimize their impact. By providing you with these tools, we hope to make your job easier while keeping our waterways clean.

Each jurisdiction will be inspecting their construction sites to ensure the protection of water quality. We look forward to seeing the BMPs presented in this brochure implemented at your sites.

Together we have the ability to preserve and improve the quality of life in our communities.

Sincerely,

The North County Storm Water Program

Contact Phone Numbers:

City of Carlsbad
760-602-2719

City of San Marcos
760-744-1050

City of Encinitas
760-633-2787

City of Del Mar
858-755-9313

City of Oceanside
760-435-5800

City of Solana Beach
858-720-2470

City of Vista
760-726-1340

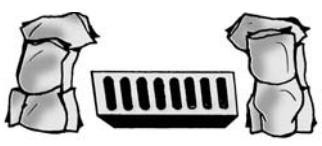
Best Management Practices

The following is a list of BMPs and pollution prevention measures that shall be implemented at all construction sites:

1. **Conduct daily site cleanings.**
2. **Develop spill response and containment procedures.**
3. **Educate employees and subcontractors about BMPs.**
4. **Develop an erosion control plan for wind and rain.**
5. **Regularly maintain all BMPs at project site.**

Construction materials such as paint, dirt and trash often find their way into our storm drains, polluting the environment and jeopardizing our creeks, rivers, lakes, lagoons, and ocean.

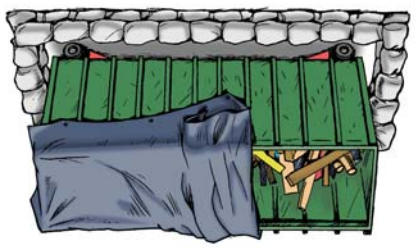
The NCSWP is working with contractors to implement what are known as Best Management Practices (BMPs) on all construction sites. That is, methods used to keep pollution out of our storm drains and off public property, such as sidewalks, streets, parkways and alleys. Carrying out and maintaining these BMPs on the construction site is critical to protecting our ocean and lagoons.





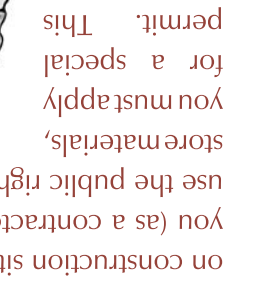
Right-of-Way Permitting

We understand that there are times when space on construction sites is limited. If at any point, you (as a contractor or subcontractor) need to use the public right-of-way in order to work or store materials, you must apply for a special permit. This permit allows you to use the City's right-of-way areas, and describes what is required to prevent illegal contaminants from entering local storm drains. For more information or to obtain a permit application contact your local jurisdiction.



Inspection and Enforcement Program

Each jurisdiction has established an enforcement program to ensure that all businesses operate in compliance with all appropriate storm water laws and other City requirements. Contractors, site supervisors and property owners can be held responsible for violations, which may lead to a civil penalty of up to $10,000 per day and/or reimbursing the local jurisdiction for all expenses associated with clean up.



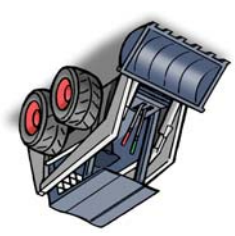
Water Quality Regulations for Construction Sites

In 1972, the environmental Protection Agency developed regulations to control water pollution. As a result, the National Pollutant Discharge Elimination System (NPDES) Permit was created. NPDES permits are issued to municipalities as well as construction sites. In addition to complying with local regulations, which are governed by our municipal NPDES permit, you may be required to obtain a permit through the State of California under the NPDES permit, which is administered by the State Water Resources Control Board. Contact your local municipality for further information.

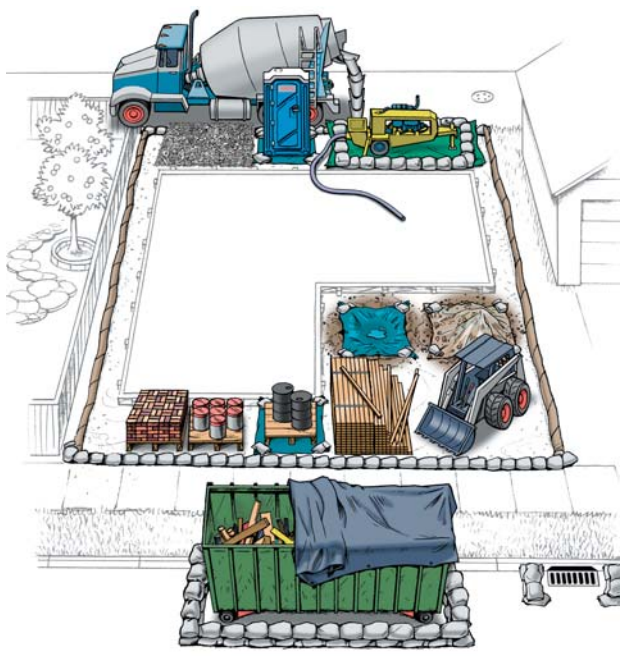
Each municipality has one or more persons dedicated to ensuring that all construction sites are in compliance with state and local storm water control regulations.

All construction sites are required to implement Best Management Practices (BMP) to prevent storm water pollution. This brochure is intended to assist your construction site in understanding BMP requirements.

Construction sites can contribute pollutants, such as sediment, metals, and chemicals, to our local creeks, rivers, lakes, lagoons, and ocean. These pollutants make their way down our streets and into storm drains, eventually discharging to the nearest body of water.



A Pollution Prevention Guide for the Construction Industry



North County Storm Water Program

Carlsbad • Del Mar • Encinitas • Oceanside • San Marcos • Solana Beach • Vista

Only Rain in the Storm Drain

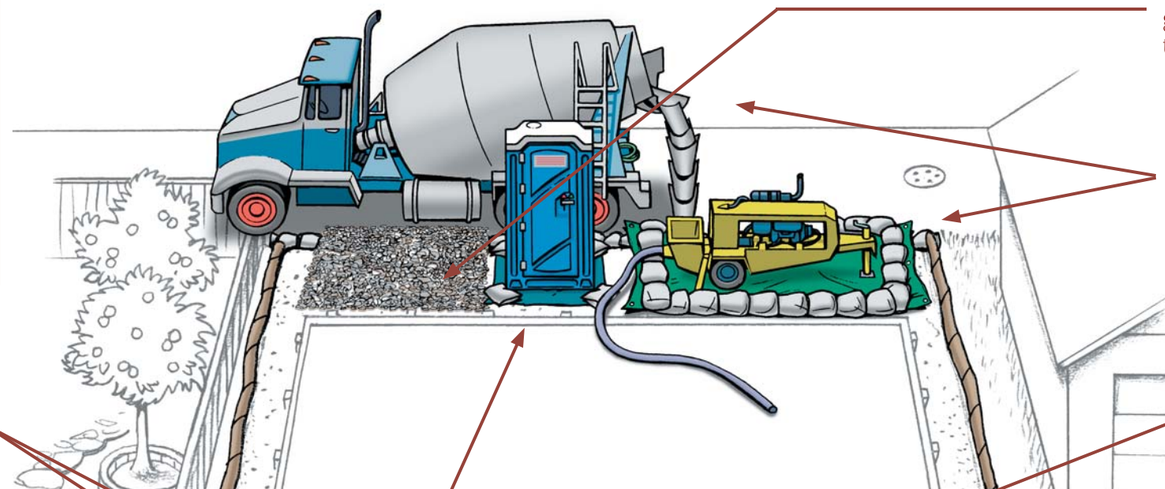
Best Management Practices

Site Overview

Protecting our water resources improves our quality of life and preserves the local environment for our children and future generations.

Untreated storm water and/or unintentional spills at work sites can flow into storm drains and pollute creeks, rivers, lakes, lagoons or the ocean. These discharges are prohibited by law.

The following drawing illustrates Best Management Practices (BMPs) that are recommended for construction sites in North County cities to protect storm drains and minimize pollution. Please check for local requirements.



Materials Storage

All building materials and fuel stored on the site must be contained and covered. It is illegal for contractors to wash out paint brushes in the street or dump any residues in the storm drain. Paint brushes and spray guns must be contained and disposed of properly.

Tracking Controls

All entrances and exits on the site must have coarse gravel or steel shaker plates to limit offsite sediment tracking.

Concrete Trucks/Pumpers

Pumpers must be surrounded by perimeter controls, such as gravel bags. Plastic sheets also must be placed beneath concrete pumpers at all times., and residual materials must be cleaned up as well. Washout areas must be used whenever cleaning trucks.

Washout area

The disposal of "wet" construction materials should be handled in the washout area. This includes paint, stucco and concrete. Use a berm and/or plastic


Mantenimiento
Automotriz
Automotive
Clean

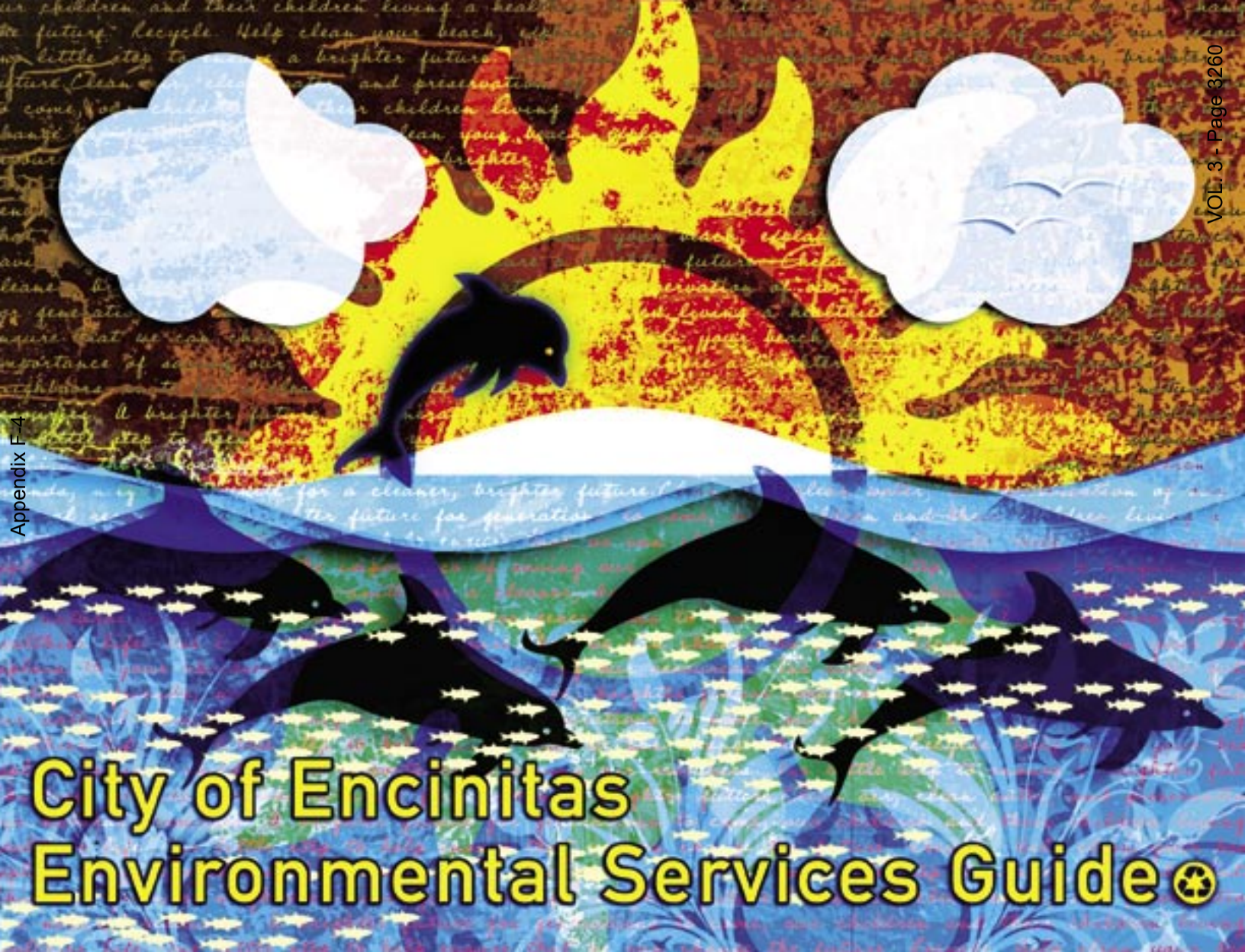

Empresas Constructoras
Developers
Simple and Cost Effective Ways to
Comply with Storm Water Regulations
Clean


Hiring a
Handy Man
Clean


Diazinón
Diazinon
Clean


Restaurants Can
Help Keep our
Waterways Clean
Clean


Cuidado del
Patio y del jardín
Yard & Garden
Care
Clean


City of Encinitas
Environmental Services Guide

Ocean protection

The ocean begins at your front door.



Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to carry rainwater away from developed areas to prevent flooding. Untreated storm water and the pollutants it carries flow directly into our creeks, rivers, lagoons, and the ocean.

Storm water pollution can have a serious impact on water quality in Encinitas. Pollutants from the storm drain system can harm marine life as well as coastal and wetland habitats. They can also degrade our recreational beach areas and contribute to beach postings.

Storm water pollution comes from a variety of sources, including:

- Sediment from construction, home improvement, and landscaping projects
- Excess pesticides and fertilizer from lawns, gardens, greenhouses, and nurseries
- Trash/litter
- Oil and metals from cars
- Detergents, cleaners, and solvents from car washing and power washing activities
- Bacteria from pet waste

Did you know?

One gallon of oil can pollute about one million gallons of water.
- California Integrated Waste Management Board

We all live in a watershed

A watershed is an area of land which drains all the water into creeks, rivers, lagoons, and eventually the ocean. The City of Encinitas drains into Cottonwood Creek, Moonlight Beach, San Elijo Lagoon, and Batiquitos Lagoon.

HEALTHY WATERSHEDS = HEALTHY COMMUNITIES

In Encinitas we are surrounded by water and your actions either help or hurt the environment. Healthy watersheds are vital to our quality of life. Here are some tips to help keep our community clean:

- Properly dispose of all trash and debris
- Use fertilizers and pesticides sparingly. For more information visit: www.ipm.ucdavis.edu
- Adjust sprinklers and prevent over-watering. For more information visit: www.bewaterwise.com
- When possible, take your car to a commercial car wash
- Keep your car properly maintained to prevent fluid leaks
- Volunteer at cleanup events in Encinitas
- Pick up after your pets

To report an illegal discharge or for more information, visit us online at:
www.ci.encinitas.ca.us/resident/environment/cleanWP
or call our Clean Water Hotline at (760) 633-2787.





Color Changing Mood Pencil



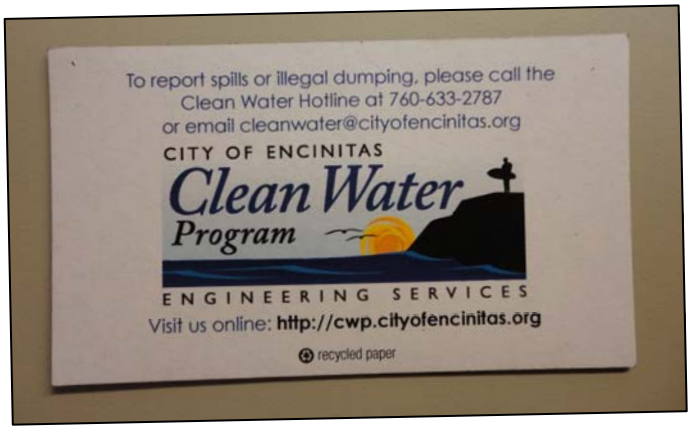
Pet Waste Bag Dispenser



Recycled Shop Towel



Recycled Key Chain



Magnet

CITY OF ENCINITAS

Clean Water Program



ENGINEERING SERVICES

Clean Water Hotline: 760-633-2787

♻ made from 85% post-industrial recycled paper

Regional URMP Attachment 2.0

Regional Residential Education Plan

FINAL – March 20, 2008

Submitted by the San Diego Stormwater Copermittees in partial fulfillment of the requirements of San Diego Regional Water Quality Control Board Order No. R9-2007-0001 (the San Diego Municipal Stormwater Permit)

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1.0 INTRODUCTION

The Regional Residential Education Program is a joint effort by the Copermittees of the Municipal Stormwater Permit (Order No. R9-2007-0001, NPDES No. CAS0108758). The Regional Residential Education Plan (Plan) contains recommended strategies for the successful development and implementation of the Regional Residential Education Program. Per section F.1 of the Permit, as amended by Addendum No. 1 on December 12, 2007, this program must be collaboratively developed and implemented by March 24, 2008.

In the past, Copermittees have been limited in their ability to pursue strategies which may have a much greater potential to influence knowledge and behavioral change in residential populations. There are several benefits to implementing an enhanced regional program to target residential sources of stormwater pollution. First, it will encourage the development of consistent messages throughout the region. Second, a regional approach will enable Copermittees to better leverage resources and utilize economies of scale. Finally, stormwater and urban runoff pollution frequently cross jurisdictional boundaries, making collaborative approaches a necessity. While the regional program will be coordinated extensively among the Copermittees, it is not meant to supplant the jurisdictional and watershed programs.

The overall goals of the program are to increase awareness and knowledge, improve attitudes toward stormwater pollution and provide a foundation for changing behaviors that contribute to stormwater pollution. Based on extensive input from the Copermittee Regional Stormwater Management Committee (RMC) and the Education & Residential Sources Workgroup, as well as an independent analysis of existing educational efforts, the following objectives were developed to support these goals:

1. Maintain a consistent image, message, and brand
2. Use positive messages to increase knowledge and awareness, and ultimately change behavior
3. Develop community partnerships to leverage resources

4. Develop assessment strategies for program effectiveness

The Regional Education & Residential Sources Workgroup advises the RMC on regional shared outreach activities as necessary to support the requirements of the Permit. The Education & Residential Sources Workgroup plans, develops, and implements the various aspects of the stormwater education program. Education & Residential Sources Workgroup participants have traditionally combined efforts to reach business, industrial, and residential communities across the San Diego region. However, in accordance with the most recent NPDES Permit, this Plan represents a distinct effort to target residential sources of stormwater pollution.

Messages developed by the Education & Residential Sources Workgroup are designed to increase knowledge and awareness of regional stormwater issues and encourage positive changes in behavior. Assessment methods and measures have also been developed to evaluate the effectiveness of these messages and the strategies used to deliver them. Program evaluation methods and strategies will evolve as various program elements are implemented. Regional assessment methods will measure knowledge, awareness, and attitudes of residents. Program elements that are determined to be ineffective or least effective will be replaced by more effective elements or improved upon as needed. The regional program will also facilitate the measurement of changes in pollutant generating behaviors by the jurisdictional and watershed programs.

As a basis for developing this Regional Residential Education Plan, the Copermittees contracted with TRG & Associates to develop *Recommended Options for the San Diego Regional Stormwater Educational Program*. This document contains a number of recommended strategies for the successful development and implementation of a regional residential education program. It includes an extensive literature review, an analysis of existing educational programs in San Diego, and a comprehensive list of public awareness surveys. The literature review outlines other programs in the State that have

successfully implemented regional residential stormwater education programs. The document also summarizes the strengths and weaknesses of existing residential education efforts, provides suggestions for how they can be improved, provides a brief analysis of baseline public awareness surveys that have been implemented locally within the last five years, and offers recommendations for improving assessment methods and survey instruments.

2.0 SOURCE CHARACTERIZATION

The San Diego region occupies 4,261 square miles with a population of approximately 3 million people. Estimates for the year 2007 indicate that the San Diego regional population is 29% Hispanic and 71% non-Hispanic. Non-Hispanic persons include African Americans, American Indians, Native Hawaiians, Asians, and persons of a multitude of races, ethnicities, and cultures. SANDAG currently estimates that the median household income in the San Diego region is $68,388. According to the US Census Bureau in 2004 only 10.9% of San Diego's population was living below the poverty level, compared to 13.2% Statewide. Other estimates indicate that as much as 25% of California's population is living below the poverty level. Much of the region's quality of life revolves around the water resources.

Residential areas have been shown to be a prevalent source of urban runoff in the San Diego region, although less than ten percent of the region is developed as residential land. Most of the urban activity is clustered in the western third of the county, near coastal areas. However; residential land–based activities throughout the entire region contribute to polluted stormwater runoff.

The Regional Residential Education Program will focus efforts on high priority residential pollution sources that are common throughout the San Diego region. Water quality monitoring data and source characterization studies have provided the Copermittees with useful information in determining regional residential sources of stormwater pollution and constituents of concern. Regional threats to water quality were initially outlined in the Report of Waste Discharged and finalized in the Permit. Section

F.1.a of the Permit describes the process for determining which pollutants will be addressed by the program.

2.1. Regional Constituents of Concern

The following constituents of concern were determined to be the primary pollutants from residential sources for the San Diego region:

- Bacteria
- Nutrients
- Sediment
- Pesticides
- Trash

Some jurisdictions may have additional high priority pollutants. Each jurisdiction will be individually responsible for addressing additional pollutants and their sources. The pollutants listed above will remain the focus of the Regional Residential Education Program.

2.2. Pollutant-generating Activities and Constituents of Concern

Table 1 outlines residential pollutant generating activities and associated constituents of concern generated by residential areas in the San Diego region.

Table 1) Pollutant Generating Activities

Pollutant Generating Activities	Priority Constituents				
	Bacteria	Nutrients	Pesticides	Sediments	Trash
• Leaving pet waste in yard, street or sidewalk • Improper disposal of pet waste	X	X			
• Over-irrigation • Improper irrigation and system maintenance	X	X	X	X	
• Fertilizer use • Pesticide use • Landscaping activities	X	X	X	X	
• Cleaning outdoor impervious surfaces (i.e., driveways and patios)	X	X		X	X
• Improper waste disposal	X	X	X	X	X

2.3. Target Audiences

As described above, this program is intended to address the entire residential community of the San Diego region. This residential audience will be further described in terms of two specific target audiences in order to design more effective education and outreach strategies. The target audiences for the Regional Residential Education Program have been identified based on information gathered by the consultant (TRG and Associates), who utilized data from market research conducted by the County and City of San Diego and surveys gathered from other case studies. Although there may be other smaller groups of target audiences, regional outreach must realistically target the highest priority demographics in order to effectively utilize program funds. The following describes the target audiences for the campaign:

1. Primary Target Audience- English speaking residents and homeowners
2. Underserved Target Audience- Spanish speaking communities and Low Socio-Economic Status (SES)

One of the challenges of program implementation will be to develop messages that appeal to these communities. While creating content and developing materials for the primary target audience may be relatively straightforward, methods and approaches will need to be modified in order to engage the Underserved Target Audience. For example; some messages will be more conducive to translation into the Spanish language than others. Once translated, Spanish language media will be used to disseminate these messages.

According to the US Census Bureau, 33% of San Diego County residents speak a language other than English at home (2000). The same data indicates that 26.7 % of the regional population is Hispanic or Latino. Although this number varied within jurisdictions from 49.5% in Chula Vista to 11.7% in Carlsbad, it is clear that every jurisdiction in the region has significant populations of Hispanic or Latino residents. Therefore, although there are many languages spoken in San Diego, Spanish speaking communities are likely the most common throughout the region.

Research indicates that the motivating factors in Spanish speaking communities are 1) health and commitment to family, 2) children, and 3) finances. Similar priorities are found within the low SES communities. Hence, some messages will resonate more strongly with the communities among the Underserved Target Audience. Other messages may need to be modified in order to create a more appealing campaign. Low SES in California is defined as household annual income less than $25,000. Low SES residents tend to obtain information and resources from different sources than the residents within the Primary Target Audience. Again, message delivery becomes a key issue. In order to address all of these issues, specific outreach strategies will need to be developed in order to effectively reach the Underserved Target Audience.

3.0 TARGETED CHANGES TO KNOWLEDGE, AWARENESS AND BEHAVIOR

The overall goals of the Regional Residential Education Program are to raise the levels of knowledge and awareness with regards to stormwater pollution among residents, while encouraging changes to behaviors that are harmful to San Diego's waterways. The program will generally educate residents on 1) The difference between stormwater conveyance systems and sanitary sewer systems 2) the connection of storm drains to local waterways and 3) common residential sources of urban run-off. These are the general knowledge and awareness concepts upon which more specific messages will be built.

Recent research indicates that many residents do not understand that storm drains and sanitary sewer systems are completely separate. While sewage is treated, everything that goes down a storm drain goes directly to a creek, bay, or the ocean. The City of San Diego conducted a public opinion survey in 2007 in which 91% of respondents said they had heard the term "storm drain" before. However, only 46% knew that the water entering storm drains is not treated. This is a fundamental stormwater pollution prevention issue and general awareness concept. Awareness of the stormwater conveyance system is the first step towards understanding pollution prevention. Increasing knowledge and awareness that the system leads directly to local waterways will help residents to understand that urban sources of pollution have a direct effect on water quality. The awareness and knowledge of these issues are precursors to adjustments in attitudes (i.e.: increased concern for preventing this type of pollution).

Ultimately, it is anticipated that the program's targeting increased awareness and knowledge of these concepts will lead to positive changes in attitude. Furthermore, improved attitudes toward the importance of stormwater issues can provide motivation for changing pollutant generating behaviors.

In keeping with the program goals, the Copermittees have agreed on a number of positive behavior outcomes for each stormwater issue presented to the target audience. Pollutant generating activities are listed in Table 2, along with the knowledge required to understand the significance of the stormwater impacts. Also listed are numerous examples of desired behavior outcomes. Since it may not be feasible to craft messages that address each of the desired behavior outcomes listed in Table 2, some behaviors may be considered primary and targeted before others. Secondary behaviors will be targeted only if the initial efforts are determined to be unsuccessful. It is important to recognize that the Copermittees agreed on these issues and the associated behaviors, and some may wish to further utilize the concepts listed in Table 2 in their jurisdictional and/or watershed programs.

Table 2) Pollutant Generating Activities and Examples of Positive Behavior

Pollutant Generating Activities	Knowledge/Awareness	Examples of Desired Behavior Outcomes
• Leaving pet waste in yard, street or sidewalk • Improper disposal of pet waste	Pet waste left in the yard and streets may introduce solids, bacteria, and nutrients to the storm drain and/or receiving water bodies.	• **Pick up pet waste during walks** • Pick up pet waste around home • **Properly dispose of pet waste in trash can or bin**
• Over-irrigation • Improper irrigation and system maintenance	Over-irrigation causes water and pollutants in its path to run into the storm drain and/or receiving water bodies.	• **Reduce over-irrigation** • Use irrigation controller technology to reduce the amount of over-watering • **Inspect and maintain irrigation system regularly** • Adjust irrigation schedule according to seasonal changes
• Fertilizer use • Pesticide use • Landscaping activities	Fertilizers and pesticides become pollutants that can be harmful to natural ecosystems when entering receiving water bodies. Soil, sediment, and yard waste can clog storm drains and/or receiving water bodies.	• Use plants that reduce the need for fertilizers (i.e.: native plants) • Apply chemical fertilizers and pesticides only as needed and at the appropriate time • **Use organic or slow-release fertilizers** • **Use Integrated Pest Management** • Store chemicals inside in a shed or storage cabinet where they are protected from rainfall • **Collect grass clippings and yard waste** • **Dispose of grass clippings and yard waste in the proper containers** • Protect exposed soil from rain with a tarp, vegetation, and/or mulch
• Cleaning outdoor impervious surfaces (i.e.: driveways and patios)	When it rains, trash, dirt, and chemicals that have built up on these surface can run into the street, the storm drain, and eventually local waterways.	• **Clean driveways, walkways, and patios by sweeping instead of hosing** • Direct wash water to soak in to lawn or garden
• Improper waste disposal	Litter and debris dropped on the ground will be washed into storm drains and local water bodies.	• **Put litter and cigarette butts in trash cans or bins** • Keep lids closed on trash cans or bins

Although many positive behaviors have been identified that may be encouraged by the messages developed in this program, the following have been selected as the primary desired behaviors to result from the changes to knowledge, awareness, and attitudes:

- Pick up pet waste and properly dispose of in trash can or bin
- Reduce over-irrigation by regularly inspecting and maintaining irrigation systems
- Reduce fertilizer use by applying chemical fertilizer only as needed and using organic or slow-release fertilizers
- Reduce chemical pesticide use through Integrated Pest Management
- Collect grass clippings and yard waste and place them in the appropriate disposal container in order to prevent them from entering the storm drain systems
- Sweep up outside areas such as driveways, walkways, and patios instead of hosing them down
- Put litter and cigarette butts in trash cans or bins

Specific messages will be designed to increase knowledge and awareness, and therefore encourage the behaviors listed above. Regional messages will be initially developed to address only the primary targeted behaviors. Once a baseline is established and program implementation is underway, Copermittees will have the opportunity to evaluate the knowledge, awareness, and willingness of the residential target audiences to adopt these behaviors. Other positive behaviors from Table 2 may also be substituted, if necessary.
It can reasonably be expected that the regional program will be able to measure success in terms of increasing knowledge and awareness, and improving attitudes, of residents.

Knowledge describes the accuracy of one's beliefs and awareness indicates recognition of the severity of the issues whereas attitude can be described as an individual's evaluation of it (favorable or unfavorable).

As a result of the regional efforts, Copermittees expect to see an increase in the general awareness of storm drain systems and their connection to local waterways, as well the sources of urban run-off. Specifically, residents should understand the difference between the stormwater conveyance system and sanitary sewer systems. They should become aware that water entering storm drains flows untreated to local waterways. Residents should also be able to accurately identify sources of stormwater pollution (i.e.: pet waste). Attitudes toward stormwater pollution should also improve. Ideally, there will be an increase in the numbers of households or individuals engaging in the desired behavior outcomes as a result of their increased knowledge and awareness. These targets will be measured using the assessment methods described in Section 6.0.

The primary assessment tool will be the public opinion surveys. A baseline regional residential telephone survey will be conducted in 2008 and, ideally, at one other point during the current permit cycle. The numeric objectives for survey results are set so that they exceed the statistical margin of error of 2.5 percent (assuming a sample size of 1000) so that if they are achieved, they will be statistically significant. In addition, the objectives are intentionally set high, with the understanding that they are intended as a point of reference rather than a pass/fail measure. With that in mind, Copermittees have set a target of a 10% change in knowledge that storm drains are separate from sanitary sewer systems, a 10% increase in the awareness that all storm drains are connected to local waterways, and a 15% increase in the number of participants who can identify residential sources of stormwater pollution.

4.0 EDUCATIONAL METHODS AND APPROACHES

A variety of methods and approaches will be utilized to implement the program objectives. As described above, the Regional Residential Education Program objectives are 1) to maintain a consistent image and brand 2) use positive messages to change behavior 3) develop community partnerships and 4) develop strategies to assess program effectiveness. The following regional program elements are designed to meet these objectives:

- Standardized Regional Brand (Think Blue)
- Regional Think Blue Website
- Mass Media (Broadcast and Outdoor)
- Regional Outreach Materials (Development and Distribution)
- Regional Outreach Event
- Partnerships
- Regional Stormwater Hotline
- Public Relations

Some of the elements are designed for program management whereas others are outreach methods. Program management elements include standardizing the Think Blue brand, message and material development, and partnership development. The program will have a multi-faceted outreach approach utilizing a regional website, mass media (broadcast and outdoor), public relations, printed materials and promotional items, and regional outreach such as a community event. Implementation of all the recommendations is dependent on funding for each year. Therefore, some activities may be feasible only if sufficient or additional funds are available in a given year.

4.1 Standardized Regional Brand (Think Blue)

The Think Blue campaign has created a locally recognizable brand that has demonstrated effectiveness in stormwater outreach. Expanding the brand to the regional program has obvious benefits for all of the Copermittees. With a consistent look and brand, the Copermittees can continue to conduct their own outreach; however they can use the Think Blue brand in conjunction with their materials for consistency. There will be a Think Blue Graphic Standards Guide that provides the correct fonts, colors and standards to be used for all outreach materials. This will help reinforce the Think Blue brand and provide standards for its use in messages and materials. Messages and materials may need to be continuously revised in order to keep current and effectively reach target audiences.

4.2 Regional Think Blue Website

A regional Think Blue website will help build upon and reinforce the branding strategy. The Internet is a powerful means of communication. Web sites can reach large audiences with relatively minimal effort. The regional website will be developed and maintained by a contractor. It could contain easy to download, user friendly information sheets, links to Copermittees websites, and short surveys or quizzes. The regional web site, along with the new logo and slogan, will increase program visibility.

4.3 Mass Media

Although the website is an important component of the outreach efforts, many residents still get the great bulk of their environmental messages from more traditional venues such as the television and radio (broadcast media). Public Service Announcements (PSA) and advertisements are the most common forms of broadcast media. Some PSAs have already been developed under the Think Blue campaign and through the combined efforts of the Copermittees. The Copermittees can utilize funds to expand or complement the existing Think Blue campaign. The public relations component will involve news coverage such as news stories, interviews, and event coverage. Public relations provide

valuable outreach opportunities that will be sought whenever possible. Outdoor media such as bus placards and billboards can also be utilized for outreach. The location of outdoor media advertisements will need to be carefully placed in order to reach the regional target audience.

4.4 Regional Outreach Materials and Community Events

Print materials and promotional items are critical items for successful outreach. Materials include items like fact sheets, brochures, flyers, booklets, coupon booklets, posters, and doorknob hangers. These materials are easily created and the target audience can refer to them repeatedly. Promotional materials are good for promoting the regional brand, increasing knowledge and awareness, and encouraging simple actions to prevent stormwater pollution. They will be designed to also serve as visual prompts that remind people to choose behaviors that protect and improve water quality.

A regional outreach event can be an energizing and successful venue for distributing outreach messages. Careful attention should be given to participating in a community event so that the effort reaches residents from the entire region. Extensive planning, material or display development, coordination, and marketing will be necessary in order to prepare for one successful regional outreach event. This is an endeavor that will involve identifying events that reach the entire region as well as coordinating, funding, and staffing the selected event. The Copermittees expect to participate in up to two regional events over the duration of this permit cycle. Some examples of regional events that may be considered are the San Diego County Fair, the Miramar Air Show, or a local sports venue.

4.5 Partnerships

Partnerships are both a management and outreach element of the program. A partnership is a voluntary collaboration of agencies, organizations, or other groups or individuals that have joined to work toward a common goal. The Copermittees can maximize resources through the use of partnerships. The potential for partnerships is immense for the

Copermittees. Potential partnerships include local water districts (combine conservation and pollution prevention messages), hardware stores and nurseries, pet stores, and Homeowner's Associations and Property Management Companies. Initial development of partnerships with businesses and business organizations, nonprofits, other government agencies, will be necessary before the full benefits can be realized. Copermittees may then encourage partners to distribute materials or spread messages through signage, advertising and websites. Partnerships will require time to develop and may not be fully recognized until later in the permit cycle.

4.6 Regional Stormwater Hotline

Although a regional stormwater hotline is already in place, successful outreach may lead to an increase in hotline calls. The regional hotline can also help the public gain access to information quickly and easily. The hotline will be promoted through the website, media advertising and other promotional venues. The number of calls to the hotline can be tabulated to help gauge whether some advertising is effective (if the call to action is a hotline call). Since the hotline will also be an important measure of program success, careful consideration will be given to managing the hotline as the program implementation moves forward.

4.7 Behavior Specific Outreach Methods

Table 3 lists the primary target behaviors for the program during this permit cycle. The table indicates which of the outreach methods described above may be utilized to deliver messages designed for each behavior. These were selected as the primary targets because they have current appeal. Primary target behaviors may be updated as program evaluation progresses. If necessary, resources may be reallocated to address the other (secondary) target behaviors previously listed in Table 2.

Table 3) Applicability of Outreach Methods to Primary Target Behaviors

Primary Target Behaviors	Potential Methods of Outreach						
	Website	Mass Media Broadcast	Mass Media Outdoor	Public Relations	Material Distribution	Partnerships	Regional Community Events
Pick up pet waste and dispose of in trash bin	X	X	X	X	X	X	
Reduce over-irrigation by regularly inspecting and maintaining irrigation systems	X			X	X	X	X
Apply chemicals to lawn and garden only as needed	X	X		X	X	X	X
Use organic or slow-release fertilizers	X	X		X	X	X	X
Collect grass clippings and dispose of them in the proper container	X				X		
Employ Integrated Pest Management	X	X	X		X	X	X
Sweep outside areas instead of hosing them down	X		X		X		
Put litter and cigarette butts in trash cans or bins	X			X	X	X	X

Specific messages will be developed to increase knowledge and awareness that will lead to each desired behavior outcome

4.8 Program Implementation

While the overall goals of the program are to educate the general public in order promote knowledge and awareness and decrease pollutant generating behaviors, a successful program will also require coordination among the Copermittees. Program planning and message development are key components of the program that will precede full implementation. Message delivery will be ongoing. Subsequently, as results from assessments are reviewed, messages and delivery methods will need to be revised. Therefore, there are essentially three steps in the program implementation process 1)

development, 2) implementation, and 3) assessment. For the purposes of this report, the development phase includes planning projects as well as developing materials and messages. Implementation includes initiating a program element (such as media outreach) as well as maintaining the ongoing nature of the element once it is in place. Assessment includes all levels of determining the effectiveness of program elements, as well as making revisions that reflect the knowledge gained through assessment.

Table 4 charts the schedule of program implementation over the 5-year permit cycle. Strategies to achieve these objectives will be implemented over the 5-year permit cycle. Because some upfront planning and development is necessary, the first year will focus on standardizing a regional brand, developing messages, and determining the most appropriate methods for disseminating messages on a regional scale (i.e.: a regional website). Copermittees may also begin fostering partnerships in the initial years of the program. Subsequent years will build on this foundation. Copermittees may decide to refine messages and could begin leveraging resources through partnerships.

Table 4) Projected General Implementation Schedule

Program Elements	Year 1: 2007-08	Year 2: 2008-09	Year 3: 2009-10	Year 4: 2010-11	Year 5: 2011-12
Branding	D	D, I, A	I, A	I, A	I,
Regional Website	D	D, I, A	I, A	I, A	I,
Regional Hotline	D	D, I	I, A	I, A	I,
Mass Media	D	D, I	I, A	D, A	I,
Regional Outreach (Marketing and Community Events)	D	D, I	I, A	D, A	I,
Materials Development & Distribution	D	D, I, A	D, I, A	D, A	D, I
Public Relations	D	D, I	I, A	D, A	I,
Market Research & Assessment Tools	D, I, A	D, I, A	D, I, A	D, I, A	D, I,
Partnerships	D, I	D, I,	I, A	I, A	I

Development (D), Implementation (I), Assessment (A)

4.9 Social Marketing Approaches

In all of the aforementioned efforts, a variety of social marketing approaches will be utilized whenever possible. There are so many techniques described as social marketing that it is not possible to utilize them all, especially with limited staff and budgets. Social marketing uses many of the principles of social psychology and marketing techniques to bring about behavior change. Rather than being product oriented, social marketing focuses on people and their behaviors. All social marketing approaches use audience research to learn how to motivate an audience to change one or more recurring actions.

Social marketing consists of several basic components that result in delivering messages that will increase knowledge and awareness, thereby prompting people to change certain behaviors. The challenge is to present the new behavior in a positive way and emphasize the benefits to adopting a new behavior. Forming strategic partnerships with community resources can help to achieve the end goal of behavior change. Social marketing campaigns deliver messages that are strategically created and positioned to give people a compelling reason to adopt a new behavior. In order to overcome the barriers to action it is necessary to understand what the barriers are and why they exist. Researching and understanding the audience is a critical step in developing a social marketing campaign. Messages are conveyed through advertising, websites, materials and other communications. Messages should be simple, memorable and easy to follow. There should be one simple message for each of the targeted areas of knowledge and awareness. Each message needs to be used consistently in communications.

Community Based Social Marketing (CBSM) is a type of social marketing. It has gained popular appeal among the environmental community as an effective alternative to traditional information-based marketing approaches. CBSM packages basic principles of behavior change and social science research in a way that provides a usable framework for practitioners working to promote positive behavior change.

A key element of the CBSM approach is to pilot test the program with a small representative segment of the community, and compare the results to a control group. For example, a small jurisdiction may implement a project that essentially serves as a pilot for the regional program. If the pilot is not successful, the strategy should be refined and then pilot tested again. If the pilot is successful at changing behavior, the strategy can be implemented more broadly throughout the community or on a regional level. Once the successful pilot program has been widely implemented CBSM requires that the program be carefully evaluated at several points to measure continued success.

The Copermittees have agreed that CBSM offers a solid foundation for developing an effective program. However, it may not always be feasible to utilize the CBSM approach on a regional scale, hence the need for a combined approach that uses traditional social marketing techniques as well as CBSM. Some methods will lend themselves more readily to developing CBSM based approaches. When implementing each of the methods, a CBSM approach will be pursued whenever feasible.

5.0 RELATIONSHIP OF REGIONAL, WATERSHED, AND JURISDICTIONAL OUTREACH

The Regional Residential Education Program is designed to meet the Permit requirements for residential education based on regional needs and issues. The first step in meeting these requirements is to establish a regional brand and consistent image. The City of San Diego's regionally recognized Think Blue logo will be utilized as the Regional Residential Education Program's brand. During the implementation phase of the permit cycle the Copermittees will work collaboratively with the City of San Diego to update and standardize the Think Blue brand. A Graphics Standards Manual will be developed by the City of San Diego and adopted by the Copermittees in order to facilitate ease of material development and ensure a consistent regional image. Existing jurisdictional programs may also choose to use the Think Blue brand, maintain individuality, or

combine both programs for maximum impact. In a similar manner, watershed activities may be coordinated under the Think Blue brand, so long as the standards are adhered to.

Copermittees will hire a contractor to build and maintain a regional Think Blue website. The website may include links to jurisdictional program, watershed program websites, and other regional websites such as Project Clean Water. The regional Think Blue website will provide user friendly information for the public in a single location, thereby promoting consistency and coordination among the regional, jurisdictional, and watershed programs.

In addition, the Education & Residential Sources Workgroup provides a platform for integration of regional, jurisdictional, and watershed messages. The Education & Residential Sources Workgroup also coordinates activities between non-profit organizations, private institutions, and governmental agencies providing environmental and water quality education. Regular meetings will continue to provide a forum for educators, trainers, and public information officers to collaborate, share methods and materials, and seek policy level support and direction.

Watershed and jurisdictional programs should look to the Regional Residential Education Program when designing residential educational activities. The Regional Residential Education Program can thereby serve as a basis for developing these other programs. Some specific watershed or jurisdictional issues may not be covered by the Regional Residential Education Program, and must still be met by the individual or Watershed Copermittees as required by the Permit. These issues will be addressed in the watershed or jurisdictional programs. In this manner, the watershed and jurisdictional programs can supplement the Regional Residential Education Program in order to ensure that all requirements are met. As a result, each jurisdictional program may be unique in some respects and elements of the watershed programs may go beyond those in the regional program.

While the regional program may play a role in encouraging behavior changes, it is more feasible for jurisdictional programs to be able to measure actual behavioral changes resulting from increased knowledge and awareness because of their ability to implement pilots on a small scale. The broad based regional program will be implementing methods and utilizing assessment tools that most accurately gauge attitudes, knowledge, and awareness. Positive changes in attitudes and awareness are generally accepted as precursors to behavior change. Therefore, due to the difficulty of assessing behavior change on a regional level, demonstrating behavior change will therefore reside with the jurisdictional and watershed programs. In order to facilitate the assessment of jurisdictional and watershed programs, the Plan outlines assessment tools for measuring changes in knowledge and awareness through the regional program. These measures can also be tailored to meet the needs of the jurisdictional and watershed programs that implement CBSM pilots or focused outreach efforts, which provide excellent opportunities to assess behavior change. Section 6.0 describes assessment tools in further detail.

6.0 ASSESSMENT OF REGIONAL EDUCATION ACTIVITIES

In order to evaluate whether the various components of the program are resulting in the targeted knowledge and awareness outcomes, a number of assessment methods may be utilized. A random digit dial telephone survey will be the primary tool for measuring changes resulting from implementation of the regional program. Different types of assessment methods will be employed in order to gauge the outcomes of each activity and thereby determine effectiveness. Copermittees will review and assess existing survey data while developing the new regional baseline survey. Public opinion surveys will be alternated with other assessment methods to adequately assess the overall effectiveness of the Regional Residential Education Program. Copermittees have agreed to work cooperatively on funding and conducting market research and surveys. Measurement tools outlined in the Plan may be modified somewhat to correspond with different program elements. The Plan basically provides a model for program effectiveness

assessment. Specific assessment methods will depend on the type of outreach or education activity conducted and other constraints.

Copermittees will work with the City of San Diego to conduct a county-wide random digit dial telephone survey in order to obtain baseline information on knowledge, awareness, attitudes, and behaviors pertaining to stormwater. Results of the survey will guide further adaptation of the program objectives. Ideally, another public opinion survey will be conducted later in the permit cycle to assess any changes resulting from program implementation. Once the baseline is established, future permit cycles may involve one or more public opinion surveys. Additional evaluation methods may be utilized once specific media, promotions, and outreach activities are implemented. Results will enable Copermittees to determine the most effective outreach methods and make modifications to the programs as needed.

Outcome levels used in this program are based on the Hierarchy of Targeted Outcomes Pyramid referred to in the NPDES Permit, which includes outcome levels 1-6. Outcome levels 1-3 will be most applicable to educational and outreach activities. Table 5 illustrates potential assessment methods that may be utilized for each of the activities being considered. Level 1 outcomes indicate compliance with permit based activities. This is the most basic means of assessing program effectiveness. Measuring Level 2 outcomes will indicate changes in attitudes, knowledge and awareness. Surveys and quizzes provide the most common means for measuring Level 2 outcomes. Level 3 outcomes provide an opportunity to measure behavioral changes and implementation of Best Management Practices (BMPs). This can be accomplished through observations and program specific counts. For example, tracking sales of less toxic pesticides in a store where IPM information is available may indicate changes in the behavior of consumers. Level 4 outcomes indicate actual load reduction, and are more practical for activities such as clean up events or Household Hazardous Waste collection activities, which are sometimes associated with outreach activities.

Table 5) Potential Program Element Assessment Measures

Activity/ Level		Type of Assessment Measure
Branding		
1		Updating materials to reflect new regional brand.
2		Count number of survey respondents who are aware of brand/program.
3		N/A
4		N/A
Website		
1		Count number of hits to website, interactive use/quizzes taken, etc.
2		Administer survey/quiz to assess attitude/knowledge of web users.
3		Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data. Downloads of informational brochures.
4		N/A
Mass Media/Public Service Announcement (PSA)/Public Relations		
1		Count number of household/individuals reached.
2		Administer survey/quiz to assess attitude/knowledge of PSA recipients.
3		Comments and feedback received regarding PSA via the hotline or website.
4		N/A
Outreach Materials (i.e.: fact sheets and brochures)		
1		Count number of fact sheet/brochures handed out.
2		Administer survey/quiz to assess attitude/knowledge of fact sheet/brochure recipients
3		Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data.
4		N/A
Regional Outreach Event		
1		Count number of visitors to booths, brochures handed out, surveys/quizzes completed, etc.
2		Count number of mail-in cards, number of volunteers to organization, number of persons who attended community event. Administer survey/quiz to assess attitude/knowledge of visitors
3		Administer survey/quiz to assess behavior change and compare to pilot, historical, or control data.
4		N/A

Partnerships

1	Count number of incentives distributed, participants in the program.
2	Survey or quiz to assess attitude/knowledge of volunteers pre- and post- participation
3	Administer survey to assess behavior change in program participants or count observable behavior of program participants and compare to pilot data, historical data, and/or control group. Count number of mail-in cards, number of volunteers to organization, or number of persons who signed a petition directed from incentive program.
4	Count amount of load reduction in targeted residential area or count amount of load removed from targeted area

Hotline

1	Count number of calls to hotline.
2	Administer survey/quiz to assess attitude/knowledge of hotline users.
3	Administer survey to assess behavior change of participants in program and compare to pilot, historical, or control data, count observable behavior of participants in program and compare to pilot data and/or control group.
4	N/A

7.0 CONCLUSIONS AND RECOMMENDATIONS

The San Diego region has widely diverse socio-economic, ethnic, biological, and physical characteristics. These characteristics create the region's appeal and present many challenges to the entities charged with developing and implementing an effective Regional Urban Runoff Management Program (RURMP).

The Regional Residential Education Program is a component of the San Diego RURMP. This program is designed to increase knowledge and awareness of stormwater issues and potentially change pollutant generating behaviors. Research indicates that these are attainable goals under a well-funded, long term, multi-faceted and strategic public outreach campaign.

In order to implement program goals, the Copermittees have agreed on general objectives: 1) maintain a consistent image, message and brand 2) use positive messages to increase knowledge and awareness, thereby increasing the likelihood of behavior change 3) develop community partnerships and 4) develop strategies to assess program effectiveness. In order to efficiently accomplish these objectives, Copermittees have agreed to adopt Think Blue as the regional flagship brand. In addition, strong and

focused outreach messages will be selected to increase knowledge and awareness and ultimately target the primary pollutant generating behaviors from residential activities.

The basic program elements include an array of methods and approaches that will be utilized for program management, message delivery, and effectiveness assessment. Over time, the Regional Residential Education Program will be adapted to utilize the most effective outreach and education strategies practicable while maintaining a clear focus for the entire region. Annual reports will summarize progress and provide an opportunity to reflect on the year's successes and shortcomings. At the end of the 5-year permit cycle, Copermittees will be able to assess of the program's progress and develop more effective regional outreach strategies.

Appendix G

JURMP Annual Report

Requirements Checklist

G-1 **Requirements Checklist**

Appendix G
JURMP Annual Report Requirements Checklist

2.0 Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location In Report**
i. A description of any amendments to the General Plan, the environmental review process, development project approval processes, or development project requirements.	2.2.4, 2.3, 2.4.4.1, 2.4.4.2
ii. Confirmation that all development projects were required to undergo the Copermittee's urban runoff approval process and meet the applicable project requirements, including a description of how this information was tracked.	2.4.4.2, 2.4.4.3, 2.4.4.4
iii. A listing of the development projects to which SUSMP requirements were applied.	2.4.4.3, Table 2-2
iv. Confirmation that all applicable SUSMP BMP requirements were applied to all priority development projects, including a description of how this information was tracked.	2.4.4.3, 2.4.4.4
v. At least one example of a priority development project that was conditioned to meet SUSMP requirements and a description of the required BMPs.	2.4.4.3
vi. A listing of the priority development projects which were allowed to implement treatment control BMPs with low removal efficiency rankings, including the feasibility analyses which were conducted to exhibit that more effective BMPs were infeasible.	2.4.4.3 (N/A)
vii. An updated treatment control BMP inventory.	2.4.4.4, Appendix A-1
viii. The number of treatment control BMPs inspected, including a summary of inspection results and findings.	2.4.4.7, Appendix A-8
ix. A description of the annual verification of operation and maintenance of treatment control BMPs, including a summary of verification results and findings.	2.4.4.6, Appendix A-8
x. Confirmation that BMP verification was conducted for all priority development projects prior to occupancy, including a description of how this information was tracked.	2.4.4.5, Appendix A-4
xi. A listing of any projects which received a SUSMP waiver.	2.4.4.3 (N/A)
xii. A description of implementation of any SUSMP waiver mitigation program.	2.4.4.3 (N/A)
xiii. A description of Hydromodification Management Plan (HMP) development collaboration and participation.	2.4.3.1, 2.4.4.1
xiv. A listing of development projects required to meet HMP requirements, including a description of hydrologic control measures implemented.	2.4.4.3, Table 2-2
xv. A listing of priority development projects not required to meet HMP requirements, including a description of why the projects were found to be exempt from the requirements.	2.4.4.3, Table 2-2

2.0 Development Planning Component

Permit Annual Reporting Requirement—Section J.3.a.(3).(a)	**Location In Report**
xvi. A listing of development projects disturbing 50 acres or more, including information on whether Interim Hydromodification Criteria were met by each of the projects, together with a description of hydrologic control measures implemented for each applicable project.	N/A
xvii. The number of violations and enforcement actions (including types) taken for development projects, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	2.4.4.8
xviii. A description of notable activities conducted to manage urban runoff from development projects.	2.4.3.1, 2.4.4.1, 2.4.4.4, 2.4.4.6, 2.4.4.7

3.0 Construction

Permit Annual Reporting Requirement—Section J.3.a.(3).(b)	**Location in Report**
i. Confirmation that all construction sites were required to undergo the Copermittee's construction urban runoff approval process and meet the applicable construction requirements, including a description of how this information was tracked.	3.5.1
ii. Confirmation that a regularly updated construction site inventory was maintained, including a description of how the inventory was managed.	3.2.2, Appendix B-1
iii. A description of modifications made to the construction and grading ordinances and approval processes.	3.3
iv. Confirmation that the designated BMPs were implemented, or required to be implemented, for all construction sites.	3.4.1
v. Confirmation that a maximum disturbed area for grading was applied to all applicable construction sites.	3.5.4 (N/A)
vi. A listing of all construction sites with conditions requiring advanced treatment, together with confirmation that advanced treatment was required at such construction sites.	3.5.3, 3.5.4 (N/A)
vii. For each construction site within each priority category (high, medium, and low), identification of the period of time (weeks) the site was active within the rainy season, the number of inspections conducted during the rainy season, and the number of inspections conducted during the dry season, and the total number of inspections conducted for all sites.	Appendix B-1
viii. A description of the general results of the inspections.	3.5.5.2
ix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	3.5.5.1
x. The number of violations and enforcement actions (including types) taken for construction sites, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	3.5.5.2, Appendix B-6 and H-1
xi. A description of notable activities conducted to manage urban runoff from construction sites.	3.2.2, 3.3, 3.4.1.1

4.0 Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
i. Any updates to the municipal inventory and prioritization.	Appendix C-1
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for municipal areas and activities, as well as special events.	4.2.3, 4.3.3, 4.4.3, 4.5.3, 4.6.3, 4.7.3
iii. A description of inspections and maintenance conducted for municipal treatment controls.	4.4.4.1, Appendix C-2
iv. Identification of the total number of catch basins and inlets, the number of catch basins and inlets inspected, the number of catch basins and inlets found with accumulated waste exceeding cleaning criteria, and the number of catch basins and inlets cleaned.	4.4.4.1, Appendix C-2
v. Identification of the total distance (miles) of the MS4, the distance of the MS4 inspected, the distance of the MS4 found with accumulated waste exceeding cleaning criteria, and the distance of the MS4 cleaned.	Appendix C-2
vi. Identification of the total distance (miles) of open channels, the distance of open channels inspected, the distance of open channels found with anthropogenic litter, and the distance of open channels cleaned.	4.4.4.1, Appendix C-2
vii. Amount of waste and litter (tons) removed from catch basins, inlets, the MS4, and open channels, by category.	4.4.4.1, Appendix C-2
viii. Identification of any MS4 facility found to require inspection less than annually following two years of inspection, including justification for the finding.	N/A
ix. Confirmation that the designated BMPs for pesticides, herbicides, and fertilizers were implemented, or required to be implemented, for municipal areas and activities.	4.3.3.1
x. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating the highest volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2
xi. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating moderate volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2
xii. Identification of the total distance of curb-miles of improved roads, streets, and highways identified as consistently generating low volumes of trash and/or debris, as well as the frequency of sweeping conducted for such roads, streets, and highways.	Appendix C-2

4.0 Municipal

Permit Annual Reporting Requirement—Section J.3.a.(3).(c)	**Location in Report**
xiii. Identification of the total distance of curb-miles swept.	4.2.4, Appendix C-2
xiv. Identification of the number of municipal parking lots, the number of municipal parking lots swept, and the frequency of sweeping.	4.2.4, Appendix C-2
xv. Amount of material (tons) collected from street and parking lot sweeping.	4.2.4, Appendix C-2
xvi. A description of efforts implemented to prevent and eliminate infiltration from the sanitary sewer to the MS4	4.5.4.1
xvii. Identification of the number of sites requiring inspections, the number of sites inspected, and the frequency of the inspections.	4.3.2, 4.3.4.3, Appendix C-2
xviii. A description of the general results of the inspections.	4.3.4.3, Appendix C -6
xix. Confirmation that the inspections conducted addressed all the required inspection steps to determine full compliance.	4.3.4.3, Appendix C -6
xx. The number of violations and enforcement actions (including types) taken for municipal areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	4.4.4, Appendix C-6 and H-1
xxi. A description of notable activities conducted to manage urban runoff from municipal areas and activities.	4.2.4, 4.4.2, 4.4.4.1, 4.5.4.1, 4.7.3.1, 4.7.4

5.0 Industrial and Commercial

Permit Annual Reporting Requirement—Section J.3.a.(3).(d)	**Location in Report**
i. Any updates to the industrial and commercial inventory.	5.2.2, Appendix D-1 and D-2
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for industrial and commercial sites/sources.	5.2.4.5, 5.3.4.4, Appendix D-5 and H-1
iii. A description of efforts taken to notify owners/operators of industrial and commercial sites/sources of BMP requirements, including mobile businesses.	5.2.4.4, 5.3.4.1 Appendix D-7 and D-8
iv. Identification of the total number of industrial and commercial sites/sources inventoried and the total number inspected.	5.2.4.2 Appendix D-1, D-2 and D-5
v. Justification and rationale for why the industrial and commercial sites/sources inspected were chosen for inspection.	5.2.4.1
vi. Confirmation that all inspections conducted addressed all the required inspection steps to determine full compliance.	5.2.4.3, 5.2.4.5
vii. Identification of the number of third party inspections conducted.	5.2.4.3 (N/A)
viii. Identification of efforts conducted to verify third party inspection effectiveness.	5.2.4.3 (N/A)
ix. A description of efforts implemented to address mobile businesses.	5.3.4
x. The number of violations and enforcement actions (including types) taken for industrial and commercial sites/sources, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	5.2.4.5, 5.3.4.4 Appendix H-1
xi. A description of steps taken to identify non-filers and a list of non-filers (under the General Industrial Permit) identified by the Copermittees.	5.2.4.5
xii. A description of notable activities conducted to manage urban runoff from industrial and commercial sites/sources.	5.2.4, 5.3.4

6.0 Residential

Permit Annual Reporting Requirement—Section J.3.a.(3).(e)	**Location in Report**
i. Identification of the high threat to water quality residential areas and activities that were focused on.	6.2 Appendix E-1
ii. Confirmation that the designated BMPs were implemented, or required to be implemented, for residential areas and activities.	6.3, 6.4.3, Appendix H-1
iii. A description of efforts implemented to facilitate proper management and disposal of used oil and other household hazardous materials.	6.4.2
iv. Types and amounts of household hazardous wastes collected, if applicable.	6.4.2
v. A description of any evaluation of methods used for oversight of residential areas and activities, as well as any findings of the evaluation.	6.2.3
vi. The number of violations and enforcement actions (including types) taken for residential areas and activities, including information on any necessary follow-up actions taken. The discussion should exhibit that compliance has been achieved, or describe actions that are being taken to achieve compliance.	6.4.3, Appendix H-1
vii. A description of collaboration efforts taken to develop and implement the Regional Residential Education Program.	6.4.4, Appendix F-6
viii. A description of notable activities conducted to manage urban runoff from residential areas and activities.	6.4

7.0 IDDE

Permit Annual Reporting Requirement—Section J.3.a.(3).(f)	Location in Report
To be included in FY 2010-11 Illicit Discharge Detection and Elimination Component on December 15, 2011.	N/A

8.0 Education

Permit Annual Reporting Requirement—Section J.3.a.(3).(g)	Location in Report
i. A description of education efforts conducted for each target community.	8.2
ii. A description of how education efforts targeted underserved target audiences, high-risk behaviors, and "allowable" behaviors and discharges.	8.2.4
iii. A description of education efforts conducted for municipal departments and personnel.	8.2.3
iv. A description of education efforts conducted for the new development and construction communities.	8.2.5
v. A description of jurisdictional education efforts conducted for residents, the general public, and school children.	8.2.7

9.0 Public Participation

Permit Annual Reporting Requirement—Section J.3.a.(3).(h)	Location in Report
i. A description of public participation efforts conducted.	9.3

10.0 Fiscal Analysis

Permit Annual Reporting Requirement—Section J.3.a.(3).(j)	Location in Report
i. A fiscal analysis of the Copermittee's urban runoff management programs which meets all requirements of section G of this Order.	10.1, 10.2, 10.3, 10.4

11.0 Effectiveness Assessment

Permit Annual Reporting Requirement—Section J.3.a.(3).(i)	Location in Report
i. An assessment of the effectiveness of the Jurisdictional Urban Runoff Management Program which meets all requirements of section I.1 of this Order.	11.2, 11.3

12.0 Special Investigations

Permit Annual Reporting Requirement—Section J.3.a.(3).(k)	Location in Report
i. A description of any special investigations conducted.	12.1, 12.2

13.0 Non-Emergency Firefighting

Permit Annual Reporting Requirement—Section J.3.a.(3).(l)	Location in Report
i. A description of efforts conducted to reduce pollutant discharges from non-emergency firefighting flows.	13.2

14.0 JURMP Revisions

Permit Annual Reporting Requirement—Section J.3.a.(3).(m)	Location in Report
i. A description of any proposed revisions to the JURMP.	14.0

Appendix H

Complaint Response Summaries

H-1	**Construction Complaint Response Summary**
H-1	**Municipal Complaint Response Summary**
H-1	**Industrial Complaint Response Summary**
H-1	**Commercial Complaint Response Summary**
H-1	**Mobile Complaint Response Summary**
H-1	**Residential Complaint Response Summary**
H-1	**Referral or Request for Info**

Appendix H-1 Construction Complaint Response Summary FY 2011 - 2012

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	100241	7/12/11	construction waste	Discharge of concrete cutting slurry or washwater. - Received call from waste water regarding a possible illegal dumping.	WO#129169 : By EMERSON, MIKE: 7/13/2011 4:40:58 PM Site inspection took photos contacted manager and requested clean up and discontinue discharge and install BMPs in the future. By EMERSON, MIKE: 7/13/2011 4:47:37 PM Issued citation WO#129176 : By EMERSON, MIKE: 7/15/2011 3:10:24 PM Site inspection area cleaned up took photos case closed	Yes	No		Yes	7/12/11		LCS	8/9/11
2	104350	7/14/11	sediment	Discharge of sediment - received complaint stating "The construction crew currently working on Requeza near Beach Street has had some problems today resulting the discharge of quite a bit of sediment"	WO#133376 : By EMERSON, MIKE: 8/2/2011 3:07:34 PM inspector reported "I checked with the contractor and SDWD. The contractor is doing a Bac-T Test on the newly installed water lines. The test past and the water was dechlorinated and hosed to a brow ditch which feeds into an inlet. Apparently after about a ½ hour, leaves and palm fronds blocked the grate and water spilled over the slope into someone's yard. The homeowner alerted the contractor and he immediately unclogged the drain and everything was fine. The hoa knows and is working with Fieldstone homes on several issues that impact both	Yes	No		Yes			ENC	8/2/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					properties, and the hoa said they would make contact with them. The contractor said it was caught in time and was a non-issue."								
3	104499	8/09/11	Building debris	Discharge of construction debris - Construction waste in roadway without permits or BMPs	WO#133900 : By EMERSON, MIKE: 8/30/2011 1:25:44 PM Site inspection area cleaned up case closed	Yes	No		Yes				8/30/11
4	106697	9/9/11	sand	Discharge of sediment - received complaint from PW streets regarding uncovered stock pile	WO#136247 : By EMERSON, MIKE: 10/5/2011 5:09:36 PM Site inspection took photos contacted CIP staff to address stock pile WO#136248 : By EMERSON, MIKE: 10/5/2011 5:14:53 PM Site inspection with inspector. Stock pile covered but blowing in the wind. Inspector to contact contractor to better secure plastic. Case closed	Yes	No		Yes				10/3/11
5	106713	9/15/11	dirt	Discharge of sediment - Specialist observed 3 huge dirt stockpiles @ corner of Cornish & Santa Fe Drive. Sign said "FREE DIRT." Part of Cardiff Traffic Calming Project. CM	WO#136439 : By EMERSON, MIKE: 10/18/2011 3:09:19 PM Site inspection took photos of un secured stock piles of dirt. The dirt was from the Cardiff street calming project and the piles will be secured and removed shortly. Construction inspector to follow up case closed	Yes	No		Yes			ENC	10/19/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
6	106890	10/05/2011	Dirt	Discharge of construction debris - Anonymous complaint came through about a Construction Site on Hymettus Avenue. Complainant said that dirt was escaping the site and it was drizzly outside. CM	WO#136909 : MOMILE: 11/17/2011 4:16:50 PM Inspector notified contractor that a complaint came in. BMP's were installed before runoff. Complainant did not report any discharge. CM	No	No		Yes		NA	LUC	11/17/11
7	106911	8/3/11	N/A	Discharge of construction debris - Observed construction activites taking place in the shopping center. CM	WO#136950 : By EMERSON, MIKE: 11/28/2011 10:50:43 AM Site inspection observed all BMPs in place no discharge case closed	No	No		Yes			LCS	11/30/11
8	106954	11/15/11	Silt sediment	Discharge of sediment - City Staff phoned to complain about broken water line. CM City Staff observed an additional water line break while doing routine follow ups. More sediment and dirt mixed with potable water running in street. CM City Staff phoned to complain about broken water line. CM City Staff observed a second water line break and sediment mixed with potable water. CM City Staff phoned to complain about broken water line. CM City Staff performed routine inspection and noticed 2nd water line break with se	WO#136910 : By EMERSON, MIKE: 11/18/2011 9:03:59 AM Site inspection took photos of silt/sediment discharge from broken water pipe resulting from a sewer installation for construction project located at 1050 Eolus Ave. Contractor to clean street to inspectors approval. WO#136911 : By EMERSON, MIKE: 11/18/2011 9:11:34 AM Inspector reported that street was clean case closed	Yes	No		Yes			LUC	11/18/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
9	106955	11/15/11	silt/sediment	Discharge of sediment - Routine inspection of construction sites revealed sediment leaving site. Specialist and Construction Inspector observed discharge. CM	WO#136945 : By EMERSON, MIKE: 11/28/2011 10:07:11 AM Site inspection requested clean up case closed WO#136946 : By EMERSON, MIKE: 11/28/2011 10:13:15 AM Site inspection took photos of gravel bags and cleaned up area case closed	Yes	No		Yes			LUC	11/23/11
10	106961	11/16/11	sediment/silt	Discharge of sediment - Specialist observed additional discharge in a follow up investigation. Sediment and potable water leaving property due to a second water line break above the sewer line. CM	WO#136916 : By EMERSON, MIKE: 11/16/2011 2:39:13 PM Site inspection took photos of silt/sediment discharge from water pipe. Construction inspector issued an NOV-correction notice to clean up area by 11/18/11 COB WO#136939 : By EMERSON, MIKE: 11/18/2011 10:53:11 AM Site inspection area cleaned up case closed	Yes	No	11/16/11				LUC	11/18/11
11	106985	11/22/11	silt/sediment	Discharge of sediment - Specialists observed poor BMPs and some discharge from construction site	WO#136938 : By EMERSON, MIKE: 11/23/2011 10:42:06 AM Site inspection took photos contacted contractor to clean up sediment WO#136942 : By EMERSON, MIKE: 11/28/2011 9:14:33 AM Site inspcetion took photos of clean up case closed	Yes	No		Yes	11/22/11		LCS	11/23/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
12	107026	12/5/2011	Concrete	Discharge of concrete waste. - Inspector called Clean Water Staff to report concrete pumping with no containment. CM	WO#137257 : By EMERSON, MIKE: 12/20/2011 10:42:39 AM Site inspection took photos of no discharge case closed	No	No		Yes			LUC	12/28/11
13	107132	12/13/11	sediment	Discharge of sediment - Contractor discharging footing rain water mixed with sediment into alley	WO#137302 : By EMERSON, MIKE: 12/27/2011 4:58:30 PM Site inspection took photos of hose discharging sediment laden water. Contactor to sweep up sediment and discharge into landscaped area in the future. Case closed	Yes	No		Yes			ENC	12/28/11
14	107142	12/13/2011	silt/sediment	Discharge of sediment - Citizen phone Eng Construction Inspector to report sediment leaving Ashbury street. Specialist to investigate. CM	WO#137366 : By EMERSON, MIKE: 12/30/2011 3:46:47 PM Site inspection with engineering inspector took photos and contacted resident to address her concerns. Inspector contact adjacent construction site to allow run-on in two locations. Contacted streets to clean street and prevent run on into respondents garage. WO#137367 : By EMERSON, MIKE: 12/30/2011 3:49:07 PM Site inspection contractor allowed run-on into vacant lot CASE CLOSED	Yes	No					LUC	12/29/11
15	107143	12/13/2011	Water	Discharge of water - Specialist noticed run-on erosion at a construction site. CM	WO#137364 : By EMERSON, MIKE: 12/30/2011 3:39:03 PM Site inspection with engineering inspector took photos. Inspector contact construction site to allow run-on and prevent ereosion. Contacted streets.	Yes	No					LUC	12/29/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					WO#137365 : By EMERSON, MIKE: 12/30/2011 3:41:43 PM Site inspection erosion addressed CASE CLOSED								
16	107146	12/15/2011	silt	Discharge of sediment - City Staff phoned to report dirty water and sediment leaving construction site. Specialists to investigate. CM	WO#137354 : By EMERSON, MIKE: 12/29/2011 2:14:08 PM Site inspection took photos of silt discharge contacted Contractor to clean and implement BMPs. CASE CLOSED	Yes	No		Yes		Batiquitos Lagoon	LUC	12/30/11
17	107207	1/11/12	cement	Discharge of concrete waste. - City Staff: ENG Construction Inspector noticed concrete being dumped into a planter in the shopping center. Workers were not using a wash out pan. Specialist to investigate. CM	WO#138480 : By EMERSON, MIKE: 1/11/2012 11:22:59 AM Site inspection observed poor BMP wash out area. Took photos and contacted workers to clean up planter WO#138492 : By EMERSON, MIKE: 1/12/2012 11:16:13 AM Engineering inspection preformed follow up inspection area cleaned up NOV signed off CASE CLOSED	Yes	No	1/11/12	Yes			ENC	1/30/12
18	119829	3/6/2012	NONE	Discharge of concrete waste. - Cititzen noticed over the weekend that there was a pile of dirt/concrete at the base of the sea wall on the beach. CM	WO#151722 : By MEADOW, CHAMOMILE: 5/30/2012 3:07:41 PM CONSTRUCTION INSPECTOR WENT TO SITE TO INSPECT STOCKPILES. PILE WAS NOT CONCRETE BUT EROSION FROM CLIFF. CONSTRUCTION MANAGER RESPONDED TO COMPLAINANT. CASE	No	No					LUC	5/30/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					CLOSED. CM								
19	120119	6/6/2012	concrete wash	Discharge of concrete cutting slurry or washwater. - Staff in the area noticed work being done in a driveway near the market. Some debris noticed in the right of way; workers still on site. Specialist to investigate. CM	WO#152234 : MOMILE: 7/25/2012 5:05:54 PM 6/7/2012: Site inspection; Specialist contacted lead contractor who indicated that he was not discharging but would clean the street. Follow-up inspection later the same day showed area clean. Before and after photos taken. CM	No	Yes		Yes			CBS	7/25/12
20	120125	6/18/2012	Concrete wash & muriatic acid	Discharge of concrete waste. - City Staff noticed a construction job washing down a new concrete driveway. Specialist to investigate. CM	WO#152266 : MOMILE: 7/26/2012 12:07:37 PM 6/18/2012: Site Inspection, took photos and contacted worker who referred us to head contractor. Contractor provided homeowner's phone number and stated that he finished working two weeks prior. Owner provided landscaper's # who agreed to clean the street. NOV issued to comply by next day 6/19/12. CM WO#152267 : MOMILE: 7/26/2012 12:13:35 PM 6/20/2012: Site Inspection; compliance received. NOV signed off. CM	Yes	Yes	6/18/12	Yes			ENC	7/26/12
21	120131	6/21/2012	asphalt	Other discharge - 6/21/12: City Staff noticed a messy street with asphalt spread all over. Specialist to inspect. CM	WO#152270 : MOMILE: 7/26/2012 5:57:21 PM 6/21/12: Site inspection; issued NOV to comply by the end of the day-5pm. WO#152271 : MOMILE: 7/26/2012 6:03:37 PM 6/25/2012: Site inspection to review compliance. Area clean. Case Closed.	Yes	Yes	6/21/12	Yes			ENC	7/26/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					CM								
Totals	**21**					**16**	**3**	**4**	**17**	**2**			

Appendix H-1 Municipal Complaint Response Summary FY 2011 - 2012

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	106726	10/06/11	silt	Discharge of water - Received complaint of dirty water flowing down street from main repair. CM	WO#136344 : By EMERSON, MIKE: 10/17/2011 5:43:51 PM Site inspection took photos of silt discharge, Contacted Mark from SDWD to clean up street. He said his contractor has a sweeper to clean up the streets. This was an accidental discharge. I suggested additional BMPs WO#136345 : By EMERSON, MIKE: 10/17/2011 5:47:40 PM Site inspection took photos of cleaned up area Case Closed	Yes	No		Yes			CBS	10/19/11
2	106727	10/6/11	h20	Discharge of water - Received complaint that truck was emptying substance into catch basin. CM	WO#136343 : By EMERSON, MIKE: 10/17/2011 5:03:20 PM Site inspection took photos called complainant and followed a southland paving truck to A-tank yard. Driver indicated that he was working on Seeman drive for the City of Encinitas and that he was directed to discharge this "clean water" into a storm drain catch basin. SDWD confirmed that the water was de-chlorinated. Case closed.	No	No		Yes		Cottonwood Creek	ENC	10/19/11
3	106751	10/11/11	silt	Discharge of sediment - Received call that sediment is in the street. CM	WO#136317 : By EMERSON, MIKE: 10/13/2011 2:18:00 PM Site inspection contacted lead worker and showed him sediment photos and obtained his phone	Yes	No		Yes			CBS	10/13/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					number requested call back when streets are clean WO#136318 : By EMERSON, MIKE: 10/13/2011 2:27:28 PM Site inspection most silt appeared to be cleaned up except San Elijo west of Glen Park WO#136319 : By EMERSON, MIKE: 10/13/2011 2:34:52 PM Site inspection area cleaned up case closed								
4	106766	9/7/11	unsecured stockpiles X 4	Other discharge - received complaint from the building official regarding uncoverd stockpiles	WO#136332 : By EMERSON, MIKE: 10/17/2011 3:06:37 PM Site inspection with PW and CIP staff. It was agreed that the gravel bags & silt fences will be replace and the stockpiles will be sprayed. Took photos. WO#136333 : By EMERSON, MIKE: 10/17/2011 3:12:43 PM Site inspection Took photo of new gravel bags. Still needs coverage. WO#136335 : By EMERSON, MIKE: 10/17/2011 3:15:50 PM Site inspection Took photo of storm drains that need better BMPs. WO#136336 : By EMERSON, MIKE: 10/17/2011 3:19:36 PM site inspection stock piles secured case closed	Yes	No		Yes			ENC	10/25/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
5	106809	10/21/11	sediment	Discharge of sediment - Citizen emailed the Clean Water Program with concern of dirt residue and pollutants near the school. Specialist to investigate. CM	WO#136464 : By EMERSON, MIKE: 10/24/2011 5:24:57 PM Site inspection took photos of sediment being removed. Pw workers say they do this every year. Sent complainant email to PW utilities & maintenance field supervisor to respond. Case closed	No	No		Yes			ENC	10/25/11
6	106891	11/9/2011	sediment and vegetation	Other discharge - Citizen phoned Specialist to alert Clean Water that a contractor is blowing everything from the street into the creek @ 4th & B. CM	WO#136876 : By EMERSON, MIKE: 11/16/2011 11:16:30 AM Site inspection met with complainant and workers regarding dumping vegetation and sediment into creek took photos. Called supervisors and requested BMPs be adhered to. Informed clean water staff. CW manager to send compliance request to parks and rec. regarding landscapers and PW regarding street sweeping and ground water pipe cleaning	Yes	Yes		Yes		Cottonwood Creek	ENC	11/18/11
7	107149	12/15/2011	cement wash	Discharge of concrete waste. - Engineering Construction Inspector phoned Stormwater Specialist to report cement runoff. Specialist investigated. CM	WO#137356 : By EMERSON, MIKE: 12/29/2011 3:31:38 PM Site inspection took photos of cement discharge contacted Parks and rec, realtor & property owner. Parks & Rec to clean and implement BMPs WO#137358 : By EMERSON, MIKE: 12/30/2011 11:32:42 AM Site inspection area cleaned up case closed	Yes	No		Yes			LUC	12/29/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
8	107208	1/11/12	Irrigation Water	Discharge of other washwater - Specialist out in the field noticed runoff floating off site from parking lot improvements. Referred to Engineering Construction Inspector in charge of job. Inspector phoned and reporting to scene in 5 min. CM	WO#138692 : By MEADOW, CHAMOMILE: 1/30/2012 11:54:19 AM Engineering Construction Inspector responded immediately and found an irrigation line break. CM	No	No					ENC	1/30/12
9	119623	4/10/2012	antifreeze	Discharge of antifreeze - City Staff noticed a car in the parking lot leaking antifreeze. Specialist to investigate immediately due to eminent rain. CM	WO#151389 : By MEADOW, CHAMOMILE: 4/16/2012 3:53:40 PM Specialist spoke to car owner and explained issue. Both owner of vehicle and City Specialist cleaned up discharge with cat litter and disposed of spill reponse materials. Re-stocked City Facilities' Spill Kit. Case Closed. CM	Yes	No					ENC	4/16/12
10	119834	3/15/2012	Dirt & water	Discharge of sediment - City Staff noticed dirt and water running in parking lot while landscape maintenance was being done. CM	WO#151725 : By MEADOW, CHAMOMILE: 5/30/2012 5:44:44 PM Environmental Specialist contacted lead worker and issued a Notice of Violation to discontinue discharge and clean up. Signed off NOV within one hour. Case Closed. CM	Yes	Yes	3/15/12	Yes			ENC	5/30/12
Totals	**10**					**7**	**2**	**1**	**8**	**0**			

Appendix H-1 Industrial Complaint Response Summary FY 2011 - 2012

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	106712	9/14/11	reclaimed h2o	Discharge of water - Leaky reclaimed water into street. West Side of Santa Fe Drive. CM	WO#136442 : By EMERSON, MIKE: 10/18/2011 4:54:05 PM Site inspection took photos of what appears to be leaking reclaimed water sprinkler. Called JPA. WO#136443 : By EMERSON, MIKE: 10/18/2011 4:58:15 PM Site inspection met with worker and he confirmed that it was broken but he fixed it case closed	Yes	No		Yes			CBS	9/19/11
Totals	**1**					**1**	**0**	**0**	**1**	**0**			

Appendix H-1 Commercial Complaint Response Summary FY 2011 - 2012

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	100219	7/1/11	H2O	Discharge of water - Large amount of run off discharging from garden area No bmps	WO#129236 : By EMERSON, MIKE: 7/21/2011 3:16:27 PM Site inspection no discharge observed case closed	No	No					LCS	7/21/11
2	100240	7/13/11	oil	Discharge of oil. - Received complaint of dumped oil in an area South of 699 N. Vulcan Ave	WO#129168 : By EMERSON, MIKE: 7/13/2011 4:31:23 PM Site inspection Called complainant to locate spill. Found spill took photos and called PW streets to clean up. Will be cleaned up in the next few days WO#129172 : By EMERSON, MIKE: 7/14/2011 5:10:18 PM Site inspection area cleaned up took photos thanked PW case closed	Yes	Yes					LUC	7/14/11
3	100255	7/17/11	oil	Discharge of oil. - received report of spilled oil in alley behind restaurant	WO#129177 : By EMERSON, MIKE: 7/18/2011 2:19:59 PM Site inspection took photos contacted manager to clean up litter and better secure oil storage unit WO#129178 : By EMERSON, MIKE: 7/18/2011 3:30:06 PM Site inspection area cleaned up took photos case closed oil storage will be address in inspection follow up	Yes	No		Yes				7/18/11

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4	104351	8/1/11	sediment	Discharge of sediment - Construction's contractor downstream reported large amount sediment in storm drain appeared to be from neighboring property	WO#133377 : By EMERSON, MIKE: 8/2/2011 4:02:22 PM Called and emailed both parties to set up site meeting to create an clean up action plan	Yes	No		Yes			LCS	8/9/11
5	104371	7/29/11	oil/grease	Discharge of oil. - Received email complaint from Pw waste water stating that the restaurant to discharging oil into the storm drain Received email complaint from PW waste water stating that the restaurant is discharging oil into the storm drain	WO#133523 : By EMERSON, MIKE: 8/8/2011 10:40:14 AM Site inspection took photos contacted manager and requested clean up and discontinue discharge and install BMPs in the future. WO#133524 : By EMERSON, MIKE: 8/8/2011 10:47:37 AM Site inspection area cleaned up took photos signed off NOV case closed	Yes	No	7/29/11	Yes			ENC	8/8/11
6	104376	7/12/11	Sediment	Discharge of sediment - Received call complaining of sediment discharge from palm grower upstream.	WO#133528 : By EMERSON, MIKE: 8/8/2011 11:26:27 AM Site inspection took photos contacted called property manager and requested clean up and discontinue discharge and install BMPs in the future. WO#133529 : By EMERSON, MIKE: 8/8/2011 11:32:51 AM Site inspection took photos contacted manager and requested clean up and discontinue discharge and install BMPs in the future. need to schedule a complete inspection	Yes	No		Yes			LUC	8/8/11

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7	104433	11/1/11	Wash Water	Discharge of other wash water - Strong chemical smell and evidence of possible recent wash water discharge.	WO#136564 : By EMERSON, MIKE: 11/1/2011 10:04:45 AM Site inspection did not observe any discharge but did observe stains contacted manager and informed them of the storm water prohibitions case closed	No	No		Yes			ENC	11/8/11
8	106602	9/19/11	wash water	Discharge of sewage - Complainant phoned that restaurant dumped large amounts of sewage in alley. Smells of sewage. Complainant states that facility admits to discharging every six months. Caller would like a follow-up call. CM	WO#136407 : By EMERSON, MIKE: 10/18/2011 10:48:34 AM Site inspection took photos of dirty water discharged into alley. Contacted new manager to discontinue discharge and to clean up water pooled in alley. By EMERSON, MIKE: 10/18/2011 11:26:03 AM Contacted Sergio of Sergio's Salon De Sol to discontinue washing pavement in front of his business. he said he would comply 760 9441996 WO#136409 : By EMERSON, MIKE: 10/18/2011 10:57:22 AM Site inspection alley cleaned case closed	Yes	No	9/19/11	Yes				10/19/11
9	106631	9/17/11-referred from County 9/21/11	H2o	Discharge of oil. - Complainant notified County of San Diego that a local Jiffy Lube is washing some oil residue into a storm drain when their sprinklers activate. The residue left on the side walk has an oily sheen look to it. CM	WO#136521 : By EMERSON, MIKE: 10/26/2011 5:18:00 PM Site inspection took photos of h20 discharge appears to be irrigation water. Contacted business & Property managers. Confirmed that it is over irrigation and that the water will be drained through a hole that will be cored	No	No		Yes			LCS	10/31/11

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					through the sidewalk. . 10/21/11received call from PW that sidewalk has been cored WO#136537 : By EMERSON, MIKE: 10/27/2011 10:35:23 AM Site inspection took photos contacted PW and property manager. PW to give no fee construction permit to core through the sidewalk via Engineering. By EMERSON, MIKE: 10/27/2011 10:36:55 AM site inspection took photos case closed								
10	106684	10/03/11	Wash water	Discharge of other wash water - Specialist observed runoff. Power washing without collection. CM	WO#136235 : MOMILE: 10/4/2011 3:57:06 PM Site inspection. Contacted contractor and requested an immediate discontinue of wash water discharge. Issued NOV. CASE CLOSED.	Yes	No	10/3/11	Yes			CBS	10/4/11
11	106704	9/1/11	silt	Discharge of sediment -Received complaint of uncovered stock piles	WO#136519 : By EMERSON, MIKE: 10/26/2011 4:10:47 PM Site inspection with business owner took photos of three stock piles and silt on access road issued NOV to comply by covering or removing stock piles and racking silt off access road by 10/1/11 WO#136520 : By EMERSON, MIKE: 10/26/2011 4:18:18 PM Site inspection with business owner took photos of covered stock piles and access road clear of silt. Case	Yes	No	9/8/11	Yes			ENC	10/31/11

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					closed								
12	106707	9/08/11	wash water from car cleaning	Discharge of vehicle wash water - Received complaint stating auto detailing without BMP's. CM	WO#136418 : By EMERSON, MIKE: 10/18/2011 11:50:19 AM Site inspection contact auto detailer issued NOV to discontinue discharge	Yes	Yes	9/8/11	Yes			ENC	10/19/11
13	106714	9/20/11	trash wash water	Discharge of trash - Received complaint about black liquid substance draining into alley. CM	WO#136413 : By EMERSON, MIKE: 10/18/2011 11:06:41 AM Site inspection took photos of dirty water discharged into alley. Contacted manager to discontinue discharge and to clean up water pooled in trash area, move smoker inside and ensure shower wash water flows into drain. WO#136415 : By EMERSON, MIKE: 10/18/2011 11:17:57 AM Site inspection took photos of cleaned up area case closed	Yes	No	9/20/11	Yes			ENC	9/27/11
14	106715	9/15/11	oil	Discharge of oil. - Received email stating poor BMP Practices and washing out floor mats in alley, and oil uncovered and spilling out-not contained. CM	WO#136404 : By EMERSON, MIKE: 10/18/2011 10:22:39 AM Site inspection took photos of poor oil storage, open trash container and spilled oil left out. Contacted head chef to clean and store potential pollutants properly. Gave educational information to help with compliance. WO#136405 : By EMERSON, MIKE: 10/18/2011 10:26:57 AM Site inspection area	Yes	No	9/15/11	Yes			LUC	10/19/11

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					cleaned up case closed								
15	106723	10/7/11	h2o	Discharge of water - Received complaint of large amount of water coming out of driveway. Specialist to investigate. CM	WO#136392 : By EMERSON, MIKE: 10/18/2011 9:54:42 AM Site inspection took photos of large water discharge contacted on site person that indicated that there was a sprinkler leak in store and that it is clean water. They indicated that a fire person said it was OK to discharge into the driveway because it was an emergency. Case closed.	No	No		Yes		Cottonwood creek	ENC	10/19/11
16	106725	9/12/11	h2o	Discharge of water - Complaint received regarding over-irrigation. Specialist to investigate. CM	WO#136352 : By EMERSON, MIKE: 10/18/2011 9:06:06 AM Site inspection took photos of sediment laden water and contacted on site person (Gale) and showed her broken sprinkler. 9/13/11 called PM to fix sprinkler. Case closed	Yes	No		Yes			CBS	10/19/11
17	106731	9/29/11	Horse Manure	Other discharge - Received email from Regional Board one month after complaint. Complainant stated that horse manure was being dumped into sites wetlands. Specialist to investigate. CM	WO#136485 : By EMERSON, MIKE: 10/25/2011 11:43:21 AM Site inspection took photos and contacted horse owner who showed me how clean the stables are and the rules that each horse owner must comply with. No manure was seen on property. Obtained managers phone # who confirmed that no manure is ever dumped into the creek. She said she cleared the creek of trash but was told to discontinue clearing as the stream is considered a wetland.	No	No		Yes			ESC	11/8/11

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					In addition, manure management practices were observed. Horse manure was properly picked up and stored in three (3) covered dumpsters located on site. Case closed								
18	106732	8/17/11	oil	Discharge of oil. - Received complaint from Regional Board alleged that automotive batteries stored on the ground & unsafe storage of Methanol, manufacturing of diesel fuel. Illegal dumping of waste/unused product from the manufacturing of fuel in the toilet. CM	WO#136471 : By EMERSON, MIKE: 10/25/2011 9:03:21 AM Site inspection took photos of liquid storage without overhead coverage & 2nd containment. Contacted owner and requested the following corrective actions Issues of Concern: a. Automotive Batteries Stored on Ground: This issue was validated during the initial site visit. Used batteries were being temporarily stored outside on wooden pallets prior to pick by a disposal company. b. Unsafe Storage of Methanol: This issue was validated during the site visit. 55 gallon drums of Methanol were stored outside, uncovered, and without proper secondary containment. c. Manufacturing of Diesel Fuel: This activity (manufacturing) was evaluated within the context of potential threat to water quality. The manufacturing process is contained within a structure (trailer), minimizing the potential threat to water quality directly related	Yes	No		Yes			ENC	9/6/11

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					to the manufacturing activities. d. Illegal dumping of waste / unused manufacturing fuel in the toilet: This issue was not validated upon the initial site visit. Required Corrective Actions a. Battery Storage - Automotive Batteries must be stored in a closed container. b. Materials Storage - 55 Gallon Drums must be stored with proper coverage and containment. c. Good Housekeeping – Paved lot areas require significant cleaning of old fluid and material spills, excessive scrap parts need to be removed or covered for proper storage, overall site wide cleanup required. d. Drip Pans – Required under all stored vehicles on site. e. Spill Kit – A spill control / containment kit is required for the facility. By EMERSON, MIKE: 10/25/2011 9:12:08 AM In addition the city was provided Department of Toxic Substances Control # CAL000366472								

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					WO#136476 : By EMERSON, MIKE: 10/25/2011 9:18:10 AM Site inspection with clean water manager took photos of improvements and completed inspection This inspection action concluded that all required corrective actions were adequately addressed. Upon further consideration of ongoing business activities, additional requirements for more permanent BMP's were defined, and will be reassessed at a second follow-up inspection through storm water quality inspection follow up. case closed								
19	106733	8/17/11	Carpet wash	Discharge of other wash water - Received complaint that carpet cleaner discharging wash water. CM	WO#136448 : MOMILE: 10/19/2011 4:53:58 PM Site inspection, took photos, informed workers that they were in violation. CM	Yes	Yes		Yes			CBS	11/8/11
20	106775	10/17/11	oil and trash water	Discharge of oil. - Specialist observed poor BMPs for trash and oil.	WO#136324 : By EMERSON, MIKE: 10/17/2011 11:42:55 AM Site inspection took photos of open grease and trash storage. Contacted book keeper and worker. Requested manager T.J. give me a call. By EMERSON, MIKE: 10/17/2011 2:45:04 PM Received call from restaurant manager stating that he will clean oil & trash area and give me a call back. WO#136538 : By EMERSON, MIKE:	Yes	No		Yes			ENC	10/27/11

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					10/27/2011 10:44:48 AM Site inspection area cleaned up case closed								
21	106776	10/17/11	h20	Discharge of other wash water - Specialist observed poor BMPs appears business is washing in alley.	WO#136329 : By EMERSON, MIKE: 10/17/2011 2:21:40 PM Contacted Business owner to ensure that his staff is not washing the floor mats into alley.	Yes	No		Yes			ENC	10/19/11
22	106791	10/19/11	gray water	Discharge of other wash water - Complainant phoned that a bad smell and foul water was in a brow ditch near a storm drain. Caller was asking if the fruit stand had anything to do with it. CM	WO#136462 : By EMERSON, MIKE: 10/24/2011 4:56:28 PM Site inspection with complainant/tenant took photos of gray water discharge. Contacted property owner who informed me that he was not aware of this discharge and removed the sinks and the end of the pipe. A compliance inspection is set for 10/24/11 @ 10am. WO#136463 : By EMERSON, MIKE: 10/24/2011 5:10:19 PM Site inspection took photos of abated sinks, port-a-potty and wash trailer. Respondent requested information on getting connected to the sewer. Case closed	Yes	No		Yes			LUC	10/25/11
23	106899	11/03/11	trash wash water	Discharge of other wash water - received complaint resident preformed a site inspection and found employees washing out the trash containers Specialist received complaint that a resident performed a site inspection and found employees washing out the trash containers.	WO#136877 : By EMERSON, MIKE: 11/16/2011 1:54:31 PM Site inspection took photos of area that appeared to be washed and contacted business manager to discontinue this practice. Manager agreed to meet for a routine storm water quality inspection. Case closed	Yes	No	11/4/11	Yes	11/4/11	ocean	ENC	11/18/11

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24	106903	11/03/11	trash	Discharge of oil. - Specialist observed poor BMPs in trash area restaurant indicated that it was PM responsibility Specialist observed poor BMPs in trash area. Restaurant indicated that it was PM responsibility. ME	WO#136770 : By EMERSON, MIKE: 11/10/2011 10:31:31 AM Site inspection took photos of poor BMPs in trash area WO#136791 : By EMERSON, MIKE: 11/10/2011 4:23:16 PM Received call from PM stating that the grease/oil storage is the responsibility of the restaurant and the trash area has been cleaned up. In addition, the PM trained the on site staff. Site inspection took photos of cleaned trash area and thanked worker. Oil grease still needs to be addressed WO#136878 : By EMERSON, MIKE: 11/16/2011 2:12:57 PM Site inspection took photos of trash area and used oil storage. Restaurateur indicated that property manager was responsible for the trash area. Left messages for property manager to clean trash area. WO#136879 : By EMERSON, MIKE: 11/16/2011 2:23:15 PM Site inspection took photos of cleaned trash area. Used oil storage area still needs maintenance. WO#137264 : By EMERSON, MIKE: 12/20/2011 2:22:48 PM Site inspection took photo of cleaned up area case closed	Yes	No	11/3/11	Yes			ENC	12/28/11

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					WO#136770 : By EMERSON, MIKE: 11/10/2011 10:31:31 AM Site inspection took photos of poor BMPs in trash area WO#136791 : By EMERSON, MIKE: 11/10/2011 4:23:16 PM Received call from PM stating that the grease/oil storage is the responsibility of the restaurant and the trash area has been cleaned up. In addition, the PM trained the onsite staff. Site inspection took photos of cleaned trash area and thanked worker. Oil grease still needs to be addressed WO#136878 : By EMERSON, MIKE: 11/16/2011 2:12:57 PM Site inspection took photos of trash area and used oil storage. Restaurateur indicated that property manager was responsible for the trash area. Left messages for property manager to clean trash area. WO#136879 : By EMERSON, MIKE: 11/16/2011 2:23:15 PM Site inspection took photos of cleaned trash area. Used oil storage area still needs maintenance. WO#137264 : By EMERSON, MIKE: 12/20/2011 2:22:48 PM Site inspection took photo of cleaned up area case closed								

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25	106908	8/03/11	h2o	Discharge of sediment - Specialist observed broken sprinkler running and carrying sediment and green waste into the storm drain. Smelly trash compactor also discharging. Staff was notified and indicated that the compactor needed a repair. CM	WO#136956 : By EMERSON, MIKE: 11/28/2011 2:34:38 PM Site inspection took photos of trash compactor and broken sprinkler. Contacted store manager to fix trash compactor and sprinkler. WO#137265 : By EMERSON, MIKE: 12/20/2011 2:45:33 PM Site inspection area looked cleaned up and sprinklers were shut off case closed	Yes	No		Yes			LCS	12/28/11
26	106909	8/3/11	oil kitty litter	Other discharge - Specialist observed poor management of grease storage w/remnants of cat litter on the ground. CM	WO#136952 : By EMERSON, MIKE: 11/28/2011 11:30:31 AM Site inspection took photos of poor BMPs for oil storage contacted GM to clean and train workers. Facility will be added to FY 11-12. WO#137266 : By EMERSON, MIKE: 12/20/2011 3:00:15 PM Site inspection took photos of cleaned area case closed	Yes	No		Yes			LCS	12/5/11
27	106910	8/3/11	Human waste?	Other discharge - Construction worker reported that an employee from the restaurant sleeps in his vehicle and then dumps their waste into the stormdrain.CM	WO#136951 : By EMERSON, MIKE: 11/28/2011 11:21:55 AM Site inspection did not observe van case closed	Yes	No					LCS	11/30/11

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28	106917	11/13/11	wash water	Discharge of other wash water - Hotline call over weekend reported restaurant washing back area of restaurant with water and a broom. No containment and wash water was running all over into parking lot. CM	WO#136949 : By EMERSON, MIKE: 11/28/2011 10:42:48 AM Site inspection took photos scheduled a completed storm water quality inspection case closed	Yes	No		Yes			LCS	11/30/11
29	106957	11/17/11	silt/sediment	Discharge of sediment - City Staff-PW/Streets complained that NCTD did not have proper BMP's and may clog the slew gate. CM	WO#136940 : By EMERSON, MIKE: 11/23/2011 11:04:13 AM Site inspection took photos discussed cased with CW manager By EMERSON, MIKE: 11/23/2011 11:29:12 AM Called NCTD 760 966-6500 and left message for the maintenance person to call me back regarding the sediment/silt discharge into the city's MS4 By EMERSON, MIKE: 12/27/2011 3:37:32 PM Received email with drainage agreement attached stating that the City was responsible for maintenance. Gave contact info to PW streets see attached emails case closed	Yes	No		Yes			LUC	12/28/11
30	106982	11/22/11	oil	Discharge of oil. - Over filled 55 gal oil container	WO#136937 : By EMERSON, MIKE: 11/23/2011 9:48:34 AM Site inspection took photos of over filled oil container. Called company to empty. WO#136943 : By EMERSON, MIKE: 11/28/2011 9:38:31 AM Site inspection called grease hauler who had a miss-communication and when to the wrong	Yes	No		Yes				11/30/11

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					restaurant but will pick it up ASAP. WO#136965 : By EMERSON, MIKE: 11/30/2011 12:44:37 PM Site inspection Oil removed case closed								
31	107003	11/29/2011	Vehicle Wash	Discharge of vehicle wash water - City Staff noticed two guys washing vehicles with no containment. CM	WO#137008 : By EMERSON, MIKE: 12/2/2011 9:47:05 AM Site inspection no evidence of vehicle washing case closed	Yes	Yes					LUC	12/5/11
32	107024	12/2/2011	h20	Discharge of other wash water - Specialist noticed runoff/water leak flowing through trash area. Poor BMP's. CM	WO#137272 : By EMERSON, MIKE: 12/21/2011 10:34:41 AM Site inspection took photos of broken hose connection flowing through trash area. Issued NOV to comply in one week. WO#137273 : By EMERSON, MIKE: 12/21/2011 10:45:08 AM Site inspection took photos of cleaned up area Signed off NOV Case closed	Yes	No	12/5/11	Yes			LCS	12/21/11
33	107025	12/5/2011	Gypsum	Discharge of sediment - Eng. Inspector phoned Clean Water Specialist regarding sediment and gypsum stored on street without containment. CM	WO#137178 : By EMERSON, MIKE: 12/16/2011 9:35:49 AM Site inspection took photos and contacted lead worker regarding discharge into storm drain. Issued NOV to clean up street. WO#137179 : By EMERSON, MIKE: 12/16/2011 9:49:49 AM Site inspection took photos cleaned up street case closed	Yes	Yes	12/5/11	Yes			LUC	12/5/11

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34	107027	12/5/2011	grease	Discharge of oil. - Specialist observed grease spilling over poor BMP grease storage unit. No containment or overhead coverage. CM	WO#137180 : By EMERSON, MIKE: 12/16/2011 9:57:25 AM Site inspection took photos and contacted lead worker regarding storage of grease and recent spills. Issued NOV to clean up old spilled grease. WO#137184 : By EMERSON, MIKE: 12/16/2011 2:59:23 PM Site inspection took photos signed off NOV case closed	Yes	No	12/5/11	Yes			LCS	12/28/11
35	107116	12/21/11	auto parts	Other discharge - Citizen reported workers repairing an engine in the road. Engine was pulled out and looked messy. Specialist responded immediately. CM	WO#137279 : By EMERSON, MIKE: 12/27/2011 2:01:20 PM Site inspection large amount of car parts on sidewalk and roadway no discharge. Issued NOV to discontinue use of the street and clean up all parts WO#137280 : By EMERSON, MIKE: 12/27/2011 2:05:49 PM Site inspection area cleaned up case closed	Yes	Yes	12/21/11	Yes			ENC	12/21/11
36	107117	12/19/11	trash	Discharge of trash - Citizen phoned to report trash bins behind business area are overflowing and out of control. Specialist to investigate. CM	WO#137292 : By EMERSON, MIKE: 12/27/2011 2:47:42 PM Site inspection took photos contacted fire fly manager who indicated that they had a really busy weekend but the trash was picked up case closed	No	No		Yes			LCS	12/28/11

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37	107131	12/13/11	RAIN WATER	Discharge of other wash water - received complaint from construction inspector that de-watering is occurring at Vons and sent a photos showing discharge specialist to inspect.	WO#137301 : By EMERSON, MIKE: 12/27/2011 4:10:02 PM Site inspection contacted manager to get PM info. Senor Civil Engineer determined that the discharge was rain water and it is not a violation CASE CLOSED	No	No		Yes			ENC	12/28/11
38	107139	12/12/11	silt/sediment	Discharge of sediment - City Staff reported sediment in the street. Specialist to inspect. CM	WO#137337 : By EMERSON, MIKE: 12/29/2011 9:41:42 AM Site inspection took photos of silt discharge contacted Contractor to clean and implement BMPs WO#137338 : By EMERSON, MIKE: 12/29/2011 9:46:38 AM Site inspection took photos of cleaned up area and reinforcement BMPs CASE CLOSED	Yes	No		Yes			LCS	12/30/11
39	107140	12/12/2011	silt/sediment	Discharge of sediment - City Staff reported sediment run-off after recent rain. CM	WO#137339 : By EMERSON, MIKE: 12/29/2011 9:51:16 AM Site inspection took photos of silt discharge contacted Contractor to clean and implement BMPs WO#137340 : By EMERSON, MIKE: 12/29/2011 11:11:22 AM Site inspection took photos of silt discharge contacted Contractor to clean and implement BMPs WO#138609 : By EMERSON, MIKE: 1/24/2012 10:52:15 AM Area cleaned case closed	Yes	No		Yes			LCS	1/25/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
40	107141	12/12/2011	silt/sediment	Discharge of sediment - City Staff reported sediment leaving properties in the area after heavy rains. CM	WO#137352 : By EMERSON, MIKE: 12/29/2011 2:02:17 PM Site inspection took photos of silt discharge contacted Contractor to clean and implement BMPs WO#137353 : By EMERSON, MIKE: 12/29/2011 2:07:49 PM Site inspection took photos of cleaned up area and implemented BMPs CASE CLOSED	Yes	No		Yes			LCS	12/30/11
41	107144	12/13/2011	silt	Discharge of sediment - Citizen emailed staff photos of drainage changes. CM	WO#137362 : By EMERSON, MIKE: 12/30/2011 2:23:50 PM Site inspection with senor civil engineer appears to be a grading violation resulting from surface drainage change. Respondent to submit a plan through a construction permit to show how the property is to drain. Informed respondent who requested 30 days to submit a plan. 12/15/11 inspection showed pipes removed but sediment flowing across sewer easement into drainage ditch. Sent email to comply by 1/16/12 WO#137363 : By EMERSON, MIKE: 12/30/2011 2:33:40 PM Site inspection no work completed on drainage but ditch cleaned By EMERSON, MIKE: 1/12/2012 9:47:56 AM Business owner met with city engineer on site 1/11/12 and showed the drainage facility that needed	Yes	No		Yes			ENC	7/25/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					repair. Repair to be completed by mid-February. By EMERSON, MIKE: 1/12/2012 10:30:44 AM Contacted business owner to implement BMPs to discontinue silt discharge into drainage swale and remove any silt that is on the access road.								
42	107237	01/17/12	Wash water	Discharge of other wash water - City Staff noticed poor BMP practices while en route to work. Pictures show evidence of buckets of water being used to clean outside areas. Specialist to re-inspect & letter to be sent. CM	WO#138697 :	Yes	No	1/17/12	Yes				1/30/12
43	107274	01/24/12	Pollen	Discharge of other wash water - Specialist out in the field noticed wash water dispersed behind restaurant prompting a commercial complaint inspection. CM	WO#138706 : By MEADOW, CHAMOMILE: 1/31/2012 1:15:09 PM Specialist went to site to investigate alleged paint violation. Specialist met with administrator for school and both parties agreed that the yellow substance was pollen from the trees. Photos taken. Case closed. CM WO#138706 : By MEADOW, CHAMOMILE: 1/31/2012 1:15:09 PM Specialist went to site to investigate alleged paint violation. Specialist met with administrator for school and both parties agreed that the yellow substance was pollen from the trees. Photos taken. Case closed. CM	Yes	No		Yes			LCS	2/9/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
44	107297	1/23/2012	Pollen	Discharge of paint - City Staff noticed a yellow substance (silt) on a basketball court over the weekend (Sunday). Specialist to investigate. CM	WO#138706 : By MEADOW, CHAMOMILE: 1/31/2012 1:15:09 PM Specialist went to site to investigate alleged paint violation. Specialist met with administrator for school and both parties agreed that the yellow substance was pollen from the trees. Photos taken. Case closed. CM WO#138706 : By MEADOW, CHAMOMILE: 1/31/2012 1:15:09 PM Specialist went to site to investigate alleged paint violation. Specialist met with administrator for school and both parties agreed that the yellow substance was pollen from the trees. Photos taken. Case closed. CM	No	No		Yes			LCS	2/9/12
45	107299	1/31/2012	Water	Discharge of water - City Staff from the SDWD phoned Specialist to inform of water running down the street. Specialist to investigate immediately. CM City Staff from the SDWD phoned Specialist to inform of water and sediment running down the street. Specialist to investigate immediately. CM	WO#138708 : By MEADOW, CHAMOMILE: 2/7/2012 4:05:02 PM Specialist went location and did not observe any discharge. Business closed. Case closed. CM By MEADOW, CHAMOMILE: 2/10/2012 11:24:21 AM Specialist went to location and did not observe any discharge, business was closed for the day. Case closed. CM	No	No					CBS	2/10/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
46	107329	2/7/2012	water	Discharge of water - City Staff noticed runoff from a broken sprinkler head that was leading to the nearby storm drain. Sediment & algae present. Specialist to investigate. CM	WO#151712 : By MEADOW, CHAMOMILE: 5/29/2012 2:52:28 PM 2/8/12-SDWD employee requested shut off & fix from property owner. 2/9/12-Plumber fixed problem. 2/10/12-Clean Water Specialist went to site to inspect and obtained property owner/managers contact information and left business card. Case Closed. CM	Yes	No					ENC	5/29/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
47	119742	2/22/2012 11:45AM	trash/oil	Discharge of trash - specialist contacted all three restaurants that use the same trash area; none claimed ownership of the mess. property manager was contracted to remove or provide cover & tray. meeting with property owner when he is back in town. follow-up needed. CM	WO#151557 : By MEADOW, chamomile: 5/7/2012 2:04:55 pm pm will be in town 2/24/12 to address issue. needs follow-up. CM WO#151559 : By MEADOW, CHAMOMILE: 5/7/2012 2:13:02 PM specialist did site inspection & took photos. three different grease haulers used. parking lot also inspected. cm WO#151560 : By MEADOW, CHAMOMILE: 5/7/2012 2:54:54 PM 5/3/2012; site inspection: oil barrel was removed however the storage area needs cleaning. re-inspections for all restaurants in the immediate area. property manager to inform tenants of clean-up requirements. 5/4/2012; emailed minimum bmp flyer, spill guide, & photos to property manager. case closed. cm	Yes	No		Yes			LCS	5/7/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
48	119824	2/23/12	Dirty Wash Water	Discharge of other wash water - Clean Water Specialist went to site and took photos of sudsy water in the alley adjacent to business. Poor BMP's warranted a complete Storm Water Quality Inspection Report. NOV issued and compliance by 3/1/12. CM	WO#151717 : By MEADOW, CHAMOMILE: 5/29/2012 3:54:44 PM 3/1/12 Site inspection w/ manager. Took photos and requested copies of any power washing invoices. CASE CLOSED. CM	Yes	No					ENC	5/29/12
49	119831	3/8/2012	pool siding	Other discharge - Citizen phoned to notify the Clean Water Program that a truck on her street has blue liquid dripping out the back of the vehicle. Specialist to investigate. CM	WO#151723 : By MEADOW, CHAMOMILE: 5/30/2012 4:22:09 PM Specialist contacted owner of property who called his contractor. Contractor indicated that the trailer truck would be pumped out and taken away. Temporary BMP's with traffic cones were placed on site. CM WO#151724 : By MEADOW, CHAMOMILE: 5/30/2012 4:43:30 PM 3/9 -Follow up inspection determined clean-up was done. Photos taken. Case Closed. CM	Yes	Yes					CBS	5/30/12
50	119841	2/22/12	trash leaking	Discharge of trash - Leaky trash enclosure was noticed by Clean Water Staff. Specialist to investigate. CM	WO#151730 : By MEADOW, CHAMOMILE: 5/31/2012 4:46:55 PM Specialist phoned Property Manager to have leak fixed ASAP. Property Manager agreed to fix leak and upon detecting leak found that condensation from the nearby laundry mat was cause of moisture; no leak. Case Closed. CM	Yes	No		Yes			LCS	5/31/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
51	119843	1/24/12	RESTAURANT WASH WATER	Discharge of other wash water - Specialist out in the field doing routine commercial inspections noticed a restaurant washing down while en route. Pictures taken. CM	WO#151740 : By MEADOW, CHAMOMILE: 6/1/2012 8:22:54 AM specialist spoke to manager to discontinue all future discharges, "dry clean" or collect all wash water. nov issued to restaurant. 5pm deadline 1/24/12. case closed. CM	Yes	No	1/24/12	Yes			LCS	6/1/12
52	119844	3/15/2012	PAINT WASH WATER	Discharge of paint - City Staff noticed workers washing green paint into street and gutter. Specialist to investigate immediately. CM	WO#151752 : By MEADOW, CHAMOMILE: 6/1/2012 9:31:05 AM Specialist inspected discharge immediately and spoke to three contractors (stucco, dry Waller, & painter). Painter cleaned up puddles of wash water. Power washer to wash site and collect all wash water. Dry Waller requested BMP brochures to help with compliance. CM WO#151753 : By MEADOW, CHAMOMILE: 6/1/2012 10:51:43 AM Specialist signed off NOV & took photos. Case Closed. CM WO#151754 : By MEADOW, CHAMOMILE: 6/1/2012 11:00:37 AM 3/15/12 -Staff received another complaint call. Specialist revisited site, took photos of green discharge from job. Supervisor on site was issued a 2nd NOV and given more education.	Yes	Yes	3/15/12	Yes			ENC	6/1/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Specialist to revisit site and communicate with 2nd caller nearby on activity. CM WO#151755 : By MEADOW, CHAMOMILE: 6/1/2012 12:05:35 PM 3/20/2012-Site inspection. More photos taken of waste discharge collected from cleanup. Business owner showed photos of before, during, and after cleanup. Final sign off of 2nd NOV. Case Closed. CM								
53	119874	4/8/12	sediment	Discharge of sediment - Citizen phoned to notify City that sediment was leaving a nearby property and entering the citizen's property in rain events. Specialist to investigate. CM	WO#151803 : By MEADOW, CHAMOMILE: 6/6/2012 4:32:43 PM 4/12/12 Site Inspection on 301 Crocus (complainant's address) observed sediment stains. Specialist contacted site worker at nearby construction site. Drains were addressed and BMP's requested-additional controls ASAP. CM By MEADOW, CHAMOMILE: 6/6/2012 4:41:42 PM Complainant's email forwarded to Planning Dept and Engineering. Permanent BMP's to be installed-no permit required. New BMP to be on resubmitted plans with condition to maintain in perpetuity. CM	Yes	No					LUC	6/6/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
54	119894	4/17/12	wash water	Discharge of other wash water - Hose connected to a non-metered fire hydrant to power wash site. CM	WO#151825 : By MEADOW, CHAMOMILE: 6/11/2012 3:10:11 PM Specialist did site inspection, contacted representative of businesses, as well as owner of property. Education given. Case Closed. CM	Yes	Yes		Yes			ENC	6/11/12
55	119898	4/24/12	Concrete wash	Discharge of concrete waste. - Citizen noticed workers washing concrete wash down the street. Environmental Specialist to inspect immediately. CM	WO#151826 : By MEADOW, CHAMOMILE: 6/11/2012 4:30:21 PM Specialist contacted business owner to "dry clean" the street and swale to the Maximum Extent Possible ASAP. NOV given to owner of business. Street cleaned properly. Case Closed. CM	Yes	Yes	4/18/12	Yes			ENC	6/11/12
56	119916	4/24/12	milky white substance	Other discharge - Business owner phoned to notify the City that they observed white milky water in a little stream under the bridge. Specialist to investigate immediately. CM	WO#151836 : By MEADOW, CHAMOMILE: 6/13/2012 4:24:52 PM White milky water evident just downstream of bridge. Inspector looked upstream for source. No obvious discharge. Some clear water coming from business nearby; inspection recommended to verify no illegal connection to storm drain. A commercial van with no decal had just serviced dishwasher-maybe unrelated. An additional search along the nearby creek showed no evidence of discharge. A homeowner nearby was conducting power washing with no collection of wash water. Evidence of debris and	Yes	No				Rossini Creek/San Elijo Lagoon	CBS	6/13/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					wash water entering storm drain. An advisory letter of education and notice to correct work to be sent. Investigator asked homeowner to correct work and clean up debris in street. Case Closed. CM								
57	119918	4/26/2012	None	Other discharge - Citizen phoned to report the odor of chemicals and white foam on the sidewalk. Specialist to investigate. CM	WO#151837 : By MEADOW, CHAMOMILE: 6/13/2012 5:17:04 PM Specialist went to site and spoke to staff. Paint had already been picked up. Insulation had been re-installed. Storm drain and parking lot were free of debris. No evidence of pollution, foam, or chemicals. White foam observed by caller may have been old insulation. Employees were knowledgeable and receptive. Case Closed. CM	No	No		Yes			LUC	6/13/12
58	119994	5/1/2012	water & dirt	Discharge of sediment - A resident phoned to report that a nearby business is hosing down water and dirt into the street and her property. Specialist to investigate. CM	WO#151925 : By MEADOW, CHAMOMILE: 6/28/2012 12:51:12 PM 5/3/12: Specialist did site inspection & took photos of discharge into storm drain. Tenant was contacted and shown pictures of violation. Follow up for following day 5/4/12. CM WO#151926 : By MEADOW, CHAMOMILE: 6/28/2012 2:56:43 PM 5/4/12: Specialist requested repair of BMP's and miscellaneous pipes. An NOV & Citation to	Yes	No		Yes			LUC	6/28/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					be issued if repairs are not done in a timely manner or done to specifications. Re-inspection for 5/8/12. CM WO#151928 : By MEADOW, CHAMOMILE: 6/28/2012 3:31:00 PM 5/8/12 Received call from owner of property regarding sprinkler system timer issue. Owner promised to adjust timer and clean dirt from drain. 5/8/12 site inspection determined work had not been completed. 5/15/12 work complete. Landscapers directed to call the CWP hotline if future silt discharges occur. Case closed. CM								
59	120013	5/8/2012	water	Discharge of water - Report of water running down sidewalk and street. Specialist to investigate. CM	WO#151947 : By MEADOW, CHAMOMILE: 7/2/2012 12:57:04 PM 5/8/12: Specialist contacted Gen. Contractor who indicated that the drainage was from a broken sprinkler head. Landscaper was called and they fixed the problem together. CASE CLOSED. CM	No	No		Yes			LCS	7/2/12
60	120014	5/14/2012	water	Discharge of water - 5/14/12: Staff noticed water runoff coming from a nearby restaurant. Specialist to investigate immediately. CM	WO#151948 : By MEADOW, CHAMOMILE: 7/2/2012 1:31:56 PM 5/14/2012: Specialist took photos of water from property into patio drain. Business owner was contacted; owner will check property & call back. 5/17/12: Specialist phoned owner who stated that	Yes	No		Yes			ENC	7/2/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					the water heater leak will be fixed on Saturday. CM WO#151949 : By MEADOW, CHAMOMILE: 7/2/2012 1:37:47 PM 6/5/12: Specialist did site inspection; leak fixed. Photos taken. CASE CLOSED. CM								
61	120087	Unknown; pipes discovered 5/16/2012	no discharge	Other discharge - During a Dry Weather Monitoring event, staff notice black PVC pipe coming from a business and into the storm drain channel. Please request to have pipes removed if unpermitted. Specialist to investigate. CM	WO#152226 : MOMILE: 7/19/2012 6:19:20 PM 5/24/12: Staff met with supervisor & business owner to determine the purpose and content of pipes and any possible discharge. Owner of property/business agreed to remove pipes. Routine commercial storm water quality inspection to be conducted after pipes are removed. CM By MEADOW, CHAMOMILE: 7/19/2012 6:29:44 PM 5/31/2012 Staff contacted business owner to confirm pipes were removed. Site inspection completed to view corrected work. Photos taken. Some erosion detected and addressed. Routine commercial inspection scheduled. Case closed. CM	No	No		Yes			LUC	7/19/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
62	120110	5/23/2012	sediment	Discharge of sediment - 5/23/12: Clean Water Staff requested that business owner fix erosion on the west end of the site. 5/31/12 Received call that erosion work would be completed by Saturday, 6/2/12. CM	WO#152230 : MOMILE: 7/24/2012 6:25:37 PM 6/21/12: Specialist did a site inspection of completed work; erosion fixed. Case Closed. CM	Yes	No		Yes			LUC	7/24/12
63	120124	6/12/2012	sediment	Discharge of sediment - Citizen noticed a large renovation of planter boxes taking place within a nearby parking lot. Specialist to ensure BMP's are in place. CM	WO#152265 : MOMILE: 7/26/2012 11:52:04 AM 6/12/12: Site inspection; made contact with construction site supervisor who said that he did not wash down any sediment. Property Manager contacted to inquire who was washing down the patio at a nearby restaurant. Property Manager claims that it was not their worker either. CM	No	No		Yes			ENC	7/26/12
64	120132	6/25/2012	Removal of permanent TC BMP	Other discharge - City Staff noticed a landscape change at a recently finaled job. Contractor was questioned and explained that the owners requested the landscape change even though they were explicitly warned that no changes were to be made without City knowledge.	WO#152272 : MOMILE: 7/26/2012 6:43:13 PM 6/25/2012: Site inspection; took photos of direct connecting of pipes from gutter to swale with no filter. 6/26/12 Specialist left message for owner. 6/27/12 sent NOV & Citation to owner to comply by 7/27/12. 6/28/12 Specialist met with contractor on site & took additional photos of BMP removal & direct connect. CM	Yes	No	6/27/12	Yes	6/27/12		LUC	7/26/12
Totals	**64**					**51**	**10**	**18**	**54**	**2**			

Appendix H-1 Mobile Complaint Response Summary **FY 2011 - 2012**

	SRID	Incident Date	Material(s) Discharged	Event Description	Work Order IDs	Was it a Violation?	Was it a Mobile Business ?	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	100240	7/13/11	Oil	Discharge of oil. - Received complaint of dumped oil in an area South of 699 N. Vulcan Ave	129168	Yes	Yes					LUC	7/14/11
2	106707	9/08/11	Wash water from car cleaning	Discharge of vehicle wash water - Received complaint stating auto detailing without BMP's. CM	136418	Yes	Yes	9/8/2011	Yes			ENC	10/19/11
3	106733	8/17/11	Carpet wash	Discharge of other wash water - Received complaint that carpet cleaner discharging wash water. CM	136448	Yes	Yes		Yes			CBS	11/8/11
4	106891	11/9/2011	Sediment and vegetation	Other discharge - Citizen phoned Specialist to alert Clean Water that a contractor is blowing everything from the street into the creek @ 4th & B. CM	136876	Yes	Yes		Yes		Moonlight creek	ENC	11/18/11
5	107003	11/29/2011	Vehicle Wash	Discharge of vehicle wash water - City Staff noticed two guys washing vehicles with no containment. CM	137008	Yes	Yes					LUC	12/5/11
6	107025	12/5/2011	Gypsum	Discharge of sediment - Eng. Inspector phoned Clean Water Specialist regarding sediment and gypsum stored on street without containment. CM	137178	Yes	Yes	12/5/201	Yes			LUC	12/5/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Work Order IDs	Was it a Violation?	Was it a Mobile Business ?	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
7	107116	12/21/2011	Auto parts	Other discharge - Citizen reported workers repairing an engine in the road. Engine was pulled out and looked messy. Specialist responded immediately. CM	137279	Yes	Yes	12/21/20	Yes			ENC	12/21/11
8	119486	3/14/2012	Unknown	Other discharge - Fire Dept. staff noticed a white filmy substance near their private residence after an HVAC company had serviced their neighbor's property. Specialist to investigate. CM	151388	Yes	Yes					LUX	4/16/12
9	119831	3/8/2012	Pool siding	Other discharge - Citizen phoned to notify the Clean Water Program that a truck on her street has blue liquid dripping out the back of the vehicle. Specialist to investigate. CM	151723	Yes	Yes					CBS	5/30/12
10	119834	3/15/2012	Dirt & water	Discharge of sediment - City Staff noticed dirt and water running in parking lot while landscape maintenance was being done. CM	151725	Yes	Yes	3/15/201	Yes			ENC	5/30/12
11	119844	3/15/2012	PAINT WASH WATER	Discharge of paint - City Staff noticed workers washing green paint into street and gutter. Specialist to investigate immediately. CM	151752	Yes	Yes	3/15/201	Yes			ENC	6/1/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Work Order IDs	Was it a Violation?	Was it a Mobile Business ?	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
12	119894	4/17/12	Wash water	Discharge of other wash water - Hose connected to a non-metered fire hydrant to power wash site. CM	151825	Yes	Yes		Yes			ENC	6/11/12
13	119898	4/24/12	Concrete wash	Discharge of concrete waste. - Citizen noticed workers washing concrete wash down the street. Environmental Specialist to inspect immediately. CM	151826	Yes	Yes	4/18/201	Yes			ENC	6/11/12
14	120119	6/6/2012	Concrete wash	Discharge of concrete cutting slurry or wash water. - Staff in the area noticed work being done in a driveway near the market. Some debris noticed in the right of way; workers still on site. Specialist to investigate. CM	152234	No	Yes		Yes			CBS	7/25/12
15	120125	6/18/2012	Concrete wash & muriatic acid	Discharge of concrete waste. - City Staff noticed a construction job washing down a new concrete driveway. Specialist to investigate. CM	152266	Yes	Yes	6/18/201	Yes			ENC	7/26/12
16	120131	6/21/2012	Asphalt	Other discharge - 6/21/12: City Staff noticed a messy street with asphalt spread all over. Specialist to inspect. CM	152270	Yes	Yes	6/21/201	Yes			ENC	7/26/12
Totals	**16**					**15**	**16**	**8**	**12**	**0**			

Appendix H-1 Residential Complaint Response Summary FY 2011 - 2012

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
1	100218	7/1/11	H2o	Discharge of water - Large amount of run off pooling at intersection of requeza and Vulcan ave	WO#129278: By EMERSON, MIKE: 7/26/2011 8:49:50 AM Site inspection appeared to be over irrigation from 701-721 S Vulcan ave. case closed	No	No					ENC	7/26/11
2	100224	7/1/11	Red/rust colored substance	Discharge of paint - received complaint from waste water and SDWD of red/rust colored substance flowing into storm drain	WO#129166: By EMERSON, MIKE: 7/13/2011 3:09:52 PM Site inspection took photos of brown substance in storm drain. Called waste water and they reported natural causes produced from minerals. Case closed.	Yes	No					LUC	8/9/11
3	100276	7/20/11	Seal coating for parking	Other discharge - Received complaint call of smelly substance being dumped on vacant lot at unit # 11	WO#129229: By EMERSON, MIKE: 7/21/2011 9:27:10 AM Site inspection did not find violation contacted park manager who informed me that he had just resealed some parking spaces case closed.	No	No		Yes				7/21/11
4	100282	7/21/11	Bird droppings	Other discharge - Received email complaint of dumping bird droppings into storm drain	WO#129240: By EMERSON, MIKE: 7/21/2011 4:45:58 PM Site inspection left card to call me By EMERSON, MIKE: 7/26/2011 8:59:28 AM 7/26/11 received call from respondent stating that they put the bird droppings in the trash not the storm drain case closed	No	No		Yes			ENC	7/26/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation?	Was it a Mobile Business ?	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
5	104352	7/29/11	Vegetation	Discharge of construction debris - Received complaint of planters installed in BMP	WO#133378 : By EMERSON, MIKE: 8/2/2011 5:02:00 PM Site inspection took photos appears that the planters and walkway will not hinder the effectiveness of the road bmp case closed	No	No						8/2/11
6	104368	7/29/11	Vegetation wash water	Discharge of yard waste - Resident washing down drive way without collecting wash water	WO#133522 : By EMERSON, MIKE: 8/8/2011 10:03:49 AM Site inspection contacted property owner to discontinue or collect all wash water case closed	Yes	No		Yes			ENC	8/8/11
7	104375	714/11	Fire wash water	Discharge of water - Received call from FD wanting to know what to do with the waste water	WO#133527 : By EMERSON, MIKE: 8/8/2011 11:09:35 AM Site inspection took photos contacted PW and requested clean up case closed	Yes	No					ENC	8/8/11
8	106683	9/29/11	Water	Discharge of water - Complainant phoned the hotline to say water was running down the street with debris, dirt, chemicals, & suds. Caller said that this is the 2nd time. CM	WO#136234 : MOMILE: 10/4/2011 3:28:49 PM Site inspection completed. No discharge observed. CASE CLOSED.	No	No				NA		10/4/11
9	106685	10/03/11	Wash from cleaning paint	Discharge of paint - Citizen phoned to say that white liquid was washing down driveway. CM	WO#136239 : By EMERSON, MIKE: 10/5/2011 10:44:15 AM Site inspection contacted resident. Resident stated his son was painting a wall and must have washed off his brushes into the storm drain. He will clean the brushes in a sink from now on. Case closed	Yes	No		Yes			CBS	10/6/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
10	106686	10/03/11	Oil/car part debris	Discharge of oil. - Wastewater Staff observed vehicle maintenance with parts left in street in right of way. CM	WO#136241 : By EMERSON, MIKE: 10/5/2011 11:23:31 AM Site inspection took photos and contacted resident. Resident stated that it was air conditioner parts in the street and he will clean it up ASAP. Case closed	Yes	No		Yes			CBS	10/11/11
11	106694	9/7/11	Oil	Discharge of oil. - Received complaint from community service officer stating that vehicle is leaking oil	WO#136243 : By EMERSON, MIKE: 10/5/2011 1:49:53 PM Site inspection took photos left information on windshield. WO#136399 : By EMERSON, MIKE: 10/18/2011 10:06:49 AM Site inspection took photos of dripping oil left educational information on vehicle WO#136400 : By EMERSON, MIKE: 10/18/2011 10:09:07 AM Site inspection took photos of dripping oil left educational information on vehicle WO#136401 : By EMERSON, MIKE: 10/18/2011 10:11:02 AM Site inspection vehicle removed case closed WO#136243 : By EMERSON, MIKE: 10/5/2011 1:49:53 PM Site inspection took photos left information on windshield. WO#136399 : By EMERSON, MIKE: 10/18/2011 10:06:49 AM	Yes	No		Yes			ENC	10/11/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					Site inspection took photos of dripping oil left educational information on vehicle WO#136400 : By EMERSON, MIKE: 10/18/2011 10:09:07 AM Site inspection took photos of dripping oil left educational information on vehicle WO#136401 : By EMERSON, MIKE: 10/18/2011 10:11:02 AM Site inspection vehicle removed case closed								
12	106711	9/14/11	Cement wash water	Discharge of building or sidewalk wash water - Received complaint that wash water from building was running into storm drain. CM	WO#136416 : By EMERSON, MIKE: 10/18/2011 11:33:53 AM Site inspection took photos of dirty water discharged into Street. Contacted worker to discontinue discharge and to clean up water pooled in street using dry cleaning methods or collection all wash water. WO#136417 : By EMERSON, MIKE: 10/18/2011 11:38:09 AM Site inspection took photos of area that was cleaned up case closed	Yes	No	9/14/11	Yes			CBS	9/14/11
13	106724	10/7/11	H20 with sediment	Discharge of sediment - Received complaint of large amount of water in street. Specialist to investigate. CM	WO#136375 : By EMERSON, MIKE: 10/18/2011 9:35:15 AM Site inspection took photos of sediment laden water and left card to fix sprinkler.	Yes	No		Yes			ENC	10/19/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
14	106734	8/18/11	Debris	Discharge of yard waste - Complainant phoned that street sweepers were unable to clear all debris and neighbors were dumping into street. CM	WO#136447 : MOMILE: 10/19/2011 4:34:13 PM Site inspection. Unable to locate. No violation. Case Closed. CM	No	No					LUC	11/8/11
15	106735	8/17/11	Oil-unable to locate	Discharge of oil. - Received email from PW/Streets Dept. that anonymous caller reported oil dumped at the storm drain on Avenida de San Clemente. CM	WO#136446 : MOMILE: 10/19/2011 4:26:12 PM Site inspection, drove down streets, unable to locate discharge, case closed. CM	No	No					ENC	11/8/11
16	106736	8/10/11	Cement	Discharge of concrete waste. - Complainant phoned to report that concrete had been washed from the driveway to the gutter from construction of driveway. CM	WO#136445 : MOMILE: 10/19/2011 4:14:45 PM Site inspection. Took photos of driveway. Could not locate discharge. Case closed. CM	No	No		Yes			CBS	11/8/11
17	106737	8/31/11	h20	Discharge of water - Received email from PW regarding water flowing over sidewalk slip hazard.	WO#136337 : By EMERSON, MIKE: 10/17/2011 4:11:35 PM Site inspection with clean water manager, Senior Civil Engineer and TC BMP program facilitator, we observed failing BMP (grassy swale not draining and leaking over sidewalk and creating a mosquito breeding area). Called vector control to treat water for mosquitoes and contacted property owner. Owner indicated that the property was built to plan and that he did not want to spend any money. WO#136518 : By EMERSON, MIKE: 10/26/2011 3:24:27 PM Site inspection took photos of grassy swale BMP appears to be not	Yes	No	1/12/12	Yes	1/12/12		LUC	10/26/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					working correctly. By EMERSON, MIKE: 1/12/2012 11:10:47 AM Called contractor who indicated that they will work with engineering to develop a solution within the next couple of weeks By EMERSON, MIKE: 1/24/2012 10:56:57 AM Designer is working with applicant and city engineer to create solution								
18	106741	9/29/11	Oil	Discharge of oil. - Code Enforcement received a complaint regarding a red minivan leaking excessive oil into the street and the owner refuses to respond to requests to fix the issue. CM	WO#136320 : By EMERSON, MIKE: 10/13/2011 2:57:33 PM Site inspection contacted resident and requested that she fix oil leak Case closed	Yes	No		Yes			ENC	10/17/11
19	106764	10/12/11	Soap and clay	Discharge of other wash water - Brown soapy wash water draining down alley from 2128 Manchester	WO#136315 : By EMERSON, MIKE: 10/13/2011 1:14:33 PM Site inspection contacted resident to discontinue discharge took photos. She said it was a spill and will use the sewer to empty buckets in the future case closed	Yes	No		Yes			CBS	10/17/11
20	106792	10/19/11	Gray water	Other discharge - City Staff took pictures of a site that appears to have a grey water connection discharging onto property. Specialist to inspect. CM	WO#136461 : By EMERSON, MIKE: 10/24/2011 4:31:00 PM Site inspection with complainant/tenant took photos of gray water discharge. Contacted property owner who informed me that the laundry room is locked and not being used and will contact me in the week of 10/24/11. The complainant wanted an update and indicated	Yes	No		Yes			RSF	12/21/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					that the laundry room is still in use. In addition, he requested the adjacent property owner's information (property where gray water is discharged). By EMERSON, MIKE: 10/26/2011 2:09:32 PM Received call from owner stating that the washing machine is not being used. He will call me within 3 weeks to give me an update. WO#137275 : By EMERSON, MIKE: 12/21/2011 1:17:59 PM Site inspection with owner washer replumbed to toilet case closed								
21	106836	10/26/11	H2o	Discharge of sediment - Received call from SDWD stating illegal discharge onto Cal trans easement	WO#136542 : By EMERSON, MIKE: 10/27/2011 3:40:05 PM Site inspection took photos left card at door. 10/27/11 received call back message from respondent. WO#136554 : By EMERSON, MIKE: 10/31/2011 3:38:51 PM Received call from respondent stating that the discharge is from the yard no gray or black water referred to Cal Trans. Case closed.	Yes	No		Yes			ENC	10/31/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
22	106887	11/08/2011	Water	Discharge of other wash water - Gentleman phoned the Clean Water Hotline to notify us that his neighbor is discharging large amounts of SUMP Pump water into the street. Pipe is located 3-4 ft. in front of mailbox. CM	WO#136958 : By EMERSON, MIKE: 11/28/2011 3:52:49 PM Site inspection took photos and left card with worker. Received call back from owner. He will clean up around yard drain and educate workers. Case closed	No	No		Yes			CBS	11/30/11
23	106900	11/08/2011	Silt/sediment	Discharge of sediment - City Staff requested assistance with a vacant property that appears to be lacking proper BMP's. CM	WO#136957 : By EMERSON, MIKE: 11/28/2011 3:34:58 PM Site inspection took photos and was contacted by the resident. He is maintaining his side of the road and that his neighbors need to implement some BMPs. Discussed case with CWM to come up with a solution for publically owned privately maintained streets By EMERSON, MIKE: 12/20/2011 4:18:18 PM The owner should maintain their property unless otherwise stated. Sent email back to PW requesting owner fix or reason why they should not. Case closed	Yes	No		Yes			ENC	12/21/11
24	106921	11/10/11	Silt	Discharge of sediment - Citizen came into City Hall Engineering counter to complain that his neighbor discharged dirt over his property. Specialist to investigate. CM	WO#136948 : By EMERSON, MIKE: 11/28/2011 10:35:02 AM Site inspection observed small amount of dirt requested resident to clean up case closed	Yes	No		Yes			ENC	11/30/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
25	106956	10/23/11	Water	Discharge of water - City Staff (Code Enforcement) forwarded complaint from 10/23/11 on 11/15/11 regarding a backyard being paved over with pipes	WO#137347 : By EMERSON, MIKE: 12/29/2011 1:43:03 PM Site inspection took photos of drainage area and suggested BMPs between properties CASE CLOSED	No	No		Yes			CBS	12/30/11
26	106976	11/21/11	Silt/sediment	Other discharge - Complainant came to Engineering counter and filled out a complaint form stating that muddy water runoff floods sidewalk and flows to storm drain. Erosion of dirt and plants occur with every rain. CM	WO#136944 : By EMERSON, MIKE: 11/28/2011 9:47:24 AM Site inspection contacted owner to implement BMPs directed him to PW to pick up sand bags. Case closed.	Yes	No		Yes			ENC	11/30/11
27	107002	11/28/2011	h2o	Other discharge - Complainant phoned the clean water hotline with a concern of neighbor's horses and possible pollution of urine and feces from animals running off into storm drain nearby and complainant's property. Smells bad. CM	WO#137295 : By EMERSON, MIKE: 12/27/2011 3:18:44 PM Site inspection met owner and took photos. Requires direction from Civil Engineer. WO#137296 : By EMERSON, MIKE: 12/27/2011 3:23:56 PM Site inspection with Senior Civil Engineer. Appears to be a grading violation and case was referred to Engineering construction division for enforcement clean water case closed	Yes	No		Yes			RSF	12/2/11
28	107004	11/28/2011	H2O	Discharge of water - PW/Streets called Specialist about constant water draining from 133 Town wood. CM	WO#137003 : By EMERSON, MIKE: 12/1/2011 5:16:27 PM Site inspection took photos of drainage over sidewalk. Left card at door to call me. 11/29/11 received call from tenant stating that they have tried to find the source of the water and have reviewed their water bill appears that there are no leaks and it	No	No		Yes			RSF	12/28/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					may be water from the upper property over irrigating. Discussed case with CW manager and it may not be a clean water issue. 12/1/11 left message with tenant that the City is looking for a solution. By EMERSON, MIKE: 12/27/2011 3:14:13 PM Sent email to PW streets that this is not a clean water concern but a possible slip hazard concern case closed								
29	107048	12/5/2011	Wash water	Discharge of other wash water - Citizen phoned the Clean Water Hotline to inform us that a resident was washing his driveway and sidewalk with a hose. Water was running off into the street. CM	WO#137254 : By EMERSON, MIKE: 12/20/2011 10:29:25 AM Site inspection no discharge observed left card with resident case closed	No	No		Yes			ENC	12/28/11
30	107050	12/6/2011	Silt	Discharge of sediment - An employee of the Encinitas Landfill phoned the Code Enforcement Dept. to report grading and dirt being pushed onto San Elijo Lagoon Property. Environmental Specialist and Engineering Construction Inspector to investigate; appt. made w/ County. CM	WO#137252 : By EMERSON, MIKE: 12/20/2011 10:10:27 AM Site inspection with county worker and engineering inspector. Took photos of grading. WO#137253 : By EMERSON, MIKE: 12/20/2011 10:21:15 AM Site inspection took photos of stream adjacent to grading appears grading does not leave the property referred to grading engineer for NOV case closed	Yes	No					RSF	12/12/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
31	107085	12/8/2011	h2o	Discharge of concrete cutting slurry or wash water. - SDWD phoned the Hotline # to report discharge of water and concrete slurry running down the street. Specialist to investigate. CM	WO#137251 : By EMERSON, MIKE: 12/20/2011 9:57:45 AM Site inspection took photos of discharge contacted owner and contractor to implement BMPs and discontinue any discharges ASAP case closed	Yes	No		Yes			ENC	12/28/11
32	107086	12/13/11	Sediment/silt/rock	Discharge of sediment - Building inspector report sediment wash out from old palm co. Building inspector reported sediment wash out from old palm co. ME	WO#137249 : By EMERSON, MIKE: 12/20/2011 9:32:48 AM Site inspection took photos of discharge called owner to implement BMPs ASAP WO#137250 : By EMERSON, MIKE: 12/20/2011 9:47:12 AM Site inspection took photos of implement BMPs Case closed	Yes	No		Yes		na	LUC	12/28/11
33	107133	11/23/11	h2o	Discharge of water - received complaint call manhole cover water leaking out of it	WO#137303 : By EMERSON, MIKE: 12/27/2011 5:45:18 PM Site inspection observed broken sprinkler contacted gardener to fix it case closed	No	No		Yes			ENC	12/28/11
34	107134	12/28/2011	Soap	Discharge of other wash water - Citizen phoned to report powdery substance in gutter and street. Possibly cement dust? Specialist to investigate. CM	WO#137336 : By EMERSON, MIKE: 12/29/2011 9:22:54 AM Site inspection observed white substance in gutter. Resident said it was soap from washing a car and agreed to clean up area case closed	Yes	No		Yes			CBS	12/30/11
35	107145	12/13/2011	Silt sediment	Discharge of sediment - Specialist observed poor BMP's. Sediment runoff into MS4. Specialist to contact HOA President to correct. CM	WO#137360 : By EMERSON, MIKE: 12/30/2011 1:54:59 PM Site inspection observed sediment from HOA flowing into drainage ditch. 12/13/11 requested HOA to BMP	Yes	No		Yes			ENC	8/16/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					bank to prevent sediment from flowing into ditch. WO#137361 : By EMERSON, MIKE: 12/30/2011 1:58:21 PM Site inspection took photos no work done By EMERSON, MIKE: 1/12/2012 10:23:44 AM Called HOA president to install BMPs on her bank she requested a meeting to discuss solutions. We are to meet on 1/18/12 10am with John Smith By EMERSON, MIKE: 1/18/2012 4:38:47 PM Site inspection with HOA president, their landscaper, Mike Piper from the JPA and John Smith from SDWD. Landscaper informed the group that all reclaimed water sprinklers on the lower bank were shut off. Sent email with BMP details from erosion control to HOS president. Neighbor was called regarding stock pile and monitoring especially after a rain event.								
36	107148	12/20/2011	Wood chips/vegetation	Discharge of sediment - City Staff reported large amount of sediment runoff from residential property. Specialist to investigate. CM	WO#137355 : By EMERSON, MIKE: 12/29/2011 3:07:41 PM Site inspection took photos of wood chips discharge left card to clean and implement BMPs WO#137359 : By EMERSON, MIKE: 12/30/2011 1:42:07 PM Site inspection street cleaned up left	No	No		Yes			ENC	12/29/11

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					construction flyer at door CASE CLOSED								
37	107159	1/3/2012	UNKNOWN	Discharge of paint - City Staff noticed white paint in road, gutter, & storm drain on the way to work. Specialist to investigate. CM	WO#137369 : By EMERSON, MIKE: 1/3/2012 4:26:31 PM Site inspection took photos of shite substance in street. Received call from respondent stating that he will sweep it up WO#137450 : By EMERSON, MIKE: 1/10/2012 10:44:39 AM Site inspection area cleaned up CASE CLOSED WO#137369 : By EMERSON, MIKE: 1/3/2012 4:26:31 PM Site inspection took photos of shite substance in street. Received call from respondent stating that he will sweep it up WO#137450 : By EMERSON, MIKE: 1/10/2012 10:44:39 AM Site inspection area cleaned up CASE CLOSED	Yes	No					ENC	1/10/12
38	107161	1/3/2012	Chemicals	Other discharge - Citizen came to Engineering Counter to report neighbor dumping hazardous chemicals. Chemicals are killing his palm trees and runoff is entering the storm drain system. Specialist to investigate. CM	WO#137368 : By EMERSON, MIKE: 1/3/2012 4:18:55 PM Site inspection no discharge observed contacted respondents grand kid regarding over spraying chemicals into storm drain CASE CLOSED	No	No		Yes			ENC	1/11/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
39	107213	1/11/12	Sewer waste	Discharge of sewage - Business owner called Code Enforcement to report pipes from a residential home nearby have open sewer lines that drain to street and storm drain. Call was forwarded to the CWP. Specialist to investigate. CM	WO#138490 : By EMERSON, MIKE: 1/12/2012 9:24:44 AM Site inspection took photos of uncapped clean out line. Tenant was contacted to fix problem. Tenant to contact landlord ASAP WO#138584 : By EMERSON, MIKE: 1/18/2012 4:29:52 PM Site inspection took photos of capped clean out CASE CLOSED	Yes	No		Yes			ENC	1/18/12
40	107239	01/13/2012	Paint? Stucco?	Discharge of paint - City Staff noticed over the weekend that paint wash was thrown all over the property, sidewalk, & street. Pictures show clear violation. Specialist to investigate. Letters to be sent. CM	WO#138698 : By MEADOW, CHAMOMILE: 1/30/2012 6:06:02 PM Environmental Specialist investigated complaint and was unable to find responsible party. Business card left at Unit #1 requesting a call back. More photos taken. NOV Letter sent to owner of property and also to property manager at violation address. CM	Yes	No	1/23/12	Yes				1/31/12
41	107273	1/13/2012	Car fluid	Discharge of oil. - Sheriff's Dept. phoned the CWP to report a vehicle has been sitting on the street in the same spot for one week and is leaking fluid. Specialist to report. CM	WO#138696 : By MEADOW, CHAMOMILE: 1/30/2012 3:16:28 PM Specialist went to complaint location the same day and did not observe the described vehicle or any leaking fluid. The vehicle had either been towed or moved already. CM	No	No						1/30/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
42	119389	2/15/2012	WATER	Discharge of water - Complainant phoned the hotline to report water run-off in excess that is entering his property and causing erosion. Call directed to drainage specialist in ENG. Specialist to respond also. CM	WO#150886 : By MEADOW, CHAMOMILE: 2/22/2012 4:57:08 PM Complainant observed that the water has slowed/decreased after contacting owner of neighboring property. He will follow-up with the water district and neighbor. Drainage Engineer indicated that this could be a civil issue. Complainant was updated of actions City would be able to take. CM	No	No					LUC	2/22/12
43	119484	3/14/2012	Unknown. Only water was visible at time of investigation	Other discharge - Citizen phoned Streets Dept. to report a green substance that was thrown in the street. Specialist to respond immediately. CM	WO#151130 : By MEADOW, CHAMOMILE: 3/14/2012 4:02:26 PM Environmental Specialist responded to complaint and found water in the street. No visible signs of green liquid or substance. Pictures taken. Case closed. CM	No	No					CBS	3/14/12
44	119486	3/14/2012	Unknown	Other discharge - Fire Dept. staff noticed a white filmy substance near their private residence after an HVAC company had serviced their neighbor's property. Specialist to investigate. CM	WO#151388 : By MEADOW, CHAMOMILE: 4/16/2012 3:02:25 PM Site visit on 3/15/12. No discharge observed or material observed. Entire 300 block of street inspected. Complainant emailed with results of investigation. CM	Yes	Yes					LUX	4/16/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
45	119839	3/28/12	Paint	Discharge of paint - Sheriff's Dept. phoned to report an incident in Village Park whereby a citizen saw their neighbor dumping white paint in the gutter and storm drain. The citizen confronted her neighbor and the polluter laughed and ignored the request. CM	WO#151729 : By MEADOW, CHAMOMILE: 5/31/2012 3:39:46 PM Specialist investigated and took pictures. Staff met with homeowner and explained violation. Paint stains were evident all the way down the street. Education given and a follow up advisory letter to be sent. CM	Yes	No		Yes			LCS	5/31/12
46	120045	5/15/2012	Pool water	Discharge of water - City Staff noticed a homeowner draining their pool into the storm drain with the hose in the gutter line. Specialist to respond immediately. CM	WO#152070 : MOMILE: 7/10/2012 3:51:03 PM Specialist did site inspection; no erosion. Project Clean Water Pool Draining Flyer left for homeowner on front door of property. Case Closed. CM	Yes	No		Yes			LCS	7/10/12
47	120046	5/16/2012	Salt water	Discharge of water - Citizen phoned to complain that a large amount of water was running down the street. Not a water line break. Specialist to inspect immediately. CM	WO#152071 : MOMILE: 7/10/2012 5:25:45 PM Specialist went to site of pool discharge and spoke to owner. Salt water pool with no chemicals. Owner redirected discharge to landscaped area. CASE CLOSED. CM	Yes	No		Yes			ESC	7/10/12
48	120049	5/17/2012	Sewage	Discharge of sewage - Manager of trailer park phoned to report a leaking mobile home on the street in front of her place of business. Specialist to investigate. CM	WO#152073 : MOMILE: 7/11/2012 10:44:04 AM 5/17/12: Specialist did site inspection & took photos. Sheriff was called to post vehicle with 72 hour notice. Sheriff unable to give out address information for vehicle. PW/Streets unavailable to respond to spill. Specialist Mike E. cleaned pollution in street with dirt and broom. CM WO#152074 : MOMILE: 7/11/2012 11:53:52 AM 5/21/12: Site inspection;	Yes	No		Yes			LUC	7/11/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
					RV Home removed. Photos taken of street. Code Enforcement Dept. to get address to send citation. CM								
49	120051	5/18/2012	Paint washout	Discharge of paint - Citizen phoned to report dumping of paint and other debris behind fence into canyon trail. Citizen mentioned that event occurred two weeks prior. Clean Water Staff to investigate. CM	WO#152075 : MOMILE: 7/11/2012 12:32:09 PM Clean Water Staff inspected site and took photos of construction debris, concrete or stucco or paint washout evident. Garden hose inside fence near washout pollution. NOV & Advisory Letter to be sent. CM	Yes	No					ENC	7/11/12
50	120120	6/11/2012	Paint etc.	Discharge of paint - Citizen phoned to report a neighbor dumping paint, chemicals, and trash onto a shared embankment. Citizen asked neighbor to stop and discharge defiantly continued to pollute onto property and out to the street. Specialist to investigate. CM	WO#152235 : MOMILE: 7/25/2012 6:12:01 PM 6/11/12: Site inspection conducted. Home owners and contractor contacted regarding white milky discharge from landscape area drain & were instructed to clean. Dry Waller was called back to property. Waste Water Vaccon was dispatched to site. Dry wall debris was removed from catch basin before it discharged into 2nd storm drain. CM	Yes	No		Yes			CBS	7/25/12
51	120123	6/12/2012	No discharge observed	Discharge of antifreeze - A citizen phoned the Streets Dept. to report a neighbor allegedly flushing his van's radiator system. Specialist to investigate. CM	WO#152260 : MOMILE: 7/26/2012 10:37:10 AM 6/12/12: Specialist investigated area and found no evidence of any discharge. Photos of street and storm drain taken. Auto maintenance brochure left for resident. Case Closed. CM	No	No		Yes			LCS	7/26/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
52	120128	6/19/2012	Silt/sediment	Discharge of sediment - City Staff noticed some sediment leaving a residential property. Further inspection required by Clean Water Specialist. CM	WO#152268 : MOMILE: 7/26/2012 3:16:40 PM 6/20/12: Site inspection, took photos, and issued NOV to correct work. CM WO#152269 : MOMILE: 7/26/2012 5:05:46 PM 7/3/2012: Site inspection; swale cleaned and new BMP's are in place. Case Closed. CM	Yes	No	6/20/12	Yes			ENC	7/26/12
53	120136	6/27/2012	Diatomaceous earth	Discharge of other wash water - City Staff noticed over the weekend that someone in the neighborhood washed down a white substance from their driveway into the street and down a canyon. Specialist to investigate. CM	WO#152277 : MOMILE: 7/27/2012 12:34:20 PM 6/27/12: Site inspection; took photos of white stain in the street. Door Hanger and Business Card left on front door. Received phone call from homeowner stating that the substance was diatomaceous earth that he used in his pool. Specialist educated homeowner that this is NOT an allowable discharge and needs to be diverted to the sewer system. Case Closed. CM	Yes	No		Yes			ENC	7/27/12
54	120137	6/27/2012	Green liquid	Other discharge - Citizen reported that green water is coming out of a street drain near her home. Specialist to investigate. CM	WO#152278 : MOMILE: 7/27/2012 3:01:34 PM 6/27/12: Specialist went to inspect area and viewed the green water coming out of sidewalk drain. Door hanger with request to phone the Clean Water Program left at residence. CM WO#152279 : MOMILE: 7/27/2012 3:18:08 PM 7/12/12 Site visit; took photos. Discharge was stopped. Complainant was notified. Case Closed. CM	Yes	No		Yes			ENC	7/27/12

	SRID	Incident Date	Material(s) Discharged	Event Description	Actions Taken/ Follow-Ups	Was it a Violation	Was it a Mobile Business	NOV Date	Education Given	Citation Date	Waterway Reached	Sub Basin	Investi-gation Completed
Totals	**54**					**35**	**1**	**4**	**41**	**1**			

Appendix H-1 Referral or Request for Info **FY 2011 - 2012**

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
1	100226	7/1/11	Commercial	h20	Discharge of water - Constant water and slime	Streets Division of PW			7/11/2011
2	100227	7/7/11	Commercial	pool water	Discharge of water - Car washing discharge question		Car washing requirements		7/11/2011
3	104486	7/1/11	Residential	Water	Discharge of vehicle wash water - Car washing at home what are the regulations		Car Washing requirements		8/26/2011
4	104487	7/1/11	Municipal	trash	Discharge of trash - Lots of trash going into Buena Vista Lagoon	Oceanside			8/26/2011
5	104488	7/1/11	Residential	Hot tub water	Discharge of water - Emptying hot tub is it legal?		Draining hot tub		8/26/2011
6	106609	9/9/11-	Municipal	N/A	Other discharge - Complainant called about abnormally large mosquito problem and suggests that the storm drain in front of Mira Costa College may be clogged causing a mosquito problem. CM	County Vector Control & City of Encinitas Streets Dept.		CBS	9/20/2011
7	106843	10/25/11	Residential	Washing Machine Water	Discharge of other wash water - Citizen called the Hotline to ask if it was alright for his neighbor to discharge large amounts of grey water (washing machine water) and soap into his yard causing flooding and standing water. Has spoken to neighbor to alert them. CM	Wastewater-r	Discharging grey water allowed?		11/8/2011
8	106978	11/21/11	Construction	Water	Discharge of water - Biologist from City of SD noticed a water leak coming from a utility box on Saturday and Sunday. Complainant emailed Clean Water Program on Monday. CM	Caltrans			11/22/2011
9	107087	12/12/11	Residential	Rain Runoff	Discharge of water - Citizen phoned to report large amounts of rain runoff leaving the two properties above and flooding complainant's property. CM	-Civil Engineer and then to -Public Works Supervisor		LUC	12/14/2011
10	107099	12/14/11	Construction	Dirty water	Discharge of construction debris - Citizen phoned the CWP hotline to report construction site allegedly dumping dirty water onto HWY 101. CM	Engineering Inspector		LUC	12/16/2011
11	107157	12/30/11	Construction	Sediment	Discharge of sediment - City Staff requested inspection of sidewalk at job site. Sediment on sidewalk and gutter. CM	Construction Inspector			12/30/2011

	SRID	Incident Date	Type	Materials Discharged	Comments	Referred To	Request for Info	Sub Basin	Completed Date
12	107158	12/29/11	Construction	Dust	Other discharge - Citizen phoned the City Manager's Office with a concern about dust control and air quality at a construction site doing excavation. CM	Engineering Construction Inspector			12/30/2011
13	119392	2/22/12	Residential	Water	Discharge of water - Citizen phoned with concern of large amounts of water running onto his property from neighboring property. Information given to Wastewater due to concern of possible grey water. CM	Wastewater then to the Drainage Specialist in Engineering		ESC	6/13/2012
14	119835	3/28/12	Commercial	Paint	Discharge of paint - Complainant originally emailed the E-Assistance Program and then emailed the Clean Water Program. Citizen noticed that a truck lost a gallon of paint when turning the corner. Paint had been there for many weeks. Referred to Streets/PW Dept. CM Complainant originally emailed the E-Assistance Program and then emailed the Clean Water Program. Citizen noticed that a truck lost a gallon of paint when turning the corner. Paint had been there for many weeks. Referred to Streets/PW Dept. CM	STREETS/Public Works Dept.		LCS	5/31/2012
15	119892	4/12/12	Construction	sediment	Discharge of sediment - Citizen phoned to report sediment/silt runoff during heavy rains. Completed development project believed to be the source. Referred to Engineering Inspector assigned to job. CM	Engineering Construction Inspector		ENC	6/11/2012
16	119988	4/9/12	Commercial	Dirt	Discharge of sediment - City Staff noticed a dirt spill in the road that has been left for at least 48 hours. Streets Dept will sweep up. Case Closed. CM	STREETS DEPT.		LUC	6/27/2012

Commercial Total:	**4**
Residential Total:	**5**
Construction Total:	**5**
Municipal Total:	**2**
Industrial Total:	**0**
Total:	**16**

Appendix I

Public Participation

I-1 **Green Spring List 2012**

I-2 **Official Lifeguard Field Manual**

Encinitas "GREEN SPRING" Activities & Events
(April through June, 2012)

Welcome to the Encinitas "Green Spring" listing of local educational activities and events being brought to the community through a collaborative effort of volunteers from the Encinitas Environmental Commission, Encinitas Environment Day, and the Solana Center for Environmental Innovation.

April

April 14 *Free* **Paper Shredding & Electronic Waste Collection Event** for Encinitas residents & businesses – up to 2 bankers boxes - provided by EDCO. Saturday 9 am – 1pm at Encinitas City Hall, 505 S. Vulcan Avenue. For more information call (760) 436-4151 or see City of Encinitas website calendar at www.EncinitasCA.gov.

April 14 *Free* **Used Oil Filter Exchange – Encinitas Residents Only** Saturday 10am-2pm at Pep Boys, 256 N. El Camino Real, Encinitas. Encinitas residents are invited to bring their used oil filters to exchange for new oil filters. Residents are eligible to receive up to 5 FREE filters in exchange. Coordinated by Solana Center for Environmental Innovation www.SolanaCenter.org

April 16–June 4 **Environmental Art Exhibit: The Many Faces of Trash -** View fine art by 25 local artists using recycled materials. In Encinitas Library Community Room, 540 Cornish Drive.

April 18 *Free* **Solar Water Heating Basics for Homeowners:** information on different solar water heating technologies and applications. Discussion provided on CSI-Thermal rebate program and the economics of Solar Water Heating. California Center For Sustainable Energy 8960 Balboa Ave, Suite 100, San Diego, CA, 6pm-8pm. For registration information see Events Calendar: www.energycenter.org

April 21 **Habitat Restoration Activity**: San Elijo Lagoon's Coastal Dunes – Saturday 9:00 am – 12 noon www.sanelijo.org/restoration-events

April 21 **Encinitas Garden Festival**; Saturday 10 am – 4:30 pm www.EncinitasGardenFestival.org

April 21 **Lady Bug Day:** San Diego Botanic Garden, Saturday 10:00 am – 12:30 pm, Free with admission or membership www.sdbgarden.org/ladybug.htm

April 28 **E-Waste Collection Event** – *FREE*; Solana Center for Environmental Innovation, Saturday 9 am – Noon www.solanacenter.org/recycling

April 28 **Build Your Own Spring Hydroponic Garden;** San Diego Botanic Garden, 9:00 am – 1:00 pm, for registration and fees visit www.sdbgarden.org/classes.htm

Continued……..

April 28 **Waterwise Without the Compromise;** San Diego Botanic Garden, 2:00 pm – 4:00 pm, for registration and fees visit www.sdbgarden.org/classes.htm

April 28 **Waterwise Garden Tour:** San Diego Botanic Garden, Saturday 10:30 am www.sdbgarden.org/tours.htm#water

April 28 **Beach Clean-Up** at Moonlight Beach; Encinitas Clean Water Program & Solana Center for Environmental Innovation; Saturday 9:00 am – Noon. Please pre-register at: www.creektobay.org

MAY

May 5 *Free* **Composting Workshop** from the Solana Center; at San Diego Botanic Garden, Saturday 10:00 am – 12 noon, register at: www.solanacenter.org/free-compost-workshops

May 5 **Spring Fling at Carpentier Parkway –** Celebrate spring and sustainable gardening practices by attending this FREE, informative event. Saturday 9am-1pm along San Elijo Ave in downtown Cardiff. Hosted by Cardiff 101 Mainstreet, www.Cardiff101.com.

May 18 **Bike to Work Day** Those who register for Bike to Work Day will be automatically entered to win one of many great prizes, including the grand prize — a new bicycle! Visit Sandag's iCommute site at: http://www.icommutesd.com/Events/BikeToWorkDay.aspx

- Pit Stop locations in Encinitas for t-shirts, snacks, water & encouragement: El Camino Bike Shop, Nytro, REI, and Whole Foods.

May 19+++ **Landscape Makeover Workshop Series** The San Dieguito Water District and their partners are offering a workshop series designed to provide homeowners a comprehensive overview and the basic hands-on skills necessary to makeover a traditional turf yard into a beautiful and climate-appropriate WaterSmart showcase. The series consists of three workshops and two professional landscape design coaching sessions that will teach participants how to transform their yards. For more information and a listing of all dates visit SDWD Website.

May 19 **Habitat Restoration Activity**: San Elijo Lagoon's Coastal Dunes – Saturday 9:00 am – 12 noon www.sanelijo.org/restoration-events

May 26 **E-Waste Collection Event** – *FREE*; Solana Center for Environmental Innovation, Saturday 9 am – Noon www.solanacenter.org/recycling

May 26 **Waterwise Garden Tour:** San Diego Botanic Garden, Saturday 10:30 am www.sdbgarden.org/tours.htm#water

Continued……

GREEN SPRING www.eeday.org

JUNE

June 2 **Tips on Designing a Water-Smart Landscape with Color, Interest, and Budget Savings**; San Diego Botanic Garden 2:00 pm – 4:00 pm, for registration and fees visit www.sdbgarden.org/classes.htm

June 7 **Environmental Film: Queen of the Sun: What Are Bees Telling Us?** is a profound, alternative look at the global bee crisis. Thursday at sundown (time tbd) in the Whole Foods/Pacific Station courtyard www.wholefoodsmarket.com/stores/encinitas/store-calendar

June 10 **Encinitas Environment Day** – *FREE* ; Cottonwood Creek Park; Saturday 10 am – 4 pm **www.EEDay.org**

June 14 *Free* **Solar Water Heating Basics for Homeowners:** information on different solar water heating technologies and applications. Discussion provided on CSI-Thermal rebate program and the economics of Solar Water Heating. California Center For Sustainable Energy 8960 Balboa Ave, Suite 100, San Diego, CA, 6pm-8pm. For registration information see Events Calendar: www.energycenter.org

June 16 **Habitat Restoration Activity**: San Elijo Lagoon's Coastal Dunes – Saturday 9:00 am – 12 noon www.sanelijo.org/restoration-events

June 23 **E-Waste Collection Event** – *FREE*; Solana Center for Environmental Innovation, Saturday 9 am – Noon www.solanacenter.org/recycling

June 30 **Attracting Birds, Hummingbirds, and Butterflies;** San Diego Botanic Garden, Saturday 10:00 am – 12 noon, for registration and fees visit www.sdbgarden.org/classes.htm

June 30 **Waterwise Garden Tour:** San Diego Botanic Garden, Saturday 10:30 am www.sdbgarden.org/tours.htm#water

Regular Ongoing Activities:

Nature Walks & Lagoon Clean-ups - Saturdays
San Elijo Lagoon Conservancy www.sanelijo.org

Leucadia Farmer's Market & Art Fair - EVERY Sunday 10 am – 2 pm
Paul Ecke Central School, 185 Union Street, Leucadia

Cottonwood Creek Clean-ups – 3rd Saturday each month, 8:30 am – Noon
Contact Brad Roth, Project Manager, Cottonwood Creek Conservancy broth@cox.net

All of this programming and coordination has been brought to you by the following organizations and their dedicated volunteers:

City of Encinitas GREENING OUR COMMUNITY
The Encinitas Environmental Commission

Solana Center for Environmental Innovation



Encinitas Environment Day '12
www.EEDay.org

To give us feedback, or request future events/activities: GreenCommunity@cityofencinitas.org
Visit Encinitas Environmental Commission webpage @ www.EncinitasCA.gov for any updates to Green Spring Listing

ENCINITAS
JR. LIFEGUARDS

N33° 2' 52" / W117° 17' 49"
MOONLIGHT BEACH, CA



OFFICIAL

ENCINITAS MARINE SAFETY DEPARTMENT
JUNIOR LIFEGUARD FIELD MANUAL

CITY OF ENCINITAS CLEAN WATER PROGRAM

The storm drain system carries untreated runoff directly to our creeks, lagoons, and the ocean. Runoff containing trash, pet waste, oil, grease, soap, metals, and other pollutants contributes to high bacteria levels in the ocean and may cause sickness and/or beach closures. The Clean Water Program was created to protect our waterways and keep our beaches clean and safe.

WHAT DOES THE PROGRAM DO?

- Water quality monitoring
- Public outreach & education
- Complaint response and enforcement
- Annual facilities inspections
- Low impact development
- Watershed planning and coordination

CITY OF ENCINITAS
Clean Water Program
ENGINEERING SERVICES

HOW CAN YOU PROTECT OUR WATERWAYS?

- Pick up after your pets. Pet waste carries bacteria, viruses, and parasites that can pose risks to human and environmental health.
- Don't be a litter bug. Trash easily makes its way to the beach.
- Never dispose of household hazardous waste in the trash, sewer system, or storm drains.
- Limit your use of fertilizers and pesticides. Do not apply chemicals if rain is in the forecast, and avoid over-irrigation, which can wash chemicals into the storm drain.
- Sweep or rake instead of using water to wash off outdoor surfaces.
- During home improvements and maintenance activities, do not allow any runoff or debris to enter the street or storm drain. Properly dispose of all wash water, paint and other construction materials.

To report spills or illegal dumping in Encinitas, or for more information on stormwater pollution prevention, please call the **Clean Water Hotline: 760-633-2787**, or email: **cleanwater@cityofencinitas.org** website: **www.cwp.cityofencinitas.org**

ESCONDIDO
City of Choice

Christopher W. McKinney
Director of Utilities
201 N. Broadway, Escondido, CA 92025
Phone: 760-839-4662 Fax: 760-839-4651

September 28, 2012

California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340

Three compact disc (CD) copies of the City of Escondido's FY 2011-2012 Jurisdictional Urban Runoff Management Plan (JURMP) Annual Report are being submitted to comply with Order No. R9-2007-0001, NPDES No. CAS0108758 issued by the California Regional Water Quality Control Board, San Diego Region. As a copermittee, the City of Escondido is providing this annual report to the County of San Diego (Principal Permittee) for inclusion in the collated submittal to the Regional Board.

I certify under penalty of law that the FY 2011-2012 Jurisdictional Urban Runoff Management Plan (JURMP) Annual Report was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine or imprisonment.

If you have any questions or need assistance, please contact Cheryl Filar, Environmental Programs Manager, at 760-839-6315.

Sincerely,

Christopher W. McKinney
Director of Utilities

Sam Abed, Mayor Marie Waldron, Deputy Mayor Olga Diaz Ed Gallo Michael Morasco

ESCONDIDO
City of Choice

JURISDICTIONAL

Urban Runoff

MANAGEMENT PROGRAM

2011-2012 Annual Report







SEPTEMBER 2012

Submitted to

CALIFORNIA REGIONAL WATER
QUALITY CONTROL BOARD
SAN DIEGO REGION
9174 SKY PARK COURT, SUITE 100
SAN DIEGO, CA 92123-4340

Submitted by

CITY OF ESCONDIDO
201 NORTH BROADWAY
ESCONDIDO, CA 92025

With Assistance from

AECOM
1420 KETTNER BLVD., SUITE 500
SAN DIEGO, CA 92101

AECOM

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EXECUTIVE SUMMARY

The City of Escondido's (City's) jurisdictional urban runoff management program (JURMP) is a small component of a larger effort to comply with the regulatory framework that serves to control the discharge of pollutants to "waters of the U.S." in accordance with the National Pollutant Discharge Elimination System (NPDES) permit program and its associated municipal stormwater program, which is enforced through the San Diego Regional Water Quality Control Board (RWQCB or Regional Board) Order R9-2007-0001 (i.e., municipal stormwater permit). The San Diego RWQCB administers the municipal NPDES stormwater program, which requires each Copermittee to implement a JURMP. The City is one of the Copermittees subject to this permit.

This document satisfies the Annual Report submittal requirements of Order R9-2007-0001. The information in this Annual Report describes related compliance activities conducted by City staff in multiple departments and divisions (e.g., Engineering, Field Engineering, Utilities, Code Enforcement, Planning, Attorney's Office, and Fire).

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM

The development of the JURMP was the first step in an evolving stormwater management program mandated by the previous municipal stormwater permit (Order 2001-01). The JURMP was first developed in 2001 and was updated in March 2008. The City significantly revised and redesigned the JURMP (City of Escondido 2008) to address the new and expanded compliance requirements set forth in Order R9-2007-0001. The results of this program over the last fiscal year (June 2011–July 2012) are summarized below relative to each plan component.

Environmental Setting

Escondido is located in the northern part of inland San Diego County and primarily lies within two major watershed units: Carlsbad and San Dieguito. A very small natural area in the north part of Escondido also crosses the boundary line into the San Luis Rey Watershed.

Escondido is largely a residential semi-urban city, with a variety of land uses, including industrial, commercial, municipal, agricultural, and rural, in each of the major drainages. Stormwater in Escondido is discharged into three main drainage basins: Escondido Creek (including Reidy Creek) and San Marcos Creek in the Carlsbad Watershed, and Lake Hodges (a dammed section of San Dieguito River) in the San Dieguito Watershed. The municipal boundaries of the City abut, for the most part, properties located in unincorporated portions of San Diego County, which also drain across and into City stormwater conveyance facilities. The total drainage area within the City limits is 23,687 acres.

Development Planning Component

Development, redevelopment, and land use planning efforts are governed by municipal ordinances and policies, including the City's updated Standard Urban Stormwater Mitigation Plan (SUSMP) (City of Escondido 2010). The SUSMP requires an evaluation of site conditions and proposed project designs through the development and submittal of a Water Quality Technical Report that designates appropriate best management practices (BMPs) (i.e., site design, source control, and treatment control) to mitigate potential development impacts to the maximum extent practicable (MEP).



In March 2010, the City adopted its local SUSMP, consistent with Order R9-2007-0001 requirements and the Regional Board-accepted Model SUSMP template, including low-impact development (LID) design

requirements to reduce runoff volumes, improve parcel-specific water quality benefits, and improve aesthetics.

During the last reporting period, the City updated its local SUSMP to incorporate the Hydromodification Management Plan (HMP) as required by Order R9-2007-0001. The HMP was approved by Escondido's City Council in January 2011, and HMP requirements became effective on January 14, 2011. Consistent with the requirements set forth in the HMP, priority development projects are required to implement hydromodification mitigation measures so that post-project runoff flow rates and durations do not exceed pre-project flow rates and durations where such increases would result in an increased potential for erosion or significant impacts to beneficial uses.

Nine projects were subject to SUSMP requirements and three projects were subject to HMP requirements during the reporting period. No projects received compliance waivers; if this were to occur, appropriate collateral mitigation would be required.

Construction Component

Construction site owners, developers, contractors, and other responsible parties are mandated to employ stormwater pollution prevention measures at active construction sites to protect receiving waters and other environmental resources in accordance with local ordinances and permit requirements.

In addition to the requirements set forth in the City's JURMP and SUSMP, construction projects during the reporting period were also subject to coverage and compliance requirements of the *General Permit for Discharges of Stormwater Associated with Construction Activity* (Order 2009-0009-DWQ as amended by 2010-0014-DWQ). Under this permit, risk evaluations must be conducted for each project and minimum BMP requirements must be implemented specific to risk type to eliminate or reduce pollutant discharges to the MEP.

City staff inspect construction sites for compliance with these regulations. Construction activity remains slow due to the continued economic downturn in the region. As determined by City compliance inspectors, no enforcement measures were necessary during the reporting period. For inactive sites, staff confirmed that effective BMPs were installed and/or maintained, even though dry conditions prevailed through most of the rainy season.

Municipal Component

The City implements an extensive municipal program to control and eliminate the discharge of pollutants from municipal areas and activities. Municipal program elements are as follows:

- inspection and maintenance of the sanitary sewer system, including implementation of the Sewer System Management Plan; Sewer Overflow and Prevention Plan; and Fats, Oils and Grease Control Program;
- frequent sweeping of all municipal streets and parking lots;
- year-round Municipal Separate Storm Sewer System (MS4) inspection and cleaning;
- regular flood control channel trash and debris removal, including sea curtain deployment and cleaning;
- implementation of pollution prevention and treatment control BMPs at fixed municipal facilities and events;
- general stormwater education for City staff and continued focused training for City departments;
- stormwater compliance inspections for municipal facilities;

- implementation of standard procedures and required BMPs to prevent discharges from special events and power washing activities to the MS4; and
- implementation of an integrated pest management program for pesticides, herbicides, and fertilizers.

During the program year:

- approximately 9,408 curb miles were swept and 543 tons of material was collected;
- approximately 40 miles of sanitary sewer line were inspected and approximately 191 miles were cleaned;
- approximately 302 miles of open channel and 3,113 storm drain facilities were inspected resulting in the removal of 77 tons of debris from the MS4; and
- 26 high-priority and 13 medium-priority fixed municipal facilities were inspected for stormwater compliance, surpassing permit inspection requirements.

The City continues to evaluate existing municipal program pollution prevention efforts and BMPs and develop and implement new measures, as needed. Through implementation of the municipal component, the City is ensuring the removal of many pollutants that otherwise could have been exposed to precipitation and eventually transported to surface waterbodies by urban runoff.

Industrial and Commercial Component

The City's most notable efforts to control pollutants from industrial and commercial activities are maintaining and updating a facility inventory, inspecting high- and medium-priority facilities, and educating owners and operators on stormwater pollution prevention.

During the reporting period, more than 1,400 industrial and commercial sites were inspected by trained staff for compliance with stormwater requirements and to verify the use of appropriate BMPs. Sites were assessed based on the following:

- maintenance/general site housekeeping,
- pollutant source control/material storage,
- erosion control,
- sediment control,
- non-stormwater control, and
- waste management control,

Compliance inspectors also performed the following:

- assessed compliance with City ordinances and permits related to urban runoff;
- assessed BMP implementation, maintenance, and effectiveness;
- confirmed facility coverage under the General Industrial Permit (Notice of Intent [NOI] and/or Waste Discharge Identification number), when applicable;
- reviewed BMP implementation plans, when applicable, and determined whether they were being properly implemented;
- reviewed facility monitoring data, when applicable;
- informed operators/owners about stormwater pollution prevention, as conditions warranted; and

- conducted visual observations for non-stormwater discharges, potential illicit connections, and potential discharge of pollutants in stormwater runoff.

During inspections, staff educated site owners and operators on applicable stormwater regulations and BMP implementation. Educational and outreach materials are distributed to many facilities based on site conditions and activities.

As in years past, Notices of Correction (NOCs) were the primary form of enforcement action used to correct compliance issues at commercial or industrial facilities during the reporting period. Each business was given a specific timeframe to correct noncompliance based on the severity of the issues found. Follow-up inspections were conducted for every business that received an NOC, and re-inspections continued until compliance was achieved.

All commercial/industrial inspections and NOC follow-ups were completed prior to the end of the fiscal year (June 30). During this reporting period, 150 NOCs were issued to industrial and commercial businesses for stormwater violations. The majority of the NOCs were given for poor housekeeping practices, inadequate maintenance of pretreatment devices (e.g., grease traps), and lack of secondary containment (e.g., 55-gallon drums outside without secondary containment and weather protection). Other common BMP requirements that were found to need enhancement were the following:

- frequency of sweeping,
- presence of dumpster covers,
- implementation of spill kits, and
- removal of equipment/materials stored outside or improperly covered.

All sites were found to be compliant upon reinspection.

During inspections, City staff also evaluated whether industrial facilities needed to obtain coverage under the Industrial General Permit (RWQCB 1997). No new non-filers were discovered during this reporting period. However, as reported in past annual reports and via email, seven businesses were determined to require coverage under the permit. Information associated with these businesses was provided to the Regional Board, but inspections conducted during the 2011–2012 reporting period revealed that none of the facilities have yet obtained coverage under the permit.

Industrial and commercial inspection results continue to indicate that, in spite of the high-priority designation assigned to many sites, a majority of facilities are currently compliant with BMP implementation (structural and nonstructural) that reduce and/or eliminate urban runoff pollutants to the MEP.

Residential Component

The City's residential program consists of pollution prevention and source control BMP activities associated with the following:

- disposal of household hazardous waste, pet waste, and green waste;
- at-home car maintenance and cleaning; and
- home and garden care.

The City targets these issues through a variety means, but most notably through a public education and outreach campaign, and a recycling and household hazardous waste collection program. In addition to these programs, the City implements a stormwater hotline for reporting illegal storm drain discharges, conducts resident research surveys to gather data for program modification and effectiveness, and performs water quality monitoring to identify and evaluate potential sources of pollutants from residential areas. Furthermore, the City focuses its outreach and education campaign on high-priority residential areas that correspond to the community's underserved populations. As part of this campaign, the City

partners with the Neighborhood Services Division, which coordinates groups in Escondido's higher density areas.

City staff also strongly encourage public reporting of violations to help with Citywide pollution prevention. Compliance violations may be documented through verbal warnings, written warnings, orders to abate and correct, and fines. Throughout the reporting period, the City issued three verbal warnings and 18 NOCs for the discharge of illegal substances to the storm drain system from residential areas. All of the violations were resolved within the reporting period. To prevent such violations from recurring, the City continued to focus its residential outreach program on increased residential pollution prevention awareness.

Illicit Discharge Detection and Elimination Component

The City established the dry-weather monitoring program in 2000 to detect illicit connections and eliminate illegal discharges. This program represents an extensive and geographically widespread monitoring station network along the reaches and tributaries of Escondido Creek, Reidy Creek, Felicita Creek, and Kit Carson Creek. Monitoring stations were selected on the basis of location, drainage patterns, surrounding land uses, and historic water quality monitoring results. These monitoring stations mostly coincide with major storm drain outfalls, but they also are strategically located in natural creek tributary junctions and/or specific drainages associated with heavy urbanization (e.g., industrial activities).



As reported to the RWQCB in the JURMP 2011–2012 Illicit Discharge Detection and Elimination (IDDE) Annual Report (City of Escondido 2011), 57 of the 117 dry-weather monitoring stations (49 percent) were found to have suitable runoff for collecting samples for laboratory analyses. Analysis of the samples collected this reporting period revealed the following:

- fifteen stations were above the nitrate action level (26 percent of all stations sampled), and
- one station was above the action level for total fecal coliform and *Enterococcus* (less than 2 percent of all stations sampled).

No other dry-weather monitoring parameters were above their respective action level.

For samples found to contain concentrations above action levels, follow-up sampling was conducted. During the reporting period, nitrate was the only constituent that was found in follow-up samples above action level concentrations. Evaluation of the data revealed findings consistent with past annual reports that stations with elevated nitrates were likely affected by factors outside of the City's jurisdiction, such as upstream livestock/agricultural activities.

Bacteria action levels were not exceeded upon analysis of follow-up sampling at the site that initially exceeded fecal and *Enteroccocus* concentrations.

If an illicit connection or illegal discharge is suspected, observed, or reported, the City initiates an investigation to identify the source. A systematic process of elimination is used to determine the potential source—tributary junctions are screened and/or tested for constituents related to the discharge to determine upgradient conditions until the source is located.

No illicit sewer connections were detected as a result of the follow-up investigations during this reporting period. However, 44 illicit discharges to the MS4 were identified and resolved (Appendix D). Twenty-two violations were issued to commercial/industrial and/or food service businesses, and 22 were associated with residential activities

To address and reduce these types of illicit discharges, the City continues to modify and strengthen its public outreach and education program.

Education Component

Education training this fiscal year continued to focus on the requirements of Order R9-2007-0001. City employees received stormwater-related messages through *CityLine*, a weekly electronic Citywide newsletter distributed by the City Manager's Office. New employee orientation included a 20-minute presentation on the Clean Water Act (CWA), current permit requirements, and general information on watersheds and BMPs. During this reporting period, 20 new employees received this presentation.

Various City departments received focused training sessions, as follows:

- On May 30, 2012, the City's Field Engineering, Engineering, Planning and Utilities staff attended a three-hour workshop designed to cover the various components of the development process as it relates to stormwater requirements: the Construction General Permit; Standard Urban Stormwater Management Plan (SUSMP), Low Impact Development, and Hydromodification. The training included stormwater requirements from the inception of a construction project, through its active construction phase(s), and then into its post-development and final phase. Much of this discussion was set in the larger context of the municipal stormwater permit. Questions were raised throughout the presentation, which provided a good dialogue between staff and the environmental professionals who were retained to conduct the workshop.

- On June 27 and 28, 2011, Pretreatment staff watched a municipal training video that provides an overview of basic stormwater concepts, as well as detailed procedures for implementing basic best management practices.

- The City provides a thorough, bi-annual workshop on municipal stormwater concepts, requirements, and BMPs. The last workshop was provided on April 19, 2011, for maintenance and collections staff. The training provided an overview of stormwater regulations, municipal requirements, watershed concepts and drainages, pollutant sources, and BMPs such as inlet protection, perimeter controls, storage practices, and spill preparedness. The presentation also addressed the legal consequences for noncompliance and included opportunities for questions and answers. Another workshop will be provided in the spring of 2013.

In addition to staff education, the City conducted numerous programs to educate and involve the public (residents, business owners, developers, and school children), such as the following:

- A focused education and outreach campaign to Escondido's underserved population.

- A comprehensive stormwater website that features an interactive BMP education site for residents and businesses.



- Televised City Council meetings, community service announcements and videos related to urban runoff.

- Numerous special events that provided a venue for stormwater education and public outreach efforts.

- Public outreach events focused on water conservation, urban runoff and the importance of reusable bags in the reduction of waste.

- Composting demonstration workshops, which are hosted by the City of Escondido and the Escondido Community Garden group.

- Education programs for school children that include presentations focused on water conservation and water quality protection, a poster contest, City-sponsored mobile lab, summer camp programs in partnership with the Humane Society, and participation in career fairs.

- Installation of pet waste stations in various neighborhoods and distribution of pet waste dispensers to individuals adopting dogs from the Escondido Humane Society.
- Hotlines for the community to report stormwater violations and obtain information on water conservation and recycling opportunities.
- Operation of a Permanent Household Hazardous Waste Collection facility.
- Litter removal events.
- Distribution of stormwater materials and BMP handouts to industrial and commercial facilities and construction site owners and developers.

The City's outreach and education program is modified on an ongoing basis such that it continues to educate the public on evolving stormwater quality concepts and particular pollutants of concern associated with various jurisdictions and/or watersheds.

Public Participation Component

Public participation is an integral part of the City's successful stormwater planning. The public is provided with numerous opportunities to participate in the City's urban runoff management program. During the 2011–2012 reporting period, the City continued to provide opportunities to participate that included efforts summarized above in the Education Component, as well as the following:



- Participation in the San Dieguito Watershed group, a consortium of nongovernmental organizations and governmental agencies that are collaborating to preserve and improve the environmental integrity of the San Dieguito Watershed.
- Participation in the Escondido Creek Watershed Cooperative Agreement (ECWA), a collaboration of jurisdictions and nongovernmental organizations that seeks to preserve and create a healthy environment to provide a foundation for the overall quality of life in the watershed.
- Participation in the Escondido Revealing the Creek organization, which is a group of residents, nongovernmental organizations, and local government representatives who seek to create a new vision of the creek as a functional and aesthetically pleasing recreation and transit corridor that is a social, environmental, and economic resource to the community.

In addition, the City holds numerous public outreach events throughout the year. Participation in these programs continues to grow and is a key component to keeping the public educated on stormwater pollution prevention.

Effectiveness Assessment

The JURMP effectiveness assessment analyzes the data collected to date and evaluates the progression toward achieving receiving water quality improvements. For the City, these improvements are gauged by dry-weather data collected as part of the JURMP, but are also related to available wet-weather information provided from regional monitoring efforts.

Load Reductions

From the 10 years of data collected, it is clear that urban runoff pollutant load reductions have been achieved in Escondido (see Figures 11-5 through 11-8 in the Effectiveness Assessment Component). Although these loads are difficult to accurately quantify due to the instantaneous nature of grab-sampling under the IDDE component, it is clear that water quality has improved in the City, which is attributed to structural and non-structural BMPs that continue to be implemented as part of the JURMP.

In terms of pollution prevention, the City has intercepted more than 3 million cubic yards of sediment around the City, translating to a capacity of approximately 159,653 dump trucks of sediment, or more than 8 feet of sediment over an entire football field.

Other pollutant load reductions are evident from the results of various education and public participation efforts of the past decade. These collective efforts have reduced City-dispersed trash, removed litter from local creeks, increased recycling of potentially toxic electronic materials, and diverted tons of household hazardous waste from landfills and potential watershed exposure. Since 2002, more than 35 tons of creek litter and Citywide trash has been diverted from reaching receiving waters (e.g., San Elijo Lagoon).

The San Diego County-sponsored wet-weather water quality monitoring program is the region's sole evaluation tool for assessing pollutant load reductions because it is the only composite stormwater runoff sampling campaign sponsored under the NPDES municipal stormwater program. The benefits of the JURMP and this regional counterpart can be summarized by the low pollutant concentrations found within the City's jurisdiction (as described and quantified in this Annual Report), coupled with the results of the 2005–2011 Carlsbad Watershed long-term assessment (Weston et al. 2011). This regional study found that wet-weather receiving water data from mass loading stations at the lower reaches of Escondido Creek (i.e., close to the Pacific coast) and at temporary watershed assessment stations in the Escondido Creek Hydrologic Area contained the following:

- High-priority constituents — turbidity, bifenthrin, and fecal coliforms
- Medium-priority constituents — total suspended solids (TSS) and diazinon
- Low-priority constituents — toxicity and nutrients

The priority constituents found in the Escondido Creek Hydrologic Area during the regional dry-weather receiving water quality monitoring program were as follows:

- High-priority constituents — total dissolved solids (TDS) and total nitrogen, enterococci, total nitrogen, and benthic algae
- Medium-priority constituents — total phosphorus, fecal coliforms, and chemical oxygen demand
- Low-priority constituents — metals, organics, and pesticides

Relative to these observations and conclusions from regional long-term data collection, Escondido's JURMP is not contributing to the exacerbation of high- or medium-priority pollutants. Moreover, the results of its implementation have significantly improved watershed pollution prevention. Although some nutrient sources have been identified and eliminated or significantly reduced through BMP implementation over the past 10 years, nutrient concentrations above action levels are related to wildlife found in semi-rural Escondido. The levels found do not indicate problematic sources but, rather, a characterization of background ambient water quality.

Changes in Discharge Quality

To date, the results of Escondido's urban runoff management program indicate improvements in dry-weather discharge water quality and that pollutants measured are generally low, with concentrations mostly below action levels. This indicates that the City's Clean Water Program (monitoring, public education, outreach, and enforcement) has been effective in achieving meaningful pollutant-load

reductions. From 10 years of data collection under the JURMP, the following observations, improvements, and recommendations can be made:

- Runoff pollutant concentration data is consistently low, with few results that are over action levels. There are no water quality problems or significant stressors that can be associated with urban runoff as measured through the JURMP components.
- Bacteria levels are notably lower than 2001 levels, and no sporadic bacteria elevations were recorded this reporting period (see Figures 11-5 and 11-6). Some anthropogenic sources of bacteria and nitrate have been documented from unincorporated lands outside and upgradient of the City's jurisdictional boundaries under this program.
    - Bacteria concentrations appear to be declining. This reporting period, no bacteria action levels were exceeded.
    - Historically high groundwater elevations and the potential for seepage throughout the City's MS4 may be influencing some of the elevated nitrate levels found within the infrastructure system (non-riparian areas). Overall, the number and occurrence of stations with elevated nitrate have ranged from four to 15 stations (about 3 percent to 13 percent of the total). Concentrations exceeding the action level have typically been between 11 milligrams per liter (mg/L) and 25 mg/L.
- Dissolved metal concentrations are overall very low, demonstrating a notable improvement from initial sampling in 2001–2002, and show no definitive correlation to an area within the jurisdiction that suggests a significant pollutant source (see Figure 11-8).

Changes in Receiving Water Quality

Since the Escondido dry-weather monitoring program began in 2000 (pre-JURMP implementation), receiving water quality data from in-stream sampling during dry weather have shown positive changes in water quality and appear to correlate with the positive behavioral changes. Citywide dry-weather monitoring data show that urban runoff quality is good throughout the City, with very few samples exceeding action levels, suggesting that the JURMP's various components are successful.

Program Assessment

In general, the success of Escondido's urban runoff management program has been largely reliant on the quality and content of the City's educational outreach and public participation programs, including the extensive outreach efforts conducted during the annual inspections of its municipal, commercial, and industrial facilities, as well as active construction sites. These programs have been successful in continually elevating the public's awareness concerning the importance of urban runoff pollution prevention and proper stormwater management. Dry-weather data suggest that these outreach efforts are providing tangible results.

Targeted outcomes have been achieved, as follows:

- To date, the realized urban runoff water quality improvements reflect a change in human behavior and reflect that the JURMP has reduced concentrations of surface water pollutants.
- Pollution prevention by municipal staff and through municipal maintenance practices and engineering designs has improved over the past 9 years at municipal facilities.
- The inspection of industrial facilities, commercial properties, and construction sites has substantially raised awareness levels and improved compliance since the JURMP began.
- Field Engineering and Maintenance staff training continues to raise compliance awareness and contributes to pollution prevention.

The City is proud of the vast dataset that has been collected from the JURMP program to date and the water quality characteristics that it portrays. The results of Escondido's urban runoff management program show that dry-weather discharge water quality has improved and that pollutants measured are generally low, with concentrations mostly below action levels.

Fiscal Analysis Component

This program year represents the third year in which the City's fiscal analysis was based on the "Standardized Fiscal Method and Format" (Fiscal Analysis Method) that was collaboratively developed by the Copermittees in January 2009 in accordance with Order R9-2007-0001. It provides Copermittees with guidance and standards to analyze and report their expenditures for each of the urban runoff management programs (jurisdictional, watershed, and regional), and provides direction to identify the funding sources that support those costs. A fee assessed through the City's wastewater fund provides fiscal support for each of these programs. During fiscal year 2011–2012, the City spent $1.55 million to develop and deliver its stormwater program and services to its residents, businesses, and watershed and regional stakeholders. These expenditures are divided among the various categories of the permit-required components, which incorporate a wide range of jurisdictional, watershed, and regional services.

The City's Wastewater Fee provides fiscal support for jurisdictional, regional, and watershed urban runoff management plan components. The fee is based on each utility customer's contribution to the City's wastewater system. Commercial and residential customers are charged a fixed fee of $16.37 and then are assessed additional fees based on customer class and volume. Of the revenue generated from the wastewater fee in 2011–2012, the stormwater program was allocated $2.1 million.

The stormwater program is supplemented by services provided by the City's General Fund departments and divisions. Although the stormwater services represent functions that would occur regardless of the stormwater-mandated functions, such as street sweeping and maintenance of the City's storm sewer infrastructure, these General Fund-supported services allocate a portion of their operational costs to the stormwater budget to address gaps in resources created by the expanded requirements of the 2007 stormwater permit (Order R9-2007-0001).

The City will continue to participate with other Copermittees in reviewing and reporting regional and local stormwater program funding and expenditures. Programs where shared costs and resources are beneficial to reduce jurisdictional expenses will be evaluated—an effort that began in fiscal year 2010–2011 because of continuing fiscal restraints resulting from the ongoing economic downturn. As a result of this evaluation, outside contracts were significantly reduced or eliminated, and several functions, such as project administration and street maintenance, were accomplished with in-house staff. City activities and staffing will continue to be analyzed for cost-effectiveness and fiscal responsibility relative to municipal stormwater permit compliance, water quality improvements, and pollution reduction. Annual modifications to the overall stormwater budget and/or City fees will be made in accordance with permit requirements, established public review processes, and minimum debt service funding levels.

Special Investigations

In March 2012, a chemical release of sodium hydroxide solution occurred at the City's Dixon Lake water treatment plant as a result of a holding tank rupture. The spill flowed into an adjacent natural land area but did not impact the lake, drinking water supply, or reach downstream receiving waters. Around-the-clock emergency measures were employed to contain and capture the spilled material in areas where it had pooled. The City, in collaboration with San Diego County HAZMAT and the California Department of Fish and Game, remediated the area through various cleanup, collection, and disposal measures. Stormwater staff and an environmental consultant conducted an environmental assessment and designed BMPs for protecting downstream receiving waters from the residual efforts of the remediation cleanup or from potential precipitation and runoff transport of pollutants.

Follow-up measures conducted to confirm that water quality protection continued throughout the cleanup process included sampling of base soil in excavated areas until pH levels returned to acceptable levels

and/or until agencies were satisfied, returning modified areas to their natural topographic state, and maintaining erosion and sediment controls until landscape was reestablished.

To prevent and/or reduce the occurrence of similar situations, the City is assessing the tank storage system, including evaluating the installation of a remotely controlled isolation valve, the modification of secondary containment measures; and the spill response measures and controls.

Non-Emergency Firefighting

The City's program to reduce pollutants from nonemergency firefighting flows includes the implementation of BMPs targeted at firefighting activities with the potential for stormwater discharge. There are now six fire stations within Escondido that employ a variety of structural and operational BMPs. This program is enforced and evaluated through the City's municipal inspection campaign.

JURMP Revisions

The City continues to evaluate program elements through this annual reporting effort. Pending this yearly evaluation perspective (and each year), the results and analysis of the dry-weather water quality monitoring and program effectiveness are used to determine whether positive changes in water quality protection are being maintained. JURMP data collected to date indicate that no revisions to the program are presently necessary particularly since JURMP requirements are anticipated to change substantially under the new municipal stormwater permit expected to be issued in 2013.

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1 INTRODUCTION

1.1 BACKGROUND

In response to widespread water pollution concerns several decades ago, the federal Clean Water Act (CWA) was established and continues today as the basic structure for regulating discharges of pollutants into "waters of the U.S." (lakes, rivers, creeks, aquifers, and oceans). In 2001, to help achieve the Act's primary objective of making waters "fishable and swimmable," the San Diego Regional Water Quality Control Board (RWQCB or Regional Board) required cities and other regional entities to develop and implement a Jurisdictional Urban Runoff Management Program (JURMP) under Order 2001-01. The purpose of the required program was to improve the water quality of urban runoff to better protect the beneficial uses of waterbodies. The City of Escondido's (City's) evolving runoff water quality program began in 2002 and included development of a JURMP as its first major step.

The requirements of Order 2001-01 focused on inventorying and prioritizing facilities and pollution sources, setting up a program to implement and enforce the plan, establishing best management practices (BMPs) to control pollutants identified, and developing an education and outreach program for various groups. In accordance with Order 2001-01, the 2002 JURMP was in effect for 6 years until Order R9-2007-0001 was issued. Under this Order, municipalities were required to update their programs based on new and more extensive requirements and annually report on the activities implemented as part of the program. In 2008, the City developed and began implementation of its updated JURMP (City of Escondido 2008) in accordance with the new Order.

1.2 PURPOSE OF THE ANNUAL REPORT

This report fulfills the annual reporting requirements as set forth in Order R9-2007-0001; summarizes the activities that were implemented between July 1, 2011, and June 30, 2012, as part of the JURMP; and provides information related to those activities.

1.3 JURISDICTIONAL OVERVIEW

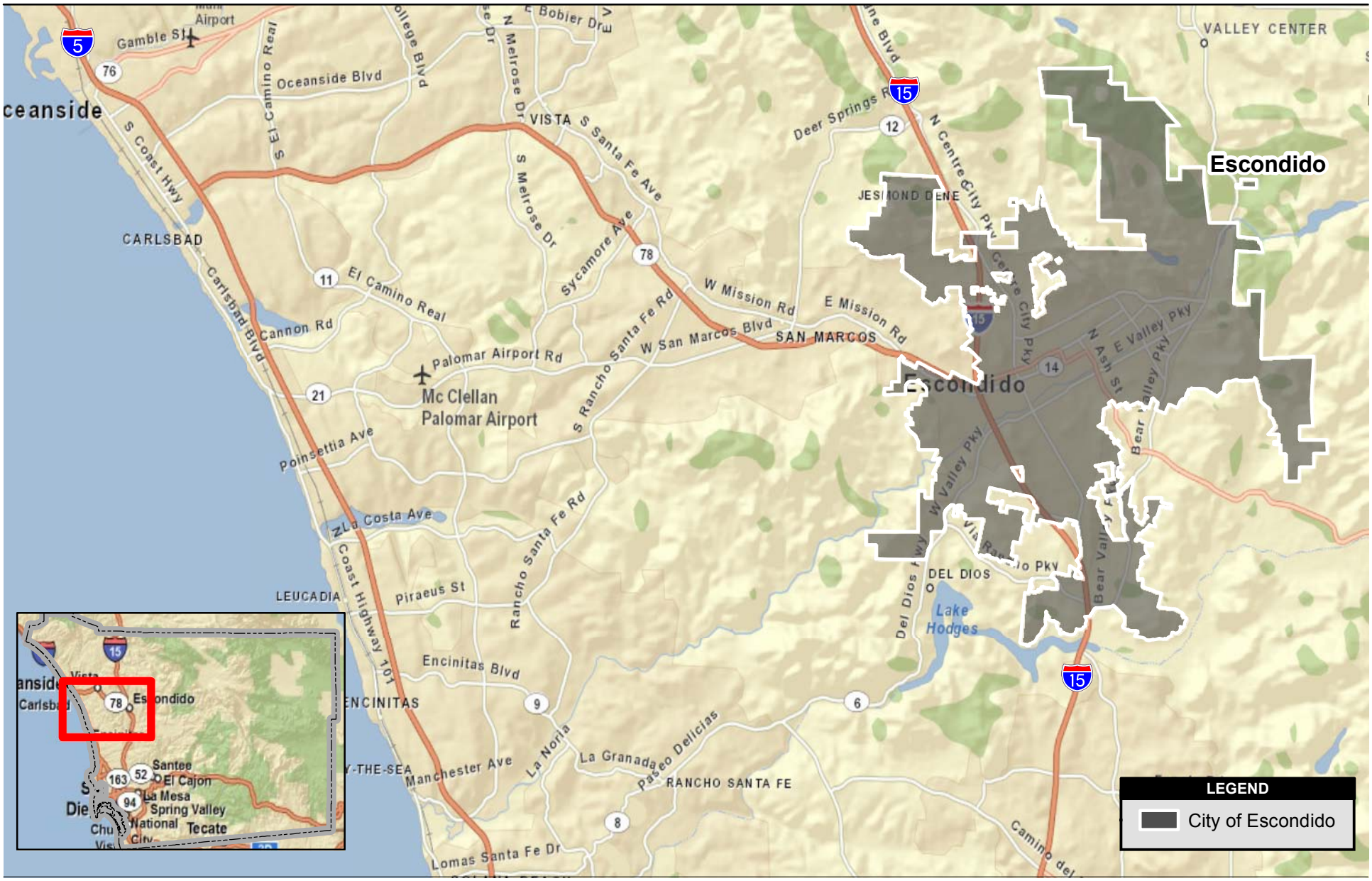
To better understand the program components described within this report, the following sections provide an overview of Escondido, including location, land uses, and watersheds. Additional specific information can be found in the approved 2008 Escondido JURMP.

1.3.1 Location and Land Uses

With a population of just under 144,000, Escondido is located in northern San Diego County, approximately 13 miles east of the Pacific Ocean (Figure 1-1). Land within the city generally ranges in elevation between 800 and 1,000 feet above mean sea level (MSL); however, Burnt Mountain (Daley Ranch) is over 2,100 feet above MSL. The area within city limits is 23,687 acres, much of which is residential. More than 60 percent of Escondido is either residential land use or dedicated space for parks and recreation. Only 9 percent of the jurisdiction remains undeveloped. Current major land uses within Escondido are graphically presented in Figure 1-2 and are summarized in Table 1-1.

Table 1-1. Land Use Percentage in Escondido

Land Use Designation	Percentage of Total
Residential	35
Parks and Recreation	28
Public Facilities and Utilities	16
Undeveloped	9
Commercial and Office	4
Industrial	3
Agriculture	4
Total	**100**



Source: ESRI 2011; SANGIS 2008; City of Escondido 2009

2.5 1.25 0 2.5 Miles

Scale: 1 = 158,400; 1 inch = 2.5 miles

Figure 1-1
City of Escondido Location Map

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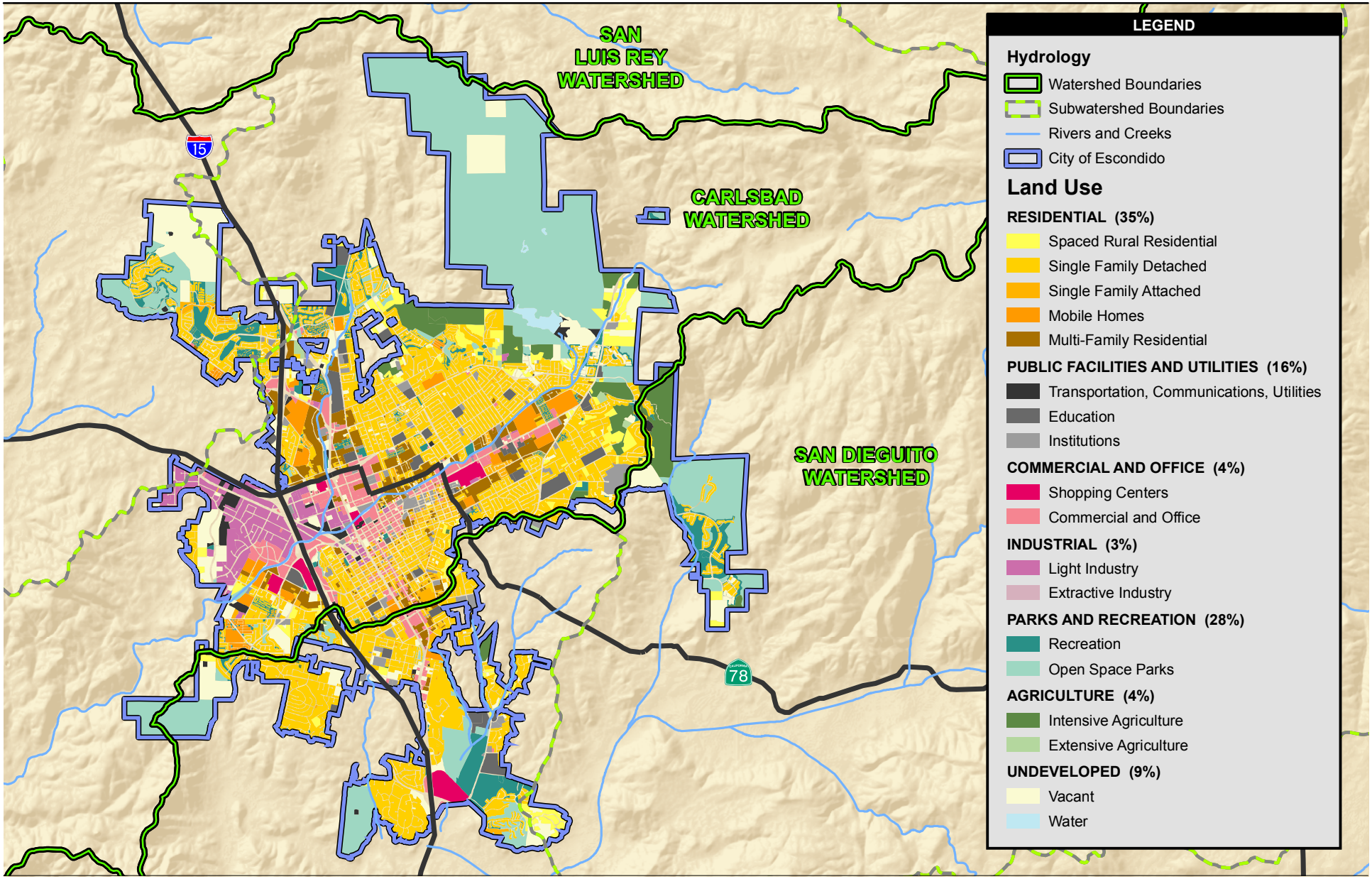

Source: USGS 2000; SANDAG 2010; California Interagency Watershed Mapping Committee 2004; City of Escondido 2009

1.8 0.9 0 1.8 Miles

Scale: 1 = 114,000; 1 inch = 1.8 miles

Figure 1-2
Land Use Designations

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1.3.2 Watersheds

Escondido falls primarily within two major watersheds: Carlsbad and San Dieguito, as illustrated in Figure 1-3. A very small undisturbed area at the northern end of the city's jurisdictional boundary crosses into the San Luis Rey Watershed. The following sections briefly describe the watershed characteristics specific to Escondido.

Carlsbad Watershed

Approximately 75 percent of Escondido is located within the Carlsbad Watershed. The majority of the city's northern jurisdiction drains to Escondido Creek within the Escondido Creek drainage area. Reidy Creek, located mostly within the city, is a main tributary to Escondido Creek. A very small portion of the city drains into the San Marcos Creek Subwatershed. The Carlsbad Watershed drains to several coastal lagoons, including San Elijo Lagoon. Escondido Creek is tributary to San Elijo Lagoon. San Elijo Lagoon is listed as being impaired for eutrophic conditions, indicator bacteria, and sedimentation and/or siltation. Escondido Creek leaves the city's boundaries approximately 14 miles upstream of San Elijo Lagoon.

According to the 2010 CWA §303(d) List of Water Quality Limited Segments (SWRCB 2010), the following Carlsbad Watershed surface waters within the jurisdiction are impaired for the following water quality constituents:

- Escondido Creek: DDT, enterococcus, fecal coliform, manganese, phosphate, selenium, sulfates, total dissolved solids (TDS), total nitrogen as N, toxicity
- San Marcos Creek: DDE, phosphorus, sediment toxicity, selenium

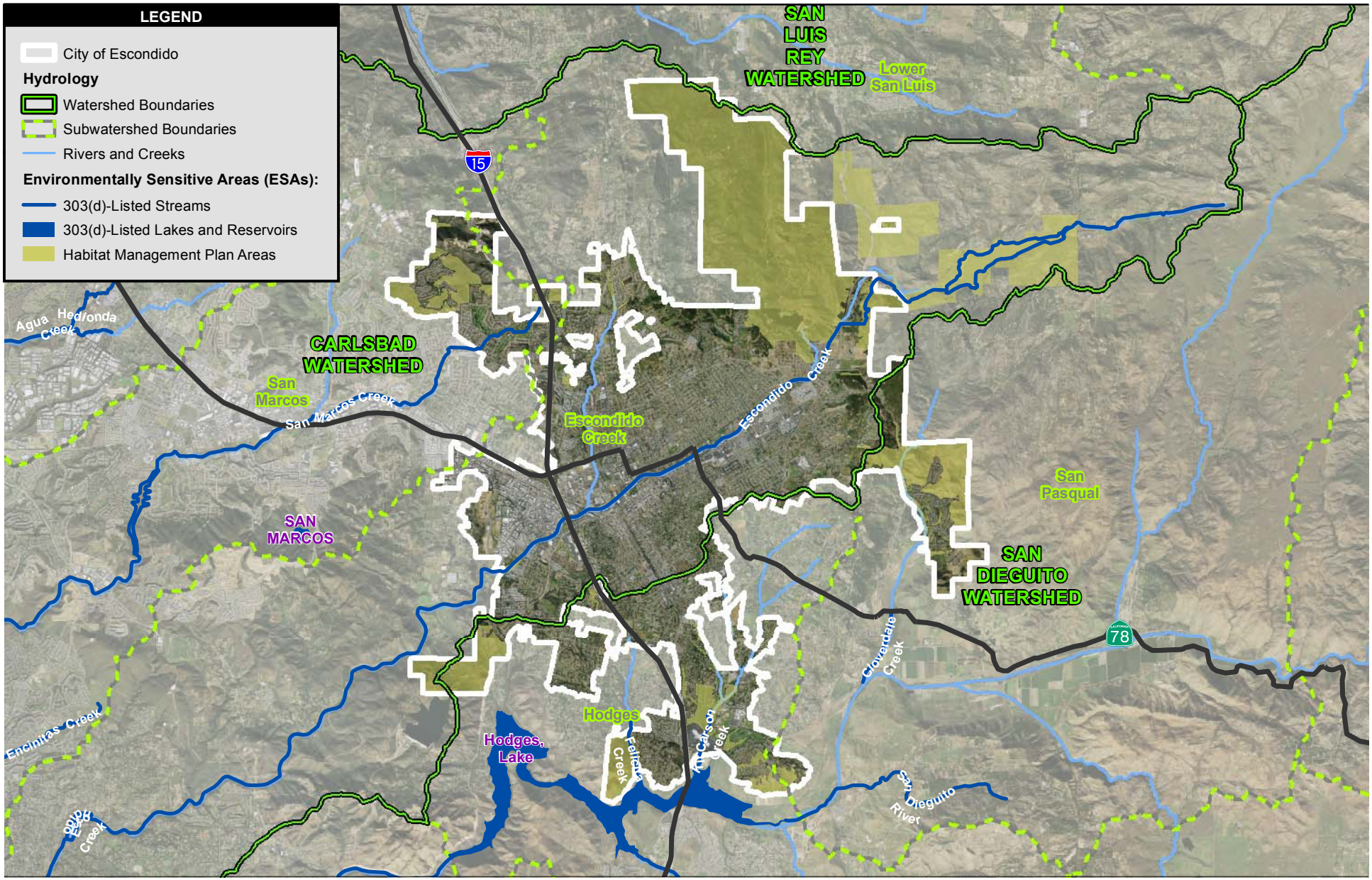
San Dieguito Watershed

The southern part of Escondido is located within the San Dieguito Watershed. The major receiving water within the San Dieguito Watershed is the San Dieguito River. For the most part, the San Dieguito River is an ephemeral stream that flows into Lake Hodges during extreme wet weather. Additionally, except during extreme wet weather events, the water contained behind Lake Hodges Dam is rarely released and allowed to proceed westerly to San Dieguito Lagoon. The majority of the city's area within this watershed drains to Felicita and Kit Carson creeks and ultimately Lake Hodges. Within the San Dieguito Watershed, the following CWA §303(d)-listed waterbodies are located in Escondido and are currently listed as being impaired for the following constituents:

- Felicita Creek: aluminum, TDS
- Lake Hodges: color, manganese, mercury, nitrogen, pH, phosphorus, turbidity
- Kit Carson Creek: pentachlorophenol, TDS

San Luis Rey Watershed

Only about 50 acres (0.2 percent) of Escondido is located within the San Luis Rey Watershed. This area is composed of a portion of Daley Ranch, a 3,058-acre open-space reserve owned by the City that will remain undeveloped in perpetuity. This area makes up only about 0.014 percent of the entire San Luis Rey Watershed and is far removed from any tributary that would convey runoff into the San Luis Rey River. Because of this extremely low runoff contribution to the San Luis Rey Watershed, the City is not included as a member agency in the management of this watershed. Therefore, for the purposes of assessing and controlling potential pollutants in runoff within watershed areas, the City focuses on the Carlsbad and San Dieguito River watersheds, which make up the majority of the City's jurisdictional area.



Source: DigitalGlobe 2008; State Water Resources Control Board 2006; California Interagency Watershed Mapping Committee 2004; City of Escondido 2009

2 1 0 2 Miles

Scale: 1 = 126,720; 1 inch = 2 miles

Figure 1-3
Hydrology

Path: P:\2012\60241576\06GIS\6.3_Layout\AR_2011-2012\fig 1-3_Watersheds.mxd, 9/17/2012, irelandm

1.4 DESIGNATION OF ENVIRONMENTALLY SENSITIVE AREAS

In compliance with Order R9-2007-0001, environmentally sensitive areas (ESAs) have been designated by the City and include CWA 303d-listed impaired waterbodies and areas associated with and protected by the City's Habitat Management Plan.

2 DEVELOPMENT PLANNING COMPONENT

2.1 INTRODUCTION

This chapter provides a perspective of the water quality and watershed protection principles the City is implementing for proposed development projects, specifically focusing on:

- procedures that the City employs for authorizing the implementation of development projects,
- BMP requirements that responsible parties must employ for development projects to protect water quality and provide environmental enhancement and/or protection for the community, and
- efforts conducted by the City to ensure that the program is being implemented to the maximum extent practicable (MEP).

2.2 LAND USE PLANNING

As Escondido and the surrounding region continue to grow, and as available open space for new development diminishes, redevelopment is receiving more attention. Land development and urban redevelopment projects in Escondido now require the integration of stormwater protection and, in some cases, treatment measures to protect and improve water quality. Through implementation of its Standard Urban Stormwater Mitigation Plan (SUSMP)/ Hydromodification Management Plan (HMP) and other local regulations and plans, the City strives to implement significant and sustainable outcomes that minimize urban runoff and its pollution potential.

2.2.1 Background

The City's development design standards and building permit issuance requirements are structured to inform the general public about established and emerging practices for properly managing site runoff in environmentally sensitive and economical ways. Traditional practices in the industry have often featured larger runoff detention-type systems that are usually associated with large footprints, which are becoming more difficult and expensive to implement as available space becomes scarcer. Consistent with Order R9-2007-0001 and the San Diego region's local SUSMPs, the City and other Copermittees are promoting consistent, more economical, and small-scale (i.e., project- or parcel-specific as opposed to regional- or community-level) stormwater treatment and runoff volume control opportunities that are based on low impact development (LID) concepts and practices.

2.2.2 Source Characterization

From a planning viewpoint, source characterization is conducted at the design stage, when project proponents or planners evaluate site conditions and approaches to developing the landscape into the desired end product. The City's SUSMP provides contractors, designers, planners, and the general public with the appropriate guidance for evaluating site conditions and project elements, and establishes a consistent and regulated approach to prescribing appropriate BMPs for controlling pollutant discharges from priority development projects (as defined by SUSMP requirements). City planning and engineering staff meet with project proponents in one or more preapplication meetings to identify priority projects and discuss SUSMP requirements applicable to the specific project site.

A variety of pollutants can be attributed to runoff from proposed projects. In approving development projects through the SUSMP process, target pollutants are identified, their potential sources are evaluated, and appropriate BMPs are designated to manage urban runoff quality.

2.2.3 Best Management Practice Requirements

In accordance with Order R9-2007-0001, the review of planning and development projects involves collectively considering a number of traditional water quality/watershed protection practices, as well as emerging sustainable planning approaches that incorporate a variety of LID concepts. Low-impact options are considered for general land use planning designs based on project-specific parameters and constraints.

The City has established guidelines and requirements for evaluating and approving development projects to ensure that pollutants and runoff from proposed projects are reduced to the MEP to avoid causing or contributing to an exceedance of receiving water quality objectives and to avoid hydromodification impacts. The evaluation and incorporation of BMPs into development projects are governed by the City's SUSMP/HMP and the 2008 JURMP, which provide information and guidance associated with development project BMP options, including LID and hydromodification management guidance. Specific LID and hydromodification management site designs that must be implemented by priority development projects are discussed in Section 2.4.3 below.

2.2.4 Program Implementation

The discussion below outlines the steps and methods the City employs to protect water quality and instill watershed protection principles through land use planning.

Environmental Policies

With the adoption of Order R9-2007-0001, municipal policies and ordinances were reviewed and revised. The City incorporated amendments to the General Plan, the Zone Code, and the Storm Water Ordinance. The sections below provide a summary of resolutions and updates, including BMP requirements and other measures that are now being implemented and enforced.

General Plan Amendment

In accordance with the direction of Order R9-2007-0001, the General Plan was reviewed and amended in 2008 to maintain consistency with pertinent state and federal water quality and watershed protection regulations. These amendments included the following:

- Land Use/Circulation Policy D2.4 (i.e., street design that accounts for anticipated runoff issues);
- Community Facilities and Services Drainage Policy G3.8 (i.e., the maintenance of flood control channels and storm drains consistent with state and federal permits, such as permits issued by the California Department of Fish and Game [DFG] and the U.S. Army Corps of Engineers [USACE]);
- Storm Water Permit and Drainage Policy G3.9 (i.e., permanent mitigation or buffering measures between drainage-way corridors, and adjacent and surrounding land uses that protect watershed and water quality principles and practices, such as preserving the integrity of natural land uses);
- Community Protection and Safety Soils Policy D1.4 (i.e., grading practices that restore or preserve natural patterns of surface water runoff so that any diversions will not create or accelerate various types of erosion); and
- Flood Policy D2.4 (i.e., the maintenance of flood control channels and storm drains that are consistent with state and federal permits, such as those issued by DFG and USACE).

In May 2012, the City adopted a new General Plan that includes the amendments above and additional stormwater policies to protect natural resources and water quality. These newly adopted stormwater policies are as follows:

- Storm Drainage Policies 14.1 through 14.13, Goal 4 – Provision of adequate and sustainable infra-structure that is environmentally sensitive to serve residents, businesses, and property.
    - For example, Policy 14.6 – Require new development to minimize alterations to natural landforms and amount of impervious surfaces to minimize erosion, while encouraging implementation of low impact development measures and the maximum use of natural drainage ways, consistent with sound engineering and best management practices.
    - Policy 14.7 – Require new development and redevelopment to minimize stormwater runoff and contaminants entering drainage facilities by incorporating low impact

development measures and other on-site design features such as bio-swales, retention ponds, and cisterns for storage and infiltration treatment of flows, and appropriate best management practices consistent with the National Pollution Discharge Elimination System.

- Flood Policies 6.4 and 6.5, Goal 6 – A safe community that is protected from potential flood hazards.
    - For example, Policy 6.4 – Maintain flood control channels, storm drains, and detention basins through periodic dredging, repair, desilting, and clearing, subject to approval from appropriate state and federal agencies to ensure they are operating efficiently.
- Water Resources and Quality Policies 6.1 through 6.16, Goal 6 – Preservation and protection of the City's surface water and groundwater quality and resources.
    - For example, Policy 6.14 – Require new development to protect the quality of water resources and natural drainage systems through site design and use of source controls, stormwater treatment, runoff reduction measures, best management practices, and low impact development measures.

Zone Code Amendment, Article 55 Grading and Erosion Control

The amendments to Zone Code §33-1062 (Best Management Practice Implementation) respond to the construction requirements of Order R9-2007-0001, which address phased grading, natural land use preservation, erosion and sediment controls, and advanced treatment for sediment. These BMPs specifically require the following:

- minimizing site clearing and grading to the portion of the site that is necessary for construction;
- minimizing exposure time during the wet season and maximizing grading during the dry season to the extent feasible; and
- developing sediment control specifications for advanced treatment, such as flocculation or chemical treatment at construction sites determined to be a high threat to water quality (e.g., soil erosion potential, slope steepness, proximity to ESAs).

Since the initial effort to update ordinances and policy documents to comply with the 2007 Stormwater Permit, no new resolutions or updates have been made to the Zone Code Amendment.

Storm Water Ordinance— Escondido Municipal Code Chapter 22, Article 2

Revisions to the Storm Water Ordinance language were incorporated for better consistency with Order R9-2007-0001, in particular the language referenced in the Prohibited Discharges and Discharge Exemptions sections. Other changes include the addition of enforcement measures, such as administrative fines, which are consistent with the schedule employed by the City's Code Enforcement Division, and stop-work notices, which are used by City inspectors to require developers to install appropriate BMPs prior to resuming construction activities.

Throughout the program year, the City continued to operate in accordance with all municipal policies and regulations designed to protect water quality. These environmental measures are enforced but are also periodically reviewed and updated as the regulatory compliance setting changes. No updates to the City's Municipal Code relating to stormwater occurred during this reporting period. Updates to the City's municipal codes relating to stormwater are anticipated subsequent to the State Water Resources Control Board's issuance of the next Municipal Storm Water Permit, expected in spring 2013.

Standard Urban Stormwater Mitigation Plan

The City continues to implement the current SUSMP that was adopted in March 2010. The SUSMP encourages the following:

- adopting smart growth principles that involve an integrated perspective, comprehensive analysis, and incorporation of sustainable elements;
- retrofitting or otherwise modernizing aged municipal separate storm sewer system (MS4) infrastructure with similar structures that offer improved water quality protection and pollutant capture abilities (e.g., older urban centers where surface and subsurface improvements are needed and there is little opportunity for vegetated treatments); and
- integrating designs for new projects that incorporate environmentally balanced development approaches relative to regional conditions.

Hydromodification Management Plan

In 2011, the City updated its SUSMP to include hydromodification management regulations required by Order R9-2007-0001. The City's current HMP is based on the model HMP developed in coordination with all 21 permit Copermittees.

The HMP was approved by Escondido's City Council in January 2011 and HMP requirements became effective on January 14, 2011. Consistent with the requirements set forth in the plan, priority development projects are required to implement hydromodification mitigation measures so that post-project runoff flow rates and durations do not exceed pre-project flow rates and durations where such increases would result in an increased potential for erosion or significant impacts to beneficial uses. Overall, hydromodification mitigation involves any one and/or several of the following outcomes, practices, or measures:

- demonstration of no post-project increase in impervious area and resultant peak flow rates as compared to pre-project conditions for a certain percentage (10, 30, or 50 percent) of the 2-year storm (determined through a channel erosion susceptibility analysis on a project-by-project basis) up to the 10-year storm;
- installation of LID BMPs;
- mitigation of flow and durations through the implementation of extended detention flow duration control basins;
- preparation of continuous simulation hydrologic models; and/or
- implementation of in-stream rehabilitation controls to demonstrate the projected increases in runoff would not accelerate erosion to the rehabilitated receiving stream.

Application Process

All proposed development projects must complete the City's application and project review process, which includes the requirements identified below:

- The project proponent is required to complete the application package, including the SUSMP applicability form and the California Environmental Quality Act (CEQA) Initial Study form. All priority development projects are required to prepare a Water Quality Technical Report (WQTR).
- The project proponent must meet with planning and engineering staff in one or more pre-application meetings to review project details; assess water resource impacts; including potential impacts to water quality and drainage patterns; and discuss SUSMP and hydromodification requirements as applicable.
- For all priority development projects, an HMP analysis must be provided with the WQTR.
- City staff evaluate the project for any mitigation measures required by CEQA and confirm that the project design meets SUSMP requirements. Once the WQTR is finalized, for a priority development project, the project site plan is updated to reflect the site design and treatment

control measures. A final site plan that is in full compliance with the City's adopted SUSMP is processed with recommendation for approval.

Construction/Grading Approval

The City takes the following steps before approving and issuing local construction and grading permits:

- requires individual proposed construction sites to implement designated BMPs and other measures to reduce the discharge of pollutants to the MEP such that discharges from properly maintained BMPs will not cause or contribute to a violation of water quality standards;
- requires and reviews the project proponent's stormwater management plan to verify compliance with the Grading Ordinance, the Storm Water Ordinance, and Order R9-2007-0001; and
- verifies that project proponents subject to the state's General National Pollution Discharge Elimination System (NPDES) Permit for Storm Water Discharges Associated with Construction Activities (Order 2009-0009-DWQ) have obtained coverage under that permit.

Municipal Staff Education and Training

The City conducts education efforts designed to inform and train municipal employees on an ongoing basis to increase their knowledge and awareness of urban runoff impacts such that planning and development decision-making achieves measurable improvements in water quality and watershed protection. Moreover, the municipal education program educates City departments and personnel (including planning boards and elected officials) on advances in land use planning and environmental development concepts, which are then conveyed to construction site owners and developers. Municipal training generally focuses on establishing and maintaining an understanding of the following:

- existing and evolving federal, state, and local water quality laws and regulations applicable to development projects;
- connection between land use decisions and short- and long-term water quality impacts; and
- implementation of various source controls and both nonstructural and structural BMPs to minimize impacts to receiving water quality resulting from development (i.e., the SUSMP process).

The City's internal development and redevelopment education program is delivered through formal and informal means, including in-house staff training/workshops, JURMP reports provided to the Planning Commission and the City Council, and regular stormwater staff meetings that are attended by personnel from a broad range of departments and divisions.

On May 30, 2012, a workshop was provided to the Utilities, Planning, and Engineering staff regarding HMP requirements and implementation, and the MS4 permit. The presentation was developed and provided by the City's environmental contractor, AECOM, and included a discussion of the following:

- the regulatory background that supports HMP requirements,
- the HMP review process and submittal requirements,
- exemptions to HMP requirements,
- the HMP decision matrix,
- HMP design standards,
- modeling versus the BMP Sizing Calculator,
- designing for LID and HMP goals—Integrated Management Practices (IMPs),

- construction inspection requirements, and
- program reporting requirements.

The 3-hour workshop allowed for staff questions and discussion.

Engineering staff members regularly attend the Land Development Workgroup established by the San Diego Copermittees group, which focuses on implementation of the SUSMP and HMP components of the jurisdictional program.

As unique project situations related to stormwater arise, project planners or engineers update other staff members at the weekly Staff Development Committee meetings and/or division staff meetings.

Project Applicant Education and Outreach

The City's SUSMP is designed to educate project applicants, developers, contractors, and property owners on the following:

- complying with federal, state, and local water quality laws and regulations applicable to development projects; and
- reducing water quality impacts on receiving waters from development and urbanization.

The City's public website provides information about stormwater regulations and design for applicants and interested parties. Project and application information related to stormwater issues is provided on the Engineering and Planning Departments' web pages, as well as on a dedicated Stormwater Regulations page. Links to various documents, including the City's JURMP; hydromodification criteria; stormwater ordinance; Stormwater Permit; and the grading, erosion control, and zoning ordinances, are included. Planning and engineering staff encourage applicants to schedule preapplication meetings at which City staff acquaint the project proponent with stormwater regulations and discuss project-specific requirements.

2.3 ENVIRONMENTAL REVIEW PROCESS

In addition to the analysis and permitting clearance required to satisfy CEQA (if applicable), the City's environmental assessment of potential impacts to water quality and the proposed mitigation measures is controlled through the SUSMP process. The City's SUSMP/HMP was updated to assist the land development community in streamlining project reviews and maximizing cost-effective environmental benefits.

Implementation of the SUSMP/HMP process serves to accurately evaluate water quality and hydromodification impacts of priority development projects, and identify appropriate measures to avoid, minimize, and mitigate those impacts. The Engineering, Utilities, and Planning Departments are responsible for reviewing projects for compliance with all applicable environmental regulations, including stormwater requirements.

City planning staff members coordinate environmental review for development projects using a team approach with staff from Engineering, Utilities, and other departments. Development applications include the CEQA Environmental Information form, SUSMP Applicability form, and the three-part Storm Water Urban Runoff Management Program form, which are all required to be filled out by the applicant before an application package is deemed complete by City staff. City staff members evaluate the proposed development for conformance with General Plan policies, SUSMP requirements, and City Code standards, and determine the potential for significant environmental impacts to water quality, drainage patterns, flood hazards, and runoff. Any potentially significant environmental impact must be addressed by revising the project to reduce or eliminate the impact, or by including a mitigation measure that reduces the impact to a less-than-significant level. All mitigation measures are incorporated into project conditions.

2.4 DEVELOPMENT PROJECT APPROVAL AND VERIFICATION PROCESS

2.4.1 Background

The City's local SUSMP provides guidance for complying with postconstruction stormwater requirements for new private and public priority development projects in the jurisdiction. The SUSMP guides the project applicant through the project prioritization evaluation and the subsequent selection, design, and incorporation of stormwater BMPs into the project's design plan by providing the following:

- a description of the regulatory requirements, concepts, and criteria associated with stormwater pollution control;
- hydromodification mitigation measures so that post-project runoff does not exceed pre-project flow rates;
- guidance for selecting appropriate source control and water quality treatment control measures;
- an LID design procedure for integrating site planning and design measures with engineered, small-scale BMPs, such as bioretention;
- guidance for demonstrating compliance with the hydromodification management criteria in the Stormwater Permit;
- guidance for preparing detailed maintenance plans for each proposed stormwater treatment facility; and
- step-by-step instructions for preparing a SUSMP project submittal for review by City staff.

All priority development projects are subject to LID and water quality treatment requirements, even if hydromodification flow controls are not required.

2.4.2 Source Characterization

As part of the authorization process for obtaining grading or building permits from the City, projects are assessed for incorporation of any project mitigation measures and/or conditions of approval, appropriate design, source control, and applicable stormwater runoff treatment controls. Prior to this jurisdictional review, project proponents are responsible for assessing proposed projects for SUSMP applicability and (if a priority project) applying appropriate permanent source controls, site designs, and treatment controls relative to site-specific conditions and proposed elements. As a result, the City's SUSMP process serves to identify and incorporate proper stormwater management planning and water quality principles into regulated projects located in the City's watersheds. In general, the City requires a consistent set of BMPs to be applied to projects for reducing the following potential pollutants:

- sediments
- nutrients
- heavy metals
- organic compounds
- trash and debris
- oxygen-demanding substances
- oil and grease
- bacteria and viruses
- pesticides

2.4.3 Best Management Practice Requirements

For priority projects, the City's SUSMP was developed to reduce pollutants of concern to the MEP to protect receiving water quality (with specific attention to impaired waterbodies defined under CWA §303[d]). The SUSMP process involves a review of the project's land use type and associated pollutants, as well as pollutants that would be expected to be present on-site relative to the proposed site activities.

Pollutants of concern are addressed through the incorporation of the following BMP categories. The SUSMP/HMP evaluation process identifies which combination of these BMP categories is necessary for controlling and minimizing anticipated pollutants due to site runoff. The BMP categories are as follows:

- LID BMPs,
- source control BMPs,
- treatment control BMPs, and
- hydromodification flow control BMPs.

BMP design objectives and requirements for these categories are described below.

LID BMP Requirements

Through the SUSMP evaluation and compliance process, applicable priority development projects are required to implement LID BMPs that will collectively minimize directly connected impervious areas and promote on-site biofiltration. LID BMP design guidance, which is provided in the SUSMP, includes two general considerations:

- Projects with landscaped or other pervious areas: (1) Drain a portion of impervious areas (rooftops, parking lots, sidewalks, walkways, patios, etc.) into properly designed and constructed pervious areas to effectively receive and infiltrate or treat runoff prior to discharge to the MS4. The amount of runoff from impervious areas that is drained to pervious areas shall correspond to the total capacity of the project's pervious areas to infiltrate or treat runoff, taking into consideration the pervious area's soil conditions, slope, and other pertinent factors, and (2) properly design and construct the pervious areas to effectively receive and infiltrate or treat runoff from impervious areas, taking into consideration the pervious area's soil conditions, slope, and other pertinent factors.
- Projects with low traffic areas and appropriate soil conditions: Construct a portion of walkways, trails, overflow parking lots, alleys, or other low-traffic areas with permeable surfaces, such as pervious concrete, porous asphalt, unit pavers, and granular materials.

As determined by City engineering and planning staff, the following LID BMPs are implemented for priority development projects, where applicable and feasible:

- conserve natural areas, including existing trees, other vegetation, and soils;
- construct streets, sidewalks, or parking lot aisles to the minimum widths necessary, provided that public safety and a walkable environment for pedestrians are not compromised;
- minimize the impervious footprint of the project;
- minimize soil compaction; and
- minimize disturbances to natural drainages (e.g., natural swales, topographic depressions).

Source Control BMP Requirements

City engineering and planning staff review project plans to ensure that the following source control BMPs are implemented for priority development projects, where applicable and feasible:

- minimize stormwater pollutants of concern in urban runoff,
- include stenciling or signage for the storm drain system,
- include properly designed trash storage areas and outdoor material storage areas,

- incorporate efficient irrigation systems, and
- address water quality requirements applicable to individual priority project categories.

Treatment Control BMP Requirements

The City requires each priority development project to implement treatment control BMPs that accomplish the objectives outlined below.

- Mitigate (infiltrate, filter, or treat) the required volume or flow of runoff from developed portions of the project, including landscaped areas.
- Infiltrate, filter, or treat the required runoff volume or flow prior to its discharge to any "waters of the U.S." Multiple priority development projects may use shared treatment control BMPs as long as construction of any shared treatment control BMP is completed prior to the use or occupation of any portion of the project within the treatment control drainage area.
- Comply with the following numeric sizing criteria (single-priority development projects only):
    - Volume-based treatment control BMPs shall be designed to mitigate (infiltrate, filter, or treat) the volume of runoff produced from a 24-hour 85th percentile storm event, as determined from the County of San Diego's 85th Percentile Precipitation Isopluvial Map; or
    - Flow-based treatment control BMPs shall be designed to mitigate (infiltrate, filter, or treat) either (a) the maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour, for each hour of a storm event or (b) the maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity (for each hour of a storm event), as determined from the local historical rainfall record, multiplied by a factor of 2.

All treatment control BMPs for priority development projects must accomplish the objectives identified below:

- Be ranked with a high or medium pollutant removal efficiency for the project's most significant pollutants of concern (per the City's SUSMP). The City Engineer must approve the proposed use of any treatment control BMPs with a low removal efficiency ranking. Low-efficiency treatment control BMPs may be approved only once a feasibility analysis has been conducted that concludes high or medium removal efficiency BMPs are infeasible.
- Be correctly sized and designed to remove pollutants to the MEP.
- Target removal of pollutants of concern from urban runoff.
- Be implemented close to pollutant sources (where shared BMPs are not proposed) and prior to discharging into "waters of the U.S."
- Not be constructed within a receiving water.
- Include proof of an ongoing long-term BMP maintenance agreement.

Hydromodification Flow Control Requirements

Through the SUSMP evaluation and compliance process, all priority development projects are required to implement hydrologic control measures so that post-project runoff flow rates and durations do not exceed pre-project flow rates and durations where they would result in an increased potential for erosion or significant impacts to beneficial uses. City engineering staff review all project plans to determine if they are subject to SUSMP requirements, including those that pertain to hydromodification.

Selection of the appropriate flow control treatment device(s) depends on the susceptibility of the receiving channel, geologic conditions, and impacts of the proposed development and water quality sensitivity of the receiving streams. City engineering staff ensure compliance with hydromodification flow control

requirements by adhering to design criteria and specifications that have been provided in the SUSMP for a variety of LID-based flow control methods, including the following:

- bioretention basins,
- flow-through planter boxes,
- dry wells,
- bioretention in series with an underground vault, and/or
- self-retaining areas.

In addition, City engineering staff evaluate if sizing factors have been appropriately developed through the use of continuous hydrologic modeling, the results of which are incorporated into the HMP Sizing Calculator.

2.4.4 Program Implementation

The sections below describe the results of the development planning process employed by the City for development projects submitted within the reporting period.

Urban Runoff Project Approval

The City's SUSMP process was used to guide priority development project proponents through the project approval process. Municipal staff responsibilities for this process are identified in Table 2-1.

Table 2-1. Summary of Municipal Responsibilities for Priority Project Review and Approval

Title	Responsibility
Staff Planner and/or Engineering Desk Clerk	Completes checklist review for completeness of submittal package
Staff Planner	Reviews environmental information and determines mitigation measures, if any
Staff Planner & Engineer	Reviews LID design and BMP incorporation (i.e., SUSMP compliance) and determines project conditions, incorporating any mitigation measures
Approval Body	Conducts final review and approval of conditions and mitigation measures

Proposed development projects were assessed for pollutant potential and appropriate selection of BMPs prior to project approval and issuance of local permits. As a result of this analysis, LID, source control, and treatment control BMPs and flow control measures, where appropriate, were reviewed or recommended on the basis of the project site's location (including sensitive receiving waters) and preliminary project design. These measures were incorporated into the project plans prior to submittal, along with a WQTR that analyzed the project's anticipated pollutants of concern in downstream receiving waters, and analyzed conditions of concern prior to City approval. Project applicants were also required to submit proof of an ongoing long-term maintenance agreement for all post-construction BMPs, where applicable. Data associated with priority development projects were tracked and managed in the City's development planning database to ensure that the project approval process was complete and that project designs complied with BMP requirements.

During the reporting period, all of the proposed development project applications submitted to the Planning Division were reviewed for SUSMP/HMP applicability and compliance. No projects have received compliance waivers to date.

A list of the development projects that were approved during the reporting period and that are subject to SUSMP requirements is provided in Table 2-2; a description of one project that underwent SUSMP/HMP review is provided below. None of the priority development projects implemented treatment control BMPs with low removal efficiency rankings during the reporting period.

Table 2-2. Development Projects Subject to SUSMP Requirements, Fiscal Year 2011–2012

Project ID	Project Type	Location	Watershed	Project Owner	Disturbed Area (Acres)	HMP Exempt (Yes or No)	Exemption Description	Hydromod Mitigation Measures Implemented
PRI-11-198	Commercial	761 N Broadway	Carlsbad	ARCO Fuel	0.55	Yes	No increase in impervious area or increase to unmitigated peak flows to any outlet	N/A
PRI-11-199	Commercial	1999 Citracado Parkway	Carlsbad	Liquid Stone Holdings LLC	4	Yes	No increase in impervious area or increase to unmitigated peak flows to any outlet	N/A
PRI-11-200	Commercial	543 W 2nd Avenue	Carlsbad	Antonio & Alicia Rubalcaba	2	Yes	No increase in impervious area or increase to unmitigated peak flows to any outlet	N/A
PRI-11-203	Commercial	1700 Mission Road	Carlsbad	SDG&E Northeast ANNEX	4.09	Yes	No increase in impervious area or increase to unmitigated peak flows to any outlet	N/A
PRI-12-205	Commercial	1330 E Grand Avenue	Carlsbad	Escondido Venture 99 LLC	9	Yes	No increase in impervious area or increase to unmitigated peak flows to any outlet	N/A
PRI-12-208	Industrial	2305 Harveson Place	Carlsbad	JRM-ERTC, I LP	5.13	No	N/A	Bioretention
PRI-12-209	Residential	141 E El Norte Parkway	Carlsbad	Community Housing Works	2.2	No	N/A	Bioretention
PRI-12-212	Commercial	400 Brotherton Road	San Dieguito	Talk of the Town LLC	1.35	No	N/A	Bioretention
PUB-11-035	Capital Improvement	Maple Street	Carlsbad	City of Escondido	0.83	Yes	No increase in impervious area or increase to unmitigated peak flows to any outlet	N/A

During the reporting period, the Corodata Records Management Facility (PRI-12-208) underwent HMP analysis that included implementation of perimeter bioretention treatment control BMPs integrated with temporary on-site water storage for avoiding hydromodification effects. Two LID bioretention basins incorporate an underground gravel water storage layer equipped with an underdrain, orifice plate, amended soil layer, and a separate surface detention basin for overflow. These BMPs were combined to treat and provide volume control in accordance with the City's HMP requirements.

BMP Verification

In compliance with Order R9-2007-0001, LID, source control, treatment control BMPs, and flow control on priority development project sites subject to SUSMP/HMP requirements are inspected by City compliance staff prior to building occupancy to verify that construction complies with all applicable specifications and regulations.

Treatment control BMPs, consistent with the project's WQTR, are indicated on the Street Improvement/ Drainage Grading and Landscaping Plans. All projects are subject to completion of all improvements in accordance with the approved plans prior to filing notice of completion and occupancy. Field engineering inspectors verify the completion of improvements and project engineers provide signed and sealed record plans certifying completion of all improvements. Both the inspection and certification procedures ensure that all approved treatment control BMPs are in place prior to owner occupancy.

Once the initial BMP verification inspection is complete, the City conducts operation and maintenance verification inspections of treatment control BMPs in accordance with permit requirements as described below.

Treatment Control BMP Maintenance Inspections and Data Tracking

The City maintains a geographic information system (GIS)-based inventory of treatment control BMPs. With other information, the inventory is used to track BMP type, location, watershed, and the party responsible for maintenance, inspections, inspection findings, and maintenance needs. The City continues to prioritize treatment control BMPs based on the following criteria:

- Sites with drainage insert treatment control BMPs are designated as medium priority.
- All other sites are prioritized based on consideration of treatment control BMP size, recommended maintenance frequency, likelihood of operational and maintenance issues, location, receiving water quality, and other pertinent environmental factors.

During the reporting period, all inventoried public and private treatment control BMPs were inspected for maintenance needs and verification of operation. Vegetated treatment controls, such as detention basins and vegetated swales, are inspected for erosion/sedimentation issues, sufficient vegetation cover, and drainage issues. Structural treatment controls, such as storm drain filters or other drainage inserts, are inspected for components in need of repair or replacement and any other issues that may affect performance. Information gathered during the inspection is documented on a standardized BMP form. This form, as well as the treatment control BMP inventory and summary of findings, is provided in Appendix A.

City maintenance staff are deployed to public treatment control BMP locations for repair or maintenance, when necessary. Cleaning treatment control BMPs that are associated with capital roadway projects is performed by maintenance staff during the MS4 inspection and cleaning component, as discussed in Chapter 4.

For private treatment control BMPs in need of maintenance, the City notifies private property owners via mail. In some cases, property owners cannot be tracked or are unresponsive to City requests. To address this issue, the City is currently improving its protocol for notifying responsible parties and updating its municipal ordinance to better enforce private treatment control operation and maintenance requirements of property owners. The City anticipates that the ordinance will be adopted within the next reporting period. No violations were issued in this reporting period.

3 CONSTRUCTION COMPONENT

3.1 INTRODUCTION

This section summarizes the City's program for identifying potential pollutants that may exist at active construction sites and presents the BMPs that can be implemented to eliminate or minimize these pollutants in construction site stormwater runoff. With the adoption of Order R9-2007-0001, the City has modified and is enforcing local ordinances and construction permit requirements. Construction site owners, developers, contactors, and other responsible parties are mandated to improve stormwater pollution prevention measures such that receiving waters and other environmental resources are protected in accordance with the requirements of the Order.

In addition to the requirements set forth in the City's JURMP, construction projects that disturb 1 acre or more of soil (or those projects that disturb less than 1 acre but are part of a larger common plan of development that disturbs 1 or more acres) including Linear Underground/Overhead Projects (LUPs) were required to obtain coverage under the *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit, Order 2009-0009-DWQ as amended by 2010-0014-DWQ). Construction activities subject to this permit include clearing, grading, stockpiling, or excavation, but do not include regular maintenance activities performed to restore the original line, grade, or capacity of a facility.

The current Construction General Permit has several new requirements and changes as compared to the previous permit. Under the Construction General Permit, LUPs are now under the same permit, whereas before they were covered under their own separate permit. In addition, following are some of the significant changes to the Construction General Permit:

- Technology-Based Numeric Action Levels (NALs) – for pH and turbidity.
- Risk-Based Permitting Approach – three levels of risk possible for a construction site. Risk is calculated by project sediment risk and receiving water risk.
- Effluent Monitoring/Reporting – monitoring and reporting for pH and turbidity in stormwater discharges.
- Bioassessment Monitoring/Reporting – requires Risk Level 3 discharges to conduct bioassessments under certain criteria.
- Rain Event Action Plan (REAP) – designed to protect all exposed portions of the site within 48 hours prior to any precipitation event.
- Certification/Training Requirements – specific training or certifications to ensure adequate design, knowledge, and skills pertaining to the Construction General Permit.
- Annual Reports – electronic annual reports via the State's Storm Water Multiple Application and Reporting Tracking System (SMARTS) Database.

3.2 SOURCE CHARACTERIZATION

If not properly managed, construction activities have the potential to contribute various pollutants to stormwater runoff and downstream receiving waterbodies. Erosion and sedimentation from earth-moving operations, including grading, excavation, clearing, and stockpiling, are generally the most significant source of stormwater pollution associated with construction sites. However, other activities, including dewatering operations, hazardous materials handling and storage, paving and painting operations, structure construction, waste management (solid, concrete, sanitary), and vehicle and equipment maintenance and fueling, can also contribute pollutants and adversely impact water quality.

Construction site pollutants are characterized in the Construction General Permit as visible and nonvisible forms. Visible pollutants are generally associated with erosion and sedimentation that lead to suspended

solids and turbidity in site runoff, whereas nonvisible forms are usually associated with chemicals or other substances that are diluted or dissolved in runoff and are not observable to the eye.

Because the occurrence and exposure of pollutants associated with construction sites are highly variable relative to construction phases, building materials, site size, and other physical parameters, site inspections are the principal tool for assessing on-site pollution potential. The City uses the Construction Site Inspection Checklist for evaluating pollution potential on a site-by-site basis. In general, information and features identified below are evaluated, as applicable, by City inspectors, to characterize pollutant sources and identify BMPs needed to control the pollutants:

- geographic features and the general topography both before and after construction;
- existing and planned paved areas, lots, and roadways;
- stormwater collection and discharge points and the anticipated discharge location(s) where the stormwater from the construction site discharges to a municipal storm sewer system or other waterbody;
- drainage patterns across the project area and surrounding relevant drainage areas;
- temporary on-site drainages to carry concentrated flow;
- potential sources of pollutants that may result in non-stormwater discharges from the construction site, and off-site discharges that flow across or through areas disturbed by construction;
- drainage patterns and slopes anticipated after major grading activities are completed;
- drainage patterns into each on-site stormwater inlet point or receiving water;
- potential sources of sediment discharges and soil amendments (e.g., lime or gypsum, concrete or asphalt saw-cutting slurry, aggregate or concrete rinse water, building washing operations, equipment washing operations, minor street washing associated with street delineation, and/or sealing and paving activities occurring during rains);
- existing areas known to have toxic materials that have been treated, stored, disposed, spilled, or leaked onto the construction site;
- soil or waste storage areas;
- vehicle storage and service areas;
- construction material loading, unloading, and access areas; and
- equipment storage, cleaning, and maintenance areas.

3.2.1 Site Inventory

The current construction project inventory is maintained by the City's Engineering Department and is regularly updated as projects are proposed, approved, and completed. An inventory of construction sites active during the reporting period and associated inspection records are provided in Appendix B.

3.3 UPDATES TO ORDINANCES AND APPROVAL PROCESSES

With the adoption of Order R9-2007-0001, municipal policies and ordinances were reviewed and revised. The City incorporated amendments to the General Plan, the Zone Code, and the Storm Water Ordinance. The sections below provide a summary of resolutions and updates including BMP requirements and other measures that are now being implemented and enforced.

3.3.1 General Plan Amendment

In accordance with the direction of Order R9-2007-0001, the General Plan was reviewed and amended to maintain consistency with pertinent state and federal water quality and watershed protection regulations. Recent General Plan amendments include the following:

- Land Use/Circulation Policy D2.4 (i.e., street design that accounts for anticipated runoff issues);
- Community Facilities and Services Drainage Policy G3.8 (i.e., the maintenance of flood control channels and storm drains consistent with state and federal permits, such as permits issued by DFG and USACE;
- Storm Water Permit and Drainage Policy G3.9 (i.e., permanent mitigation or buffering measures between drainage-way corridors and adjacent and surrounding land uses that protect watershed and water quality principles and practices, such as preserving the integrity of natural land uses);
- Community Protection and Safety Soils Policy D1.4 (i.e., grading practices that restore or preserve natural patterns of surface water runoff so that any diversions will not create or accelerate various types of erosion); and
- Flood Policy D2.4 (i.e., the maintenance of flood control channels and storm drains that are consistent with state and federal permits, such as those issued by DFG and USACE).

In May 2012, a new City General Plan was adopted and includes several goals and policies to protect natural resources and water quality. These goals and policies are discussed in more detail in Section 2.2.4.

3.3.2 Zone Code Amendment, Article 55 Grading and Erosion Control

The amendments to Zone Code §33-1062 (Best Management Practice Implementation) respond to the construction requirements of Order R9-2007-0001, which address phased grading, natural land use preservation, erosion and sediment controls, and advanced treatment for sediment. These BMPs specifically require the following:

- minimizing site clearing and grading to the portion of the site that is necessary for construction;
- minimizing exposure time during the wet season and maximizing grading during the dry season to the extent feasible; and
- developing sediment control specifications for advanced treatment, such as flocculation or chemical treatment at construction sites determined to be a high threat to water quality (e.g., soil erosion potential, slope steepness, proximity to ESAs).

Since the initial effort to update ordinances and policy documents to comply with the 2007 Stormwater Permit, no new resolutions or updates have been made to the Zone Code Amendment.

3.3.3 Storm Water Ordinance – Escondido Municipal Code Chapter 22, Article 2

Revisions to the Storm Water Ordinance language were incorporated for better consistency with Order R9-2007-0001, in particular the language referenced in the Prohibited Discharges and Discharge Exemptions sections. Other changes include the addition of enforcement measures, such as administrative fines, which are consistent with the schedule employed by the City's Code Enforcement Division, and stop-work notices, which are used by City inspectors to require developers to install appropriate BMPs prior to resuming construction activities.

Since the initial effort to update ordinances and policy documents to comply with Order R9-2007-0001, no new resolutions or updates have been made to the Storm Water Ordinance.

3.4 BEST MANAGEMENT PRACTICE REQUIREMENTS

As mandated by the Construction General Permit, construction site owners, developers, contactors, and other responsible parties were required to implement minimum BMP requirements to eliminate or reduce pollutant discharges from construction sites to the maximum extent possible (MEP) based on the project's determined risk. These BMPs and their implementation are outlined in each project's SWPPP and are to be maintained at the project construction site at all times. Through the site inspection process, City inspectors confirm that required BMPs are implemented, assess the condition of BMPs, and determine when measures are inadequate (refer to construction site inspection form presented in Appendix B).

3.4.1 Pollution Prevention

Pollution prevention measures are required for construction sites and include the following:

- preservation of natural hydrologic features;
- preservation of riparian buffers and corridors;
- minimized or phased grading, including a maximum disturbed area for erosion control as set forth in the City's grading ordinance;
- rapid protection requirements for areas of bare soil;
- dry weather scheduling; and
- slope stabilization during rain.

3.4.2 Erosion and Sediment Control

BMPs to eliminate or reduce erosion and control sediment are required for construction sites on a case-by-case basis and may include the following:

- soil stabilizers such as mulch, hydroseed, binders, geotextiles, and mats;
- velocity dissipation devices;
- slope drains;
- earth dikes, drainage swales, and sediment basins;
- fiber rolls, silt fences, berms, and barriers;
- storm drain inlet protection;
- stockpile management;
- tracking control; and
- dust suppression.

3.4.3 Non-Stormwater Control

BMPs are selected and required at construction sites based on site-specific activities to control non-stormwater discharges. General BMP categories are as follows:

- material delivery, storage, and use;
- spill prevention and control;
- vehicle and equipment maintenance and fueling practices;

- recycling and disposal requirements;
- construction operations (such as dewatering, and paving and grinding) practices;
- water conservation practices;
- waste management requirements; and
- recycling and disposal requirements.

3.4.4 Advanced Treatment

Construction sites that are identified as posing an exceptional threat to water quality for sediment may be required to incorporate advanced treatment methods (e.g., mechanical or chemical means to flocculate and remove suspended sediment from runoff). The following factors are considered in determining the sedimentation threats to water quality:

- soil erosion potential or soil type,
- slopes,
- project size and type,
- sensitivity of receiving waterbodies,
- proximity to receiving waterbodies,
- non-stormwater discharges,
- ineffectiveness of other BMPs, and
- any other relevant factors.

There were no projects subject to advanced treatment requirements during the reporting period.

3.4.5 Additional Controls

Per Order R9-2007-0001, construction projects are evaluated on a case-by-case basis in relation to the following criteria prior to project approval to determine if additional controls are needed above and beyond the required BMPs:

- sites within or adjacent to ESAs,
- sites discharging directly to receiving waters within ESAs, and
- sites tributary to CWA §303(d) waterbody segments impaired for sediment.

Relative to the 2010 CWA §303(d) List of Impaired Water Quality Limited Segments, Lake Hodges is listed as impaired for turbidity (a condition associated with the discharge of sediment into a receiving water). Additional controls for construction sites within the Lake Hodges drainage area are evaluated by City compliance staff during site inspections; additional controls are considered for implementation where deemed necessary.

3.5 PROGRAM IMPLEMENTATION

3.5.1 Staff Education and Training

New and existing engineering staff or construction site inspectors are provided stormwater training as needed. This training includes an overview of current regulations, City-specific requirements, and individual project needs. The City also utilizes stormwater professionals (e.g., CASQA, local workshops, and RWQCB) to provide training for City personnel. In May 2012, Field Engineering staff

attended a 3-hour training/education workshop on Construction General Permit and Order R9-2007-0001 requirements. In addition, SUSMP/HMP requirements and implementation of LID BMPs were emphasized. The presentation was developed and provided by the City's environmental contractor, AECOM, and the City's stormwater staff.

3.5.2 Construction Site Owner or Operator Training

To promote awareness of and compliance with construction stormwater regulations and BMP requirements, the City provided the following:

- educational material for construction and land development companies;
- BMP handouts for building and grading permit applicants;
- preconstruction meetings with developers, project supervisors, and engineers to review stormwater pollution prevention requirements and BMPs; and
- education for construction site inspectors regarding routine and nonroutine (e.g., noncompliance follow-up) inspections.

Through these efforts, the potential water quality issues, such as incorporating LID practices, were addressed early in the site design process, (as directed by the City's SUSMP).

3.5.3 Urban Runoff Approval Process

Prior to project approval and issuance of construction and grading permits, project applicants must demonstrate they comply with local ordinances and the City's SUSMP (as applicable). This process includes:

- attending a preconstruction meeting, where proposed projects are evaluated in accordance with the stormwater management requirements and local SUSMP guidance document (City of Escondido 2010);
- verifying that the minimum required BMPs and other measures provided in the SUSMP are incorporated into the construction phase to reduce potential pollutant discharges and protect water quality to the MEP;
- reviewing the stormwater management plan to verify compliance with the Grading Ordinance, the Storm Water Ordinance, and Order R9-2007-0001;
- verifying that projects subject to the state's Construction General Permit (Order 2009-0009-DWQ) are compliant with and covered by that permit; and
- providing an up-front cash deposit ($2,000 to $30,000 depending on project size) to ensure that funds are available if compliance remedies are necessary.

As required by Order R9-2007-0001, each Copermittee must update its local SUSMP to meet the requirements of §D.1.d. The updated SUSMP was adopted by the City Council in March 2010 and, in addition, City Council adopted the new Hydromodification Plan (HMP) in January 2011. Designated personnel within the City's Engineering Department are responsible for reviewing projects in accordance with the urban runoff approval process. This SUSMP/HMP process is discussed in further detail in Chapter 2. All proposed construction projects during the reporting period underwent this review process prior to approval.

3.5.4 BMP Manual

During project review and throughout construction site compliance evaluations and inspections, the City uses its BMP manual (City of Escondido 2008) to provide staff with guidance for reducing water quality impacts, including erosion control, sediment control, non-stormwater control, and waste management control associated with construction activities.

3.5.5 Construction Site Inspections

Construction sites were inspected depending on a variety of site conditions, season, size, environmental sensitivity, and several other factors. Construction site inspections serve to:

- assess compliance with city ordinances and permits related to urban runoff, including the implementation and maintenance of required minimum BMPs;
- verify coverage under the General Construction Permit (i.e., Notice of Intent is filed) and/or grant a Waste Discharge Identification number, if applicable;
- review the site erosion control and BMP implementation plans;
- determine if BMPs (including advanced treatment, additional controls, and maximum disturbed area requirements) are being implemented properly and in accordance with approved plans;
- confirm that the designated BMPs were implemented and assess BMP effectiveness;
- determine whether the owner/developer/contractor is making appropriate adjustments when ineffective BMPs are found;
- conduct visual observations for non-stormwater discharges, potential illicit connections, and potential discharge of pollutants in stormwater runoff;
- provide education and outreach materials on stormwater pollution prevention, if needed;
- complete the construction site inspection form; and
- when applicable, confirm that a maximum disturbed area for grading was applied to all applicable construction sites.

An inventory of construction sites that were active during the reporting period and associated inspection records are provided in Appendix B.

3.5.6 Data Management and Project Tracking

During the past reporting period, construction site inspections were tracked using inspection forms, field logs, and the City's electronic project tracking system.

3.5.7 Enforcement of Noncompliant Construction Sites

City inspectors enforce stormwater pollution prevention requirements at construction sites and issue citations when violations are observed. Once a violation citation has been issued, a follow-up compliance inspection is conducted to determine if corrective actions have been implemented.

Depending on violation frequencies and severity, enforcement actions can escalate from a verbal warning to stop-work orders and/or monetary penalties. Inspectors have the flexibility to establish appropriate compliance penalties and corrective action time frames on a case-by-case basis. Figure 3-1 shows the progressive enforcement steps that may be taken as part of the City's Inspection Enforcement Program:

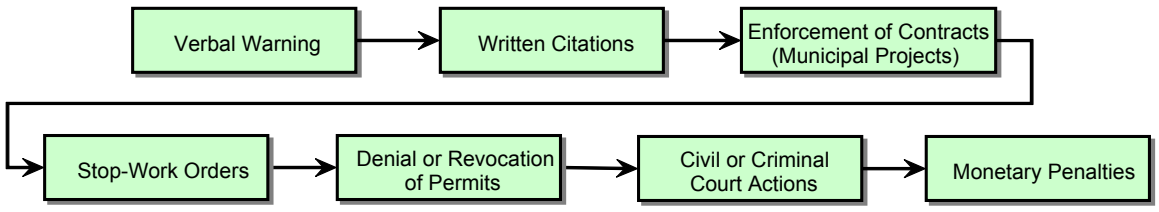


Figure 3-1. Enforcement Actions for Noncompliant Construction Sites

The economic downturn has impacted development in Escondido to the extent that construction activity at many private sites was markedly slow and/or at a standstill during the reporting period. As determined by City compliance inspectors, enforcement actions were not necessary for the sites where construction had occurred. For inactive sites, staff made sure that effective BMPs were installed and/or maintained, even though dry conditions prevailed through most of the rainy season. Site inspection records are provided in Appendix B.

3.5.8 Reporting of Noncompliant Construction Sites

In accordance with Order R9-2007-001, the City will notify the RWQCB when staff issue a stop-work order or other high-level enforcement to a construction site as a result of a stormwater compliance violation. Although there were no such enforcement actions taken during this reporting period, any noncompliance that may endanger public health and/or the environment will be reported as follows (Order R9-2007-0001 Attachment B, Section 5[e]):

> *"…(1) The Copermittee shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Copermittee becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Copermittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.*
>
> *(2) The following shall be included as information, which must be reported within 24 hours under this paragraph:*
>
> > *i) Any unanticipated bypass that exceeds any effluent limitation in the Order (See 40 CFR 122.41(g)).*
> >
> > *ii) Any upset which exceeds any effluent limitation in this Order.*
>
> *(3) The Regional Board may waive the above-required written report under this provision on a case-by-case basis if the oral report has been received within 24 hours."*

4 MUNICIPAL COMPONENT

4.1 INTRODUCTION

The City's efforts to control the discharge of pollutants associated with municipal land use areas and activities to protect receiving waters and other environmental resources while achieving compliance with Order R9-2007-0001 are described below. In general, the major elements of the municipal component are as follows:

- maintaining an updated inventory of all municipal areas and special events;
- identifying potential sources of pollution from municipal land use areas, activities, and special events;
- prioritizing the threat to water quality;
- determining and employing pollution prevention and source control measures to preclude the release of pollutants at the source;
- specifying and implementing BMPs to reduce contaminated runoff based on threat to water quality; and
- taking steps to ensure that City staff are well informed and are implementing the program appropriately.

These elements are described within this section as they pertain to the various municipal areas and special events. It should be noted that the City does not own or operate any landfills, incinerators, solid waste transfer facilities, land application sites, sewage sludge treatment or disposal sites, hazardous waste facilities, or municipal airfields. Accordingly, these facilities are not discussed below.

4.2 ROADS, STREETS, HIGHWAYS, AND PARKING FACILITIES

4.2.1 Background

Within its jurisdiction, the City is responsible for the maintenance of most surface streets and municipal parking facilities, but it does not own, operate, or maintain highway or freeway facilities. The following roadways are owned and maintained by the California Department of Transportation and are not the City's responsibility:

- Interstate 15,
- State Route 78, and
- portions of San Pasqual Road.

4.2.2 Source Characterization

Roadway activities and parking facilities can be associated with a variety of potential pollutants, such as heavy metals, oil and grease, battery acid, antifreeze, or other similar pollutants. In addition, the maintenance of municipal roadways and paved surfaces often involves repair and repaving activities that can also be sources of urban runoff pollution if not properly managed. Roadway and parking lot usage can generate notable amounts of litter and sediment as well if public awareness is lacking and proper controls are not implemented.

Because paved roads are impervious, these various pollutants have the potential to accumulate and be transported by stormwater runoff into the MS4 and/or possibly into sensitive receiving waterbodies. In turn, the City has designated its roads and parking facilities as a high-priority threat to water quality. As part of the inventory, the City further categorizes these areas relative to a high, medium, or low potential for being associated with trash and/or debris. The City uses this categorization to prescribe appropriate street sweeping frequencies for controlling these pollutants.

acilities inventory is maintained by the City and is updated annually (as part of the ss) if facilities are created, modified, or eliminated. A listing of the stand-alone provided in Table 4-1. Figure 4-1 illustrates municipal roads and parking facilities as the associated priorities relative to the presence of trash and/or debris.

Municipal Parking Lots

Address			Hydrologic Unit	Location
51	W	Valley Parkway	Carlsbad	SE Corner of W Valley Parkway & Maple
27	W	2nd Avenue	Carlsbad	SE Corner of W 2nd Ave & Maple
35	E	Valley Parkway	Carlsbad	E Valley Parkway between Broadway & Kalmia, south side of street
39	S	Kalmia Avenue	Carlsbad	Corner of 2nd Ave & Kalmia, north side of street
25	E	Valley Parkway	Carlsbad	E Valley Parkway between Kalmia & Juniper
30	E	2nd Avenue	Carlsbad	Corner of E 2nd Ave & Juniper, just west of 161 E 2nd Ave
45	E	Valley Parkway	Carlsbad	SW Corner of E Valley Parkway & Juniper

ent Practice Requirements

ity-maintained roads and parking facilities, the BMPs described below are y to minimize the amount of contaminated runoff that enters the MS4 and/or om these areas.

ent

e 2008 JURMP (as required by Order R9-2007-0001), LID designs are being l Improvement Program (CIP) projects involving roads and parking areas, where ew the BMP manual (City of Escondido 2008) to assess applicable and adequate rise, which is consistent with San Diego County-adopted standards.

ad Parking Lots

ping frequency for all City-owned and City-maintained roads was set forth in the sents the number of curb miles categorized as having a high, medium, or low g trash and the associated minimum sweeping frequencies related to each

ping Program

s	Total Number of Curb Miles	Sweeping Frequency
	68.8	Twice Monthly
	43.5	Monthly
	279.6	As Needed

Jurisdictional Urban Runoff Management Program
2011–2012 Annual Report
Path: P:\2012\60241576\06GIS\6-3_Layout\AR_2011-2012\fig 4-1_MunicipalRoadsAndParking.mxd, 9/18/2012, irelandm

Source: DigitalGlobe 2008; SanGIS 2007; City of Escondido 2009, 2010; State Water Resources Control Board 2006; California Interagency Watershed Mapping Committee 2004;

6,000 3,000 0 6,000 Feet

Scale: 1 = 72,000; 1 inch = 6,000 feet

SAN DIEGUITO WATERSHED

San Marcos

Escondido Creek

Reidy Canyon Creek

San Marcos Creek

Escondido Creek

San Pasqual

Cloverdale Creek

Kit Carson Creek

Hodges

Felicita Creek

Broadway

Westwington

Woodward

Municipal R

City of Escondi

Hydrology

Watershed Boundarie

Subwatershed Boundarie

Creeks

Environmentally Sensitive Areas

303(d)-Listed Streams

303(d)-Listed Lakes and Reservoirs

Habitat Management Plan Areas

200-Foot Buffer of ESA

Sweeping Priority/Frequency

Roads

High (twice/month)

Medium (once/month)

Low (as needed/once year)

Parking Lots

Medium (once/month)

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Source Control/Pollution Prevention

BMPs are implemented during street and parking lot maintenance activities to reduce pollutants in runoff. These BMP requirements include inlet protection, berming work areas, vacuum cleanup, and properly disposing of waste products and materials.

Good Housekeeping

Measures are employed for municipal parking areas, including utilizing and routinely emptying trash receptacles, and keeping areas swept to remove pollutants such as trash, debris, and sediment. Good housekeeping practices are also implemented during street and parking lot maintenance activities, including keeping work areas clean by removing trash, sediment, and debris, and cleaning up materials or spills, as necessary.

Additional Controls

Supplemental measures are applied in areas tributary to §303(d)-listed waterbody segments when a roadway, parking facility, or associated municipal activity generates pollutants for which the waterbody segment is impaired or for areas/activities located within or directly adjacent to or discharging directly to receiving waters within ESAs. Activities associated with roads and parking facilities have the potential to contribute to the following receiving water impairments:

- Escondido Creek (TDS and manganese)
- San Marcos Creek (sediment toxicity)
- Lake Hodges (turbidity and manganese)
- Kit Carson Creek (TDS)
- Felicita (TDS)

As part of its Integrated Pest Management (IPM) program, the City restricts the use of pesticides, herbicides, and fertilizers so that sensitive local waterways are protected. Additionally, the City implements increased sweeping above and beyond the scheduled frequency, which reduces potential turbidity and TDS in site runoff.

4.2.4 Program Implementation

The City has established numerous programs and processes to ensure that BMPs designated for streets and parking areas, as described above, are implemented in accordance with Order R9-2007-0001. A description of these programs and processes is provided below.

Municipal Staff Education and Training

The City's municipal education program (see Chapter 8) is designed to inform and train City employees on urban runoff impacts and the associated BMPs to minimize potential impacts. Additional staff from the Planning and Engineering Departments attended a workshop held by the City's Stormwater Department to review Municipal permit requirements, including SUSMP and HMP requirements in compliance with Order R9-2007-0001. Maintenance personnel and collections staff are trained to review JURMP requirements, BMP implementation compliance, and stormwater pollution prevention techniques, including proper runoff controls during street construction, maintenance, and repairs. A workshop to review Municipal permit requirements is provided to maintenance and collection staff bi-annually. The last workshop was held in the spring of 2011, and the next training will be held in early 2013.

SUSMP Process

Through the City's SUSMP and HMP process, stormwater management, water quality protection, and hydromodification management measures are integrated into priority road and parking lot development projects to reduce urban runoff pollutants from these areas to the MEP.

BMP Manual

The municipal component of the City's BMP manual (City of Escondido 2008) presents industry-standard BMP guidance specific to municipal operations information, including street maintenance and repair, spill prevention and cleanup, and solid and liquid waste management. The BMP manual has been distributed to municipal staff.

Routine Visual Inspections

Visual inspections are regularly scheduled assessments of City-owned and City-maintained roads and parking facilities focusing on road condition, litter, vegetation, and sediment. Inspections are conducted in conjunction with street and parking lot sweeping activities to determine maintenance needs, changes in sweeping frequency, and potential sources of pollutants. Municipal parking lots are also inspected as part of the municipal facility inspection program. Parking areas are inspected for adequate waste disposal; presence of trash, debris, stains, or spills; proper storage of outdoor materials (if applicable); the need for increased sweeping; and to confirm that good housekeeping practices are being employed. Annual stormwater inspections were also conducted for municipal parking lots and parking areas adjacent to fixed municipal facilities during the reporting period.

Overall, no major stormwater issues were identified at any of the stand-alone municipal parking lots during the annual inspection process. One 55-gallon drum remains within an enclosed dumpster area at one location (Parking Lot #6). The issue is being resolved and the outcome will be reported in next year's annual report. In general, all parking lots were free from trash and debris, and dumpster areas were well kept. Inspections for parking areas associated with fixed municipal facilities are described in Section 4.6.4.

Street and Parking Lot Sweeping Data Collection

The Maintenance and Operations Division of the Community Services Department is responsible for conducting a combination of comprehensive and focused sweeping on municipal roads. Moreover, during the reporting period, the City conducted a more rigorous street sweeping schedule than the minimum frequencies set forth in the JURMP to prevent trash and debris from entering receiving waters. The frequency at which municipal roads were swept is presented below:

- Downtown focus blocks were swept three times a week.
- Heavily traveled streets were swept one time per week.
- Moderately traveled streets were swept two times per month.
- All other roads were swept one time per month.

Approximately 7,408 curb miles were swept by the Maintenance and Operations Division and 410 tons (1,518 cubic yards) of material was collected.

The City currently contracts with an independent company to conduct sweeping of all municipal parking areas and downtown streets, which were each swept 36 times for heavily used lots, 24 times for medium-use lots, and 12 times for lesser used lots during the reporting period. The contractor swept approximately 2,000 miles of downtown Escondido, with approximately 133 tons (494 cubic yards) removed.

4.3 SANITARY SEWAGE COLLECTION SYSTEM

4.3.1 Background

The City's Utilities Department operates and maintains the sanitary sewage collection system under the Wastewater/Collections Division. The City's municipal sanitary wastewater is routed to the Hale Avenue Resource Recovery Facility (HARRF), where it undergoes tertiary treatment for discharge. The City's sanitary wastewater is discharged in accordance with strict NPDES permit requirements through the Escondido Land Outfall in San Elijo Lagoon. Discharged effluent is tested daily, monthly, quarterly, and annually for various constituents relative to the limits established in the NPDES permit. These results are

routinely reported to the U.S. Environmental Protection Agency (USEPA) and RWQCB to demonstrate permit compliance and environmental protection.

The Collections Division maintains more than 360 miles of sewer lines, 14 pumping stations, more than 6,000 sewer manholes, 14 miles of sewer outfall line, and a pretreatment inspection program for food and commercial establishments. The division keeps the sanitary sewers flowing and clear of obstructions, while protecting the citizens and the environment from sewer overflows and backups.

4.3.2 Source Characterization

If not properly inspected and maintained, municipal sewer systems have the potential to contribute pollutants to the MS4 and receiving waterbodies primarily as a result of blockages, leaks, or breaks in the system. Sanitary wastewater can contribute pathogens, nutrients, greases, and/or biosolids, which can impact water quality. Because of the potential for these facilities to transport these pollutants to the MS4 and/or possibly into sensitive receiving waterbodies, the City has designated all sewer facilities as a high-priority threat to water quality and designates appropriate measures as described below to maintain the sewer system and prevent wastewater releases.

The GIS-based sewer system inventory is maintained by City GIS staff and is updated on a routine basis as sewer facilities are created, modified, or eliminated. City staff use project plans and data gathered by field crews to update and modify the inventory. Figure 4-2 illustrates the City's current sewer system inventory. Further information associated with the sewer pump stations is presented in Table 4-3.

Table 4-3. Sewer Pump Stations

Property Name	Address	Hydrologic Unit
Sewer Pump Station No. 1	3680 Sunset Dr.	San Dieguito
Sewer Pump Station No. 2	2698 South Escondido Blvd.	San Dieguito
Sewer Pump Station No. 3	2045 South Escondido Blvd.	San Dieguito
Sewer Pump Station No. 4	1750 W. El Norte Pkwy.	Carlsbad
Sewer Pump Station No. 5	735 Opper St.	Carlsbad
Sewer Pump Station No. 6	2297 Felicita Rd.	San Dieguito
Sewer Pump Station No. 7	870 East 17th St.	San Dieguito
Sewer Pump Station No. 8	2472 Eucalyptus Ave.	San Dieguito
Sewer Pump Station No. 9	1399 Hamilton Ln.	San Dieguito
Sewer Pump Station No. 10	2356-1/2 Willowbrook St.	San Dieguito
Sewer Pump Station No. 11	2451 Bernardo Ln.	San Dieguito
Sewer Pump Station No. 12	1400 Country Club Dr.	Carlsbad
Eagle Crest Lift Station	20950 San Pasqual Rd.	San Dieguito

4.3.3 Best Management Practice Requirements

Relative to the source characterization described above and the associated municipal activities conducted, the City specifies various pollution prevention and source control BMPs to (1) address pollutants of concern from maintenance and operation of sewer facilities, including emergency response to sewer spills, and (2) prevent and eliminate infiltration from the sanitary sewer to the MS4. These BMPs are described below.

Sewer System Management Plan (SSMP)

The City implements the SSMP in accordance with the SWRCB Order 2006-0003-DWQ (*Statewide General Waste Discharge Requirements for Sanitary Sewer Systems*). The City's Utilities Department developed and implemented an SSMP in August 2007. The Operation and Maintenance Program portion of the SSMP includes the elements described below.

- An up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities.
- A description of routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeting known problem areas. Specific measures can include routine hydraulic and mechanical cleaning of the sanitary sewer and MS4, regular closed-circuit television inspection—particularly of identified high-priority areas—dye testing, and smoke testing.
- A Rehabilitation and Replacement Plan that identifies and prioritizes system deficiencies and implements short- and long-term rehabilitation actions to address deficiencies. The focus of the plan is on sewer pipes that are at risk of damage or prone to more frequent blockages due to pipe defects. The program includes visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation.
- The Rehabilitation and Replacement Plan also includes a Capital Improvement Program that addresses proper management and protection of the infrastructure assets, which includes a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the CIP.
- Regular training of staff in sanitary sewer system operations, maintenance, and appropriate training for contractors.
- Equipment and replacement part inventories, including identification of critical replacement parts.
- A Monitoring and Reporting Program that summarizes these activities and reports any operational, maintenance, or compliance issues.

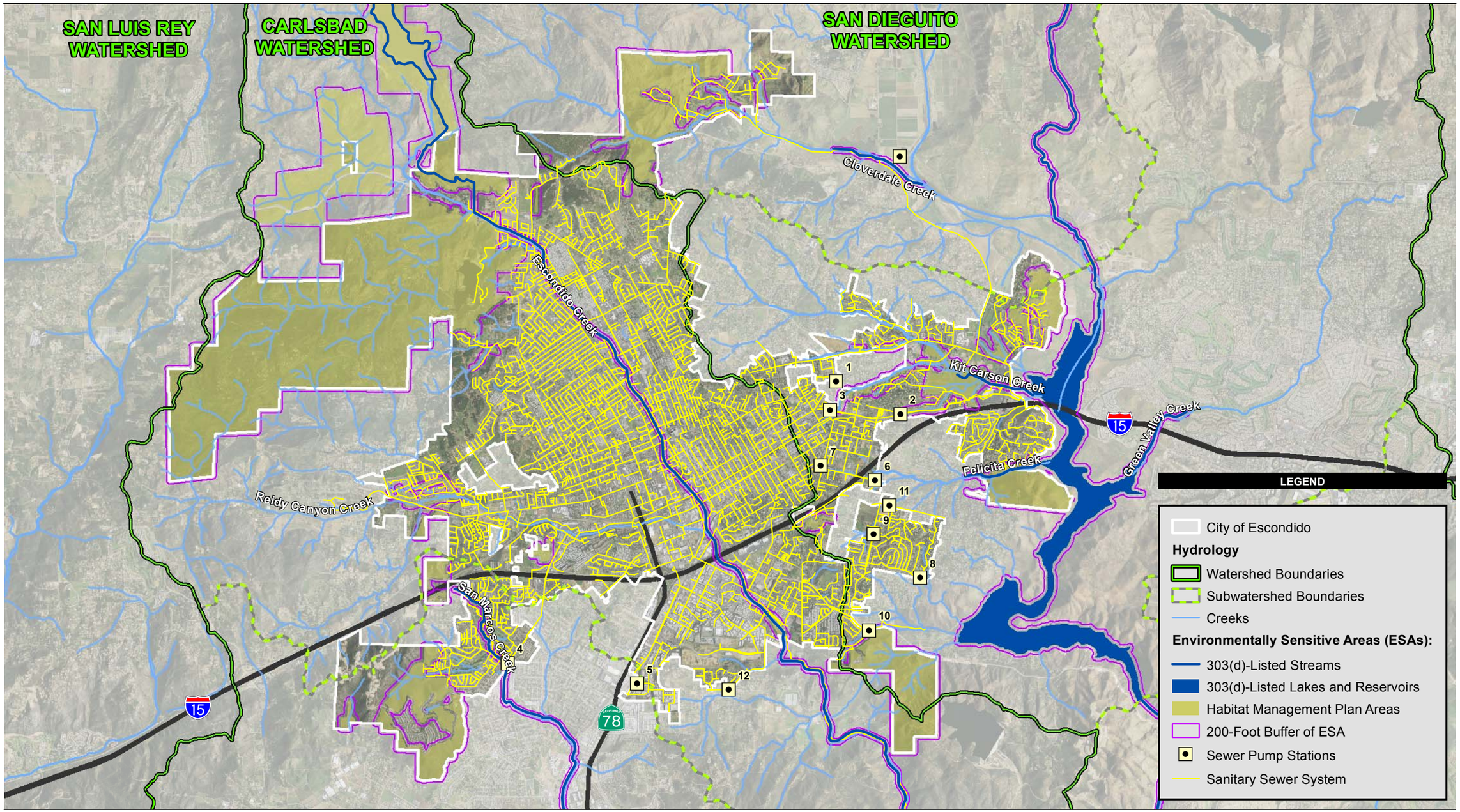
Sewer Overflow and Prevention Plan (SOPP)

The City developed and implements an SOPP to prevent overflow of the sewage collection system. The SOPP includes the City's Preventative and Corrective Maintenance Program, as well as the Sewer Overflow Response Plan (SORP), which provides emergency response measures to minimize or eliminate the potential for introducing pollutants to nearby surface waters. The Preventive and Corrective Maintenance Program consists of routine monitoring, inspection, cleaning, and related maintenance of the sanitary wastewater collection system. In addition, a Pipeline Replacement Program for damaged or failing sections of wastewater pipeline is instituted, which provides a means for tracking prior problems encountered and corrective measures taken, as well as current problem areas and necessary improvements needed.

If the sewer collection system overflows, the City implements the SORP to immediately report the incident and dispatch the appropriate City maintenance crews to minimize overflow impacts to public health and the natural environment. The SORP includes extensive notification procedures, based on the new California Integrated Water Quality System on-line Sewer System Overflow Reporting System Database.

Fats, Oils, and Grease (FOG) Control Program

This program is designed to reduce the amount of FOG substances discharged to the sanitary sewer system. The City's FOG Control Program includes an implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG. For City staff, a plan and schedule



Source:DigitalGlobe 2008; SanGIS 2007; City of Escondido 2008, 2009; State Water Resources Control Board 2006; California Interagency Watershed Mapping Committee 2004

6,000 3,000 0 6,000 Feet

Scale: 1 = 72,000; 1 inch = 6,000 feet

Figure 4-2
Sanitary Sewer Collection System

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are also included for the proper disposal of FOG generated within the sanitary sewer system service area. The program also serves to identify sanitary sewer system sections subject to FOG blockages and establish a cleaning maintenance schedule for these sections.

This program establishes the City as the legal authority to prohibit FOG discharges to the system and identify measures to prevent overflows and blockages. It also gives the City the authority to:

- require grease removal devices (such as traps or interceptors), design standards for the removal devices, proper maintenance, suitable BMPs, and accurate recordkeeping and reporting; and
- inspect grease producing facilities, take enforcement measures, and determine whether the enrollee has sufficient staff to inspect and enforce the FOG ordinance.

Good Housekeeping

Measures are incorporated into sewer maintenance activities to minimize the discharge of potential pollutants to the environment. These standard work practices include keeping work areas clean, vacuuming, and cleaning up spills or other maintenance-related materials, as necessary.

Source Control/Pollution Prevention

BMPs are implemented for sewer maintenance activities and include dry weather scheduling of activities, berming work areas, and properly disposing of waste products and materials.

Sewer System Inventory Management

To assist with inspection and maintenance activities and to track potential leaks within the sanitary sewer system, the City maintains and updates a GIS-based inventory of its sewer collection system facilities (Figure 4-2). Information related to the City's sewer pump stations is managed in the City's municipal facility database, which includes site location, activity description, potential pollutants, required BMPs, and whether the facility is within a tributary of a §303(d)-listed waterbody and generates pollutants for which the waterbody segment is impaired.

Additional Controls

As appropriate, supplemental measures are employed where facilities are repaired or maintained and are tributary to a §303(d)-listed waterbody segment (where pollutants are potentially generated for which the water is impaired), or are within, directly adjacent to (i.e., within 200 feet), or discharging directly into receiving waters within ESAs. The following 303(d)-listed waterbodies have impairments that can be associated with pollutants from sewer system operation:

- Escondido Creek (phosphate, sulfate, enterococcus, fecal coliform, total nitrogen as N),
- San Marcos Creek (phosphorus),
- Lake Hodges (nitrogen, phosphorus, turbidity),
- Kit Carson Creek (TDS),
- Felicita Creek (TDS), and
- Cloverdale Creek (phosphorus, TDS).

The following additional controls were implemented within these areas:

- increased visual inspection frequency for potential leaks,
- implementation of absorbent spill response materials in the work area perimeter, and
- additional sedimentation controls when needed.

4.3.4 Program Implementation

The programmatic elements described above serve to verify that the required BMPs are consistently employed for the sanitary sewer collection system. In addition, the following BMPs are implemented by the City to minimize potential pollution from municipal sanitary wastewater.

Education and Staff Training

The City's municipal education program is designed to inform and train municipal employees on urban runoff impacts and associated required BMPs. During the reporting period, Collections staff attended industry conferences to learn about technological advances, regulatory and permit requirement updates, and BMP upgrade requirement s relating to sewer facility operation and maintenance. New staff undergo an orientation process for proper training.

BMP Manual

The City utilizes a comprehensive BMP manual (City of Escondido 2008), which includes industry standard BMP guidance specific to municipal operations information, including sewer maintenance and repair, spill prevention and cleanup, and solid and liquid waste management.

Visual Inspections and Cleaning

The sewer system is routinely inspected by the Wastewater/Collections Division as part of the City's Preventative and Corrective Maintenance Program. Inspections were conducted at varying frequencies depending on historical issues, and age and location of the infrastructure and included:

- completing the Stormwater/Pretreatment Program inspection form for each location inspected,
- confirming manhole seal integrity,
- documenting site conditions,
- prescribing corrective action (if necessary),
- reviewing the need for additional BMPs (if necessary), and
- designating modifications for improving pollution prevention.

During the reporting period, approximately 40 miles of sewer line were inspected and approximately 191 miles were cleaned.

HARRF Monitoring

During wet weather conditions, wastewater treatment plant flows at the HARRF were monitored as an indicator of stormwater infiltration. Wastewater plant staff are vigilant in monitoring plant flow, as plant capacity is an ongoing issue of concern for operators and City management. HARRF monitoring data and associated information are reported to the state under separate cover.

4.4 MUNICIPAL SEPARATE STORM SEWER SYSTEM

4.4.1 Background

The primary function of an MS4 is to collect and convey surface runoff during storm events to prevent flooding. The City's MS4 consists of natural creeks and streams, streets, curbs/gutters, inlets, catch basins, pipes, culverts, outfalls, and concrete channels. Escondido Creek and Reidy Creek are the largest drainages within the City's MS4.

4.4.2 Source Characterization

Activities associated with the operation and maintenance, or misuse (i.e., illicit discharges or connections, as discussed in Chapter 7), of the City's MS4 can contribute a variety of pollutants to receiving waterbodies. Further, as addressed in subsequent sections of this annual report, pollutants from activities associated with construction or developed areas (industrial/commercial/residential activities) can be transported to the MS4 if not properly managed.

To successfully implement a program to preclude the release of pollutants into the City's MS4 and receiving waters, the City maintains a GIS-based MS4 inventory. In 2009 all MS4 features, including inlets, outlets/outfalls, culverts, and channels, were mapped with submeter Global Positioning System (GPS) units in concert with MS4 inspections. The updated MS4 inventory developed as part of this effort is illustrated in Figure 4-3.

4.4.3 Best Management Practice Requirements

BMPs are specified to address pollutants of concern associated with maintenance and operation of the MS4 and are applied on the basis of site-specific conditions, needs, and feasibility to the MEP. BMPs implemented by the City that are associated with the MS4 are described below.

Visual Inspections and Storm Drain Cleaning

The City conducts a variety of visual inspections of the MS4 for maintenance and cleaning needs. As part of its MS4 cleaning and inspection program, maintenance crews conduct year-round inspections of the City's high-, medium-, and low-priority MS4 facilities to assess the need for cleaning to minimize pipe blockages, remove pollutants from the MS4, and reduce flooding hazards. This effort also helps to minimize the amount of pollutants and contaminated runoff that enters the MS4 when maintenance is conducted prior to the wet season (October–April).

During this reporting period, visual inspections were conducted based on the MS4 prioritization. Other inspections and cleanings were a result of public service requests or hot line calls. Inspection procedures involved evaluating each MS4 feature (including inlets, cleanouts, curb drains, and culverts) to determine if cleaning was needed. Due to the size of the City's MS4, the effort of inspecting and cleaning storm drain facilities is conducted on an ongoing basis; therefore, data provided include what was accomplished during this reporting period (refer to Table 4-4 in Section 4.4.4). The City has one dedicated crew continually inspecting and cleaning year-round.

The information relative to each MS4 feature is documented and analyzed to assist in determining the re-prioritization of MS4 facilities throughout Escondido. In addition, the monitoring and cleaning of the MS4 locations assist in determining trends or patterns with trash/debris in relation to population density or traffic volumes and will provide assistance in determining additional BMPs to combat pollution. The City plans to analyze the inspection data collected to date and next program year's inspection results (2012–2013) to determine the need to reprioritize MS4 facilities. This analysis will coincide with the expiration of Order R9-2007-0001 and the anticipated adoption of the new permit in 2013.

The City also routinely conducts bimonthly channel and creek assessments. Visual inspections are also conducted for MS4 facilities that are prone to flooding, which can be attributed to high volumes of trash and debris. These locations are inspected once per year between May 1 and September 30.

In addition, open channels are cleaned of anthropogenic litter during regularly scheduled cleaning activities or as additional conditions necessitate. Debris and waste removed from these facilities are disposed of properly and in accordance with all applicable regulations. Where sensitive environmental conditions exist, regulatory permitting needs are assessed to avoid or minimize pollutant impacts. The amount of trash and debris collected is tracked and maintained in a database to assist in evaluating future inspection and maintenance needs. Inspection and cleaning information is provided below in Section 4.4.4.

Sea Curtain Maintenance

Areas downstream of the Escondido Creek flood control channel are protected from significant accumulation of floating trash and debris via retrofitted sea curtains. Although these curtains are deployed year-round, they primarily serve to capture trash and debris in the channel during wet weather. The curtains are cleaned in conjunction with other MS4 cleaning efforts (described above), and the amounts of trash and debris removed are quantified.

Good Housekeeping

Measures are incorporated into MS4 maintenance activities to minimize and eliminate potential pollutants. These standard work practices include keeping work areas clean of trash, sediment, and debris; vacuuming; and cleaning up spills, as necessary.

Source Control/Pollution Prevention

BMPs are implemented for storm drain maintenance activities and include dry-weather scheduling of activities, berming work areas, and properly disposing of waste products and materials.

Access Restrictions

Fencing is maintained along the perimeter of the Escondido Creek flood channel and many other associated flood control structures to prevent public access. In addition to public safety, security fencing provides additional protection against vandalism, windblown trash and debris, illegal dumping, and animal access.

Water Conservation Programs

The City administers a comprehensive Water Conservation Program that complements its stormwater pollution prevention efforts. For example, in conjunction with the San Diego County Water Authority and the Metropolitan Water District of Southern California, the City provides programs to assist the public in efficiently managing residents' outdoor water use to reduce irrigation runoff. These programs include water surveys, rebates to purchase irrigation-efficient devices such as stream-rotating nozzles, and weather-based irrigation controllers. In addition, the City adopted a water conservation/shortage ordinance that restricts water use activities often associated with urban runoff.

Additional Controls

Supplemental measures are implemented in areas tributary to §303(d)-listed waterbody segments (where an activity might generate pollutants for which the waterbody segment is impaired) and for areas directly adjacent to (i.e., within 200 feet) or discharging directly to receiving waters within ESAs. Within Escondido, Lake Hodges and Escondido, Felicita, and Kit Carson Creeks are impaired for constituents that could be associated with MS4 runoff. As needed, the following additional controls are implemented in these areas:

- increased cleaning and maintenance priority, and
- inlet protection during maintenance activities.

4.4.4 Program Implementation

The steps that the City has taken during the reporting period to ensure the implementation of required BMPs are described below.

Education and Staff Training

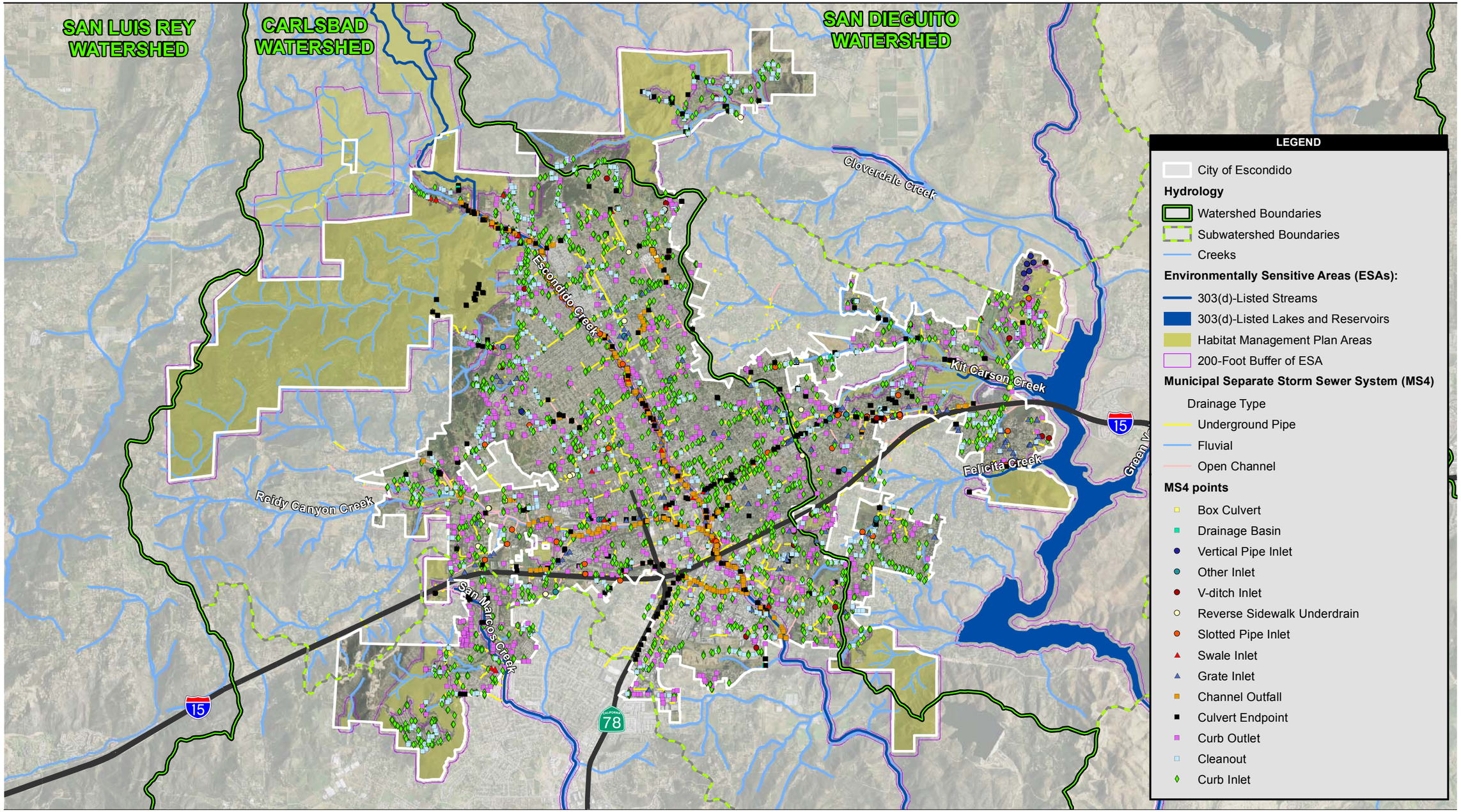
Municipal maintenance stormwater staff attend a bi-annual stormwater workshop. The last workshop was help in the spring of 2011 and the next training will be held in early 2013.

BMP Manual

The City uses a comprehensive BMP manual (City of Escondido 2008) that provides specific information and BMP implementation guidance applicable to MS4 operation and maintenance activities, including identification and elimination of illicit discharges and connections.

MS4 Trash Assessment

The City continues to implement trash monitoring requirements (as provided by the Copermittee Dry Weather Monitoring Workgroup) as part of the dry-weather monitoring program. Results of the trash assessment and monitoring will be reported in the forthcoming Illicit Discharge Detention and Elimination Monitoring Report to be provided to the RWQCB in December 2012.



Source: DigitalGlobe 2008; City of Escondido 2006, 2009; State Water Resources Control Board 2006; California Interagency Watershed Mapping Committee 2004

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Scale: 1 = 72,000; 1 inch = 6,000 feet

Figure 4-3
Municipal Separate Storm Sewer System (MS4)

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MS4 Data Inspection and Cleaning

Table 4-4 presents information associated with MS4 inspection and cleaning efforts as described in Section 4.4.3. Inspection and maintenance activities of municipal treatment control facilities are presented in Chapter 2.

Table 4-4. MS4 Inspection and Cleaning Data

MS4 Type	Total number	Number inspected	Number where accumulated trash exceeded cleaning criteria	Distance inspected found with anthropogenic litter	Number cleaned	Amount of waste and litter removed (tons)
Channel Outfalls	356	303	1	N/A	1	0.08
Open Channel	302 (mi)	379 (mi)	N/A	244 (mi)	244 (mi)	13.23**
Subtotal						**13.31**
Inlets	2,821	1,623	299	N/A	299	--
Culverts	387	224	16	N/A	16	--
Cleanouts	902	445	46	N/A	46	--
Outlets	834	516	189	N/A	189	--
Basins	4	2	1	N/A	0*	--
Subtotal	**5,304**	**2810**	**551**	**N/A**	**551**	**64**
Total Amount (tons) Collected from Entire MS4						**77**

* Site had not been cleaned as of the time of report development.
** Includes open channel, homeless camp cleanups, and adjacent bike path cleanups
mi = miles
N/A = not applicable

The City does not propose any facilities needing less than annual inspection at this time.

Administrative Controls

The City utilizes a GIS-based Asset Management Program to inventory MS4 facilities, create work orders for MS4 maintenance, and manage work history. The software creates an electronic task inventory and work history each time a work order is assigned. Utilization of this system allows City employees to analyze the City's infrastructure as a whole. Current and future problem areas are more easily tracked and located because the program compiles a maintenance history.

4.5 CORPORATE YARD

4.5.1 Background

The Corporate Yard (Yard) accommodates several divisions of the municipal Public Works/Utilities Department, including:

- **Streets Division and Parks Division**, which are responsible for maintaining streets, storm drains, and median/parkway and municipal parks landscaping; graffiti removal; and street sweeping;
- **Building Maintenance Division**, which provides preventative maintenance, repairs, and custodial services for all City-owned buildings and facilities;
- **Fleet Services Division**, which provides centralized management of the City's fleet of vehicles and equipment;

- **Water Division and Field Operations Division**, which provide maintenance and operations of the water distribution system;
- **Wastewater Collections Division**, which keeps the sanitary sewers flowing and clear of obstructions while protecting the citizens and the environment from sewer overflows and backups; and
- **Industrial Pretreatment Inspection Division,** which inspects food and commercial business establishments for appropriate sewage pretreatment.

4.5.2 Source Characterization

The Yard consists of two distinct parcels: the "Old" City Corporate Yard and the Corporate Yard Expansion. The Old City Corporate Yard site is located on North Spruce Street, approximately 0.25 mile south of Washington Avenue (Figure 4-4). Both parcels comprise approximately 9.25 acres. The Yard is situated at the confluence of Reidy and Escondido Creeks, which are concrete lined at this location. Although approximately 90 percent of the site is impermeable, it is separated by vegetated buffer strips along the upper banks of the adjacent creeks. The site has nine drainage basins that discharge stormwater at six discrete locations.

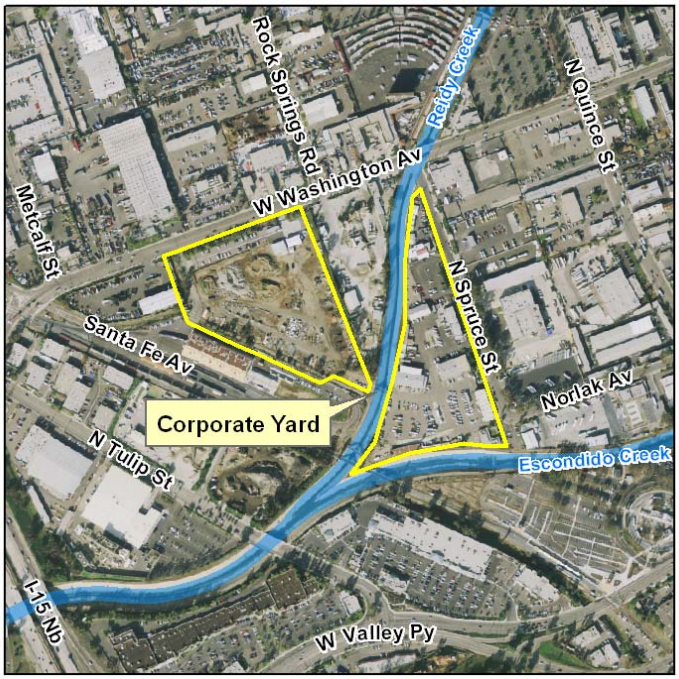


Figure 4-4. Corporate Yard Location

On-site facilities include a maintenance shop and garage for City vehicles, refueling station, two large fuel storage tanks, office building, parking lot, storage areas, and self-contained vehicle washing station. Activities at the site include the following: materials storage; vehicle washing, refueling, and maintenance; and employee parking. Pollutants of concern from these activities include oil and grease from vehicle parking; maintenance, parking, and storage of equipment; potential spills from fueling areas; sediment from unpaved grounds; and potentially hazardous waste from material storage.

The Corporate Yard Expansion site lies to the northwest of the Old City Corporate Yard and is separated via a metal-mesh bridge over Reidy Creek. Most of the site is unpaved and used for spare equipment and material storage, equipment training, and waste recycling. An unoccupied (temporary) fire station and an office trailer are situated at the northern portion of the yard along Washington Avenue. Pollutants of concern from this area could include oil and grease from temporary storage of equipment and vehicles, and sediment from stockpiles and unpaved grounds. The City plans to relocate the entire corporate yard and is currently evaluating several locations throughout the city. During this reporting period, no staff have relocated, and activities at the Yard are being conducted as mentioned above. However, the City's Water Division began relocating equipment and materials to the future site located in East Escondido, near 3450 East Valley Parkway. Currently, only water pipes are being stored on the site. Future activities associated with relocation of the Yard will be reported in the appropriate annual report.

A summary of the potential pollutant-generating activities that could occur at the Yard is provided in Table 4-5.

Table 4-5. Potential Pollutant-Generating Yard Activities/Areas and Corresponding BMPs

Area	Activity	Pollutant Source	Potential Pollutant	Required BMPs
Fuel Storage Area	Refueling of vehicles	Diesel and gasoline storage containers	Petroleum products	• Good housekeeping • Secondary containment (double-walled fuel tanks) • Hazardous material containment • Spill kits
Vehicle Parking	Parking for City vehicles	Leaks from vehicles or sheet-flow runoff	Hydrocarbons, metals	• Good housekeeping • Spill kits • Storm drain inlet protection • Vehicle inspections • Drip pans, as needed
Stockpile Yard	Stockpiling of equipment and materials used in City Public Works activities	Sediment from soil stockpiles; runoff from debris piles and equipment storage	Sediment, nutrients	• Good housekeeping • Erosion and sediment control BMPs • Dust and particulate control practices • Vehicle inspections, monitoring
Vehicle Wash Area	Washing of City vehicles and equipment	Dirt from vehicles and grey water from cleaning and washing	Detergents and emulsifiers	• Good housekeeping • Washwater recycling • Sump filtering location • Biodegradable emulsifiers and detergents
Auto Repair Shop	Vehicle repair and maintenance for City motor vehicles	Potential spills from vehicle maintenance and waste material storage, and equipment leaks	Hydrocarbons	• Good housekeeping • Spill kits • Weather protection for work areas • Secondary containment of oils and lubricants
Electrical and Paint Shop	Storage and maintenance shop for painting equipment	Potential spills from paint equipment maintenance and paint material storage	Paints, additives, and equipment leaks	• Good housekeeping • Materials kept under cover • Secondary containment of hazardous materials
Equipment Storage Areas	Heavy equipment storage for Public Works Yard	Equipment leaks and vehicle repairs	Hydrocarbons, dirt from vehicles	• Good housekeeping • Spill kits • Work conducted under covered areas • Secondary containment of oils and lubricants
Employee Parking Area	Vehicle parking for City employees	Equipment leaks	Hydrocarbons, dirt from vehicles	• Good housekeeping • Spill kits • Drip pans • Storm drain inlet protection • Vehicle inspections
Various City Buildings	Administration and offices for City Public Works	Roof drainage	Air-deposited pollutants	• Good housekeeping • Storm drain inlet protection
Landscaped Areas	Irrigation for City landscaping	Runoff from irrigation	Soil and fertilizers	• Good housekeeping • Regulated landscaping irrigation
Unpaved Areas	None	Water and wind erosion	Sediment	• Good housekeeping • Erosion and sediment control BMPs • Dust and particulate control practices • Storm drain inlet protection

4.5.3 Best Management Practice Requirements

BMPs are applied to address pollutants of concern associated with specific activities and areas throughout the Yard (Table 4-5). Additional controls are also implemented for this facility since it is tributary to a §303(d)-listed waterbody (i.e., Escondido Creek concrete flood channel). These BMPs and controls are summarized in Table 4-5.

The Yard operates under an approved HAZMAT Business Plan for the handling and storage of material used at the facility. Fueling stations are maintained in good operating condition and spill cleanup materials are readily available at multiple locations. Street cleaning of the Yard is performed at least annually (in September) but is conducted as needed if conditions warrant.

Additional Controls

Due to the proximity to sensitive surface waters and on-site activities, additional controls are implemented at the Yard. Runoff from the Yard discharges to either Escondido or Reidy creeks, both concrete-lined channels at the discharge location. The segment of Escondido Creek where Yard runoff is discharged is listed as impaired for DDT, manganese, phosphate, selenium, sulfate, toxicity, enterococcus, fecal coliform, total nitrogen as N, and TDS. Activities occurring on the portion of the Yard discharging to Escondido Creek that have the potential to contribute these pollutants include the storage and handling of fertilizers (phosphate, sulfate, total nitrogen as N) and TDS from general runoff.

Additional controls implemented to address these potential pollutants at the Old Corporate Yard are described below.

- A vegetated buffer strip is maintained along Escondido and Reidy creeks for infiltration of sheet runoff. Vegetated buffers are also protected by fiber rolls to capture sediment and help filter runoff.
- Fiber rolls are maintained along the perimeter (i.e., fence) to capture sediment and prevent it from leaving the site.
- Storm drain inlet inserts are used and maintained to filter out runoff pollutants, and some inlet locations are protected with gravel bag/fiber roll protection.

Reidy Creek is not listed for water quality impairments; however, the following BMPs are employed to control pollutant discharges to the creek:

- Pervious surfaces are maintained to promote infiltration of rainfall.
- Fiber rolls and gravel bags are used and maintained at multiple discharge points throughout the Yard. These devices are used for filtering debris, screening floatable trash, and capturing other potential solids at the main drainage inlet of the Corporate Yard Expansion.
- A construction entrance shaker plate is installed at the Reidy Creek bridge crossing to reduce the potential for sediment addition to the creek.
- Perimeter protection is used and maintained around excavation training areas.
- Removal of recycled waste materials is conducted weekly.
- Outdoor storage of equipment is minimized and consolidated.
- Equipment associated with mechanical moving parts and/or internal combustion engines is covered with tarps to prevent contact with stormwater.

4.5.4 Program Implementation

The steps described below are taken by the City to ensure implementation of the required BMPs during the reporting period.

Education and Staff Training

Stormwater training is conducted bi-annually for the Yard maintenance staff. This training provides a general overview of stormwater regulations; pollutant sources; and required BMPs specific to the Yard, including source control, runoff control, and spill response and cleanup. The last training was held in the spring of 2011 and the next is scheduled for early 2013.

Focused Stormwater Compliance Inspections

The Yard was inspected in May 2012 by City stormwater staff to:

- verify compliance with stormwater regulations (including the General Industrial and General Municipal Stormwater NPDES permits, as applicable);
- designate corrective actions (if necessary);
- identify opportunities for improvement; and
- train staff regarding permit requirements as they relate to BMP selection, implementation, and maintenance.

In general, required pollution prevention and stormwater BMPs are being implemented throughout the Yard in accordance with the JURMP. Areas in need of additional or enhanced structural or nonstructural BMPs were identified for corrective action and the associated work routines are being evaluated for improved pollution prevention.

BMP Manual

The City Yard staff utilize a comprehensive BMP manual (City of Escondido 2008), which includes specific information and guidance to effectively implement the required BMPs as specified in this section as well as in the Yard's SWPPP.

4.6 OTHER FIXED MUNICIPAL SITES

4.6.1 Background

In addition to the Yard, numerous other municipal facilities exist throughout Escondido, including administrative buildings, police and fire facilities, parks, open space, and other various municipal sites. As previously mentioned, landfills, incinerators, solid waste transfer facilities, land application sites, sewage sludge treatment or disposal sites, hazardous waste facilities, and municipal airfields do not exist within the city and therefore are not addressed.

4.6.2 Source Characterization

As shown in Figure 4-5, the various types of facilities mentioned above have the potential to contribute pollutants in stormwater runoff if not properly managed. All municipal facilities are evaluated to determine potential pollutants so that appropriate BMPs can be applied. Each site is further evaluated and categorized as being a high, medium, or low threat to water quality on the basis of the following factors:

- type of area or activity,
- type and size of materials used/generated,
- potential for pollutants to be discharged to the MS4,
- location of area/activity, and
- proximity to receiving waterbodies and condition of receiving waterbodies.

To manage and track this information, the City maintains a watershed-based municipal facilities database that is updated annually during municipal facility inspections or as needed. The database includes information such as site location, activity description, potential pollutants, required BMPs, tributary status relative to §303(d)-listed waterbodies, and whether the facility generates pollutants for which the waterbody segment is impaired.

During this reporting period, one update to the municipal inventory occurred: removal of Fire Station Number 4, which is closed and scheduled for demolition. No changes to facility prioritization were made as a result of inspection findings.

4.6.3 Best Management Practice Requirements

BMPs for other fixed municipal facilities are specified relative to pollutants of concern and on-site materials or activities. Depending on the facility location, additional controls may also be applied.

Facility-Specific BMPs

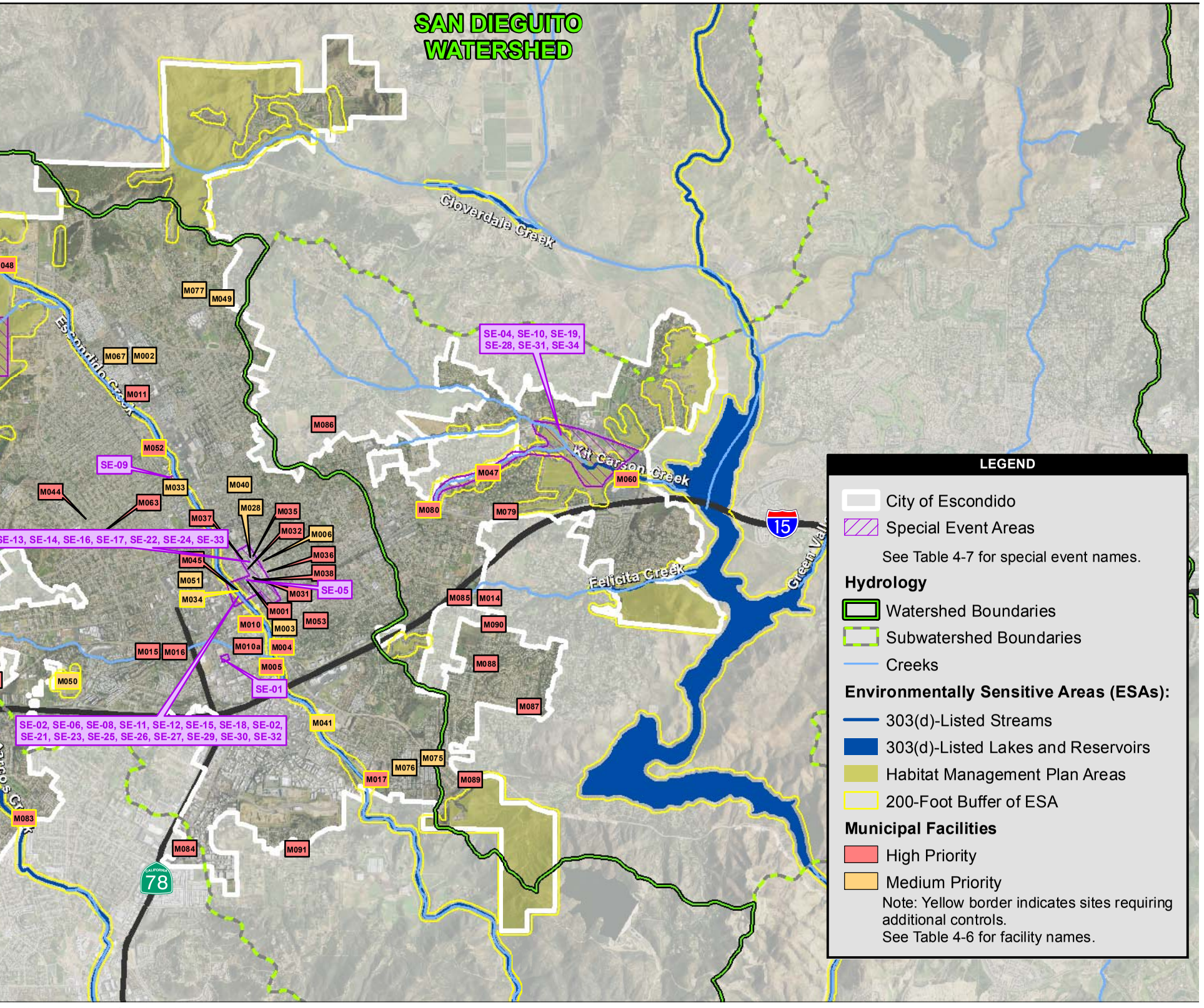
All municipal properties within Escondido are categorized on the basis of usage type and evaluated to determine the most appropriate BMPs. These practices are evaluated throughout the year by designated staff and during the annual stormwater inspections. BMPs are modified, as needed, to improve pollution prevention/reduction effectiveness. Municipal fixed facilities are required to implement the following BMPs as site conditions or activities warrant:

- good housekeeping practices,
- material and waste management,
- vehicle and equipment management,
- spill prevention control and cleanup,
- use of safer alternative products,
- erosion and sediment controls,
- non-stormwater discharge controls,
- SWPPP implementation, and
- treatment controls.

Additional Controls

Supplemental measures are employed for municipal facilities that are tributary to a §303(d)-listed waterbody segment (where pollutants are potentially generated for which the water is impaired) or within or directly adjacent to (i.e., within 200 feet); or discharging directly to receiving waters within ESAs. The following 303(d)-listed waterbodies have impairments that can be associated with pollutants from various fixed municipal facilities:

- Escondido Creek (phosphate, sulfate, TDS, total nitrogen as N, enterococcus, fecal coliform),
- San Marcos Creek (phosphorus),
- Cloverdale Creek (phosphorus, TDS),
- Kit Carson Creek (TDS),
- Felicita Creek (TDS), and
- Lake Hodges (nitrogen, phosphorus, turbidity).



ency Watershed Mapping Committee 2004

Figure 4-5
Municipal Fixed Facilities and Special Event Locations

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The following additional controls were implemented to enhance pollution prevention relative to the pollutants listed above:

- focused training for Parks and Recreation Division staff on minimizing fertilizer use and proper application timing for park maintenance;
- maintenance of vegetated buffer areas in parks and around parking lot facilities (such as City Hall, Mountain View Park, and Parking Lots #1 and #2) to capture sediment and nutrients and help filter runoff to the MEP;
- inspection and assessment of discharge points to identify areas in need of additional protection including retrofitting of drain inlet inserts or gravel bag/fiber roll protection; and
- increased sweeping of all parking lots associated with municipal fixed facilities to reduce potential turbidity and TDS in site runoff.

4.6.4 Program Implementation

The following steps are taken to ensure that BMPs as identified above are being implemented at each fixed municipal site throughout the city.

Education and Staff Training

Maintenance Division staff attend stormwater education/training bi-annually. The last workshop was held in the spring of 2011 and the next training will be held in early 2013. Since several departments fall within this Division, the 2011 training included stormwater regulation and pollution control education specific to the range of activities that staff are required to implement in their applicable fields. The general training and outreach effort is accomplished through a variety of means as described in Chapter 8. Activity-specific trainings and tailgates are conducted as appropriate, depending on the activities performed at each municipal site. Refer to Chapter 8 for a detailed discussion on municipal staff training.

BMP Manual

The City developed and utilizes a BMP manual (City of Escondido 2008), which provides information and guidance to effectively implement the required BMPs appropriate for the activities at each municipal site.

Hotline

The City Public Works main line (760-839-4668) includes a menu selection for reporting illegal dumping into storm drains, creeks, and lakes. This hotline, described in detail in Chapter 8, provides a means for individuals to report stormwater violations for all areas, including municipal facilities and activities.

Facility Inspections

Stormwater inspections are conducted annually for all fixed municipal facilities that meet the inspection requirement criteria as set forth in Order R9-2007-0001. These facilities are designated as high and medium priority within the City's municipal facilities database. Inspections of these facilities involve the following:

- verifying compliance with stormwater regulations,
- identifying issues/violations,
- designating corrective actions (if necessary), and
- identifying opportunities for improvement.

There are 26 fixed municipal areas that are designated as high priority (not including stand-alone municipal parking lots, pump stations, and the Corporate Yard as addressed in previous sections) and that were inspected for stormwater compliance during the 2011–2012 program year. In addition, 13 medium-priority fixed municipal sites were also inspected to verify priority designation and confirm stormwater compliance. Table 4-6 presents all sites that were inspected during the reporting period.

Table 4-6. Municipal Fixed Facilities Inspected, Fiscal Year 2011–2012

ID	JURMP ID	Property Name	Location		
High-Priority Facilities					
1	M016	Community Gardens			Centre City Pkwy and Lincoln Avenue
2	M044	El Norte Park	1395		El Norte Parkway
3	M001	Escondido City Hall and Center for the Arts	201	N	Broadway
4	M010	Fire Station #1	310	N	Quince Street
5	M011	Fire Station #2	421	N	Midway Drive
6	M012	Fire Station #3	1808		Nutmeg Street
7	M013	Fire Station #4	3301		Bear Valley Parkway
8	M014	Fire Station #5	2319		Felicita Road
9	M108	Fire Station #6	1735		Del Dios Hwy
10	M063	Fire Station #7 Site	1220	N	Ash Street
11	M045	Grape Day Park	321	N	Broadway
12	M017	Hale Avenue Resource Recovery Facility	1521	S	Hale Avenue
13	M082	Humane Society	3450	E	Valley Parkway
14	M046	Jesmond Dene Park	2401	N	Broadway
15	M047	Kit Carson Park	3333		Bear Valley Parkway
16	M042	Lake Dixon Park	700	N	La Honda Drive
17	M008	Lake Dixon Water Filtration Plant and Park			La Honda Drive
18	M043	Lake Wohlford Park	25453		Lake Wohlford Road
19	M048	Mayflower Dog Park	3240		Valley Center Road
20	M049	Mountain View Park	1160	S	Citrus Avenue
21	M050	Rod McLeod Park	1701	S	Iris Lane
22	M051	Stephanie Lagunas Youth Activity Area	305	E	Mission Avenue
23	M052	Washington Park	501	N	Rose Street
24	M060	Westfield Shopping Town	272	E	Via Rancho Parkway
25	M053	Westside Park	333	S	Spruce Street
26	M015	Public Safety Facility (Police and Fire)	1163	N	Centre City Parkway
Medium-Priority Facilities					
1	M067	Surplus City Property for Purchase	2245	E	Valley Parkway
2	M034	Boys and Girls Club	115	W	Woodward Avenue
3	M002	East Valley Civic Center	2245	E	Valley Parkway
4	M040	Hidden Valley House	220	S	Cedar Street
5	M039	Interfaith Community Services	401	N	Spruce Street
6	M026	Joslyn Senior Center, Veterans Memorial Bldg	210	E	Park
7	M081	Land Lease El Norte Parkway			El Norte Parkway and Seven Oaks
8	M006	Main Library and Mathes Center	239	S	Kalmia Street
9	M033	Mental Health Systems	620	N	Ash
10	M076	Mountain Shadows Mobilehome Parks	1750	W	Citracado Parkway
11	M028	Police Substation	235	E	Grand Avenue
12	M075	The Views Mobilehome Park	2400	W	Valley Parkway
13	M041	Windsor Garden	1600	W	Ninth Avenue

Inspection findings for municipal parking lots, pump stations, and the Yard are presented in the respective sections within this chapter.

In general, inspections confirmed that required pollution prevention and source control BMPs are being implemented appropriately at municipal facilities. Six locations were issued verbal warnings, primarily due to poor housekeeping issues (e.g., presence of vegetative/organic debris). All sites demonstrated full compliance during follow-up inspections.

Facility inspections may also be conducted as a result of a public report/complaint or as part of an illicit discharge investigation (if applicable). During the reporting period, no reports of this nature led to additional inspections of municipal facilities.

4.7 POWER WASHING

4.7.1 Background

Power washing uses mechanical equipment to create a high-pressure stream of water, typically from a hand-held wand or nozzle for cleaning a wide variety of surfaces and objects. Depending on the application, power washing may be conducted with or without heated water or added cleaners. If not contained properly, wastewater from runoff from power washing has the potential to transport pollutants to surface waters.

4.7.2 Source Characterization

Power washing is conducted in municipal areas as a last resort if an area cannot be sufficiently cleaned through the use of dry methods alone. If needed, City staff are instructed to transfer vehicles, equipment, or other materials to the Yard, where dedicated washwater capture and recycling systems are in place. Other than at the Yard, power washing by municipal staff is discouraged and seldom occurs.

When absolutely necessary, municipal employees may conduct power washing for the following reasons:

- parking lot grease removal,
- building painting preparation,
- heavy equipment cleaning (when it is not feasible at the Yard's washwater recycling facility),
- graffiti removal, and
- preparing or treating certain surfaces.

4.7.3 Best Management Practice Requirements

Although dry cleaning methods are the preferred choice of cleaning by municipal staff, it may be an ineffective solution and power washing may be deemed necessary. If necessary, power washing must be conducted in accordance with the BMP requirements below:

- Prior to pressure washing activities, determine wastewater collection methods and proper wastewater disposal for each cleaning activity planned.
- Avoid power washing surfaces that contain lead-based paint or freestanding liquids (e.g., oil, solvents, antifreeze, etc.).
- Identify the disposal location.
- Maximize the use of dry methods for surface precleaning so that pollutants in the wastewater generated are reduced.
- Minimize the amount of water used during pressure washing activities (reduce wastewater generation).
- Use biodegradable cleaning products.

- Before power washing, sweep the area of any visible residual solids.
- Identify where all area storm drains are situated.
- Locate depressed areas that can be used to pool wastewater for collection.
- Contain and collect wastewater using vacuum pumps, booms/berms, portable containment areas, weighted storm drain covers, inflatable plumber's plugs, holding tanks, portable sump pumps, absorbents, or other suitable method.
- Place an oil-absorbent mat/pad on the surface of collected wastewater to help reduce oils in the wastewater collection area.
- Once wastewater has been collected, sweep up the visible solids remaining.
- Wastewater containing garbage, food wastes, or visible trash may not be discharged to land.
- Disposal of power washing wastewater into the sanitary sewer must be in accordance with the City's sanitary sewer ordinance and must meet pretreatment discharge requirements.
- Discharges of power washing wastewater into a septic system within City limits must not contain constituents known to be harmful to septic systems or likely to contaminate groundwater.

These or other similar procedures must be used to capture washwater and prevent pollutants from entering the MS4.

Because the required standard procedures for power washing serve to eliminate runoff and associated pollutants from entering the MS4 and ultimately the receiving waterbodies, the same procedures are employed when power washing is conducted in areas that are tributary to CWA §303(d)-impaired waterbodies or that are located within or directly adjacent to ESAs.

4.7.4 Program Implementation

The following procedures were implemented to ensure that the standard procedures were followed for power washing activities occurring during the reporting period.

Staff Training

As the major method of controlling pollution from power washing activities, the City has specific training materials on power washing BMPs for its employees. These materials specify that individuals performing power washing must demonstrate the following:

- they have the appropriate equipment necessary for controlling and cleaning up discharges,
- they know how to use the equipment, and
- they understand waste control BMPs and cleanup requirements.

BMP Manual

Should additional guidance be needed for properly conducting power washing and managing the wastewater generated, the municipal section of the City's BMP manual (City of Escondido 2008) provides information and guidance to effectively carry out the standard procedures associated with power washing. This BMP manual is available to all municipal staff.

4.8 SPECIAL EVENT VENUES

4.8.1 Background

Agricultural fairs, heritage days, and other special events are important occasions for Escondido residents and outlying rural communities. These events showcase unique aspects of Escondido and represent one of the few opportunities when residents and businesses can come together to celebrate what makes their community special.

4.8.2 Source Characterization

The City holds various special events throughout the year. These events have the potential to contribute pollutants (primarily trash and debris) that could be introduced into nearby surface waters. As a result, pollution prevention measures and BMPs are implemented during these events.

An important element of special events is minimizing the amount of waste generated before, during, and at the end of the event. Special events can generate hundreds of thousands of tons of waste each year, which can represent a significant cost, consume many volunteer or staff hours, and potentially impact water quality (through event non-stormwater discharges and waste exposure to rainfall at the event site and at the landfills). Accordingly, avoiding waste generation or providing opportunities and tools to adequately capture and contain it are target outcomes for special events management—particularly when special events are used as a forum for promoting pollution prevention through demonstration.

Events that are held on a consistent basis and at a fixed location are included as part of the watershed-based municipal inventory. The inventory is updated annually or as changes in special events occur. A list of the special events that took place during the reporting period is provided in Section 4.8.4. The BMPs applied to these events, as appropriate, are discussed in Section 4.8.3. Each event sponsor must obtain a permit that includes stormwater requirements. Other measures that are taken to ensure that the appropriate BMPs are installed and maintained are discussed in Section 4.8.4.

4.8.3 Best Management Practice Requirements

BMPs implemented for special events address pollutants of concern (largely trash and litter) and are applied based on event- and site-specific conditions, needs, and feasibility to the MEP. These BMPs include the following:

- litter and trash management,
- inspection of venue during the event,
- street sweeping,
- catch basin cleaning,
- stormwater handout distribution,
- pet waste dispenser distribution, and
- post-event inspection.

Special events provide a valuable opportunity to outreach, inform, and educate the public on stormwater awareness. As part of the public education campaign, the City disseminates information and materials to event attendees. Further detail regarding the public education campaign is provided in Chapter 8.

The City assesses the need for additional BMPs, as changes to activities or new events occur.

Additional Controls

For events that are expected to generate a significant amount of trash (e.g., Christmas Parade, Street Fair), additional controls are implemented and include the following:

- For events where trash is generated within municipal roads or parking lots, supplemental street sweeping is scheduled with Maintenance and Operations staff and conducted subsequent to the event.
- Temporary screens are used on storm drain inlets or catch basins to provide inlet protection where trash or debris has the potential to enter.
- Catch basins that intercept trash and debris from special event locations are inspected after each event and cleaned as needed by Maintenance and Collections staff.
- Temporary fencing is used when feasible and is useful in preventing trash from being transported off premises and into adjacent MS4s or waterbodies.

4.8.4 Program Implementation

Table 4-7 identifies the special events that took place during the reporting period.

Table 4-7. Special Events

Map ID	Event	Location	Sponsor
SE-01	American Crown Circus	635 W. Mission Ave.	American Crown Circus Inc.
SE-02	American Heritage Car Show	Grape Day Park	Escondido History Center
SE-03	Farmers Market	Grand Avenue	Escondido Downtown Business Association
SE-04	California Flying Disc Championships	Disc Golf Course in Kit Carson Park	San Diego Aces Disc Golf Association
SE-05	City Employee Health Fair	City Hall	City of Escondido
SE-06	Community Easter Egg Hunt	Grape Day Park	Cornerstone Church of San Diego
SE-07	Cruisin' Grand	Grand Ave. & Broadway	So Cal Show Promotions
SE-08	Dia del Ninos	Grape Day Park	San Diego Children's Discovery Museum
SE-09	Escondido Chamber of Commerce Carnival	Ash & Washington	Christiansen Amusements
SE-10	Escondido East Rotary Club BBQ	Kit Carson Park	Escondido East Rotary Club
SE-11	Escondido High 50+ Year Reunion	Grape Day Park	Escondido History Center
SE-12	Escondido Jaycees Christmas Parade	Broadway from Esc. High to Grape Day Park	Escondido Jaycees
SE-13	Escondido Street Fair	Grand Avenue	Escondido Chamber of Commerce
SE-14	Escondido Sunrise Rotary's Grape Day 5K	Escondido Streets	Escondido Sunrise Rotary Club
SE-15	Fiesta Mexicana	Grape Day Park	Huatulco Entertainment
SE-16	For the Love of Chocolate & Sweet Art Festival	Maple Street between Grand Ave & 2nd	Downtown Business Association
SE-17	Grand Champion Cruise	Kalmia St. between Grand & the alley	So Cal Show Promotions
SE-18	Grape Day Festival & Parade	Grape Day Park & Grand Ave.	Escondido History Center
SE-19	Great Strides Walk-a-thon	Kit Carson Park	Cystic Fibrosis Foundation
SE-20	Hidden Valley Kiwanis Trout Derby	Dixon Lake	Hidden Valley Kiwanis
SE-21	Hope for Smiley Ricky	Grape Day Park	Martinez Family
SE-22	Hula Paloosa	Kalmia St. between Grand & the alley	Downtown Business Association
SE-23	Independence Day Celebration	Grape Day Park/Great Green	CCAE
SE-24	Jingle Bell Cruise	Broadway downtown	So Cal Show Promotions
SE-25	Mother's Day Festival 2012	Grape Day Park	Golazo Sports Magazine
SE-26	Movies in the Park	Grape Day Park	Escondido History Center
SE-27	National Night Out	Grape Day Park	National Association of Town Watch
SE-28	Paws in the Park	Kit Carson Park	Escondido Humane Society
SE-29	Peace Begins with ME	Grape Day Park	Escondido Education COMPACT
SE-30	Saturdays in the Park	Grape Day Park	Escondido History Center
SE-31	Spring Fling Pro	Disc Golf Course in Kit Carson Park	San Diego Aces Disc Golf Association
SE-32	Spring Forward Festival	Grape Day Park	The Kids of America
SE-33	The Wedge	Grand & Broadway	Downtown Business Association
SE-34	Walk for Life	Kit Carson Park	Alternatives Women's Center

The following steps were taken to ensure that the required BMPs were implemented for special events.

Education and Staff Training

The City's municipal education and outreach program is designed to inform and to train municipal employees on urban runoff impacts and associated required BMPs. The general training and outreach effort is accomplished through a variety of means as described in Chapter 8.

BMP Manual

The municipal section of the City's BMP Manual (City of Escondido 2008) provides information and guidance to effectively carry out BMPs required during special events. The manual was distributed and is available to all staff involved in carrying out required BMPs for special events.

Pre-Event Planning Meetings

Planning meetings are held with event coordinators and City staff to outline expectations, including regulations and restricted activities associated with stormwater, many of which are incorporated into the permit applications.

Inspections

Inspections were conducted (for multi-day events) by designated staff in Streets and Parks Divisions to ensure compliance with stormwater regulations. Inspections were also conducted subsequent to each event to ensure that proper cleanup practices were completed.

4.9 MANAGEMENT OF PESTICIDES, HERBICIDES, AND FERTILIZERS

4.9.1 Background

Improper use, handling, or storage of pesticides, herbicides, and fertilizers can allow these chemicals to come into contact with receiving waters via stormwater or urban runoff from overwatering. To the extent practicable, the City minimizes or prohibits the use of these materials unless they are essentially needed.

4.9.2 Source Characterization

The main use of pesticides, herbicides, and fertilizers is to maintain municipal lawn and landscaped areas. These products are used primarily at developed park sites. Currently, the City manages these products through the Maintenance Division of the Public Works Department.

4.9.3 Best Management Practice Requirements

In accordance with Order R9-2007-0001, BMPs are employed as pesticides, herbicides, and fertilizers are used or stored throughout Escondido. These BMPs are summarized below.

Integrated Pest Management (IPM) Program

The City's IPM program is compliant with and implemented using the guidelines outlined by the California Department of Pesticide Regulation and the N-series publication for nonagricultural pesticide handlers. The program is monitored by the San Diego County Department of Agricultural Weights and Measures Pesticide Regulation Division.

Along with annual pesticide handlers training for employees who work with and apply pesticides, the City has an in-house Disciplinary Action Policy that includes field compliance inspections and disciplinary consequences for code violations by employees. The pesticide handler's training includes such topics as Workers Right-to-Know information; controlling leaks and spills; moving, storing, and disposing of pesticides; and first aid.

The City provides BMP training for landscape maintenance personnel. This training includes such topics as fertilizer application, vegetation control, and disposal and stormwater protection.

In accordance with the City's IPM program, insect pest management practices are closely managed and applications are minimized to the extent practicable. The majority of pest control applications are for weed and rodent control.

Spill Prevention, Control, and Cleanup

City staff involved in the application or storage of chemicals are trained in practices to prevent, control, and clean up potential spills and are provided with spill kits in the event of a spill.

Proper Storage and Disposal of Unused Pesticides, Herbicides, and Fertilizers

As part of the IPM program, storage and disposal of any used portion of pesticides and herbicides are conducted in accordance with container labels for each chemical as required per 40 CFR 156.10(i)(2)(ix). These instructions also include the appropriate disposal of any rinse liquids resulting from cleaning of pesticide application equipment and the disposal of the pesticide container. At a minimum, pesticides, herbicides, and fertilizers and associated equipment for application are stored in areas where contact with stormwater is prevented.

Additional Controls

The City restricts the use of pesticides, herbicides, or fertilizers through the implementation of its IPM program, a source control effort that benefits areas that are tributary to CWA §303(d)-listed waterbodies impaired for nutrients or pesticide/herbicide constituents or that are located within ESAs. Currently, these include the following waters and their associated impairments:

- Escondido Creek (DDT, manganese, phosphate, selenium, sulfate)
- Lake Hodges (manganese, nitrogen, phosphorus)

4.9.4 Program Implementation

The City conducts the following steps to ensure implementation of the IPM program and other designated BMPs for the use and storage of pesticides, herbicides, and fertilizers.

Municipal Staff Education and Training

Employees involved in the use or handling of pesticides, herbicides, or fertilizers attended pesticide safety training in the spring of 2012. This training session involves educating appropriate employees about the proper use and storage of these chemicals. Records associated with these trainings are kept at the Yard.

BMP Manual

The City's BMP manual (City of Escondido 2008) provides the necessary information and guidance to effectively carry out the required BMPs associated with the use, handling, and storage of pesticides, herbicides, and fertilizers. The BMP manual is available to all employees involved in these activities.

Application Documentation

The City continued to maintain records of the quantity and location of chemical usage for each application area. These records help to ensure that BMPs are being implemented and allow the City to modify the IPM program, where necessary.

5 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 INTRODUCTION

The Industrial and Commercial component of the City's JURMP is designed to reduce the discharge of pollutants in urban runoff from both stationary industrial and commercial areas and similar mobile businesses to the Maximum Extent Practicable (MEP). Facility owners and operators are mandated by City ordinances to implement stormwater pollution prevention measures to protect receiving waters and other environmental resources in accordance with the requirements of Order R9-2007-0001.

5.2 STATIONARY INDUSTRIAL AND COMMERCIAL SITES / SOURCES ELEMENT

5.2.1 Background

There are thousands of industrial and commercial facilities conducting business within the City's jurisdiction. The following sections describe the City's efforts to control urban runoff pollution from stationary industrial and commercial facilities.

5.2.2 Source Characterization

As presented in the Introduction (Chapter 1), industrial and commercial land uses within Escondido make up approximately 7 percent of the total jurisdictional area. Commercial land uses account for approximately 4 percent of the total land area and include administrative office areas. Industrial land uses account for approximately 3 percent of the total land area, all of which are designated as light industry. Although these land uses only comprise a small portion of the total land area within the city, they still have the potential to contribute a wide variety of pollutants to receiving waters. Based on prior site assessments and inspections, the following pollutants could occur at commercial and industrial sites:

- petroleum hydrocarbons from lubricants and fuels,
- fat/oil and grease from food preparation,
- nutrients from fertilizers,
- caustic substances from cement and other building materials,
- metals from mechanical devices,
- bacteria from various wastes,
- sediment,
- trash, and
- pesticides.

There are no landfills, no facilities subject to the Superfund Amendments and Reauthorization Act Title III, and no hazardous waste management facilities in Escondido.

To track and assess potential pollutant sources and focus program efforts where they are needed most, the City maintains and annually updates an inventory of all commercial and industrial facilities. The inventory is made up of facilities from the City's business license database that have the potential to contribute pollutants to the MS4 and are further categorized as being either a high threat or medium threat to water quality based on facility type, outdoor activities, past compliance findings, and proximity to surface waters and ESAs. Proximity to ESAs, including sensitive waterbodies (i.e., CWA §303[d]-listed waters), is determined through the use of GIS technology. In accordance with Order R9-2007-0001, the GIS-based inventory also includes the following information associated with each business: name; address; pollutants potentially generated by the site/source (and identification of whether the site/source is tributary to a CWA §303[d] waterbody segment and generates pollutants for which the waterbody segment is impaired); and a narrative description including SIC codes that best reflects the principal products or services provided by each facility.

Updates to the commercial and industrial facilities inventory during this reporting period were as follows:

- inclusion of new facilities that applied for city business licenses,
- removal of sites that moved or went out of business, and
- changes in priority status based on site activities or inspection findings.

Updates to the inventory of medium- and high-priority stationary facilities are provided in Appendix C. Figure 5-1 illustrates the location of all industrial and commercial facilities included in the database.

5.2.3 Best Management Practice Requirements

Owners and operators of industrial and commercial facilities throughout Escondido are required to implement a variety of BMPs to reduce and/or eliminate pollutants in stormwater discharges. BMPs are selected on the basis of business type and pollutant-generating activities occurring on-site. Minimum-required BMPs, as well as additional controls required for sites meeting specific permit criteria, are presented in Table 5-1.

Additional Controls for Stationary Industrial and Commercial Sites/Sources

Sites meeting the following criteria and that have the potential to contribute pollutants to runoff are designated as high priority and are inspected annually regardless of site type/activity:

- within or adjacent (within 200 feet) to an ESA;
- discharging directly to receiving waters within an ESA;
- tributary to a CWA §303(d)-listed waterbody segment, where a site/source generates pollutants resulting in impairment of the waterbody; and
- commercial or industrial sites/sources that the City determines may contribute a significant pollutant load to the MS4.

CWA §303(d)-listed waterbodies and their respective impairments within the City's jurisdiction are as follows:

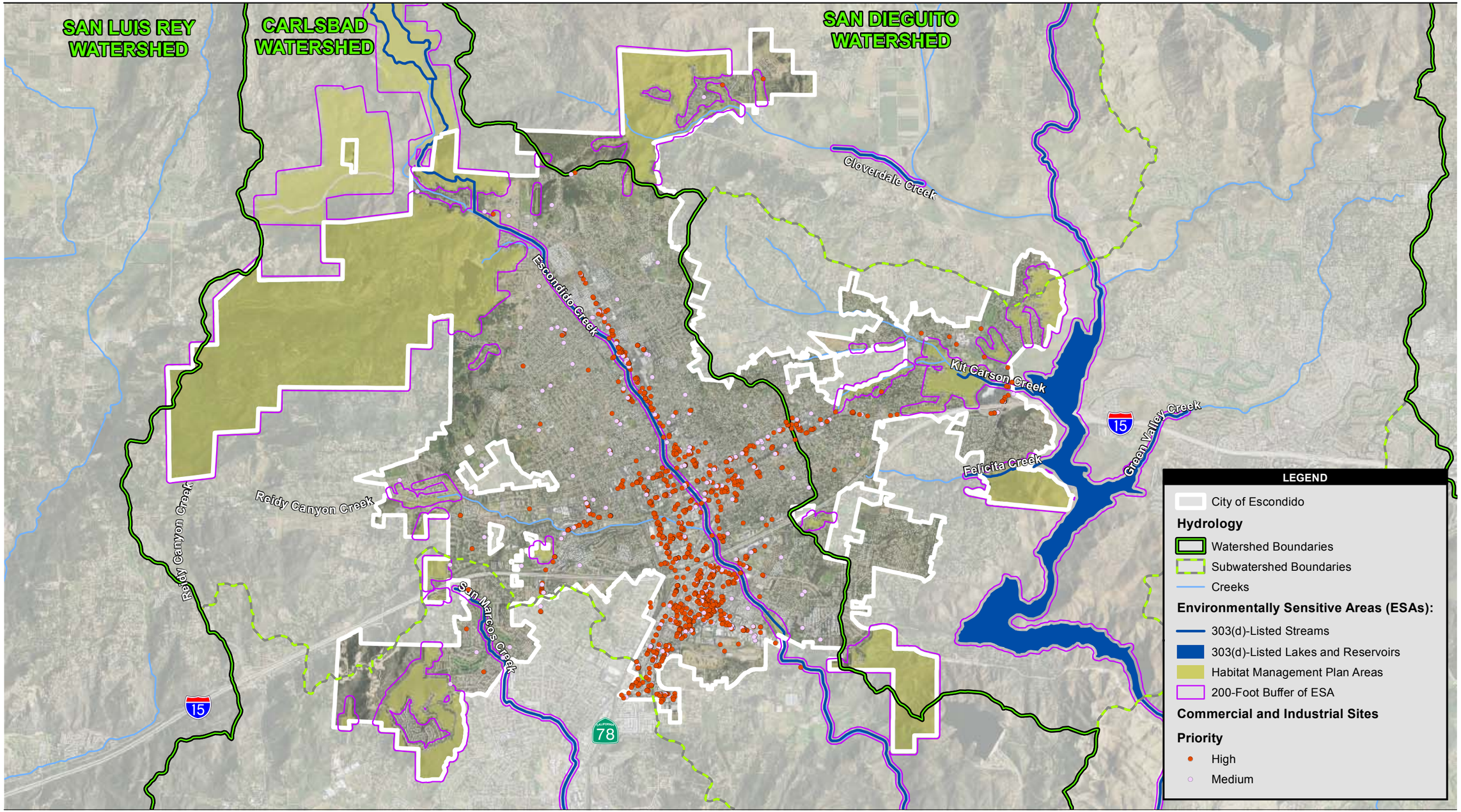
- San Marcos Creek: phosphorus, DDE, sediment toxicity, selenium
- Escondido Creek: DDT, manganese, phosphate, selenium, sulfate, TDS, toxicity, total nitrogen as N, enterococcus, fecal coliform
- Cloverdale Creek: phosphorus, TDS
- Kit Carson Creek: pentachlorophenol, TDS
- Felicita Creek: aluminum, TDS
- Lake Hodges: color, manganese, mercury, nitrogen, pH, phosphorus, turbidity

5.2.4 Program Implementation

During the current reporting period, the City implemented the methods described below to promote compliance and awareness of pollution prevention measures and BMP implementation at industrial and commercial facilities.

Facility Owner/Operator Education and Outreach

During industrial and commercial inspections, various educational and outreach materials were distributed to facility owners and operators based on site conditions and activities. In addition, the City's ordinances relative to stormwater and pretreatment were either distributed or discussed. Where necessary, inspectors designated site-specific BMPs to address on-site pollution-reduction concerns.



Source: DigitalGlobe 2008; State Water Resources Control Board 2006; California Interagency Watershed Mapping Committee 2004; City of Escondido 2009, 2011; SanGIS 2011

6,000 3,000 0 6,000 Feet

Scale: 1 = 72,000; 1 inch = 6,000 feet

Figure 5-1
Priority Commercial and Industrial Facilities

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Table 5-1. Potential Pollutant-Generating Industrial and Commercial Activities/Areas and Corresponding BMPs

Commercial / Industrial Facility Type	Potential Pollutants	BMPs Required Based on Site Conditions
Automobile/Boat/Equipment Repair, Maintenance, Fueling, or Cleaning	Oil & Grease VOCs Detergents (MBAS) Mechanical Fluids and Lubricants Metals	Secondary containment Spill kits/cleanup Preventative runoff berms Sweeping Dumpster covers
Auto/Vehicle Parking Lots/ Miscellaneous Storage	Oil & Grease VOCs Mechanical Fluids and Lubricants Metals	Sweeping Secondary containment Spill cleanup
Retail/Wholesale Fueling and Petroleum Products	Oil & Grease VOCs Detergents (MBAS) Mechanical Fluids and Lubricants Metals	Secondary containment Spill kits/cleanup Preventative runoff berms Sweeping Dumpster covers
Pest Control Services	Pesticides	Indoors/proper storage Spill kits
Eating and Drinking Establishments	Trash Grease Bacteria Cleaners	Secondary containment (oil and grease) Spill kits/cleanup Preventative runoff berms Sweeping Dumpster covers
Cement/Masonry/Aggregate/Stone/ Excavation/Plastering (stationary)	Sediment Cutting fluids Cement waste	Secondary containment Covering of outdoor storage materials Spill kits/cleanup Preventative runoff berms Sweeping Dumpster covers
Painting/Coating (stationary)	VOCs Metals	Secondary containment Covering of outdoor storage materials Spill kits/cleanup Preventative runoff berms Sweeping Dumpster covers
Golf Course/Landscaping	Oil & Grease Detergents Fertilizer (Nutrients) Pesticides Sediment	Secondary containment and/or indoor storage Spill kits/cleanup Covering of outdoor storage materials (stockpiles) Secondary containment Dumpster covers
Pool Cleaning (stationary)	Acids/Bases Chlorine products Cleaners	Secondary containment and/or proper storage (no exposure)
Sanitary Services (stationary)	Bacteria Detergents (MBAS)	Secondary containment Covering of outdoor storage materials Spill kits/cleanup Preventative runoff berms
Construction/Contractors	Oil & Grease Sediment VOCs Trash Cement	Secondary containment Covering of outdoor storage materials Spill kits/cleanup Preventative runoff berms Sweeping Dumpster covers
Textiles/Fabrics	Cutting fluids VOCS Trash Oil & Grease	Secondary containment Covering of outdoor storage materials Spill kits/cleanup Preventative runoff berms Sweeping Dumpster covers

Commercial / Industrial Facility Type	Potential Pollutants	BMPs Required Based on Site Conditions
Special Trade Contractors, including Metal Works, Recycling, Chemicals, Welding, Drywall	Cutting fluids VOCS Trash Oil & Grease Sediment Detergents (MBAS)	Secondary containment Covering of outdoor storage materials Spill kits/cleanup Preventative runoff berms Sweeping Dumpster covers

MBAS = methylene blue active substances
VOCs = volatile organic compounds

Annual Inspections

The City aims to annually inspect all businesses designated as high or medium priority. Stormwater inspections are performed by the City's Utilities Wastewater Division in conjunction with pretreatment program inspections. This ensures that, in addition to stormwater BMP requirements, businesses are inspected for proper maintenance of grease traps, clarifiers, and other pretreatment devices that have the potential to result in illicit discharges and to impact water quality. No third-party inspections were conducted during the reporting period. The overall number of high-priority and medium-priority businesses within the City's inventory is 1,430; however, the number is consistently fluctuating due to businesses closing, opening, and being reprioritized. During this reporting period, the City's stormwater inspection totals continued to be robust, with more than 1,400 priority businesses inspected by trained municipal staff. These inspection totals included more than 500 food-based businesses, which were inspected twice during the program year to assess compliance with stormwater and pretreatment regulations. This effort alone accounts for more than 1,000 inspections annually. In addition, new facilities are added to the inspection process annually. All businesses that have applied for a new business license are flagged and, based on SIC/NAIC, are added to industrial and commercial facilities inventories for inspection. Approximately 152 new businesses were added and inspected during this reporting period. Of the 152 new businesses, 73 remain on the existing high- and medium-priority inspection inventory (Appendix C). The remaining 79 businesses were either removed from the inventory or ranked as low-priority due to business activity (typically administrative) or location (i.e., outside of the City's jurisdiction).

Inspections are structured to ensure full stormwater compliance at each site. During annual inspections, owners/operators were notified of applicable BMP requirements if conditions were found deficient. Sites were assessed based on stormwater compliance in the following areas:

- maintenance/general site housekeeping,
- pollutant source control/material storage,
- erosion control,
- sediment control,
- non-stormwater control, and
- waste management control.

Compliance inspectors also performed the following tasks:

- assessed compliance with City ordinances and permits related to urban runoff;
- assessed BMP implementation, maintenance, and effectiveness;
- confirmed facility coverage under the General Industrial Permit (Notice of Intent [NOI] and/or Waste Discharge Identification number), when applicable;
- reviewed BMP implementation plans, when applicable, and determined whether they were being properly implemented;
- reviewed facility monitoring data, when applicable;

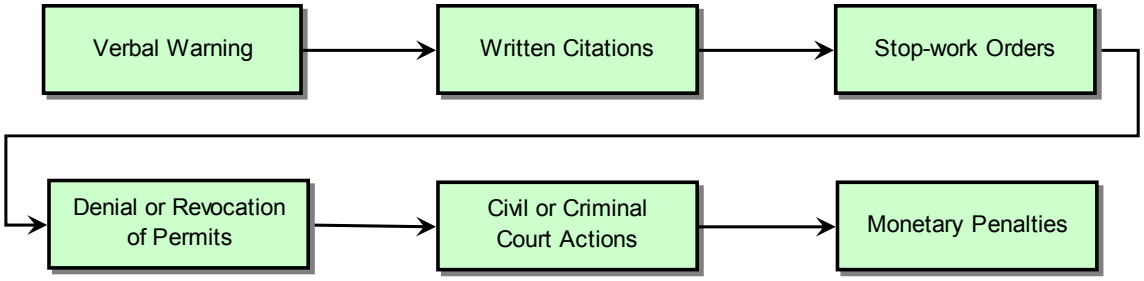
- informed operators/owners on stormwater pollution prevention, as conditions warranted; and
- conducted visual observations for non-stormwater discharges, potential illicit connections, and potential discharge of pollutants in stormwater runoff.

As evidenced in past years, the annual compliance inspection process has demonstrated that a large percentage of the regulated community is responsive to JURMP requirements.

Enforcement and Follow-Up Measures

Enforcement actions conducted during the current reporting period included verbal warnings and written citations (e.g., Notice of Correction [NOC]), depending on past violation frequencies and the severity of on-site conditions. This year, as well as in years past, NOC violations have been effective in correcting compliance issues and have had lasting effects (as confirmed by subsequent inspections). Nonetheless, the City has structured its enforcement program to now include escalating actions to allow inspectors the flexibility to establish appropriate compliance penalties and corrective action time frames on a case-by-case basis. This escalating process is illustrated in Figure 5-2.

Figure 5-2. Enforcement Action Process



During the reporting period, NOCs were the primary form of enforcement action used to correct compliance issues at commercial or industrial facilities. Each business was given a specific timeframe to correct noncompliance based on the severity of the issues found. Follow-up inspections were conducted for every business that received an NOC. In addition, verbal warnings were issued when the severity of the activities or issues did not warrant an NOC.

All commercial/industrial inspections and NOC follow-ups were completed prior to the end of the fiscal year (June 30). Inspections confirmed that designated BMPs for industrial and commercial facilities are implemented consistently at the majority of sites. During this reporting period, 20 verbal warnings and 50 NOCs for stormwater violations were issued to industrial and commercial businesses. The NOC process serves to ensure that businesses are held to the designated BMP requirements and that compliance is achieved. The majority of the NOCs were given for poor housekeeping practices, inadequate maintenance of pretreatment devices (e.g., grease traps), and lack of secondary containment. Several businesses stored various materials in containers (e.g., 55-gallon drums) outside without secondary containment or weather protection. Other common BMP requirements found to need enhancement were the following:

- frequency of sweeping,
- presence of dumpster covers,
- implementation of spill kits, and
- removal of equipment/materials stored outside or properly covered.

Following issuance of the initial NOCs, all 50 sites were found to be compliant upon re-inspection.

Businesses that received an NOC for an illegal discharge that were not identified as a result of inspections but rather another enforcement mechanism, such as a hotline complaint, are discussed in Chapter 7, Illicit Discharge Detection and Elimination Component, and listed in Appendix D.

Identification of Non-Filers

During annual inspections, stormwater compliance at industrial and commercial facilities was evaluated relative to the Industrial General Permit (RWQCB 1997). No new non-filers were discovered during this reporting period. The non-filer businesses listed in Table 5-2 were provided to the Regional Board in the past three JURMP annual reports and via email in 2010, but, to date, have not obtained the recommended Industrial Permit coverage.

Table 5-2. Industrial General Permit Candidates

Business Name	SIC Code	Address
Pauley Equipment Rental	3523001	1110 W. Washington Ave.
Neff Equipment Rental	532*	955 W. Mission Ave.
Rebel Rental	7359001	142 W. Mission Ave.
Pine Tree Lumber (Wholesale and Retail)	5211001	707 N. Andreasen Dr.
J & W Redwood Co.	5211001	1179 W. Washington Ave.
Escondido Lumber Co.	5013001	310 S. Quince St.
Santa Barbra Transportation	4151001	520 Gannon Pl.

* NAIC

5.3 MOBILE SOURCES ELEMENT

5.3.1 Background

Numerous mobile services occur throughout the City's jurisdiction that can contribute a variety of pollutants to the MS4. Urban runoff pollution potential from these business areas varies temporally and spatially, and predicting where potential pollution might occur can be difficult. Identifying potential pollutants from mobile sources, requiring appropriate BMPs and educating business owners, is critical to preventing discharges from these mobile sources.

5.3.2 Source Characterization

The City developed and maintains an inventory of mobile businesses, which is updated annually from the business license database. The pollutants identified in Table 5-3 have been inferred from the types of mobile businesses operating in Escondido. However, the actual pollutant discharges occurring from these sources is based on proper handling and management of associated products and the waste streams generated.

Table 5-3. Potential Pollutants Associated with Mobile Businesses

Mobile Business Type	Potential Pollutants
Vehicle/Pressure/Carpet Washing	Detergents (MBAS) Oil & Grease Mechanical fluids (e.g., hydraulic, antifreeze) VOCs
Pest Control Services	Pesticides
Cement/Masonry/Aggregate/Stone/ Excavation/Plastering	Sediment Cutting fluids Cement waste
Painting/Coating	VOCs Metals
Pool Cleaning	Acids/Bases Chlorine products Cleaners
Sanitary Services	Bacteria Detergents (MBAS)
Construction/Contractors	Oil & Grease Sediment VOCs Trash Cement
Special Trade Contractors, including Metal Works, Recycling, Chemicals, Welding, Drywall	Cutting fluids VOCS Trash Oil & Grease Sediment Detergents (MBAS)

MBAS = methylene blue active substances
VOCs = volatile organic compounds

5.3.3 Best Management Practice Requirements

BMPs required of mobile businesses are designed to address proper management of contaminated runoff from their activities. Operators of mobile activities that generate wastewater must capture that wastewater and prevent pollutants from entering the MS4. As applicable, the following BMPs were required of mobile businesses to control wastewater and prevent pollution:

- Identify wastewater collection/containment methods and the ultimate disposal locations before the activity, sweep the area beforehand to collect visible solids.
- Use dry methods for surface precleaning to reduce wastewater generation.
- Minimize water use.
- Use biodegradable cleaning products.
- Identify and protect downstream storm drains.
- Contain and collect wastewater using vacuum pumps, booms/berms, portable containment areas, weighted storm drain covers, inflatable plumber's plugs, holding tanks, portable sump pumps, absorbents, or other suitable method.
- Use oil-absorbent mats/pads to help contain oils in wastewater.
- Once wastewater has been collected, sweep up visible solids remaining.

- Separate and dispose of garbage, food wastes, or visible trash in wastewater generated.
- Dispose of power washing wastewater to the sanitary sewer, if allowable under the City's sanitary sewer ordinance.
- Comply with pretreatment discharge requirements.

Because the required standard procedures for power washing serve to eliminate runoff and associated pollutants from entering the MS4 and ultimately the receiving waterbodies, the same procedures are required when power washing is conducted in areas that are tributary to CWA §303(d)-impaired waterbodies or that are located within or directly adjacent to ESAs.

5.3.4 Program Implementation

Education and Outreach

As part of the business license application and renewal process, mobile businesses were provided with information associated with local ordinance and BMP requirements specific to reducing the discharge of pollutants to the MEP.

Business License Application Process

Before business licenses were granted, applicants were required to demonstrate that they:

- have the appropriate equipment necessary to control, contain, clean, and recover discharges;
- know how to use the equipment; and
- understand waste control BMPs and cleanup requirements.

City business license staff members were trained to screen and assess the knowledge of various mobile business applicants regarding urban runoff pollution prevention.

Enforcement Measures

Since the location of mobile business activities is unpredictable, the process of confirming that required BMPs are being employed is challenging. The hotline is the primary method the City uses to assist with this effort. Another method includes visual observations conducted by City staff and stormwater inspectors while performing other activities throughout the city.

As with stationary businesses, the City enforces stormwater regulations for mobile businesses through a variety of means when violations are observed. Depending on violation frequencies and severity, enforcement actions are designed to escalate from a verbal warning to stop-work orders and/or monetary penalties.

6 RESIDENTIAL COMPONENT

6.1 INTRODUCTION

Residential land use areas and activities have the potential to contribute pollutants through urban runoff to Escondido's waterways. In an effort to prevent and/or reduce these pollutants, the City has designated and implemented pollution prevention and source control measures aimed at specific high-priority areas and activities. To better educate residents, the City develops and implements a broad range of tools and programs aimed at preventing pollutants from entering its storm drain system and nearby waterways.

6.2 SOURCE CHARACTERIZATION

Residential land use in Escondido constitutes approximately 34 percent (9,357 acres) of the total jurisdictional land uses, some of which are located within or adjacent to ESAs (e.g., a CWA §303[d]-listed impaired waterbody) where pollutants in runoff are of particular concern. Residential land use within or directly adjacent to ESAs is designated as an area requiring high prioritization for urban runoff controls. Figure 6-1 summarizes the residential areas around Escondido and identifies those that are within or adjacent to ESAs.

Because various domestic activities can introduce pollutants to urban runoff, they have the potential to contribute pollutants to Escondido's waterways through a variety of means, which are discussed below.

Automobile Repair and Maintenance

Repair and maintenance of automobiles occur frequently in residential neighborhoods. Automobile repair and maintenance activities, done by either residents or professional service providers, have the potential to contribute motor oil, grease, antifreeze, solvents, trace metals, and fuel to driveways and streets where they can be picked up by runoff and discharged to the MS4. Well-maintained vehicles will pollute less because they are less likely to leak fluids, require less gasoline to operate, and produce lower tailpipe emissions of hydrocarbons and particulates.

Automobile Washing

Automobile washing can potentially contribute detergents and foaming agents, sediments, metals, and hydrocarbons into receiving waterbodies. Runoff of washwater from driveways, carports, streets, and parking lots can convey these pollutants to storm drains, which could eventually discharge to receiving waters.

Automobile Parking

Vehicle parking on driveways, streets, or parking lots contributes to the accumulation of pollutants (particularly hydrocarbons) on these impervious surfaces when poorly maintained vehicles leak various fluids. Once deposited and exposed to runoff, these pollutants have the potential to be conveyed to the MS4 and surface waterbodies.

Home and Garden Care Activities and Product Use

A variety of home and garden care activities can potentially contribute pollutants to urban runoff, including the handling, storage, and disposal of hazardous products; excessive irrigation; and disposal of green waste. The conveyance of substances such as paints, insecticides, fertilizers, and cleaning products in urban runoff can potentially lead to aquatic toxicity, nutrient enrichment, and algal blooms in surface waters. Runoff from excessive irrigation can potentially convey these dissolved contaminants to the stormwater conveyance system.

Green Waste

The presence of green waste (e.g., grass, leaves, tree branches) in waterbodies can potentially affect the natural flow and configuration of stream channels, contribute to the suffocation of bottom-dwelling organisms, and increase the biochemical oxygen demand, which can decrease the amount of dissolved oxygen available for aquatic organisms.

Disposal of Trash and Household Hazardous Waste

If improperly disposed of, trash and household hazardous waste (e.g., paints, thinners, solvents, and pesticides) can be washed into surface waters after being exposed to rainfall and runoff. Because green waste is a byproduct of gardening and landscape maintenance, it can often contain residues of insecticides, pesticides, and fertilizers that could be transported into sensitive surface waters by runoff.

Disposal of Pet and Animal Waste

Animal waste contributes fecal bacteria to receiving waters when pet owners fail to act responsibly—including on their own private residential lawns and properties. In Escondido, equestrian and other semirural livestock land uses have a significant potential to negatively impact water quality if waste is left exposed to weather and allowed to run off residential properties.

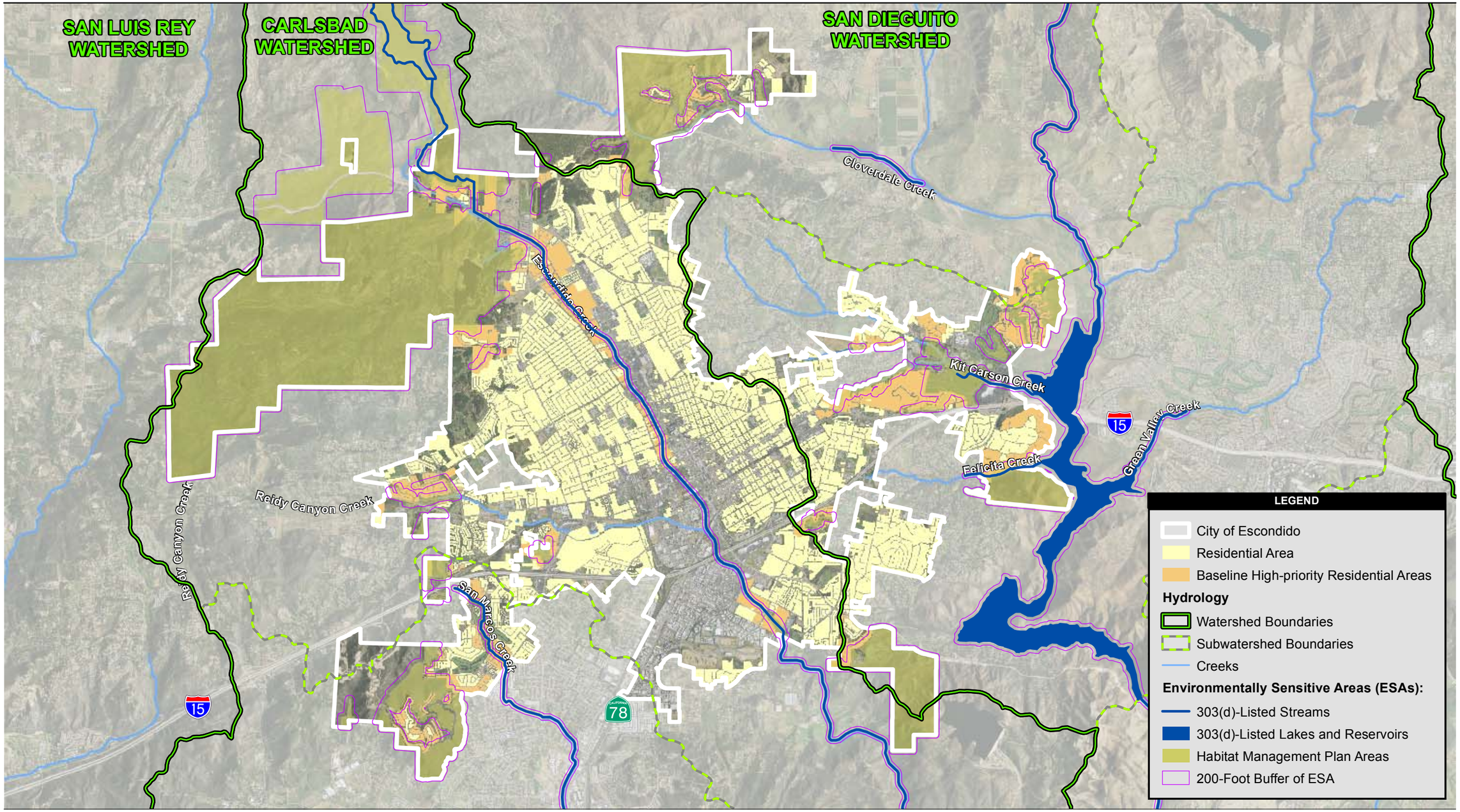
6.3 BEST MANAGEMENT PRACTICE REQUIREMENTS

During the reporting period, the City implemented a variety of BMPs for high-priority residential areas and activities. These BMPs include measures that require education and outreach. Table 6-1 specifies the BMPs that were encouraged and implemented as part of the residential education program.

6.4 ADDITIONAL CONTROLS FOR RESIDENTIAL AREAS

Although the City identifies high threat residential areas and activities as those located near or adjacent to ESAs, additional areas and controls are identified and implemented based on other variables, such as water quality monitoring results, visual observations by stormwater inspectors or other City staff, and persistent patterns of residential complaints.

Because it can be difficult to convey environmental messages in areas with language and other barriers, the City has, over the years, developed programs that directly deliver various resources to residents who are sometimes not as aware of community health, safety, and environmental issues such as the impact of litter, debris, or other activities that convey pollutants directly into the City's storm sewer conveyance system. In addition, the City's annual inspection of its storm sewer system continued to indicate greater volumes of debris in the infrastructure adjacent to areas where multi-family units and underserved populations are located. As a result of these findings, the City's stormwater education staff continued its outreach to the community's underserved populations by partnering with the Housing and Neighborhood Services Division, which coordinates neighborhood groups in Escondido's higher-density areas. Currently, the outreach program includes 16 neighborhoods that encompass 2,534 households. A description of these efforts is provided in Section 6.5.6, Community Outreach.



Source: DigitalGlobe 2008; City of Escondido 2007, 2009; State Water Resources Control Board 2006; California Interagency Watershed Mapping Committee 2004; SanGIS 2011

6,000 3,000 0 6,000 Feet

Scale: 1 = 72,000; 1 inch = 6,000 feet

Figure 6-1
Residential Areas

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Table 6-1. BMPs Designated for Residential Activities

Pollution Prevention	Controlling Discharges	Materials and Waste Management	Restrictions on Activity
Automobile Repair and Maintenance			
Practice routine preventative maintenance Reduce vehicle use through • changing driving habits • carpooling • use of public transportation • biking or walking for short trips Make timely vehicle repairs	Prevent leaks and spills from contacting stormwater by • using drip pans, plastic sheeting, or other materials to contain spills • working indoors or under shelter • not working outdoors in the rain • immediate cleanup of leaks and spills • using absorbent materials to clean up spills • establishing cleanup standards • requiring that tools and parts be cleaned only in contained areas	Properly manage and dispose of automotive wastes and material through • proper and lawful disposal of wastes • recycling of oil and antifreeze • storage of materials and wastes indoors or under cover • use of secure and watertight containers when storing materials and wastes outside	• Use commercial repair and maintenance facilities to avoid the potential for pollution in residential areas
Automobile Washing			
• Limit or eliminate detergents and/or other cleaners when washing • Use preventative practices to keep vehicles clean (i.e., park under cover)	• Use dry cleaning methods to avoid the generation of washwater • Turn off the water when not in use or use a controllable spray nozzle • Contain, capture, or divert washwater from the conveyance system, e.g., berms, etc. • Wash vehicles over porous surfaces, e.g., grass • Establish neighborhood wash areas where runoff can be properly managed	• Properly dispose of soapy water or rinse water • Launder rags and towels or dispose of them in the trash • Use dry methods to degrease or clean especially dirty parts prior to wet washing and rinsing, i.e., remove grease or brake dust using towels	• Use commercial wash facilities to avoid the potential for pollution in residential neighborhoods
Automobile Parking			
• Use routine preventative maintenance practices • Establish parking restrictions in high-priority areas • Properly design and construct residential parking areas • Establish and enforce design standards for parking areas in residential areas	• Clean parking areas, especially where deposits have accumulated	• Use drip pans for leaking vehicles • Employ dry cleanup methods • Park on vegetated areas	• Prohibit the parking of inoperable vehicles on city streets

Pollution Prevention	Controlling Discharges	Materials and Waste Management	Restrictions on Activity
Home and Garden Care Activities and Product Use			
Garden and Yard Care Use safe and alternative methods: • Plant native and drought-tolerant species to reduce water use and green waste • Use beneficial insects as biological controls • Compost yard waste • Be practical when purchasing pesticides and fertilizers • Identify pests before attempting to eliminate them • Read and follow the instructions for garden care products Conserve water through xeriscaping, drip irrigation, soaker hoses, and microspray systems, and minimize overwatering runoff	• Immediately clean up spills of gardening chemicals, fertilizers, and soils • Return spilled materials to the container for future use or proper disposal	• Store lawn care products in closed, labeled containers in covered areas • Discourage the use of materials during windy or rainy days • Cover stockpiles of soil, compost, or fertilizers with plastic tarps to prevent dispersal by wind or rain • Dispose household chemicals to household hazardous waste collection facilities or scheduled events • Use dry sweeping techniques for cleanup • Recycle lawn clippings and greenery waste through local programs	• Restrict hosing of paved surfaces to the street or gutter • Prohibit disposal of hazardous waste to the trash, landfill, or storm drain
Home Care and Maintenance			
• Plant or mulch hillsides to prevent erosion • Use safe substitutes for home cleaning and maintenance • Use products only according to label instructions • Use water-based paints when possible	• Clean up hazardous materials spills immediately • Use dry techniques for spill cleanup	• Store household hazardous materials in closed, labeled containers in a covered area • Recycle latex paint through community programs • Dispose unwanted household hazardous waste through proper collection facilities • Recycle unused, unwanted products • Recycle unwanted appliances and household equipment	• Restrict the disposal of washwaters (carpet cleaning, mop water, paint wash-up) from disposal to the street, gutter, or storm drain
Disposal of Pet Waste			
• Use spay/neuter programs to reduce feral dog and cat populations • Limit the number of pets allowed in residential neighborhoods	• Clean up after pets when walking them in public places • Clean up feces from yards • Properly dispose of pet feces in the toilet or trash	• Restrict free-running pets in high-priority areas • Properly manage manure • Compost manure	• Require livestock and similar semirural areas to control runoff from areas of animal waste

6.5 PROGRAM IMPLEMENTATION

6.5.1 Residential Area Oversight and Activities

The City's dry-weather monitoring and annual inspection programs provide a foundational tool for evaluating likely sources of pollutants. Based on data from the programs, the City implements focused education and outreach as appropriate. Table 6-2 lists each of the City programs and BMPs that are implemented based on residential activities and associated potential pollutants in order to reduce or prevent those pollutants from entering the City's storm drain system.

Table 6-2. Pollution Prevention Programs for Residential Activities

Residential Activity	Target Audience and Activity-Related Pollutants	City Program(s) and/or BMPs
Auto Repair	• Do-It-Yourselfers • Hydrocarbons • Solvents	• Used oil recycling campaign • Street survey • Street sweeping • Complaint response and education • Storm drain stenciling
Auto Washing	• All residents • Hydrocarbons • Surfactants	• Car washing campaign with coupon for free buckets • Billing inserts • City newsletter • Complaint response and education • Street sweeping • Storm drain stenciling
Auto Parking	• Multifamily schools • Locations from street survey • Hydrocarbons	• Complaint response • Street sweeping • Storm drain stenciling
Home and Garden Care	• All Residents • Single-family residences with landscaping • Household hazardous wastes • Pesticides, fertilizers	• Landscape and irrigation seminars • Home conservation surveys • Complaint response • Billing inserts • City newsletter • Storm drain stenciling • Street sweeping • City household hazardous wastes disposal/collection
Pet Wastes	• All residents • Fecal coliform	• Dog park • Dog waste disposal bags at parks • Storm drain stenciling • Targeted signage • Educational brochures
Trash**	• All residents	• "We Clean Escondido" Litter Abatement • Street sweeping • Storm drain stenciling • Signage • Strategic fencing • Catch basin cleaning • Sea curtain installation and cleaning

* Based on analysis/identification of residential properties in the City; prioritizing their potential for stormwater pollution based on location to ESAs and local waterbodies; and using monitoring and inspection data as appropriate information to support reasonable prohibitions to minimize impacts.

**Trash is considered a significant pollutant throughout Escondido. All urban runoff components include efforts to educate the public and minimize trash pollution. Citywide surveys to target debris accumulation locations and the current education and removal program, including biweekly monitoring of flood control facilities and daily debris collection and removal from City facilities, are being utilized to establish the appropriate data for a more comprehensive program.

Dry-weather data results for the 2011–2012 program year were evaluated for potential pollutant concerns related to residential sources. However, the results did not indicate a residential-specific source for some elevated actions levels. Dry-weather data provide water quality trends (i.e., exceedances over the action level) within residential areas; however, due to historical land uses (i.e., agricultural) and surrounding environmental conditions (e.g., heavily vegetated and natural waterways) it has been determined that the exceedances were not primarily caused by residential activities. However, follow-up investigations occur

with all exceedances, and during this reporting period no active residential activities were identified as a source of those exceedances. In the past, most exceedances caused by residential activities occurred upstream of the City's boundary within the unincorporated areas of San Diego County. For the complete dry-weather discussion, please refer to Chapter 7. Dry-weather data will continue to be evaluated relative to residential contributions.

Other effective mechanisms for implementing the City's residential program include the elements identified below, most of which are discussed in detail in Chapter 8 of this report.

6.5.2 Hotline

The City operates a stormwater hotline number that residents can call to report illegal storm drain discharge or disposal of trash or debris. The City Public Works main line (760-839-4668) includes a menu selection for reporting illegal disposal into storm drains, creeks, and lakes. This number is printed on all outreach material, including brochures, promotional items, and articles. Callers can leave a message or report their findings to the receptionist during business hours. After business hours, the caller is instructed to call Police Dispatch or 911 if the call pertains to a health and safety concern. The information from the calls is entered and tracked by the City's AZTECA program. This program is linked to the GIS program, which enables staff to locate the address in relation to the nearest storm drain. Details regarding the hotline calls are provided in Chapter 8, Section 8.3.4.

6.5.3 Surveys

The City used surveys to target residential areas and activities that create the greatest potential for urban runoff impacts. These surveys included street surveys to identify areas of trash and sediment accumulation, and resident research surveys by phone, mail, and email to identify community knowledge of urban runoff issues. During this reporting period, the City supported surveys developed on a regional basis. One of the surveys included questions to assess knowledge of basic stormwater concepts, such as pollution prevention and whether stormwater is conveyed to waterways untreated. This particular survey was distributed at the San Diego County Fair in June by representatives from various agencies, including the City of Escondido. In addition, a pet waste survey was developed on a regional basis and distributed at various jurisdictional outreach events. The City distributed the pet waste survey at the annual Paws in the Park event in Kit Carson Park. Regional representatives were present to help City outreach staff distribute the survey and various giveaways, such as pet waste bags. The City will continue to support surveys conducted on a regional basis and develop jurisdictional surveys as appropriate to better inform the community about the residential stormwater program.

6.5.4 Website

The City has developed the stormwater website that includes interactive BMP information for residents regarding car maintenance, pet waste disposal, swimming pool maintenance, garden care, and waste disposal. So that users can quickly access information, there is a quick link to the Stormwater Program in the "Find it Fast" section, which is located on the City's home page. The City tracks the number of visits to its stormwater website, the details of which are provided in Chapter 8, Section 8.3.2. The City will continue to track the number of visits to its website to evaluate its continuing relevance.

6.5.5 Distribution of Educational Information

The City provides a comprehensive local school educational program to provide stormwater pollution prevention information. Door hangers and focused mailings are also used to help reduce fertilizer use and exposure to pet waste when dry-weather monitoring results indicate elevated levels of nitrates and/or bacteria. The details of these efforts are discussed in Chapter 8.

6.5.6 Community Outreach

During this reporting period, the City's stormwater education staff continued their outreach to the underserved population, including the Latino population, by partnering with the Neighborhood Services Division, which coordinates neighborhood groups that target the underserved and Hispanic populations. The goal is to improve the safety and health of neighborhoods. Currently, 16 neighborhoods are in the

program, encompassing approximately 2,534 households. The City's Education and Outreach staff offer education and outreach to these neighborhoods; some of the neighborhoods have requested speakers at meetings. During this reporting period, the education staff attended meetings and gave presentations on water quality and conservation to three neighborhood groups: Rustic Village, Lansing Circle, and West Hillside. They also provided stormwater information at the Neighborhood Leadership Forum, which includes representatives from all 16 neighborhoods. In addition, the City's Education and Outreach staff provided stormwater and/or stormwater-related (water conservation) information to the Rancho Escondido Mobile Home Park residents and to the Del Lago Homeowners Association. Nineteen doggie pot stations were installed by Community Services staff in various neighborhoods organized by the Neighborhood Development Division. Although the doggie pot stations will be maintained by the neighborhoods, they will receive an ongoing supply of pet waste bags from the City. It is anticipated that other neighborhoods will participate in the near future. Refer to Chapter 8 for a more detailed discussion of the community outreach and education efforts employed by the City.

6.5.7 Recycling and Waste Collection

A Household Hazardous Waste (HHW) fee is implemented by the City and collected on customer utility bills. The fee provides funding for residential access to two permanent collection sites in North County (at Poway and Vista). These sites are open every Saturday and are more convenient for routine disposal purposes. Another HHW facility in Escondido is open two Saturdays per month by appointment from 9:00 a.m. to 3:00 p.m. for Escondido residents free of charge. In addition, there are numerous certified centers in Escondido that accept used oil from residents. The details of the City's Recycling and Waste Collection Program are provided in Chapter 8.

6.5.8 Solid Waste Disposal

Residential solid waste service includes curbside green waste collection and recyclable materials collection. This citywide service is supported by an exclusive franchise agreement with EDI, which provides collection services for both residential and commercial customers. By providing these services, the City provides the means for the proper disposal of trash, recyclables, and green waste. In addition, the City conducts litter cleanup campaigns, and electronics and plastic recycling. The details of these programs and activities are provided in Chapter 8.

6.5.9 Water Quality Monitoring

Water quality monitoring programs assist the City in identifying potential illegal discharges into the MS4 from residential areas. These data assist in determining where focused and targeted pollution prevention is needed.

6.5.10 Enforcement

The City enforces stormwater ordinances consistent with existing City policy and modifies appropriate ordinance language as applicable regulations evolve. The City encourages (and will require in some instances) BMPs in high-priority residential areas, as well as widespread implementation of the practices listed in Tables 6-1 and 6-2. City staff also strongly encourage public reporting of violations to help with Citywide pollution prevention. Ordinance violations are documented through verbal warnings, written warnings, orders to abate and correct, and fines. During the current program year, the City issued three verbal warnings and 11 NOCs and two NOVs, with an administrative fine for the discharge of illegal substances to the storm drain system from residential areas. A summary of all illicit discharges during the reporting period is provided in Appendix D. All of the violations were resolved within the reporting period.

6.5.11 Watershed and Regional Program Oversight and Evaluation

Through the watershed and regional residential education programs, the City collaborates with other Copermittees to evaluate and revise its jurisdictional program and address pollutants of concern as conditions warrant and evolve. This cooperative effort includes evaluating the methods employed for residential activity oversight. Collaboration is often conducted in concert with Copermittee member meetings and other watershed management gatherings. In 2011–2012, an example of such a watershed collaboration was the continuing implementation of the Lake San Marcos Nutrient Reduction

Management Plan, which involved the cities of San Marcos and Escondido, and the County of San Diego in identifying land uses and associated activities that are likely sources for nutrients in the upper San Marcos Creek and the lake into which it discharges. Since many of these sources are residential in nature, the implementation of the plan is accomplished through each agency's jurisdictional stormwater program. As a result of this effort, the City is focusing on the residential area within its jurisdictional boundary that drains into the upper San Marcos Creek. An example of a BMP that was implemented during the reporting period is a thorough inspection of the Escondido Country Club golf course. Another BMP that was implemented is a guidance document for homeowners associations that addresses activities such as pet waste disposal, irrigation, litter and waste management, and landscaping and green waste. All participating agencies anticipate that this targeted residential effort will result in the reduction of nutrients introduced into the Upper San Marcos Creek Watershed.

7 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

7.1 INTRODUCTION

The purpose of the City's illicit discharge detection and elimination (IDDE) component is to detect the existence of either illicit connections to the storm drainage system or the use of the storm drainage system for illegal discharges. To accomplish this, the City implements a variety of program elements, which are described below. The core of the IDDE component is the City's Dry-Weather Field Screening and Analytical Monitoring Program (Dry-Weather Program), which includes inspection of the City's MS4 and appropriate water sampling during the dry-weather season, when urban runoff is least affected by potential rainfall and its quality can be best determined. The IDDE component of the JURMP provides a core element upon which the program's effectiveness can be measured and evaluated. The data presented in this chapter were reported to the RWQCB within the JURMP 2011–2012 IDDE Annual Report December 2011 (City of Escondido 2011) and is used in this Annual Report to form and support a meaningful effectiveness analysis (see Chapter 11).

7.2 PUBLIC REPORTING OF ILLICIT DISCHARGES AND CONNECTIONS

The City facilitates public reporting of illicit connections and discharges (IC/IDs) through a bilingual City-sponsored hotline number (760-839-4668) for complaints and inquiries on a 7-day, 24-hour basis. The City's round-the-clock hotline is well advertised through the routine disbursement of flyers, bill inserts, advertisements, and brochures.

During regular business hours, all private sewer overflow calls are routed through the Public Works Administration office to designated supervisory personnel. After-hours calls are routed to the City's Police Department officials, who contact standby personnel to dispatch staff. For hazardous materials issues, the City's Fire Department is available on a 7-day, 24-hour basis.

IC/ID referrals can also be made directly to City offices and through other agencies receiving complaints of activities in Escondido. The County Health Department, RWQCB staff, and e-mail referrals can be transmitted to the City for response. City staff (either on routine work assignments or deployed for specific response calls) also provide additional awareness and corrective action support should IC/IDs be detected. Additional information pertaining to hotline calls is discussed in Section 8.3, Educational Outreach.

7.3 SPILL REPORTING, RESPONSE, AND PREVENTION

The City conducts numerous programs to prevent, report, and respond to spills into its MS4 from any source, including private laterals and failing septic systems. These programs are described below.

7.3.1 Sewer Maintenance, Overflow, and Prevention Programs

The City implements the following sewer overflow prevention programs and sewer facility protection measures for protecting the MS4 from potential sewage-related pollution.

- **Sewer System Management Plan (SSMP)** that is composed of an Operations and Maintenance Program, as well as a Monitoring and Reporting Program (see Chapter 4, Municipal Component for details).
- **Sewer Overflow and Prevention Plan (SOPP)** that includes the City's Preventative and Corrective Maintenance Program, as well as the Sewer Overflow Response Plan. This program is described in detail in Chapter 4, Municipal Component.
- **Grease-Trap Permitting and Inspection Program** for regularly inspecting food service establishments to ensure compliance and minimize sewer grease buildup. Through these inspections, staff also educate owners/operators on proper cooking grease disposal, with particular attention to areas where grease buildup in the sewer lines is most common.

- **Fats, Oils, and Grease (FOG) Control Program** to reduce discharges of these substances to the sanitary sewer system (see Chapter 4, Municipal Component for details).
- **Sewer Database Management** involves a GIS-based inventory to assist with tracking maintenance and spill response efforts. This GIS inventory includes curb inlets, outfall points, surface drainages, pump stations, manholes, flap gates, pipeline diameters, pipe composition, junction structures, age and condition of major sections of the system, and the pipeline maintenance schedule.

7.3.2 Sewer Spills and Response Procedures

The City's Collections Division's crews provide immediate assistance for sewer overflows, both public and private. As mentioned above, the City's SOPP sets forth response and cleanup measures in the event of a sewer spill. In response to sewer spills, the procedures listed below are followed:

- If the overflow occurs during working hours, Collections Division crews are dispatched immediately to the scene to clear the stoppage and implement cleanup measures. A second recovery crew is dispatched as needed.
- If the overflow occurs after working hours, the Police Department is notified and immediately calls the Collections Division standby person, who dispatches a crew to the overflow. A second recovery crew is dispatched as needed.
- System blockages are cleared as a first priority, followed by containing and recovering the surface spillage (wash down, disinfection, and vactor recovery for proper disposal).
- Crews use cameras to inspect the lines associated with the spill/overflow to determine the cause and identify any corrective action.

7.3.3 Sewer Spill Reporting Procedures

To protect the public's health and safety and protect the environment, City policy requires that the RWQCB and the County Environmental Health Department be verbally notified within 24 hours of a spill/overflow occurrence. This notification is followed by a written report submitted to RWQCB within 5 days of the incident. During the reporting period, seven spills were reported to SWRCB and RWQCB through the state's Stormwater Multi-Application, Reporting, and Tracking System (SMARTS) via SWRCB's website. Information associated with the spills can be accessed through that system.

7.3.4 Spill Prevention Program Activities and Effectiveness

During the 2011–2012 reporting period, the City's Collections Division:

- inspected 40 miles of sanitary sewer pipeline;
- cleaned 191 miles of sanitary sewer pipeline;
- responded to seven spills; and
- contained, disinfected, and collected overflow and/or washdown fluids via vacuum or vactor truck.

7.4 URBAN RUNOFF MONITORING

7.4.1 Dry-Weather Program

The Dry-Weather Program in Escondido is conducted to characterize the quality of the jurisdiction's urban runoff without the influence of storm flow. Dry-weather runoff is therefore representative of natural creek flows and non-stormwater contributions from a variety of water sources and uses, both intentional and unintentional. Monitoring this runoff helps to identify local water pollution problems by characterizing background stream water quality relative to various storm drain dry-season discharges. The characterization is largely done through the inspection of more than 100 monitoring stations, while also conducting water quality field screening and collecting water samples for chemical analyses when actively flowing water is found. Dry-weather field screening and analytical monitoring reporting are conducted in

compliance with all monitoring and standard reporting requirements in Attachment B of Order R9-2007-0001 and Receiving Waters Monitoring and Reporting Program No. R9-2007-0001.

These results provide the City with annual perspectives of urban runoff quality throughout the jurisdiction on both spatial and temporal scales. The elements of the 2011–2012 Dry-Weather Program are described below.

Site Selection Approach

The Dry-Weather Program is composed of an extensive and geographically widespread monitoring station network of 117 sites located along the reaches and tributaries of Escondido Creek, Reidy Creek, Felicita Creek, and Kit Carson Creek (Figure 7-1). These sites were selected on the basis of location, drainage patterns, surrounding land uses, and historic water quality monitoring results. Monitoring stations mostly coincide with major storm drain outfalls, but they also are situated at natural creek tributary junctions and/or specific drainages associated with heavy urbanization (e.g., industrial activities). No changes to station locations or the MS4 map were made during the reporting period.

Timing

The City monitored its dry-weather stations between June 1 and September 30 per Order R9-2007-0001. To ensure that water samples collected were from dry-weather sources, monitoring was only conducted if there was at least 72 hours of antecedent dry weather. No rainfall occurred during fiscal year 2011–2012 dry-weather monitoring.

Monitoring Procedures

The following dry-weather monitoring activities occurred for the 2011–2012 reporting period:

- recording physical characteristics at each monitoring station (visual observations, flow rate, water clarity, floatables, debris, deposits/stains, vegetation growth, and structural condition);
- conducting field screening at all stations where water was present;
- collecting water samples for analytical laboratory analyses if active flow was found;
- conducting trash assessment at each site in accordance with permit monitoring requirements;
- performing follow-up surveys/inspections where needed to confirm the presence or absence of a pollutant or condition of concern; and
- evaluating information and analysis results, including comparison with previous findings.

In accordance with Order R9-2007-0001, jurisdictions are required to collect samples for laboratory analysis for at least 25 percent of sites where water is present. During the 2011–2012 Dry-Weather Program, the City performed analytical sampling for more than 50 percent (32 of 57) of the sites where water was present. The City continues to collect additional water-quality (dry-weather flow) data within each subwatershed to monitor and evaluate surrounding land uses, trends, and the program's effectiveness.

A submeter Global Positioning System unit was used to record all monitoring data, including physical characteristics, water quality field parameters, and trash information at each station. Site data were collected in accordance with Order R9-2007-0001 and the County of San Diego's Dry-Weather Monitoring data submittal format. Dry-Weather Program data and site photographs are included in the City of Escondido's 2011–2012 Illicit Discharge Detection and Elimination Annual Report (City of Escondido 2011).

Water quality characterization parameters recorded at each station were documented on monitoring forms (Appendix D) in accordance with Order R9-2007-0001 and Project Clean Water's Dry-Weather Monitoring Workgroup requirements. Dry-Weather Program data and site photographs were included on compact disc in the 2011–2012 IDDE Annual Report (City of Escondido 2011) submitted in December

2011. Dry-weather data are evaluated as part of the IDDE annual reporting process and as part of the JURMP program effectiveness assessment (Chapter 11).

Sampling Handling

Where grab samples of actively flowing water are collected for field screening and laboratory analysis, sampling protocols comply with those specified in Title 40 of the Code of Federal Regulations Section 136 (40 CFR 136). Sampling personnel also follow established health and safety procedures while sampling as conditions warrant. When samples are collected, sample containers are:

- prelabeled with waterproof labels;
- placed in the center of the discharge flow;
- placed just below the water surface to avoid interference with underlying sediment;
- filled with the mouth of the bottle faced into the current;
- filled completely, without overfilling (to avoid loss of preservative, if present); and
- capped and placed in a waterproof storage bag within an ice-chilled cooler (at as near to 4 degrees Celsius as practicable).

Following proper labeling, preservation, and packing, samples are transported to the analytical laboratory to meet holding time requirements. Chain-of-custody forms for the samples are completed before samples are relinquished by the sampling team. Chain-of-custody forms are kept with the samples from the initial sample drop-off through the final laboratory analysis. After sampling, field staff confirm that the analytical laboratory received the samples and that they are analyzed within the proper holding times.

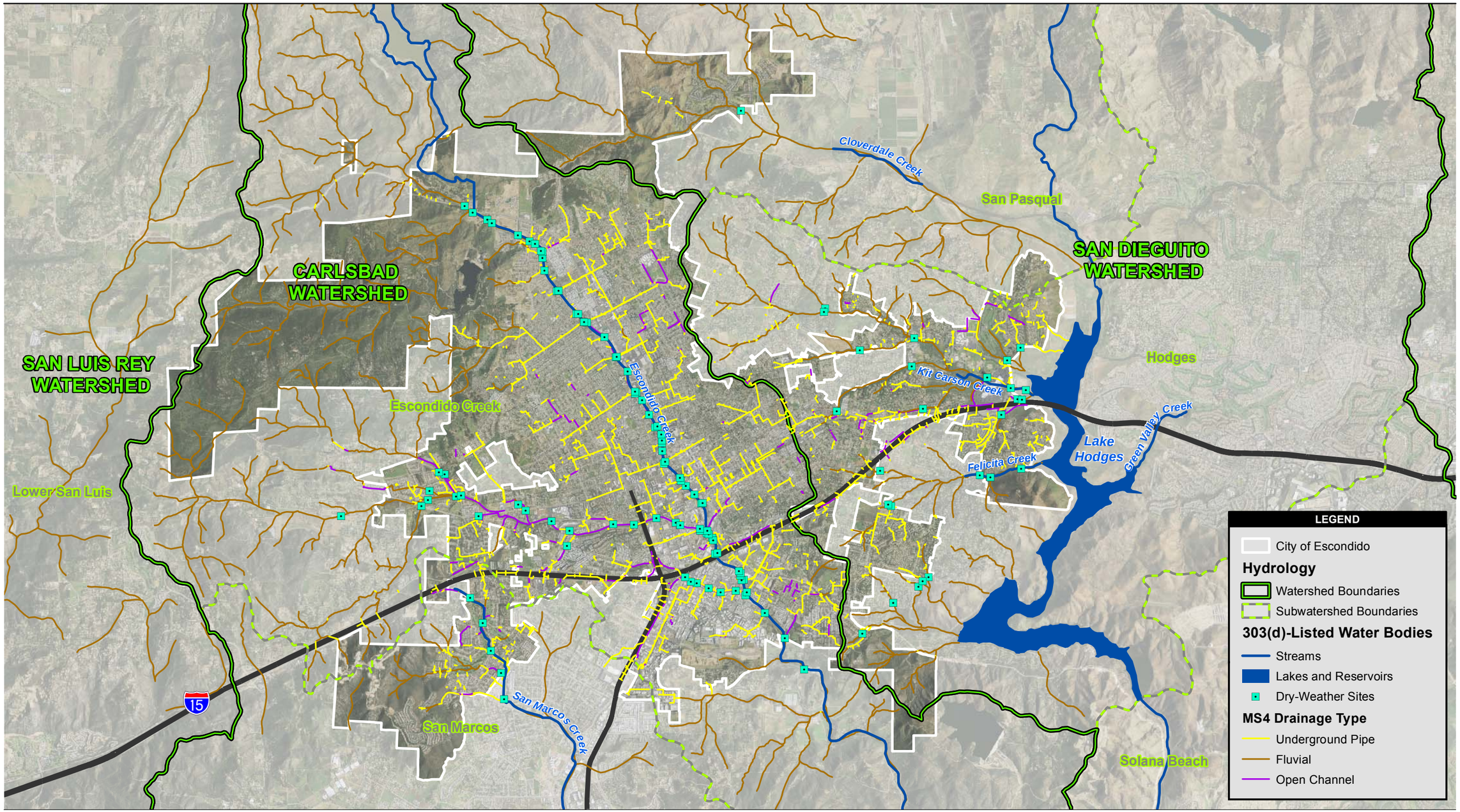
Sample Analysis

Dry-weather samples are analyzed for the following parameters and constituents in accordance with the specifications provided in Table 7-1. Although not mandated under Order R9-2007-0001, the City collects temperature, conductivity, salinity, and dissolved oxygen data for each site sampled.

- Flow
- Water Temperature
- Conductivity
- Salinity
- Total Dissolved Solids (TDS)
- Hardness
- pH
- Dissolved Oxygen (DO)
- Turbidity
- Oil and Grease
- Surfactants (MBAS)
- Orthophosphate
- Ammonia
- Reactive Phosphorus
- Nitrate (as N)
- Dissolved Cadmium
- Dissolved Copper
- Dissolved Lead
- Dissolved Zinc
- Total Coliform Bacteria
- Fecal Coliform Bacteria
- *Enterococcus* Bacteria
- Diazinon
- Chlorpyrifos

These parameters were either screened in the field using electronic probes or sensors, or chemical test kits, or they were submitted to a California-certified analytical laboratory for analysis.

As part of the dry-weather monitoring sampling and analysis, quality assurance/quality control procedures were incorporated to ensure the integrity of field sampling techniques and laboratory results. A duplicate sample was collected and analyzed for 1 out of every 10 samples collected. Duplicate sampling was conducted in conformance with approved sampling protocol (i.e., USEPA). Duplicate samples were submitted as blind samples to the analytical laboratory.



Source: DigitalGlobe 2008; City of Escondido 2006, 2009; SanGIS 2010; State Water Resources Control Board 2006; California Interagency Watershed Mapping Committee 2004

6,000 3,000 0 6,000 Feet

Scale: 1 = 72,000; 1 inch = 6,000 feet

Figure 7-1
Dry-Weather Monitoring Program Sites

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Table 7-1. Analytical Constituent Method Specifications and Recommended Reporting Limits

Analyte	Method Type	EPA Method/ Standard Method	Minimum Sample Volume (mL)	Holding Time[a]	Container Type[b]	Preservation	Reporting Limit/ Resolution	Units
Conventionals								
DO	Probe	SM4500-O G		Field		N/A	1.0	mg/L
Conductivity	Conductivity meter	SM 2510	100	28 days	glass or PE	4°C	±1[d]	µmho/cm
Hardness	Titrimetric; colorimetric	SM 2340C	100	6 months	glass or PE	4°C and HNO3 to pH<2	2	mg/L
pH	Electrometric	150.1	100	15 minutes	glass or PE	None	±0.1[d, e]	std. units
Temperature	Thermistor	SM 2550	50	15 minutes	glass or PE	None	±0.1[e]	°C
TDS	Est. Calculation	SM2510 B	100	7 days	glass or PE	4°C	1	mg/L
Turbidity	Nephelometric	180.1	100	48 hours	glass or PE	4°C	±0.05 [d]	NTU
MBAS	Extraction	SM 5540-C	500	48 hours	glass or PE	4°C	0.1	mg/L
Nutrients								
NH3-N	Salicylate Method	HACH	500	28 days	glass or PE	4°C and H2SO4 to pH<2	0.05	mg/L
NO3-N	Chromotropic Acid	HACH	200	48 hours	glass or PE	4°C	0.3	mg/L
Ortho-P, dissolved	Ascorbic Acid	HACH 8048	200	48 hours	glass or PE	4°C; filter immediately	0.03	mg/L
Metals								
Cd	ICP	200.7	1000 for all	Filter for dissolved fraction & preserve within 48 hours; 6 months to analysis	teflon, PE, or borosilicate glass	4°C and HNO3 to pH<2[c]	2	µg/L
Cu							5	
Pb							5	
Zn							10	
Total Petroleum Hydrocarbons								
Oil and Grease	Gravimetric	413.1	1000	28 days	wide-mouth glass	4°C and HCl or HCL to pH<2	5	mg/L
Organophosphorus Pesticide								
Diazinon	GC with FPD detector	8141A	1000	14 days (extraction within 7 days after collection)	glass	4°C	0.49	µg/L
Chlorpyrifos							0.49	

Analyte	Method Type	EPA Method/ Standard Method	Minimum Sample Volume (mL)	Holding Time[a]	Container Type[b]	Preservation	Reporting Limit/ Resolution	Units
Bacteriological								
Total Coliforms	Colilert/MTF	SM9223	100 100	6 hours[f]	sterile glass or plastic	4°C; sodium thiosulfate in the presence of chlorine	20	MPN/ 100 mL
E. coli	Colilert	SM9223	100	6 hours[f]	sterile glass or plastic	4°C; sodium thiosulfate in the presence of chlorine	20	MPN/ 100 mL
Fecal Coliform	MTF/EC	SM 9221E	100					
Enterococcus	Entrolilert	IDEXX	100	6 hours[f]	sterile glass or plastic	4°C; sodium thiosulfate in the presence of chlorine	20	MPN/ 100 mL

[a] Holding time specified in EPA guidance or referenced in Standard Method for equivalent method.

[b] Sampling and storage of samples in glass bottles is preferable. Sampling and storage in plastic bottles such as conventional polyethylene (PE) and cubitainers is permissible if it is established that the containers do not contribute contaminating organics to the samples.

[c] Filter dissolved samples before preservation.

[d] Refers to the instrument resolution.

[e] Also report temperature at time of measurement.

[f] 40 CFR §136.3, Table II specifies a holding time of 48 hours. Standard Methods 20th Edition requires a 6-hour holding time except when the sampling location is distant from the laboratory, in which case 24 hours is the maximum holding time. All efforts should be made to analyze samples within 6 hours of sampling to conform with the currently adopted edition of Standard Methods.

The use of expendable sampling devices eliminated the need for equipment blanks and the possibility of cross-contamination between sampling locations. Trip blanks were not required because volatile organics testing is not required under this program.

Response Procedures

Dry-weather monitoring results trigger investigation and follow-up actions when either of the following occurs:

- field technicians observe unusual qualities in dry-weather flow, such as a strong chemical odor or unusual coloration; or
- field screening parameters or laboratory analysis of water samples exceeds established water quality action levels (per Copermittees and Project Clean Water) at the time of sampling.

During the program year, the Copermittees adopted new action levels for bacteria to focus on *Enterococcus* and fecal coliform, which are indicators of human and/or animal waste. The new action levels for bacteria are as follows:

- Greater than 130,000 MPN/100mL for total coliform (previously >50,000)
- Greater than 13,000 MPN/100mL for fecal coliform (previously >20,000)
- Greater than 7,000 MPN/100mL for *Enterococcus* (previously >10,000)

These action levels were used to conduct follow-up sampling this year, where needed.

Information Management

The City maintains a GIS-based inventory of all dry-weather monitoring stations. Analytical data collected are correlated to the inventory for evaluating program results in relation to water features, drainage basins, topography, land use, and MS4.

7.4.2 Dry-Weather Program Findings

During fiscal year 2011–2012, water quality sampling for the Dry-Weather Program was conducted at 49 percent of the monitoring stations due to the presence of actively flowing water (Table 7-2). Data associated with field observations, field measurements, and laboratory analyses were provided in the 2011 IDDE Annual Report (City of Escondido 2011). Additional details are provided below. Trends in the data collected, as well as historical data, are presented in Chapter 11, Effectiveness Assessment Component.

7.4.3 Data Evaluation

The dry-weather data collected during this reporting period continue to document that urban runoff quality in Escondido is good despite the dense industrial/ commercial operations in the center of the City and the numerous agricultural/equestrian activities in the eastern and southern areas of the jurisdiction. This is verified by the lack of detectable metals and other pollutants.

As in past years, nitrate and bacteria were the two parameters that were found above action levels at some sites. Specific trends for each of these parameters are further evaluated in the below.

Table 7-2. Percentage of Wet versus Dry Sites, Fiscal Year 2011–2012

Result	Number of Stations	Percentage of Total Sites
Dry Locations	60	51% (60/117)
Sites with Active Flow	57	49% (57/117)

Nutrients

Nutrients within a semirural watershed are often a by-product of agricultural and/or equestrian land use because of fertilizers and animal waste. Residential land use, including lawn fertilizers, car-washing

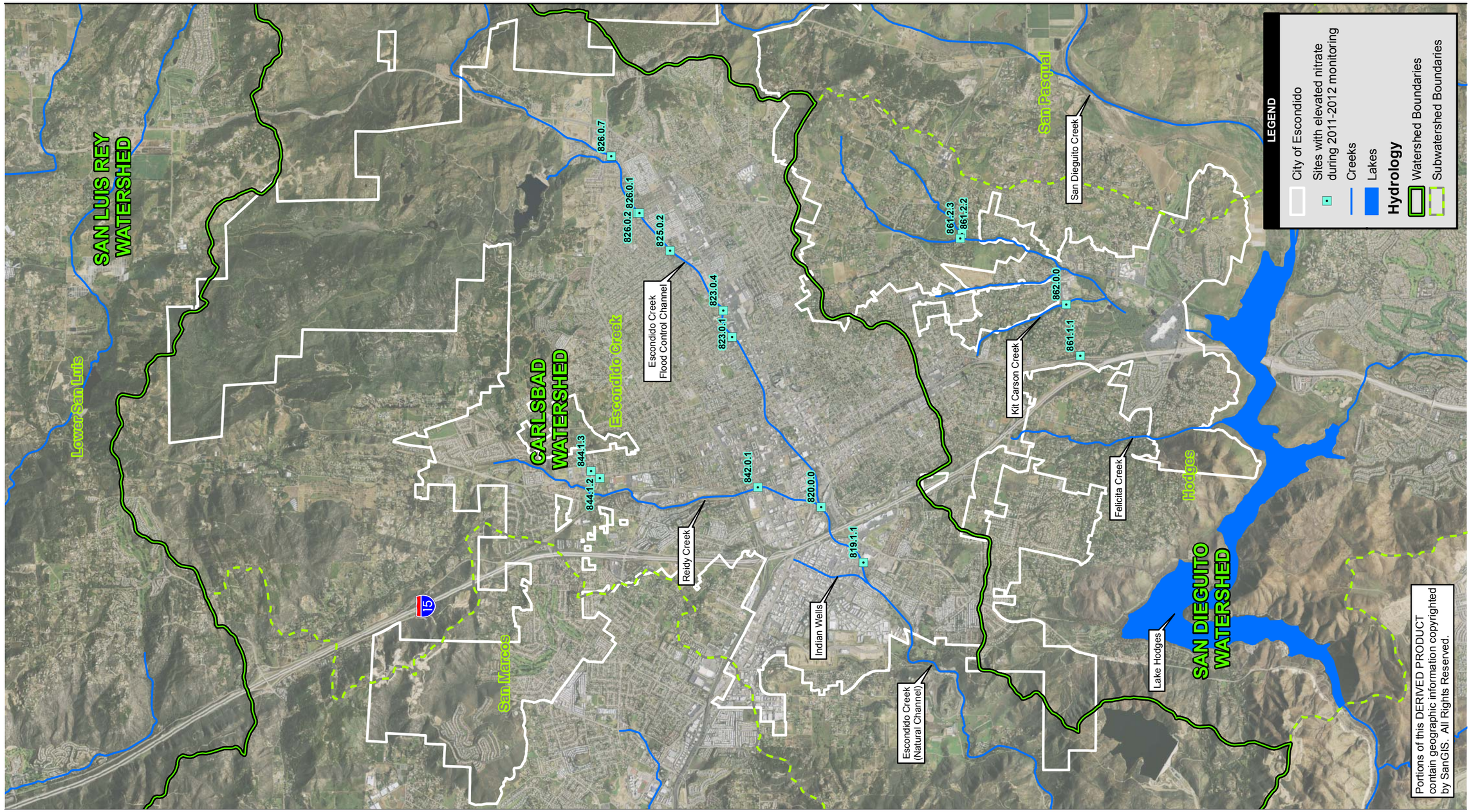
detergents, and pet waste, can also contribute to nutrient levels. Ambient nutrient levels near natural spaces and parklands are also known to exist as a result of wildlife.

Elevated nitrate levels in Escondido have been known to correlate with agricultural irrigation practices and historical land use that occurred prior to urban development. Before residential development, land areas now serviced by stormwater drainage systems were dominated by dairy farms, grape vineyards, and citrus and avocado orchards, many of which (if not all) also employed septic sewer systems. Current and historical data (including follow-up field investigations in 2008) suggest that elevated nitrate (and bacteria) concentrations are largely the result of agriculture and livestock operations. Septic systems are progressively becoming rarer, with urban development expanding into more rural areas.

The Copermittees' Dry-Weather Monitoring Workgroup established the action level for nitrate at 10 milligrams/liter (mg/L). Sites that exceeded this action level (after follow-up sampling) are presented in Table 7-3. To better understand the spatial distribution of nitrate and discern whether distinctive patterns exist in the various tributary drainages of the watershed, stations with elevated nitrate concentrations were plotted on a GIS aerial map (Figure 7-2).

Table 7-3. Monitoring Stations Exceeding Action Level Limits for Nitrate

Drainage Basin	Station	Sample Location	Nitrate Conc. (mg/L)
Escondido Creek	819.1.1	4-foot by 8-foot box culvert on east side of Escondido Creek 400 feet south (downstream) of Auto Park Way bridge	10.4
	820.0.0	Escondido Creek just east of the junction with Reidy Creek	10.9
	823.0.1	Two 48-inch-diameter CMP that drain from the north side of Escondido Creek and just west of the bridge at Ash Street	10.2
	823.0.4	36-inch-diameter flapper gate drain on south side of Escondido Creek and 81 yards east of Harding Street	13.1
	825.0.2	Two 5- by 8-foot reinforced concrete pipe drains on north side of Escondido Creek and just east of the bridge at Midway Drive	23.8
	826.0.1	Box culvert drains on south side of Escondido Creek just west of the bridge at Citrus Avenue	10.8
	826.0.2	48-inch RCP drain on north side of Escondido Creek and just east of Citrus Avenue	14.5
	826.0.7	36-inch RCP outfall on east side of Escondido Creek at Washington Street	20.7
Reidy Creek	842.0.1	54-inch RCP on northeast side of Reidy Creek, north of Mission Ave, just west of CCP	14.4
	844.1.2	Reidy Creek, west of Broadway and south of Brava Place	19.9
	844.1.3	Reidy Creek, south of Brava Place and east of N. Broadway	18.7
Lake Hodges	861.1.1	Unnamed creek just east of S. Escondido Boulevard and just north (upstream) of the bridge on Ross Lane	12.6
	861.2.2	Unnamed tributary to creek on west side of Marion Lane, about 50 yards south of bridge at Marion Lane	12.2
	861.2.3	Unnamed creek downstream of Marion Lane, east of El Dorado Drive	10.5
	862.0.0	Creek through Kit Carson Park, just south (downstream) of Las Palas Ave Bridge	10.7



Source: City of Escondido 2008, 2009; SanGIS 2010; DigitalGlobe 2008; California Interagency Watershed Mapping Committee 2004

5,000 2,500 0 5,000 Feet

Scale: 1:60,000; 1 inch = 5,000 feet

Figure 7-2
Monitoring Sites with Elevated Nitrate

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The nitrate exceedances within the Escondido Creek drainage are believed to be associated with past and present land uses located along the eastern boundary of Escondido. Citrus orchards dominated the area along Escondido Creek and East Valley Parkway until early 2006. Now homes occupy the orchard fields, with newly constructed stormwater infrastructure and unnamed tributaries, but citrus and avocado orchards are still present on the surrounding north and south hillsides that drain to Escondido Creek. Despite some of the exceedances found, an in-stream sample taken in Escondido Creek where it leaves the City boundary (813.0.0) revealed nitrate levels well below the action level. Nitrate concentrations in the Reidy Creek and Lake Hodges drainages correlate to drainage originating from unincorporated areas outside City limits that are upgradient in the watershed. All phosphorus data are below the 2.0-mg/L action level and do not exhibit a correlating pattern with the nitrate data (Figure 7-3), indicating that the nitrate source may be wildlife related rather than from fertilizer. Ammonia found at 12 stations was below the action level (Figure 7-3) and did not show a correlation to the other nutrients. Follow-up investigation procedures associated with nitrate exceedances are discussed in Section 7.5.

Bacteria

Indicator bacteria (total coliform and fecal coliform [*E. coli* and *Enterococcus*]) are used to detect the presence of human or animal waste contamination in water. Total coliform bacteria are a large group of bacteria that are common where wildlife, livestock, and equestrian activities occur, but they can also be found in human waste, soil, decomposing plant material, and other nonsewage sources. Fecal coliform bacteria or *E. coli* are found in the digestive tracts of humans and animals, and their presence in dry-weather runoff can suggest sewage contamination. *Enterococcus* bacteria are a subgroup of fecal streptococci bacteria that are more human-specific than either total coliform or *E. coli* bacteria.

During the reporting period, only one site, 860.1.4, was found to exceed bacteria action levels. Fecal coliform and *Enterococcus* concentrations at this location initially exceeded the newly adopted action levels but were compliant upon follow-up sampling. The site is located just west of Interstate 15 and south of Via Rancho Parkway in the San Dieguito Hydrologic Unit.

Figures 7-4 and 7-5 present the spatial distribution of indicator bacteria among the City's dry-weather monitoring stations sampled in FY 2011–2012.

Dissolved Metals

Metal concentrations of sites sampled during the program year were overall very low. Dissolved metal concentrations detected throughout the dry-weather monitoring stations show no definitive correlation to an area within the jurisdiction that suggests a significant pollutant source (Figure 7-6). The highest zinc concentration detected occurred at Station 874.4.0 (36.1 micrograms per liter [µg/L]) in the San Marcos drainage, which is significantly below the 297-µg/L action level. In addition, the highest copper concentration detected occurred at Station 818.0.0 (8.12 µg/L), which is substantially below the 38-µg/L action level.

Other Parameters

All other parameters not presented within spatial distribution graphs were either consistently undetected or exhibited no concentrations of concern throughout the City.

Trash Assessment

The City employs a range of preventive and proactive measures to limit trash and debris accumulation within its MS4, which is reflected by the rare occurrence of trash in the 2011–2012 dry-weather monitoring data. The results of the trash assessment for this reporting period are as follows:

- Optimal: 88 sites (77 percent)
- Suboptimal: 26 sites (23 percent)
- Marginal: One site (<1 percent)
- Poor: 0 sites (0 percent)

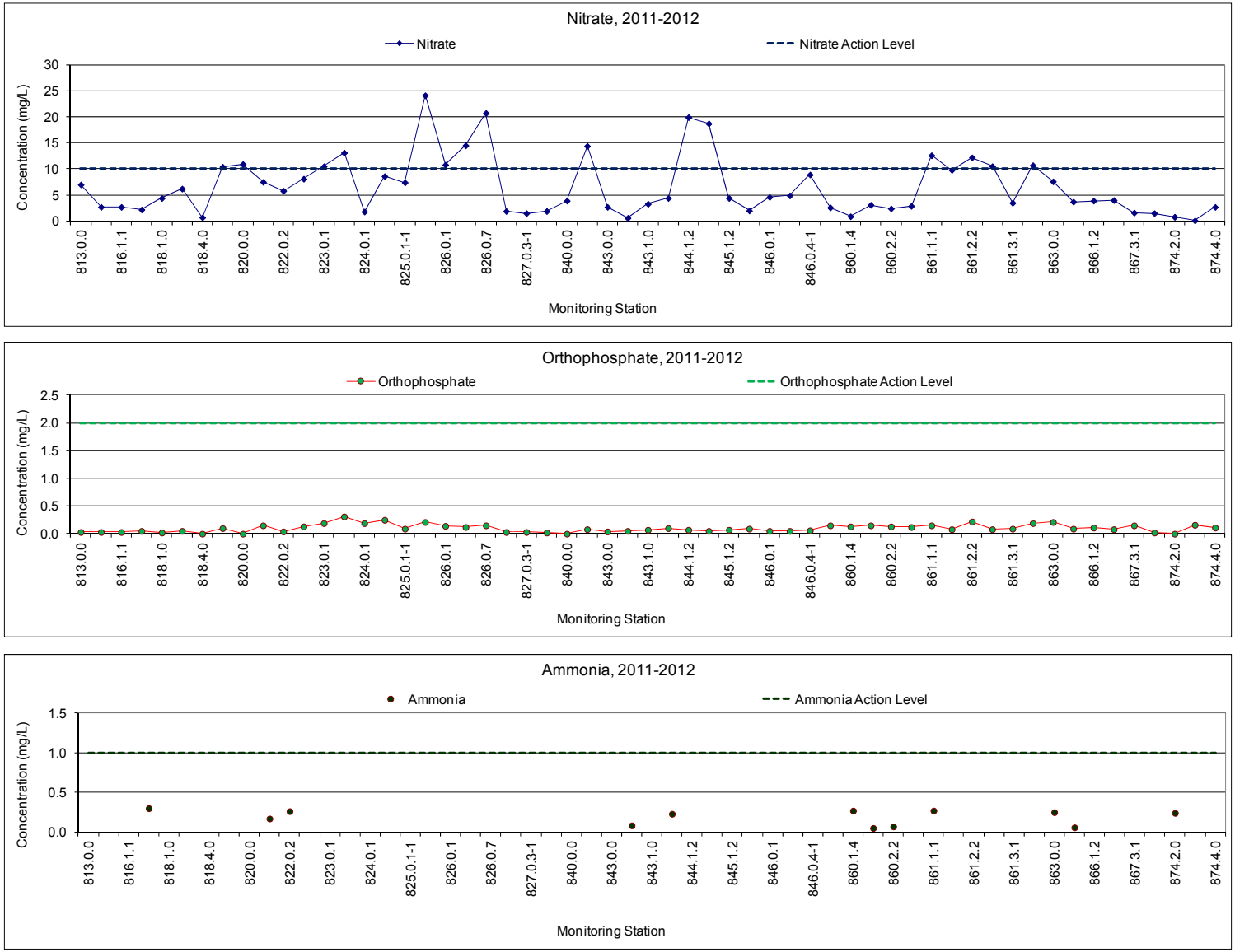


Figure 7-3. Nutrient (Nitrate and Orthophosphate) and Ammonia Concentrations, City of Escondido Dry-Weather Monitoring Program, Fiscal Year 2011–2012

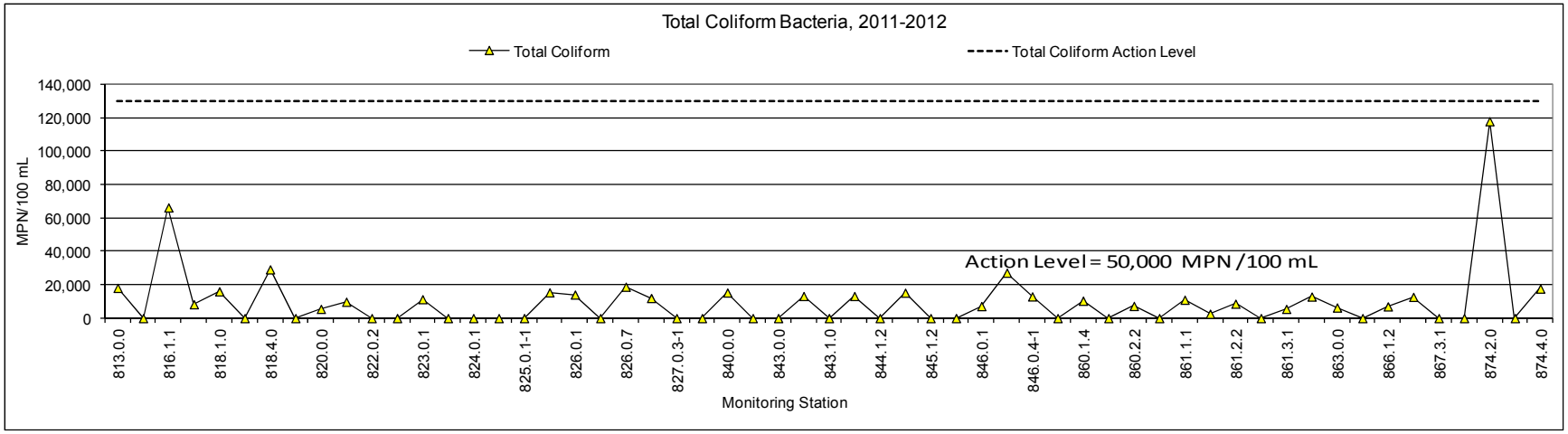
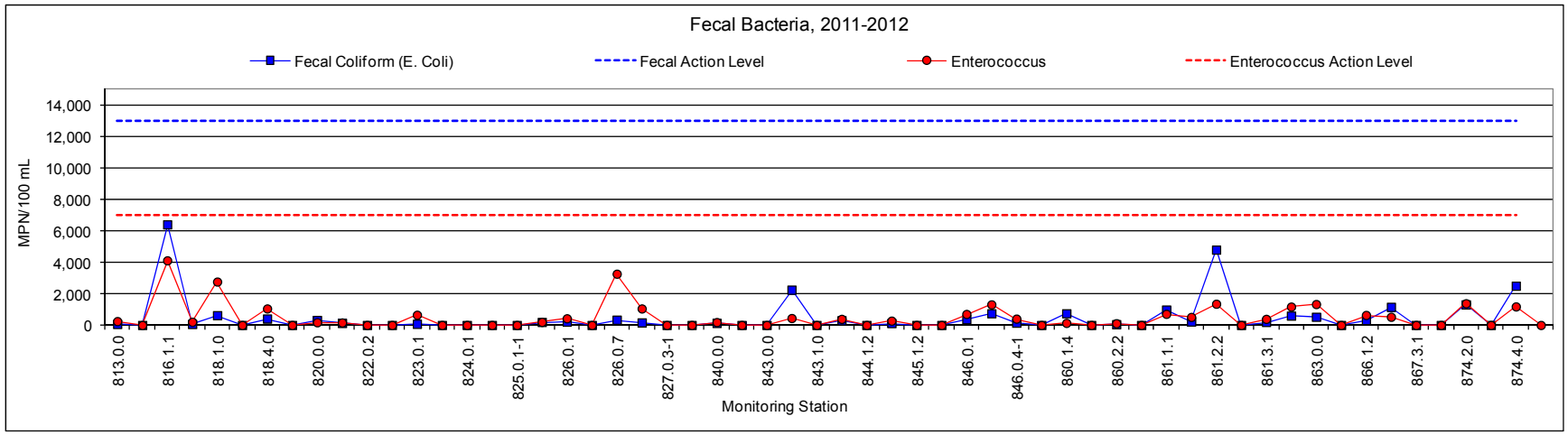


**Figure 7-4. Total Coliform Bacteria Concentrations,
City of Escondido Dry-Weather Monitoring Program, Fiscal Year 2011–2012**



Note: The follow-up sampling result is presented for site 860.1.4.

**Figure 7-5. Fecal Coliform and *Enterococcus* Bacteria Concentrations,
City of Escondido Dry-Weather Monitoring Program, Fiscal Year 2011–2012**

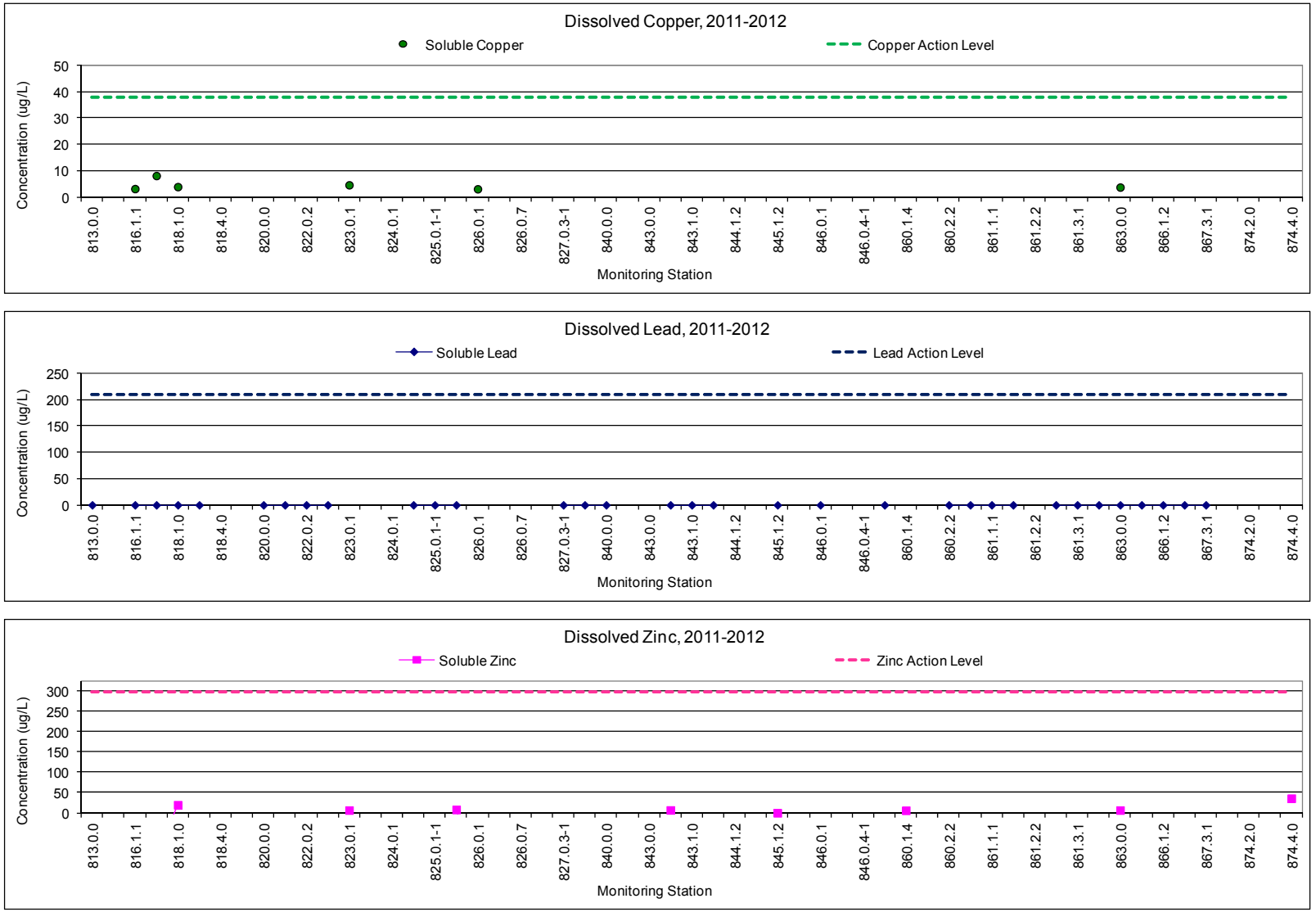


Figure 7-6. Dissolved Metals Concentrations, City of Escondido Dry-Weather Monitoring Program, Fiscal Year 2011–2012

The vast majority of trash documented during the inspections was from in-stream observations versus that which could be correlated to specific outfalls or tributaries. The entire length of Escondido Creek is exposed and flows through the center of the urbanized City, which includes several housing areas and several main arterial streets along the creek banks. As a result, Escondido Creek has a higher probability for trash and debris accumulation, but no particular source could be correlated from the data collected.

Evaluation of Historic Trends

Dry-weather investigations and sampling over the past 10 years have shown correlations of elevated total coliform organisms consistent with the existence of wildlife and other domestic animal populations and/or the decomposition of organic substances. This year, under the new pollutant action levels adopted by the Copermittees, bacteria results were all less than their respective limits (after resampling at one location). Relative to the previous action levels used to monitor bacteria source concerns, the number of exceedances for all indicator bacteria this year was significantly lower than for any of the past years. This is particularly true for total coliform, which in the past triggered follow-up sampling and several investigations.

Until this year, bacteria data collected under this program were reviewed and evaluated relative to the following action levels:

Total coliform: Greater than 50,000 MPN/100 mL
Fecal coliform: Greater than 20,000 MPN/100 mL
Enterococcus: Greater than 10,000 MPN/100 mL

Relative to these previously established limits, historic trends in the City's dry-weather data over the past 10 years reveal the following:

- Several of the stations with elevated concentrations of nitrate are being influenced by dry-weather discharge sources outside of the City's jurisdiction.
- Elevated nitrate patterns in east Escondido (see Figure 7-2) were field-investigated in the past and are suspected to be associated with the following:
  - commercial and private livestock operations/activities,
  - estate (residential) horticulture and lawn care (irrigation and fertilizers), and/or
  - agriculture.
- Bacteria action level exceedances have consistently decreased with time, as summarized in the table below:

Program Year	Percentage of Sites with Bacteria Exceedances[1]
2008–2009	35% (21 of 60 sites)
2009–2010	15% (8 of 55 sites)
2010–2011	12% (7 of 60 sites)
2011–2012	4% (2 of 57 sites)[2]

[1] Sites with exceedances during field standard and follow-up sampling.
[2] Evaluation based on original action levels for all years for comparison purposes.

Summary

Overall, fiscal year 2011–2012 dry-weather monitoring results continue to confirm good urban runoff water quality within Escondido and no discernible problem pollutant sources within the City's jurisdiction. However, some outlying unincorporated San Diego County-owned land uses are suspected of contributing bacteria and nitrate to the City's conveyance system. The watershed program will be used as

a mechanism to collaborate with the County of San Diego to address ongoing nitrate issues, especially with the anticipated development of Water Quality Improvement Plans in response to the new municipal stormwater permit that will be issued in the spring of 2013. Bacteria exceedances have consistently decreased over time.

7.4.4 MS4 Outfall Monitoring

Copermittees situated within coastal drainages that discharge to river mouths, shoreline lagoons, and/or the Pacific Ocean have developed and implemented monitoring programs to characterize pollutant discharges from MS4 outfalls in these areas during wet and dry weather. Because Escondido does not border the coastline, coastal MS4 outfall monitoring efforts are not applicable, but Escondido's watershed is partially represented through the County-sponsored wet-weather monitoring that occurs at Agua Hedionda Lagoon and Escondido Creek. The City provides financial support for, but does not conduct, this wet-weather monitoring.

However, the City monitors numerous MS4 outfalls that discharge to surface waters in the jurisdiction during the annual dry-weather monitoring. In general, these structural pipelines and culverts outfall into large concrete-lined flood-control drainage channels that are monitored as part of the Dry-Weather Program described above. These outfalls are of particular interest to the City because of the tributaries they represent, the ability to characterize runoff from a variety of land uses at a single outfall, and the sensitivity of the respective receiving waters. With the adoption of the MS4 Outfall Monitoring Program in San Diego County Watershed Management Areas Work Plan (MS4 Outfall Program) (Weston 2008), the City conducted its first MS4 (targeted) outfall sampling event in 2009. As required in the MS4 Outfall Monitoring Program, the City was assigned eight targeted outfall stations (five stations within the Carlsbad Watershed and three within the San Dieguito Watershed). Under this program, each watershed was assigned specific analytes to monitor (in addition to the dry-weather constituents) that include the following:

- TSS,
- total phosphate,
- manganese,
- selenium, and
- sulfates.

MS4 (Targeted) Outfall Monitoring results are provided to the RWQCB annually under separate cover.

7.5 FOLLOW-UP AND ENFORCEMENT

The sections below describe the City's efforts to investigate and follow up on dry-weather monitoring results or other indicators of IC/IDs.

7.5.1 Dry-Weather Monitoring Follow-Up Activities

During the reporting period, the City initiated the follow-up activities described below to identify potential sources of pollutants.

Source Identification and Follow-Up Sampling

At stations where initial samples indicate a potential water quality concern, source identification inspections and follow-up sampling were conducted to confirm persistent pollutant discharges and identify potential sources of the pollutants found. These activities were conducted at stations where field screening measurements or laboratory analyses found that samples:

- exceed an established action level, or
- have total coliform:fecal coliform/*Enterococcus* ratios that are significantly high (i.e., approaching 1:1 ratio).

Established numeric action levels are those identified by the Dry-Weather Monitoring Workgroup (component of the San Diego County-sponsored Project Clean Water) or State Water Resources Control Board's water-quality objectives.

Follow-up investigations are initiated within 2 business days of the exceedance to the maximum extent practicable. If immediate follow-up is not practicable, a rationale is provided.

As discussed below, repeat sampling and field investigation during this reporting period were necessary at some stations where action levels were exceeded for nitrate and bacteria.

Nitrate

Results of follow-up sampling found 15 sites with elevated nitrate. Of these sites, two are located outside of the City's jurisdiction (Stations 861.2.2 and 861.2.3) and three (Stations 844.1.2, 844.1.3, and 862.0.0) are within City limits but are associated with drainage originating from upstream livestock/agricultural activities or open areas on unincorporated lands. Follow-up actions for the remaining 15 elevated nitrate sites found no activities or sources contributing to the exceedances, which are believed to originate from historical land uses, as mentioned in Section 7.4.3. In the past, the City provided public outreach material to educate residents and property owners in these areas in an effort to reduce non-point-pollutant contributions; the City will continue to target these areas to address persistent water-quality issues. In addition, the City will continue to work with the County of San Diego to identify BMPs that can be implemented to address nitrate exceedances through the ongoing total maximum daily load (TMDL) effort.

Bacteria

Follow-up sampling for bacteria was only necessary at one site (Station 860.1.4), where fecal coliform and *Enterococcus* action levels were initially exceeded. Upon the analysis of follow-up samples, there were no action-level exceedances for bacteria within the jurisdiction.

Illicit Connections and Illegal Discharges

No illicit sewer connections or illegal discharges to the MS4 were detected as a result of the follow-up investigations during this reporting period.

7.5.2 Investigation Procedures

In addition to Dry-Weather Program follow-up activities, if an IC/ID is suspected, observed, or reported, the City initiates an investigation to identify the source. Depending on the circumstance, investigations normally involve following flows or discharges upstream to locate the source. A systematic process of elimination is used to determine the potential source—tributary junctions are screened and/or tested to determine upgradient conditions until the source is located. As needed, samples are collected and analyzed to provide constituent information related to the discharge. For example, if the flow under investigation is suspected of being sewage related, field screening for ammonia and/or testing for bacteria may be conducted. GIS is used to help identify possible upstream contributors and hydraulic connections, and to assist with field investigation efforts.

Various techniques are employed by the City to evaluate the hydraulic continuity of the associated MS4 components and whether IC/IDs exist. These techniques are summarized below:

- Dye-testing to confirm hydraulic connections. This involves discharging biodegradable fluorescent dye at the source of a potential IC/ID.
- Smoke-testing to confirm the hydraulic connection between a potential source and a downstream location. This process is avoided unless absolutely necessary as it has the potential to cause public alarm.

- Video monitoring to visually document pipeline condition, the occurrence of laterals, and other subsurface characteristics using mobile video cameras in underground stormwater conveyance facilities.

- Commercial and industrial pretreatment inspections.

The City documents information related to IC/ID and pollutant source investigations. This information is compiled in the City's database, AZTECA.

During the reporting period, 44 illicit discharges to the MS4 were identified and resolved. Twenty-two were associated with commercial or industrial facilities, including food service businesses, and 22 were associated with residential activities. Illicit discharges are detailed in Appendix D.

7.5.3 Enforcement Measures

The City has a number of enforcement action options against individuals or parties identified as being responsible for IC/IDs. The type of enforcement action depends on the severity of the violation and can include one or more of the actions described below.

- Verbal or written warnings are given for minor cases. The written warning, or NOC, restates the violation and sets a timeline for reinspection of the site, if applicable. Failure to comply with a verbal or written warning results in more severe enforcement actions.

- A Notice of Violation (NOV), which identifies a specific response time and compliance schedule, is written by the Utilities Department. The compliance schedule outlines what actions must be taken to remedy the violation and includes dates for implementation of the remedies.

- Stop-work orders are cited where businesses or construction activities are involved. The Field Engineering Department can issue a stop-work order and, in more severe cases, use this citation in conjunction with Cost Recovery and/or a Clean and Test Order. This effort is used to stop the violation, attempt to recover any expenses incurred from the investigation, and require proof that the activities associated with the violation have ceased. If the violation continues, or the responsible party is uncooperative, the NOV information is forwarded to the City Attorney.

- Fines are levied by the City's Code Enforcement Division and/or Utilities Department Inspectors for violations of stormwater regulations. Fines can escalate depending on the level of cooperation received by the violator.

- Revocation or denial of permits or licenses is exercised by the City's Code Enforcement Division until the violation is remedied.

- Declaration of a Public Nuisance is declared by the City Attorney and remains in force until the unauthorized activity ceases.

Civil and/or criminal court actions can be filed by the City Attorney against the responsible party. These actions can result in significant fines levied upon the responsible party. Four businesses were issued administrative fines during the reporting period. Refer to Appendix D for a list of dischargers, violation descriptions, and corrective actions for this reporting period.

7.5.4 Elimination

As described in the preceding sections, the City takes immediate action to eliminate detected illicit discharges, illicit discharge sources, and illicit connections as soon as possible after detection. The City may impose an escalating series of enforcement actions for those illicit discharges that are not a serious threat to public health or the environment, as listed above. However, illicit discharges that pose a serious threat to public health or the environment are eliminated immediately.

8 EDUCATION COMPONENT

8.1 INTRODUCTION

During the 2011–2012 reporting period, the City continued its extensive education and outreach programs to deliver information about urban runoff and its effect on water quality, focusing on the constituents of concern associated with the water bodies that lie within the City's primary watersheds: Carlsbad and San Dieguito.

According to the most current demographic data from the San Diego Association of Governments, the City of Escondido's population is estimated at 143,911. Of that total, 51 percent is considered Caucasian and 49 percent Latino, with the remainder identified as mixed ethnicity. Because of its diversity, particularly Escondido's significant Latino population, the City continued to explore ways to reach this community.

8.2 STAFF TRAINING

8.2.1 General Employees

City employees receive stormwater-related messages through CityLine, a weekly electronic citywide newsletter distributed by the City Manager's Office. To reach new employees, the City offers a day of orientation on a quarterly basis. A 20-minute presentation provides background on the Clean Water Act, the current municipal stormwater permit requirements, general information on watersheds, and BMPs. A 12-minute video, *Preventing Stormwater Pollution in San Diego County*, produced by Impact Media and developed by the San Diego Copermittees' Municipal Workgroup, has been incorporated into the presentation. The session ends with the employees playing "Storm Water Jeopardy," a game provided on PowerPoint that reinforces the information in the presentation. Included in their New Employee binder, each employee is given a laminated "Be a Clean Water Leader" sheet that explains the three C's: Control, Contain, and Capture. All employees receive a message click pen that rotates through six messages: Pick Up Pet Waste, Use a Hose Nozzle, Eliminate Runoff, Pick Up Litter, Sweep Sidewalks, and Reduce Pesticide Use. During this reporting period, 20 new employees received this presentation.

8.2.2 Field Engineering/Engineering/Utilities/Construction/Planning Staff

On May 30, 2012, the City's Field Engineering, Engineering, Planning, and Utilities staff attended a 3-hour workshop designed to cover the various components of the development process as it relates to stormwater requirements: the Construction General Permit, Standard Urban Stormwater Management Plan (SUSMP), Low Impact Development, and Hydromodification. The training included stormwater requirements from inception of a project through active construction and into the post-development phase. Much of this discussion was set in the larger context of the municipal stormwater permit. Questions were raised throughout the presentation, which provided a good dialogue between staff and the environmental professionals who were retained to conduct the workshop.

8.2.3 Utilities/Stormwater-Pretreatment Inspection Staff

In June of 2012, pretreatment staff watched a municipal training video that provides an overview of basic stormwater concepts and detailed procedures for implementing basic BMPs. The video was well received by staff.

8.2.4 Maintenance and Collections

The City provides a thorough workshop on municipal stormwater concepts, requirements, and BMPs on a bi-annual basis. On April 19, 2011, stormwater training was conducted for the maintenance and collections staff. The training provided an overview of stormwater regulations, municipal requirements, watershed concepts and drainages, pollutant sources, and BMPs such as inlet protection, perimeter controls, storage practices, spill preparedness, etc. The presentation also addressed the legal consequences for noncompliance and included opportunities for questions and answers. The next training is scheduled for early 2013.

8.3 EDUCATIONAL OUTREACH

8.3.1 Underserved Community

During this reporting period, the City's stormwater education staff continued its outreach to the underserved population, including the Latino population, by partnering with the Neighborhood Services Division, which coordinates neighborhood groups, targeting the underserved and Hispanic populations. The goal is to improve the safety and health of neighborhoods. Currently, 16 neighborhoods are in the program, encompassing approximately 2,534 households. The stormwater education staff offers education and outreach to these neighborhoods. Some of the neighborhoods have requested speakers at their meetings. During this reporting period, the education staff attended and gave presentations on water quality and conservation to three neighborhood groups: Rustic Village, Lansing Circle, and West Hillside. They also provided stormwater information at the Neighborhood Leadership Forum, which includes representatives from all 16 neighborhoods. In addition, the City's Education and Outreach staff provided stormwater and/or stormwater-related (water conservation) information to Rancho Escondido Mobile Home Park residents and to the Del Lago Homeowners Association.

8.3.2 General Public

The City continues to maintain a stormwater website (http://www.escondido.org/storm-water-program.aspx) so users can quickly access information. A link to the Storm Water Program is located in the "Find it Fast" section, which is found on the City's home page.

Beginning in 2005, the City began tracking the number of hits that the stormwater page received. The purpose of tracking website visits is to assess the success of the outreach program and to evaluate the usefulness of the website to its residents. Figure 8-1 provides the number of website visits during the past 4 program years. The higher number of site visits at the beginning of fiscal year 2010–2011 may be attributed to changes to the water conservation regulations that occurred during that time.

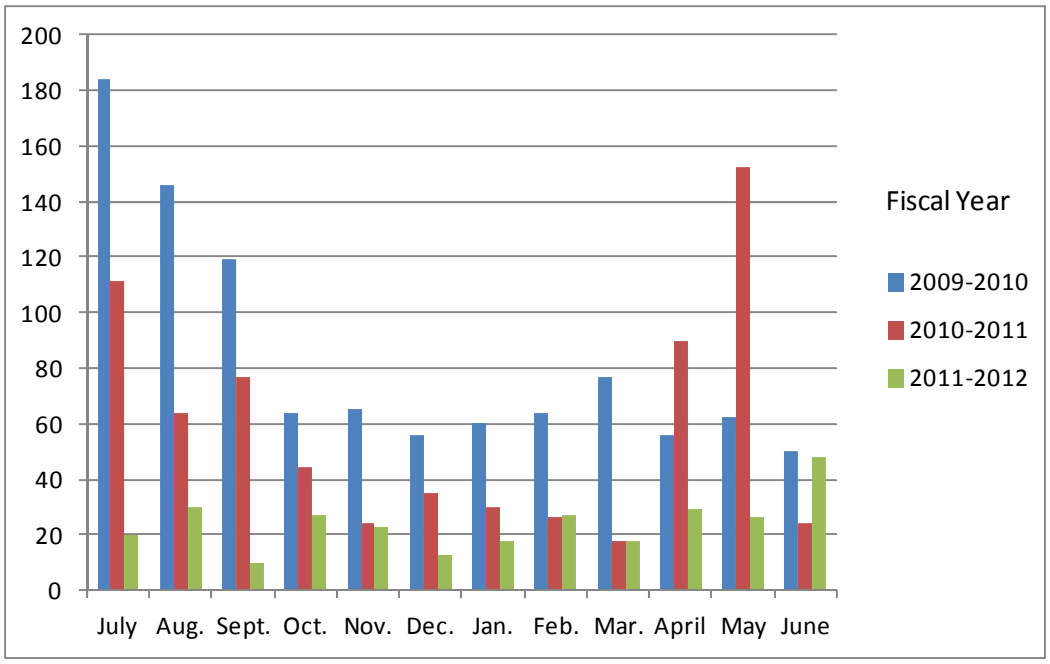


Figure 8-1. Annual Stormwater Website Hits, 2009–2012

In addition to using the website to disseminate information on the City's stormwater program and water quality issues, the City employs other means, including direct mail through utility bill inserts, local cable network, the speakers' bureau, and special events.

For local outreach, the City continued to broadcast slides on its local Cox cable station (Channel 19) and ATT Universe (Channel 99), which together reach 36,000 households. These slides are part of the City's community services announcements that run 7 days per week, 5 hours per day. In this reporting period, the City also began broadcasting two short videos about saving water, including preventing residential landscape runoff. Also, three new stormwater messages regarding cigarette butts, irrigation runoff, and litter were added this reporting period.

City Council meetings are televised live and are broadcast two times throughout the week. In celebration of Pollution Prevention Week, the City's Mayor, Sam Abed, presented the City's staff with a proclamation to reinforce the City's commitment to a clean and safe environment. Throughout the year, staff delivered presentations highlighting the City's ongoing environmental programs and activities, as well as public participation opportunities.

The City continued its extensive educational outreach efforts by participating in a variety of events (Table 8-1). Each booth typically included a visual demonstration or activity, literature, and handouts, as well as staff on hand to answer any questions.

Table 8-1. Educational Outreach Events, Fiscal Year 2011–2012

Name	Date	Location	Purpose	Participants	Handouts
Neighborhood Leadership Forum	7/21/11	City Hall	Water Conservation/ Stormwater	20	Save Water Now; Nifty 50; stormwater brochures; Spanish brochures; 10 Ways to Save Water Outdoors, Here's How; Water for Tomorrow; Escondido local brochures; giveaways
Rustic Village	8/10/11	1145 Rustic Lane, Escondido	Water Conservation/ Stormwater	40	Save Water Now; Nifty 50; stormwater brochures; Spanish brochures; 10 Ways to Save Water Outdoors, Here's How; Water for Tomorrow; Escondido local brochures; giveaways
West Hillside Neighborhood Group	9/7/11	Mitchell Room	Water Conservation/ Stormwater	20	Save Water Now; Nifty 50; stormwater brochures; Spanish brochures; 10 Ways to Save Water Outdoors, Here's How; Water for Tomorrow; Escondido local brochures; giveaways
Grape Day Festival	9/10/11	Grape Day Park	Water Conservation/Stormwater	200	Save Water Now; Nifty 50; stormwater brochures; Spanish brochures; 10 Ways to Save Water Outdoors, Here's How; Water for Tomorrow; Escondido local brochures; giveaways
I Love a Clean San Diego	9/17/11	Dixon Lake	Stormwater	80	I Love a Clean San Diego brochures
Pollution Prevention Week	9/19/11–9/29/11	City Hall Lobby	Stormwater	100	Stormwater calendars, kids' activity sheets, stormwater brochures
Educators' Night Out	9/28/11	San Diego Children's Discovery Museum	Water Conservation/ Stormwater	50	Promote classroom presentations

Name	Date	Location	Purpose	Participants	Handouts
Families on Foot	10/29/11	Kit Carson Park	Water Conservation/ Stormwater	250	Save Water Now; Nifty 50; stormwater brochures; Spanish brochures; 10 Ways to Save Water Outdoors, Here's How; Water for Tomorrow; Escondido local brochures; giveaways
Employee Health & Lifestyle Expo	11/3/11	City Hall	Water Conservation/ Stormwater	200	Save Water Now; Nifty 50; stormwater brochures; Spanish brochures; 10 Ways to Save Water Outdoors, Here's How; Water for Tomorrow; Escondido local brochures; giveaways
Farmer's Market	12/6/11	Grand Avenue	Stormwater	200	Stormwater calendars
Paws in the Park	3/25/12	Kit Carson Park	Stormwater	400	Save Water Now; Nifty 50; stormwater brochures; Spanish brochures; 10 Ways to Save Water Outdoors, Here's How; Water for Tomorrow; Escondido local brochures; giveaways
Dia Del Nino	4/28/12	Grape Day Park	Water Conservation/Stormwater	400	Save Water Now; Nifty 50; stormwater brochures; Spanish brochures; 10 Ways to Save Water Outdoors, Here's How; Water for Tomorrow; Escondido local brochures; giveaways
Street Faire	5/20/12	Grand Avenue	Stormwater/Water Conservation	100	Save Water Now; Nifty 50; stormwater brochures; Spanish brochures; 10 Ways to Save Water Outdoors, Here's How; Water for Tomorrow; Escondido local brochures; giveaways

Workshops

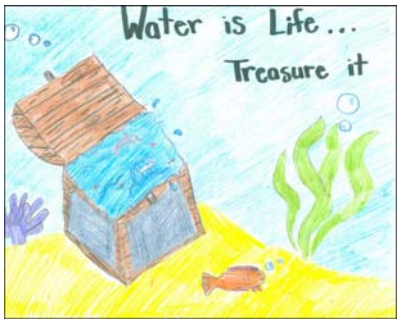
Composting demonstration workshops, which are hosted by the City of Escondido and the Escondido Community Garden group, are held quarterly. These workshops provide residents with basic information about composting, including the promotion of healthier plants that are more resistant to disease and pests. Moreover, such resilience achieved through natural means reduces or even eliminates the need for pesticides that can contribute to pollutants conveyed to nearby creeks and streams by irrigation and stormwater runoff. During the reporting year, more than 100 residents attended the four workshops. These workshops were advertised in the City's Recreation Brochure, through the Recycling Hotline, and through a press release.



8.3.3 School Education

The City's water conservation and water quality education programs continue to be a success with teachers, even with limited classroom time because of the increased emphasis on testing and reduced school staffing. A brochure on the education program, which complements California's education standards for science and social studies, is distributed to office managers and teachers at public and private schools. Through puppetry and song, kindergarten and first graders are introduced to ways they can protect the water supply through conservation and learn how to keep creeks and lakes clean. The

second-grade presentation introduces the water cycle concept and leads students to discuss ways they can use water and keep it clean. Third-graders learn about matter and the molecular structure of water by constructing a model of the water molecule using pretzels and marshmallows. The presentation finishes with an assessment of the students' knowledge by playing BINGO. Using this informative and entertaining game, fourth-grade students observe and discuss how their domestic activities can pollute nearby waterways. Fifth-graders receive an advanced review of the concepts taught in earlier grades. Dedicating one part-time temporary employee to this program, the City delivered 197 water presentations to approximately 4,348 students during this reporting year.



Sarah Lord

In addition to the regular water education program, the City partners with 12 other agencies in North San Diego County to sponsor a fourth-grade poster contest. This program year's theme was "Water is Life." Students were asked to demonstrate the importance of water and its impact on life. To complement the theme, the City provided a free presentation to 36 fourth-grade classes reaching 1,064 students. The 12 winners of the poster contest were recognized at the April 25, 2012, City Council meeting.

Since 1996, the City has sponsored the San Diego Outdoor Education's self-contained Splash Science Mobile Lab for the fifth and sixth grades. In the summer of 2008 the curriculum of the mobile lab was modified to focus on watersheds. This year, four schools were visited; approximately 160 students participated in the science lab per school. Each class was divided into teams and researched one of six areas. Utilizing a GIS program, the students identified typical beach pollutants and their likely sources. Students on the Storm Drain Team discovered how pollution that originates in their neighborhood can be conveyed to local estuaries, resulting in significant environmental consequences for the plants and animals they support. In addition, the Water Conservation Team discovered how water is used and established ways to stop its waste. Finally, the students on the Microscope Team looked at three different microorganisms and two macro-invertebrates called indicator species. During this reporting period the City sponsored 100 percent of the cost of the van for four schools. The City will continue to sponsor this exceptional educational outreach program to other schools within the district on a rotating basis so that every school will have the opportunity to utilize the Splash Science Mobile Lab resources.

During the summer months when the schools are not in session, the City partners with the Escondido Humane Society's summer camp program and gives presentations to children spanning grade levels kindergarten through sixth grade. The focus of the presentation is on stormwater issues. During this reporting period, water quality presentations were given on 15 separate visits to approximately 371 children ranging from ages 5 to 12.

8.3.4 Residents

The City involves the community to help report stormwater violations and provides opportunities for the public to help keep our watershed clean by offering a facility to dispose of their household hazardous waste and coordinating a litter abatement program.

The City Public Works main line (760-839-4668) includes a menu selection for reporting illegal dumping into storm drains, creeks, and lakes. This number is printed on all outreach material, including brochures, promotional items, and articles. Callers can leave a message or report their findings to the receptionist during business hours. After business hours, the caller is instructed to call Police Dispatch or 911 if the call pertains to a health and safety concern.

The information from the calls is entered and tracked by the City's AZTECA database. This program is linked to the City's GIS program, which enables staff to locate the address in relation to the nearest storm drain. When the calls are received, staff assign the concern to a category. A report is generated and given to the division of Community Services that handles the issue.

During this reporting period, 190 calls were labeled as stormwater-related, including debris in the MS4, illegal discharges, spills, blocked storm drains, residential and commercial discharges, and transient camps (Figure 8-2). City staff will continue to address these issues in outreach efforts and programs.

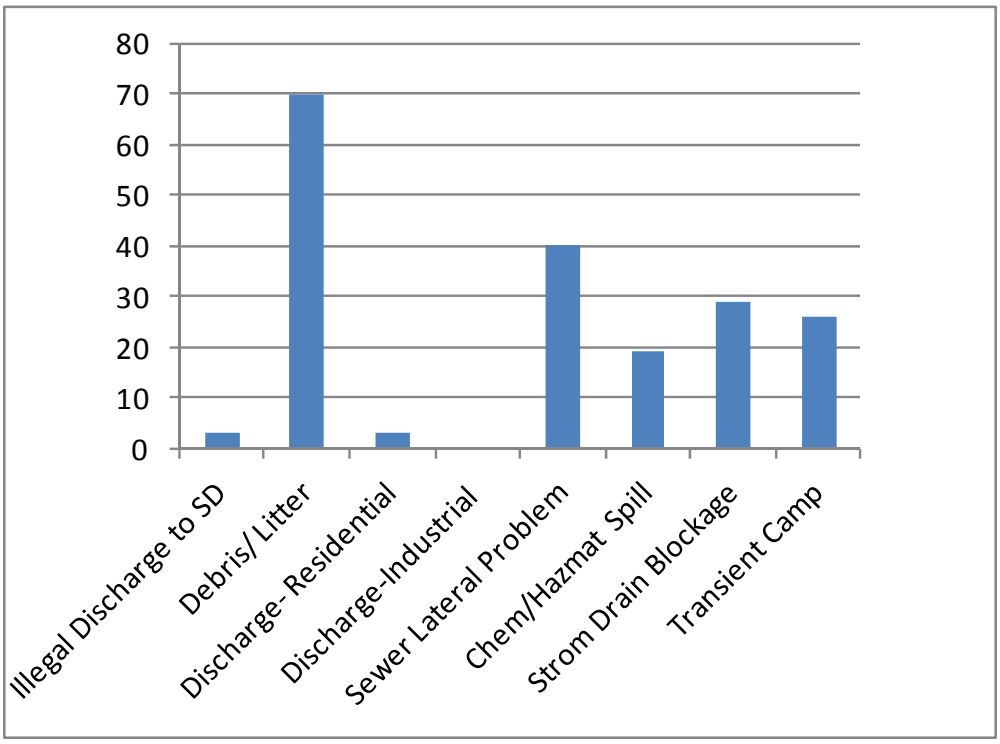


Figure 8-2. Stormwater Hotline Calls, City of Escondido JURMP, Fiscal Year 2011–2012

In addition to the Public Works hotline number, informational hotlines for water conservation (760-839-4658) and recycling (760-839-4818) are also available to Escondido's residents. Using a menu tree, the caller can receive information on used motor oil recycling, household hazardous waste disposal, water surveys, workshops, upcoming special events, and other related events or programs.

Escondido opened its own Permanent Household Hazardous Waste Collection facility in September 2004. The facility is open two Saturdays per month, by appointment, from 9:00 a.m. to 3:00 p.m. for Escondido residents, free of charge. All household hazardous wastes and universal wastes are accepted, including cathode ray tubes, alkaline batteries, miscellaneous electronics, LCD monitors, televisions, fluorescent/CFL lamps, and sharps (needles). Pharmaceuticals (non-controlled) are also now accepted at the facility, which is averaging 206 users per month, with continued usage at the regional facilities in Poway and Vista, averaging two users per month for a total of 208 users on a monthly basis. This is a 20 percent increase in the number of residents using the facility monthly. Overall volumes collected show an increase of 15.2 percent, with substantial increases in almost all areas of collection. Notable increases in collection volumes are for do-it-yourself used oil collection reported by CalRecycle (74 percent increase), paint (23.2 percent increase), e-waste (11.3 percent increase), lamps (126 percent increase), and sharps (25 percent increase). In this reporting period, the City made household hazardous waste collection the prime focus at all of its public education events. Batteries showed a 10.7 percent reduction in volume, but this is probably due to the City's waste hauler, Escondido Disposal, opening a drop-off battery collection site in 2011 at its office (open during all business hours), which is at the same location as the Household Hazardous Waste Facility. Table 8-2 shows the amount of household hazardous waste collected during the reporting period.

Table 8-2. Household Hazardous Waste Collected, Fiscal Year 2011–2012

Total Waste Collected (not including DIY used oil)	Used Oil & Filters Only	DIY Oil Collection	Paint (oil and latex)	E-waste	Lamps	Sharps	Batteries
526,706 lbs.	6,990 lbs.	53,333 gallons	101,600 lbs.	373,111 lbs.	3,190 lbs.	600 lbs.	5,075 lbs.

DIY = do-it-yourself
lbs. = pounds

The City continued its "We Clean Escondido" litter abatement program. Modeled after the "Adopt a Highway" program, businesses, civic organizations, and individuals choose an area to pick up litter before it reaches the storm drain inlets. In turn, the City supplies safety vests, gloves, trash pickers, and trash bags. Volunteers who commit to clean up a designated area once per month for 1 year can display their names on a sign provided by the City. Volunteers (individuals and groups) also conduct one-time cleanups; they are given supplies, but do not receive recognition signs. During this reporting period, 1,488 volunteers worked 2,826 service hours and picked up 1,263 bags of litter.





The City also participates in the California Coastal Cleanup Days that are scheduled in the spring and fall to coincide with Earth Day and Pollution Prevention Week. The site for these cleanups is Dixon Lake, one of the City's drinking water reservoirs. This past year, 162 volunteers picked up 614 pounds of trash and 526 pounds of recyclables, for a total of 1,140 pounds. In recognition of their volunteer efforts, each participant received a cloth litter bag, literature, and giveaways.

At all public events (composting workshops, coastal cleanups, etc.), handouts were provided to all participants regarding the following topics: Less Toxic Gardening, Recycling, Hazardous Waste Disposal, Composting, Construction Demolition Recycling, and various giveaways that include internet and hotline contact information.

This year, the City also participated in the region's "Day Without a Bag" event, held on December 15, 2011. Reusable bags were distributed at various retail outlets as a reminder to people about the waste created by the use of one-time-use disposable bags and to facilitate use of reusable bags. This event was heavily publicized throughout San Diego County. Escondido City staff coordinated with the regional group, and the City had participation at nine stores, including Jimbo's where the City hosted a table.

Because it is identified as one of the high-priority pollutants of concern, the City continued to target bacteria through its education and outreach dry-weather monitoring and watershed programs, including the San Dieguito and Carlsbad watersheds. The City partners with the Escondido Humane Society to provide pet waste dispensers to anyone who adopts a dog. During this reporting period, over 300 pet waste containers were given to new dog owners.

The dispenser has a cable-tie to attach onto the dog's leash. Twelve disposable bags are included with the dispenser. Additional bags are available at local pet retail stores. An informational tag is attached to

each dispenser. One side of the tag has a picture of a dog with a statement, “Thanks for picking up after me.” The alternate side informs the pet owner about the effects of bacteria on the watershed. The City also partnered with the Neighborhood Services Division to install 19 pet waste stations in nine neighborhoods.



On a regional and watershed basis, the City targeted pesticides and their harmful impacts on the watershed at various event venues by distributing Integrated Pest Management Tip Cards. The City distributed the tip cards at various community events.

Litter is always a focus of the City’s ongoing promotion of a healthy watershed. To raise awareness about litter, especially debris deposited on the City’s streets, colorful “Do Not Litter” signs are posted on the sides of the City’s two street sweepers. During this reporting period, approximately 7,408 curb miles were swept by the Maintenance and Operations Division and 410 tons (1,518 cubic yards) of material was collected. During this reporting period, the City conducted a more rigorous street sweeping schedule than the minimum frequencies set forth in the JURMP to prevent trash and debris from entering receiving waters. For example, downtown focus blocks were swept three times per week, heavily traveled streets were swept once per week, moderately traveled streets were swept two times per month, and all other roads were swept once per month.

8.3.5 Commercial and Industrial

The City continued to educate the commercial and industrial sector on a one-to-one basis during site visits. Brochures and posters are distributed on an as-needed basis to new businesses or those in need of assistance in understanding and implementing stormwater requirements. During the program year, new businesses were targeted to receive stormwater information, which included informative posters for break rooms. Overall, the City conducted more than 1,400 commercial and industrial inspections. These totals included more than 500 food-based businesses, which were inspected twice during the program year to assess compliance with stormwater and pretreatment regulations. This effort alone accounted for more than 1,000 inspections annually. Businesses received a variety of educational materials, including the Green Wrench Guide (available in both English and Spanish) for automotive business and the What’s Cooking Guide (available in English and Spanish), and a general BMP brochure for other businesses. Industrial businesses were assessed and, if applicable, advised about their responsibilities under the General Industrial Permit through the provision of a bilingual brochure that describes the types of operations that are subject to the Permit and the basic BMPs they should implement. In addition to distributing information via site visits, Business License staff provided brochures to applicants at the counter. In addition, the City distributed a brochure for mobile businesses through the Business License Division. The City’s Pretreatment staff reviews each mobile business’s recovery equipment as part of the business license application or reapplication process. If a business lacks the appropriate equipment or cannot demonstrate the proper use of it, a license will not be issued until corrective action has been taken.

8.3.6 Construction Site Owners and Developers

To promote awareness and compliance of construction stormwater regulations and BMP requirements, the City provided the following:

- educational material for construction and land development companies;
- BMP handouts for building and grading permit applicants;
- preconstruction meetings with developers, project supervisors, and engineers to review stormwater pollution prevention requirements and BMPs; and
- education for construction site inspectors regarding routine and nonroutine (e.g., violation follow-up) inspections.

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9 PUBLIC PARTICIPATION COMPONENT

9.1 INTRODUCTION

Public participation is an integral part of the success of stormwater planning. Key to this achievement is the City's effort to involve its citizens, as well as interested and affected groups, in the ongoing development and implementation of the JURMP, as required by Order R9-2007-0001. The City provides the public with numerous opportunities to participate in the City's Urban Runoff Management Program.

9.2 PUBLIC PARTICIPATION OPPORTUNITIES

During the 2011–2012 reporting period, the City continued to provide citizens with the opportunity to participate in many programs, including those outlined below, which are discussed in detail in Chapter 8, Education Component, of this report:

- participation in litter removal events;
- calls to the stormwater pollution prevention hotline;
- participation in composting workshops featuring stormwater pollution prevention techniques;
- stormwater presentations to elementary schoolchildren;
- promotion of the stormwater program and related events through local media (cable TV and newspapers);
- comprehensive stormwater website that features an interactive BMP education site for residents, as well as information for businesses;
- participation in the San Dieguito Watershed group, a consortium of nongovernmental organizations and governmental agencies that are collaborating to preserve and improve the environmental integrity of the San Dieguito Watershed;
- participation in the Escondido Creek and San Elijo Watershed Cooperative Agreement (ECWA), a collaboration of jurisdictions and nongovernmental organizations that seeks to preserve and create a healthy environment to provide a foundation for the overall quality of life in the watershed; and
- Participation in the Escondido Revealing the Creek organization, which is a group of residents, nongovernmental organizations, and local government representatives who seek to create a new vision of the creek as a functional and aesthetically pleasing recreation and transit corridor that is a social, environmental, and economic resource to its community.

In addition, the City holds public outreach events throughout the year. A listing of the events conducted during the reporting period is provided in Table 9-1.

Table 9-1. Public Outreach Events, Fiscal Year 2011–2012

Geographic Focus/ Outreach Group	Content	Number of Occurrences
City Council	• Legal and Regulatory Requirements • Watersheds and Water Quality Concepts • BMPs • Public and Community Resource Information	2

Geographic Focus/ Outreach Group	Content	Number of Occurrences
Environmental Groups	• Legal and Regulatory Requirements • Watersheds and Water Quality Concepts • BMPs • Public and Community Resource Information	2
Special Events (Street Faire, Earth Day, Public Works Week, Water Awareness Month, Cinco de Mayo, Grape Day Festival)	• Legal and Regulatory Requirements • Watersheds and Water Quality Concepts • Waste Reduction, Recycling, Urban Runoff BMPs • Public and Community Resource Information	See Chapter 8, Education Component
Commercial/Industrial Businesses	See Education Component	
Construction Businesses	See Education Component	
Residents and Schools	See Education Component	

As discussed in Chapter 8, the City partners with 12 other agencies in North San Diego County to sponsor a fourth-grade poster contest. This program year's theme was "Water is Life." Students were asked to demonstrate the importance of water and its impact on life. To complement the theme, the City presented a free presentation to 36 fourth-grade classes reaching 1,064 students. The 12 winners of the poster contest were recognized at the April 25, 2012, City Council meeting, where the students' achievements were recognized and where City staff provided an overview of the City's environmental programs' goals and objectives, as well as upcoming events, such as local litter cleanup events. The City's annual sponsorship of this televised event is an opportunity to celebrate and solicit residents' participation in Escondido's environmental programs. On September 14, 2011, the City's Mayor, Sam Abed, read a pollution prevention proclamation, which annually recognizes Pollution Prevention Week. The proclamation noted the City's pollution prevention efforts and programs, including stormwater and water conservation. Since City Council meetings are televised, they are estimated to reach approximately 30,000 people via live and recorded broadcasts.

10 FISCAL ANALYSIS COMPONENT

10.1 INTRODUCTION

The following fiscal analysis is based on the "Standardized Fiscal Method and Format" (Fiscal Analysis Method) that was collaboratively developed by the Copermittees in January 2009 in accordance with sections G,J.1.a(3)(k) and J.1.c(1)(d) of NPDES Order R9-2007-0001. The Fiscal Analysis Method document was submitted to the San Diego RWQCB in January 2009. The Fiscal Analysis Method provides Copermittees with guidance and standards to analyze and report their urban runoff management program (jurisdictional, watershed, and regional) expenditures, as well as with direction to identify the funding sources that support those costs. Because many stormwater-specific activities are co-mingled with other municipal responsibilities and tasks, some of the expenditures are best professional estimates of resources spent on a particular stormwater function or area. However, any estimates are documented by a rationale that will serve as a benchmark for future years' analyses.

10.2 GENERAL BUDGET INFORMATION

On an ongoing basis, the City reviews the revenue and expenditures associated with the Stormwater Management Fund to ensure that adequate support is available to implement jurisdictional, watershed, and regional urban runoff management program components (i.e., JURMP, WURMP, and RURMP). In doing so, the City annually tracks staff time, operations, maintenance, education, capital, and administrative expenditures, and makes allocation adjustments as necessary to accomplish the activities of this program. Since the majority of the stormwater program is supported by the Wastewater Fund, it is annually reviewed to determine whether adequate funding is available to sustain it.

Support from non-wastewater departments for stormwater services is largely represented by allocations to various General Fund departments involved in the planning and implementation of the program, e.g., Maintenance, Engineering, Information Systems, Planning, and Fire. However, because of budget constraints over the last couple of years, the City has focused on effectively delivering stormwater services that improve water quality and meet permit compliance targets while remaining within designated budget thresholds. To accomplish this in part, the City has relied less on outside contractors and more on existing staff resources to achieve program objectives and goals.

The following discussion of fiscal year 2011–2012 program expenditures and funding sources provides a more detailed analysis of how the balance between expenditures and available revenue has been achieved.

10.3 FISCAL ANALYSIS RESULTS

10.3.1 Expenditures

During fiscal year 2011–2012, the City spent $1.55 million to develop and deliver its stormwater program and services to its residents and businesses, as well as to its watershed and regional stakeholders. These expenditures are divided among the various categories of the permit-required components, which incorporate a wide range of jurisdictional, watershed, and regional services, including the following:

- administration;
- development project design review;
- residential complaint response and enforcement;
- education and outreach;
- commercial, industrial, and municipal facility inspections; and
- water quality monitoring.

It should be noted that an additional $15 million in wastewater funds is expended on programs that focus on removing, reducing, and preventing pollutants from entering and/or leaving city waterways and adjacent tributaries.

These programs and their costs are associated with the City's comprehensive sewer inspection and maintenance program, which incorporates a variety of methodologies to prevent sewer ruptures and overflows, including regular inspection and cleaning of its infrastructure; the operation and maintenance of its wastewater plant; and inspection of businesses such as restaurants, motive establishments, and significant industrial users that discharge to it. While not included in the stormwater budget, these services are integral to sustaining the health of the City's and the watershed's water quality.

Table 10-1 summarizes the required stormwater program components and their attendant expenditures for fiscal year 2011–2012, approximately 70 percent of which were devoted to program implementation. For more detail regarding fiscal year 2011–2012 expenditures, refer to the table, "San Diego County Copermittees' Fiscal Analysis Report," in Appendix E.

Table 10-1. Stormwater Program Expenditures, Fiscal Year 2011–2012

Program Components	Amount
Jurisdictional Programs	
Administration	$352,350
Development Planning	$255,630
Construction	$77,850
Municipal	$384,805
Industrial and Commercial	$88,000
Residential	$144,915
IDDE	$42,950
Education/Public Participation	$58,740
Special Investigations	$4,780
Non-Emergency Firefighting	$0
Jurisdictional Program Total	**$1,410,020**
Watershed Programs	
San Dieguito Watershed	$17,100
Carlsbad Watershed	$15,675
Watershed Programs Total	**$32,775**
Regional Programs	
Total Copermittee Cost Share	$95,330
Administration	$12,000
Regional Program Total	**$107,330**
TOTAL STORMWATER PROGRAM COSTS	**$1,550,125**

10.3.2 Funding Sources

A fee assessed through the City's Wastewater Fund provides fiscal support for all three urban runoff management plan components specified in the permit: (1) jurisdictional, (2) regional, and (3) watershed. The Wastewater Fee is included on the City's monthly utility bills, which is due and payable at the same time and on the same terms as other parts of the bill. The fee is based on each utility customer's contribution to the City's wastewater system. Both commercial and residential customers are charged a fixed fee of $16.37 and then are assessed additional fees based on customer class and volume. Although the fee generated $23.5 million in revenue during 2011–2012, the stormwater program was allocated $2.1 million of the total Wastewater Fund.

The Stormwater Program is supplemented by services provided by the City's General Fund departments and divisions. Although the stormwater services they provide represent functions that would occur irrespective of the stormwater-mandated functions, such as street sweeping and maintenance of the City's storm sewer infrastructure, these General Fund-supported services allocate a portion of their operational costs to the stormwater budget to address gaps in resources created by the expanded requirements of the 2007 stormwater permit.

In compliance with Proposition 218, any recommended wastewater increases are subject to a comprehensive public review process, including publicly noticed rate review workshops, proposed rate increase notifications sent to all residents and businesses, as well as publicly noticed City Council rate review hearings. In addition, under various debt issues, the City annually sets charges for wastewater services at rates sufficient to produce net revenues (after paying operating and maintenance expenses, excluding depreciation and interest) of at least 1.15 times the debt service on the Wastewater Fund bonds issued for that year. While this obligation is subject to the Proposition 218 public review process, the minimum funding requirement would legally supersede any rate restrictions proposed by the Proposition 218 public review process if the recommended rates did not meet the minimum debt service revenue requirement.

10.4 CONCLUSIONS AND RECOMMENDATIONS

The City will continue to participate with other Copermittees in the review and reporting of regional and local stormwater program funding and expenditures. Programs where shared costs and resources are beneficial to reduce jurisdictional expenses will be evaluated. City activities and staffing will continue to be analyzed for cost-effectiveness and fiscal responsibility relative to municipal stormwater permit compliance, water quality improvements, and pollution reduction. Annual modifications to the overall stormwater budget and/or City fees will be made in accordance with permit requirements, established public review processes, and minimum debt service funding levels.

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11 EFFECTIVENESS ASSESSMENT COMPONENT

This chapter assesses the JURMP's effectiveness at various levels of measurement. The effectiveness of City activities and BMP implementation, the individual JURMP components, and the program as a whole are analyzed herein using methods similar to those used in earlier years, which are based on the San Diego County Municipal Stormwater Copermittees' Effectiveness Assessment template.

11.1 INTRODUCTION

On an annual basis, the effectiveness of the JURMP, its various components, and the BMPs used in its implementation are evaluated to gauge the progress of reducing pollutants associated with stormwater and urban dry weather runoff. To be effective and measurable, JURMP priorities and activities have been established relative to program components or geographical areas that display water quality concerns. Relative to these priorities, program successes are gauged by achieving receiving water quality improvements. By realizing where water quality benefits occur, resources can then be shifted or focused in other priority locations within the City and/or within its two major watersheds.

Assessing the performance of the JURMP (and the specific BMPs that compose it) and continually improving the program on the basis of this assessment help to achieve water quality improvements in Escondido and downstream drainage areas. In compliance with Order R9-2007-0001, the City's long-term assessment of the effectiveness of the JURMP is based on direct and measureable targeted outcomes that are part of the Implementation Assessment, the Water Quality Assessment, and the overarching Integrated Assessment. This assessment considers both direct and indirect measures to evaluate the overall performance of the JURMP. The six outcome levels assessed as part of this evaluation method are as follows:

1. **Compliance with Activity-Based Permit Requirements** — outcomes directly related to the implementation of activities prescribed by Order R9-2007-0001. Examples include completion of required inspections, inventory updates, and staff training.
2. **Changes in Attitudes, Knowledge, and Awareness** — outcomes measured as increases in knowledge and awareness among target audiences such as residents, businesses, and municipal employees.
3. **Behavioral Change and BMP Implementation** — outcomes that measure the effectiveness of activities in affecting behavioral change and BMP implementation. Examples include installation of storm drain filters and decreases in littering.
4. **Load Reductions** — outcomes that measure load reductions and quantified changes in the amount of pollutants associated with specific sources before and after a BMP or other control measure was employed. Examples include street and catch basin sediment reduction.
5. **Changes in Urban Runoff and Discharge Quality** — outcomes that measure changes in one or more specific constituents or stressors in discharges into or from MS4s. An example is the decrease in copper concentrations in MS4 discharges or surface runoff.
6. **Changes in Receiving Water Quality** — outcomes that measure changes to receiving water quality resulting from discharges into and from MS4s that are expressed through a variety of means, such as compliance with water quality objectives, protection of biological integrity, or beneficial use attainment.

11.2 EFFECTIVENESS ASSESSMENT RESULTS

The effectiveness of the JURMP during the 2011–2012 reporting period is described below relative to the various levels of analysis.

11.2.1 Level 1: Compliance with Activity-Based Permit Requirements

Permit compliance activities conducted by the City as discussed in previous chapters of this Annual Report are tabulated in Table 11-1.

Table 11-1. Level 1: Compliance with Activity-Based Permit Requirements

JURMP Component	Activity	Quantity	Comments
Development Planning	Number of projects subject to SUSMP requirements	9	Three projects qualified for a Hydromodification Plan.
Construction	Number of active construction sites during the reporting period	24	Includes public and private projects.
	Number of written citations issued	0	Ten citations issued during previous year, but the continuing economic slowdown caused a corresponding slowdown and/or shutdown of construction activity.
	Stop-work orders issued	0	Consistent with previous year, stop-work orders were not necessary during the program year.
	Focused compliance training conducted for City construction site inspectors	1	Three-hour workshop on the Construction and Municipal NPDES permits. Also included staff from Planning, Wastewater, Engineering, and Field Engineering.
Municipal	Miles of streets swept Corresponding amount of debris collected	7,408 410 tons (1.518 cubic yards)	More rigorous street sweeping schedule than the minimum frequencies set forth in the JURMP.
	Number of MS4 features (inlets, culverts, catch basins, outlets, and basins) inspected Corresponding amount of sediment and debris collected	2,810 77 tons	Removed by hand and vactor methods.
	Number of municipal facilities inspected	60	Parks, fire stations, City facilities, pump stations, parking lots, Public Works yard.
	Number of NOCs issued	0	Four verbal warnings were issued.
	City employees who received stormwater permit and related BMP information via City Newsletter, New Employee Orientation, and City's Employee Health Fair	100	This is a routine distribution among City employees.
Industrial and Commercial	Number of industrial and commercial facilities inspected during annual inspection process	Over 1,400	Includes motive service and food establishments
	Percentage of all industrial and commercial sites initially in compliance	96%	20 verbal warnings and 50 NOCs issued. Compliance improved by 13% over previous year.
Residential	Number of stormwater-related calls received through the Public Hotline	190	Decrease from 217 over previous year.
	Total amount of household hazardous waste collected (pounds)	52,6706	Up from 457,063 pounds during previous year.
	Number of residents who attended workshops held by the City	100	Four workshops

JURMP Component	Activity	Quantity	Comments
Illicit Discharge Detection and Elimination	Number of dry-weather monitoring locations	117	Monitoring for presence of water, water quality, and trash
	Number of dry-weather stations sampled (i.e., wet)	57	Consistent with number of stations (60) sampled during previous year.
	Number of illicit discharges identified and resolved	44	Cited 22 violations for commercial/industrial and/or food service businesses; 22 for residential.
Education / Public Participation	**California Coastal Clean-up Days** Number of volunteers participating Pounds of trash collected Pounds of recyclables collected	 162 614 526	Collected 1,140 pounds of trash and recyclables combined. More than 3 times the amount collected during the previous year.

Implementation of the JURMP, as demonstrated by these data, has removed a variety of pollutants from the storm drain conveyance system or prevented pollution due to a variety of public and private sector activities.

11.2.2 Level 2: Changes in Knowledge/Awareness

During this reporting period, the City continued its education and outreach programs to deliver information about urban runoff and its effect on water quality, with a particular focus on educating Spanish-speaking residents. Stormwater personnel also staffed booths at a variety of special events (see Table 8-1 in Chapter 8) to promote environmental awareness, pollution prevention knowledge, and green/sustainable behavior.

The public's knowledge regarding stormwater issues was documented in surveys conducted at special events throughout the year. The City has used surveys to target residential areas and activities that create the greatest potential for urban runoff impacts. Outreach efforts have included street surveys to identify areas of trash and sediment accumulation, as well as resident research surveys by phone, mail, and e-mail to identify community knowledge of urban runoff issues. The City and the region plan to expand their outreach programs and continue to incorporate evolving stormwater knowledge, with a particular focus on pollutants associated with surface water impairments and other sensitive receiving waters.

Training and Education

City employees received stormwater-related messages through *CityLine*, a weekly electronic Citywide newsletter distributed by the City Manager's Office. New employees undergo a day of orientation that includes a 20-minute presentation on the Clean Water Act, the current permit requirements, general information on watersheds, and BMPs. During this reporting period, 20 new employees received this presentation. Other training during this reporting period were as follows:

- 3-hour training workshop regarding the new Construction General Permit (Order 2009-0009-DWQ) and Municipal General Permit (Order R9-2007-0001). Attended by Field Engineering, Engineering, Planning, Wastewater, and Construction staff.
- Stormwater inspection workshop for stormwater/pretreatment inspectors.
- Stormwater staff training of stormwater regulations, pollutant sources, and BMPs for Maintenance and Collections staff.

During this reporting period, the City's stormwater education staff continued its outreach to the underserved population, including the Latino population, by partnering with the Housing and Neighborhood Services Division, which coordinates neighborhood groups, targeting the underserved and

Hispanic populations. Currently, 16 neighborhoods are in the program, encompassing over 2,500 households. During this reporting period, the City's education and outreach staff attended and gave presentations on water quality and conservation to two neighborhood groups: Hickory and South Tulip. In lieu of education staff attendance, bilingual stormwater brochures are provided at other neighborhood group meetings.

Outreach and Participation

During the reporting period, the City continued to provide citizens the opportunity to participate in many pollution prevention programs, including the following:

- litter removal events,
- the stormwater pollution prevention hotline,
- composting workshops featuring stormwater pollution prevention techniques,
- stormwater presentations to elementary school children,
- local media (cable TV and newspapers) promotions,
- stormwater website interaction and education,
- the San Dieguito Watershed group, and
- the Escondido Watershed Cooperative Agreement (EWCA) collaboration for improved watershed management.

The City also holds public outreach events throughout the year.

Inspection Compliance Communication

Through the City's extensive annual compliance inspection campaign this reporting period, the issuance of NOCs has again proven to be effective in asserting corrective action, achieving compliance, and increasing pollution prevention. Based on inspection results, business owners/operators received a variety of general BMP educational materials in both English and Spanish, and were informed about their responsibilities under the stormwater permit. As warranted, facility owners/operators were also advised about their responsibilities under the Industrial General Permit. In addition, business license staff mailed stormwater education and awareness materials to anyone applying for or renewing a business license, and made brochures available at the counter.

11.2.3 Level 3: Behavioral Change/BMP Implementation

Knowledge and awareness training and outreach among municipal employees, residents, and business representatives continue to help change community behavior in minimizing urban runoff pollution. The methods of communication and their effectiveness are described in the sections below.

Land-Use Planning for New Development and Redevelopment

As part of the authorization process for obtaining grading or building permits from the City, applicable projects are assessed for appropriate design, source control, and stormwater runoff management and treatment controls relative to their size, location, and complexity. This process (the SUSMP evaluation) helps development project proponents plan and incorporate proper stormwater management and water quality principles into regulated projects in the City's watershed. The SUSMP evaluation and implementation process includes the Hydromodification Management Plan, which is required of certain priority projects so that applicants understand and implement runoff controls to maintain a site's pre-development hydrology.

Construction

Although contractors must have project plans approved before site preparation can begin, City inspectors have found that developers and construction crews are implementing site protection and runoff control BMPs for practicable water quality protection that typically include the following:

- erosion controls (physical and vegetation stabilization BMPs),
- sediment controls (e.g., perimeter controls, inlet protection, check dams, desilting basins),
- materials management,
- spill protection/containment, and
- concrete wash-out containment.

In addition, City construction site inspectors and municipal staff have undergone construction stormwater awareness training. Select staff have also been certified as Qualified SWPPP Developers, as required by the new Construction General Permit (Order 2009-0009-DWQ).

Municipal

Compliance training for municipal staff continues to target operations or practices relative to the City's MS4 and associated Citywide maintenance activities to promote compliance among municipal employees. This fiscal year more than 2,800 MS4 features were inspected and cleaned by the Maintenance Department, which resulted in approximately 77 tons of sediment and debris being removed. In general, stormwater compliance inspections of municipal facilities have been effective in maintaining awareness of the changing regulatory climate, site management improvements, and pollution prevention.

Many municipal operations that support the public interest have helped in achieving compliance with Order R9-2007-0001. These operations improve hazardous waste collections, increase recycling, reduce trash collection at City parks and recreational facilities, and decrease water consumption rates.

Industrial and Commercial

JURMP data collected since 2002 continue to show positive behavioral change and compliance associated with the JURMP's industrial program. Relative to an average of approximately 1,400 industrial and commercial facilities inspected annually, compliance has been routinely good. As shown in Figure 11-1, as a percentage of the total number of facilities inspected, NOC violation citations were the lowest during this reporting period (3.6 percent of inventory) than ever recorded under the JURMP inspection program. From the inspection of all high-priority and medium-priority facilities, the NOCs issued were mostly for minor housekeeping issues that did not pose immediate threats to water quality. The results of this year's industrial and commercial compliance inspections demonstrate the success of the City's pollution prevention outreach program and the positive response/acceptance of pollution prevention behavior by local businesses throughout Escondido.

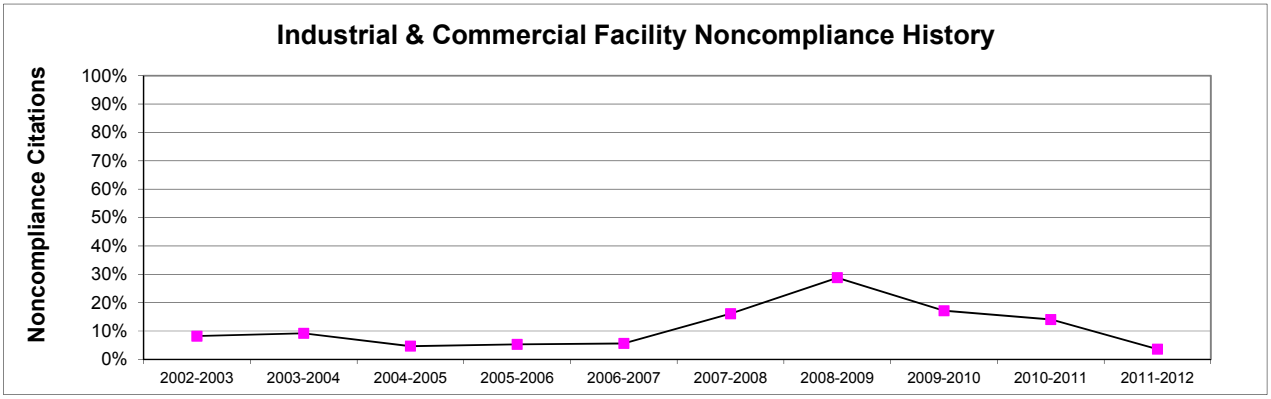


Figure 11-1. Industrial and Commercial Facility Noncompliance History

As part of the continuing campaign to optimize awareness and increase pollution prevention behavior, BMP materials were distributed during inspections to businesses based on facility type and site activities.

The City's continued escalating enforcement campaign reduced the number of noncompliance citations at municipal facilities to zero for this reporting period (Figure 11-1).

Residential

Confirming a continuously steady and impressive increase in positive behavioral change, the amount of household hazardous waste collection and electronic waste recycling has had great success since the program's inception in 2002 (Figure 11-2). Household hazardous waste collection increased over last year, suggesting a response to the City's escalated outreach within the residential community.

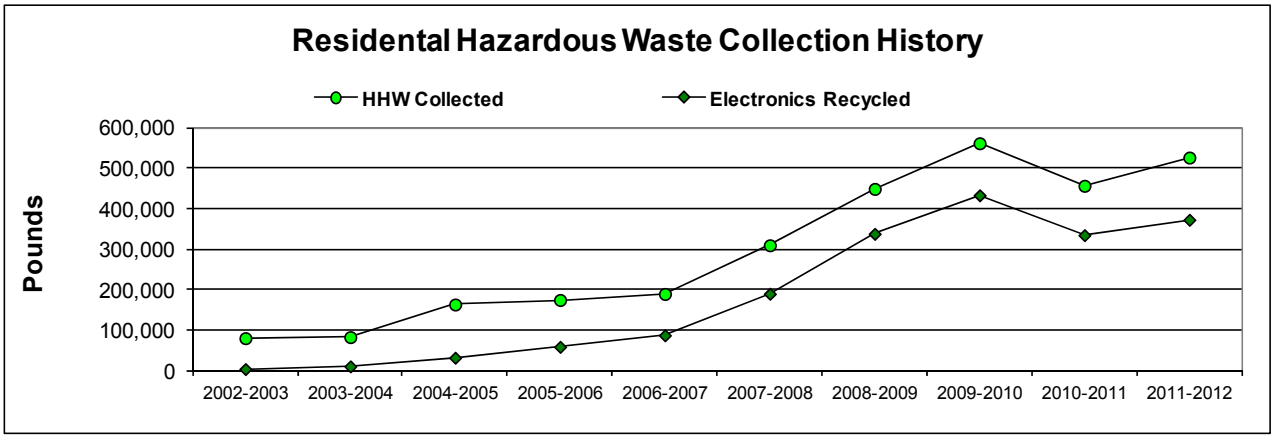


Figure 11-2. Household Hazardous Waste Collection History

As part of its residential outreach program, the City also actively educates residents about BMPs that can be applied to common domestic activities. These BMPs address the priority activities identified by the permit, including automobile repair, maintenance, and washing; home and garden care; and the disposal of pet waste. A number of approaches, such as the stormwater website and hotline, information booths, storm drain curb markers, education and outreach through local media, and bilingual door hangers have been successful in educating residents about pollution prevention.

Illicit Discharge Detection and Elimination

As discussed in Chapter 7, no illicit sewer connections or illegal discharges to the MS4 were detected during this reporting period as a result of dry-weather monitoring. However, the results of this monitoring component often indicate elevated nutrient patterns in the semirural areas known to correlate with agricultural areas (e.g., dairy farms, grape vineyards, and citrus and avocado orchards), many of which (if not all) also use septic sewer systems. Current and historical data suggest that elevated nitrate (and bacteria) concentrations are associated with agriculture and livestock operations, and may also be attributed to groundwater seepage at the point of measurement as well as residential fertilizer usage. Special follow-up investigations conducted during the course of JURMP implementation have indicated that some outlying unincorporated San Diego County properties are sources of suspected bacteria and nitrate that cause elevated measurements within the City's conveyance system downstream.

Despite some of the few elevated nitrate levels found, JURMP water quality data collected to date indicate that no significant problem pollutant sources have been identified overall within the City's jurisdiction. For the first time since JURMP monitoring began, there were no exceedances in bacteria actions levels during this reporting period.

Education

BMPs employed throughout this current permit term have consisted of the car washing education campaign, landscape and irrigation seminars, used-oil recycling program, litter abatement program, complaint response and education program, environmental classes for elementary school children, stormwater website, and stormwater hotline. As shown by the residential hazardous waste collection and recycling discussion above, the education and outreach efforts are having a positive impact on Escondido's residents and water quality. The Level 4 load reduction analysis presented below depicts similar trends of environmental benefits from the education programs in Escondido.

Public Participation

Since the first year of implementation in 2002, JURMP-related activities, community festivals, and public events and workshops have been well attended. Surveys among attendees indicate a continued and widening understanding of watershed pollution and management issues. During this reporting period, the City continued to involve its citizens and interested and affected groups in the ongoing development and implementation of the JURMP.

Summary of Behavioral Changes

As noted above, measureable improvements have occurred in behavioral changes and attention to BMP implementation related to the City's industrial, municipal, commercial, construction, and residential sectors. Individually and collectively, measurement indicators show an improvement in water quality that can be attributed to behavior changes among owners, operators, and residents. These behavior changes suggest an increased public awareness of pollution prevention and the incorporation of useful BMPs. In view of the progress documented since 2002, cumulative data collected to date demonstrate a quantifiable improvement in urban runoff and receiving water quality in the jurisdiction. The presence of such indicators is explained in the following three sections.

11.2.4 Level 4: Load Reductions

From historical dry-weather monitoring and sampling information, a number of monitoring locations and assorted water quality parameters have exhibited changes in water chemistry from year to year. In general, pollutant concentrations in urban runoff discharges and receiving waters within Escondido have decreased over 2001–2002 levels, when the program first began. Data collected as part of the City's JURMP provide useful information regarding pollutant removal on a Citywide scale. Figure 11-3 summarizes the volume of sediment removed by the City since JURMP implementation.

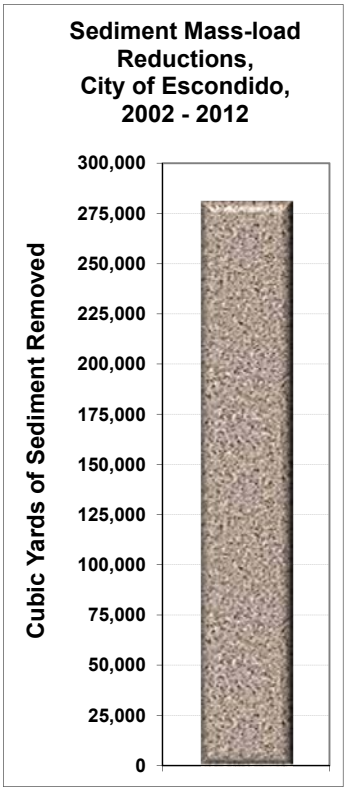
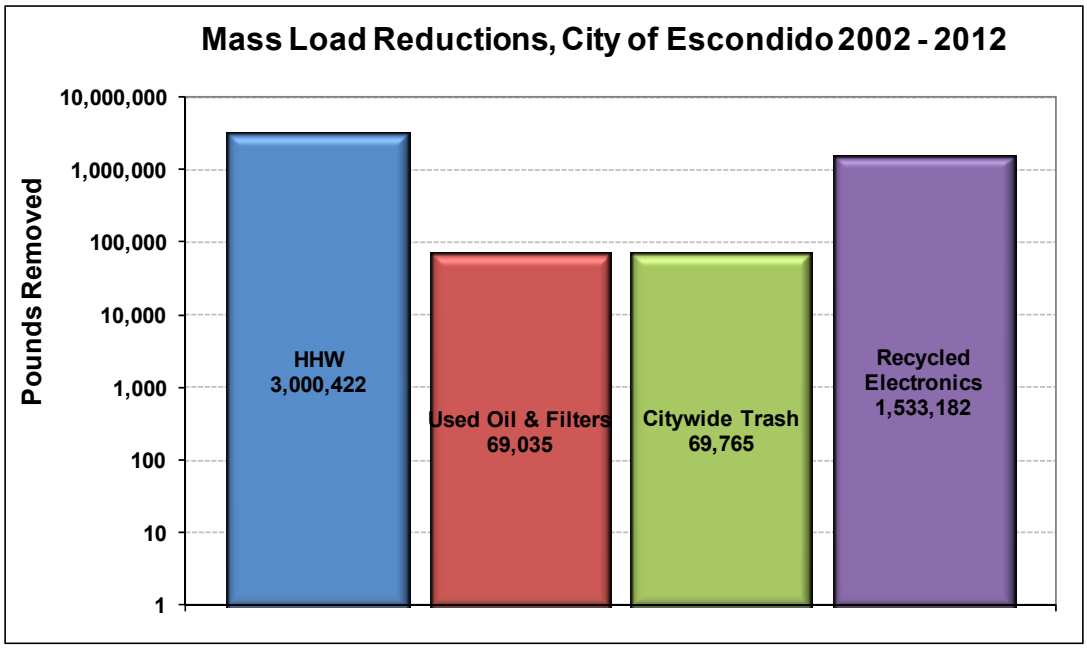


Figure 11-3.
Sediment Mass-load Reduction, City of Escondido, 2002–2012

Other pollutant load reductions are evident through various municipal data and public participation information. Figure 11-4 illustrates the pollutant mass-load reductions realized within the jurisdiction since 2002. These collective efforts have reduced City-dispersed trash, removed litter from local creeks, increased recycling of potentially toxic electronic materials, and diverted tons of household hazardous waste from landfills and potential watershed exposure. Since 2002, nearly 35 tons of creek litter and Citywide trash alone have been diverted from reaching receiving waters (e.g., San Elijo Lagoon).

The City's extensive dry-weather monitoring program provides the ability to measure water quality improvements (suggesting pollutant load reductions) from the 117 discharge points and receiving water locations monitored throughout and outside Escondido. Current and historical dry-weather sampling data indicate that a number of the monitoring locations are exhibiting

changes in water chemistry from year to year. These are reviewed relative to water quality changes in the following section.



Note: HHW= household hazardous waste

Figure 11-4. Pollutant Mass-load Reductions, City of Escondido, 2002–2012

11.2.5 Level 5: Changes in Discharge Quality

Escondido's dry-weather program monitors storm drain outfall discharges and in-stream water quality in Escondido Creek, Reidy Creek, and San Marcos Creek, and drainages in Indian Wells and the east and west drainage areas associated with Lake Hodges. The effects of the Escondido JURMP implementation are apparent in the City's dry-weather monitoring database as quantifiable reductions in measured pollutants since the program began. Although some data anomalies occur from year to year, pollutant concentrations indicate a general decline with time.

Overall, dry-weather monitoring results during the reporting period confirm good water quality associated with dry-weather flows within the City's monitoring network. In-stream sampling of the various receiving water creeks in Escondido demonstrates that the urban runoff discharges are not negatively affecting surface water quality.

Water Quality Assessment

Improvements in urban runoff water quality in Escondido can be determined with a reasonable amount of certainty due to the City's extensive JURMP monitoring efforts. Dry-weather grab-sampling data provide screening-level information of water quality conditions at the time and point of sampling (i.e., "snapshot"), which are not useful in estimating annualized pollutant loads but do reveal general spatial and temporal changes in annual discharge quality. The dry-weather monitoring data collected within the City's drainage areas indicate a general improvement in dry-weather water quality since JURMP implementation, and that urban runoff discharges are not degrading receiving waters. Comparing the sampling data collected in the summer of 2002 (first sampling year) to data collected this reporting period, the conclusions below can be made:

- Bacteria concentrations have been vastly reduced from 2002 levels (Figure 11-5 and Figure 11-6), and no bacteria action levels were exceeded during this reporting period. All bacteria concentrations were notably below the lowest *Enterococcus action level (10,000 MPN/100ml)*.

  Spatial patterns of nutrient (nitrate and orthophosphate) concentrations are illustrated in Figure 11-7. Similar to previous years, elevated nitrate levels in Escondido have been known to correlate with agricultural irrigation practices and historical land use that occurred over the last 40 years prior to urban development. As mentioned earlier, the effects of land use (dairy farms, grape vineyards, and citrus and avocado orchards) and the presence or historical presence of septic sewer systems appear to influence elevated nitrate (and sometimes bacteria) concentrations, several sources of which have been found to correlate with drainage originating from unincorporated areas outside City limits that are upgradient in the watershed. Fifteen monitoring stations had samples containing nitrate concentrations above the action level (10 mg/L). Concentrations of orthophosphate did not exceed 0.31 mg/L this reporting period and have historically been well below the 2 mg/L action level since JURMP implementation.

- Metal concentrations in urban runoff continue to be very low overall, with none of the dissolved metal concentrations measuring above action levels during this reporting period (Figure 11-8). Relative to initial sampling conducted in 2001–2002, dissolved metals in urban runoff have been significantly reduced and there is no definitive correlation to an area within the jurisdiction that suggests a significant pollutant source among the concentrations recorded.

All other parameters measured were largely undetectable above analytical laboratory reporting limits.

11.2.6 Level 6: Changes in Receiving Water Quality

The major receiving waters within Escondido are Escondido Creek, Reidy Creek, and Lake Hodges. Receiving water quality data from in-stream sampling during dry weather have shown positive changes in water quality and appear to correlate with the positive behavioral changes associated with improving water quality. Based on the trend of improved urban runoff water quality over the past 9 years of JURMP implementation, these creeks and Lake Hodges would be expected to realize an increase in receiving water quality.

Water Quality Assessment

Since the Escondido dry-weather monitoring program began in 2000 (prior to JURMP implementation), changes in receiving water quality have been recorded. As presented in Chapter 7, data collected in the receiving waters show that pollutant concentrations have remained low at the majority of the stations sampled, with few elevated levels or other outlier data anomalies observed. Figures 11-5 through 11-8 exhibit the overall improvement in water quality in the City's jurisdiction. With the exception of a very few elevated levels, 2011–2012 data from monitoring stations located within the tributary drainage areas of Escondido Creek and Reidy Creek, Lake Hodges, Indian Wells, and San Marcos Creek show water quality improvement since the JURMP was initiated.

Long-Term Program Assessment

The long-term objective of assessing the JURMP's effectiveness is to provide an overall perspective of water quality improvements, the JURMP's program components, and evaluating these two principal elements through an integrated assessment.

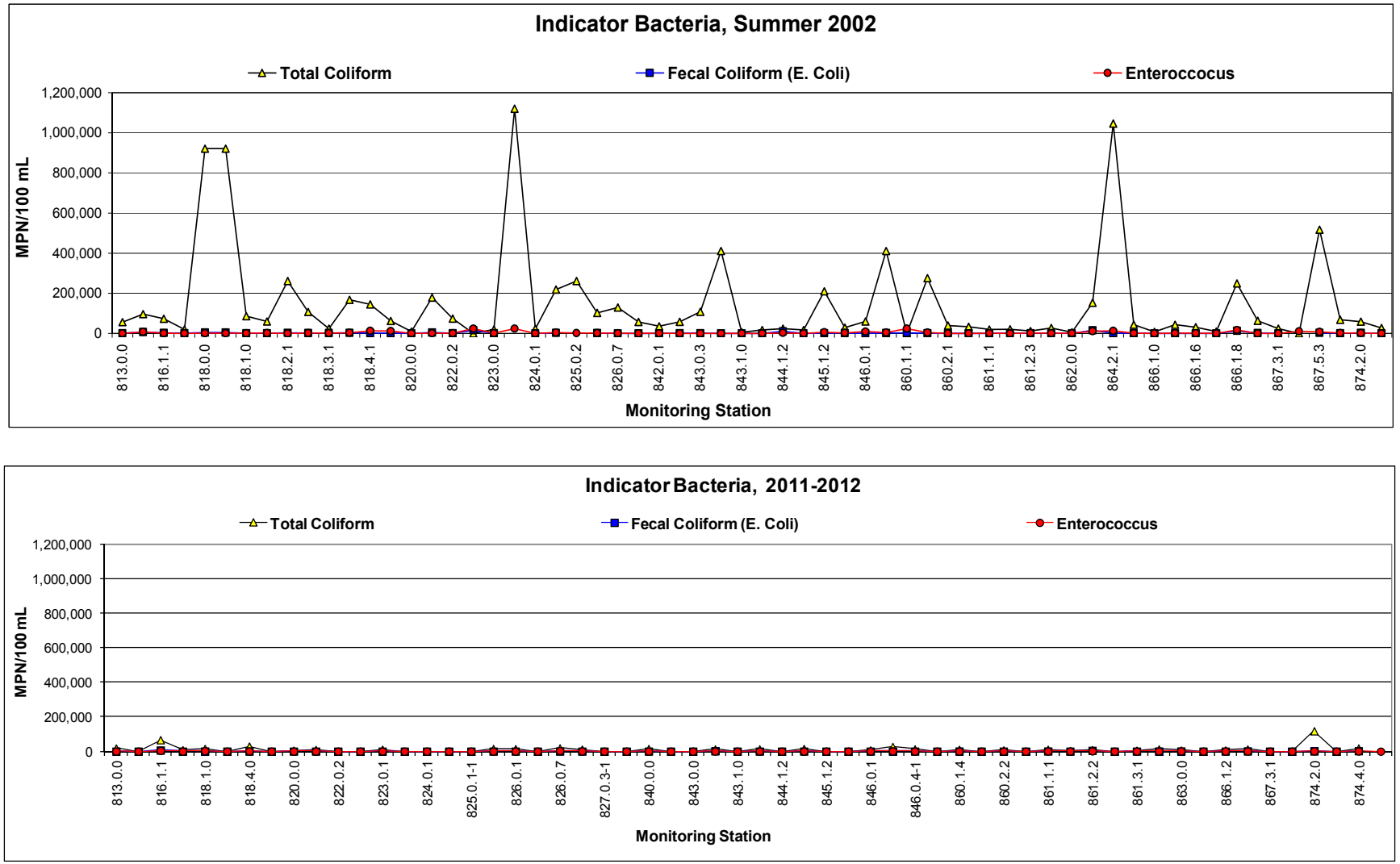
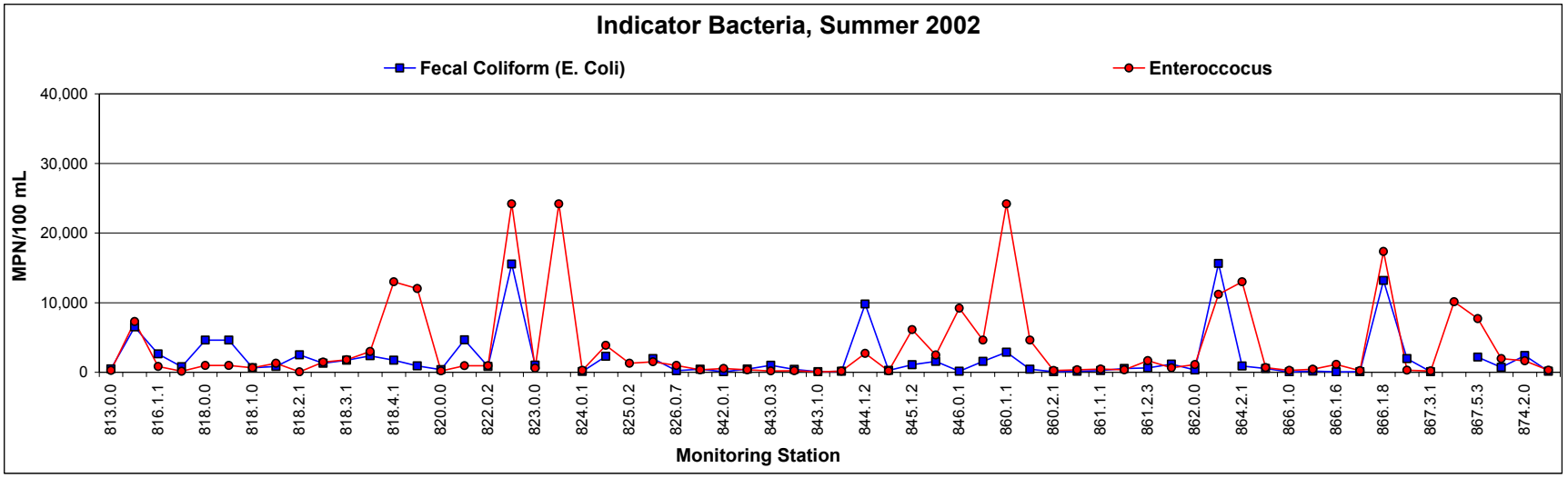


Figure 11-5. Dry-Weather Indicator Bacteria Monitoring, City of Escondido, Fiscal Year 2001–2002 and Fiscal Year 2011–2012



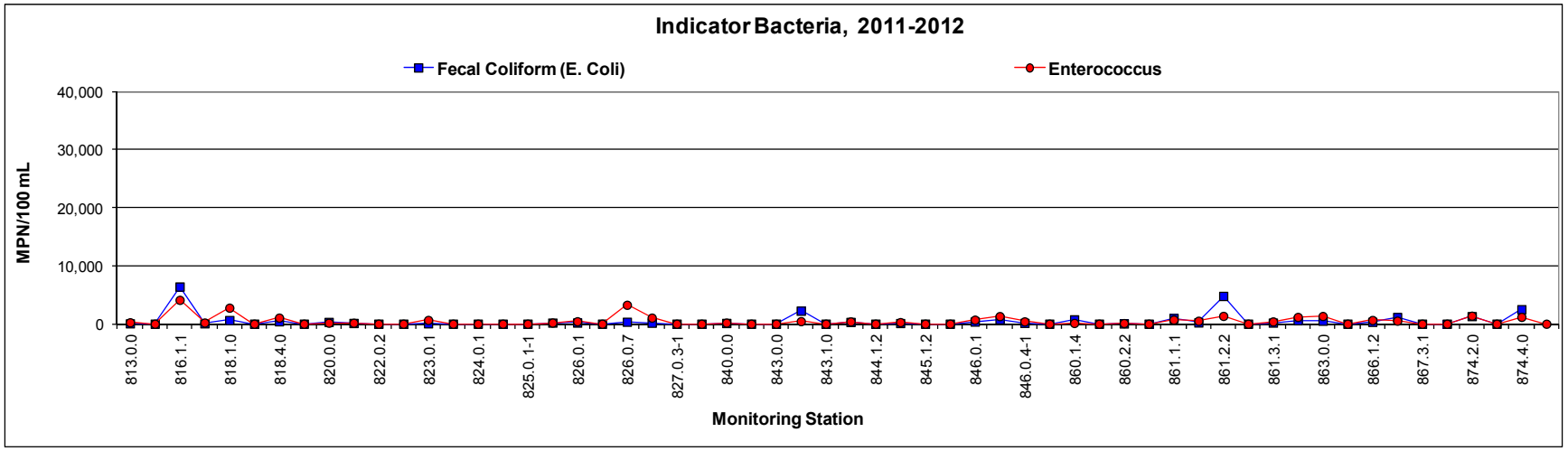
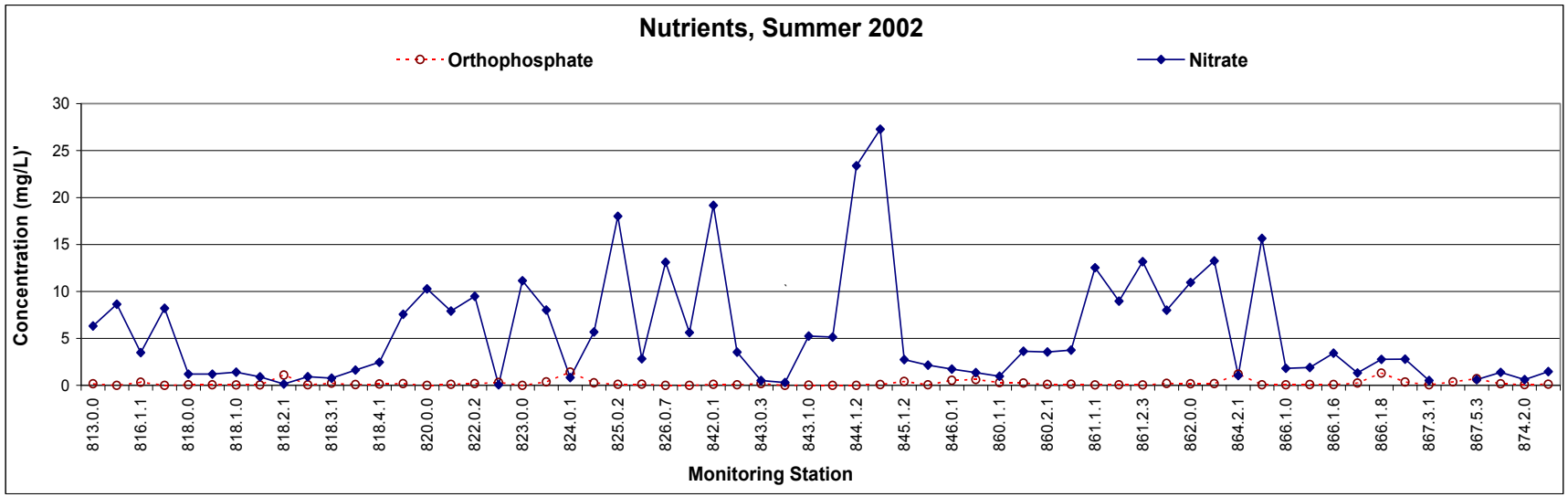


Figure 11-6. Dry-Weather Bacteria Monitoring (without Total Coliform), City of Escondido, Fiscal Year 2001–2002 and Fiscal Year 2011–2012



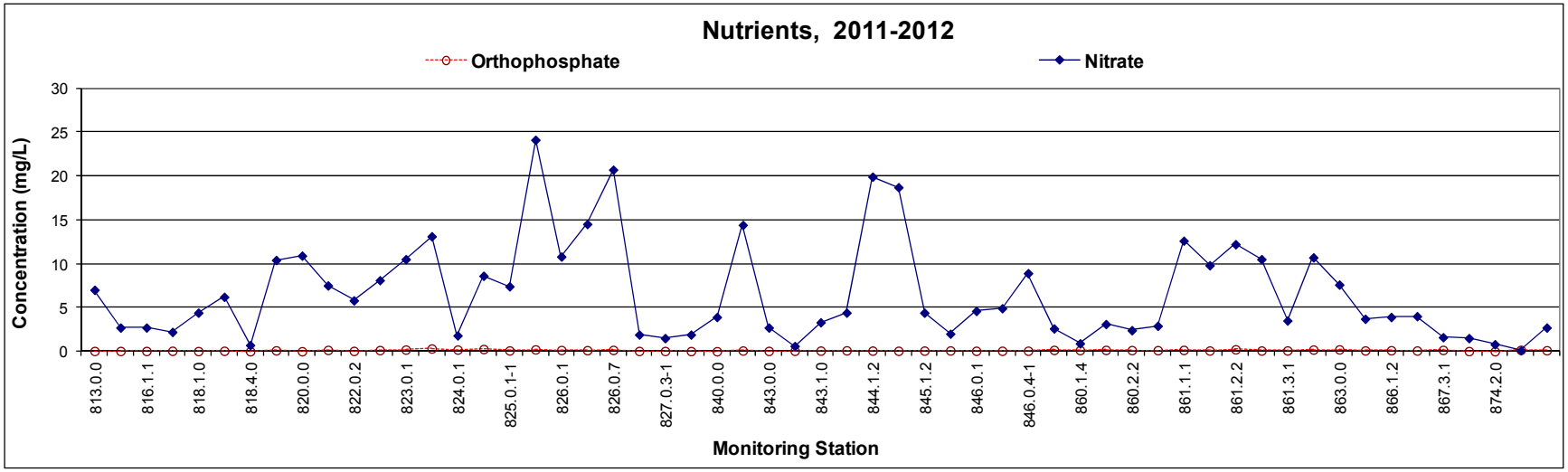
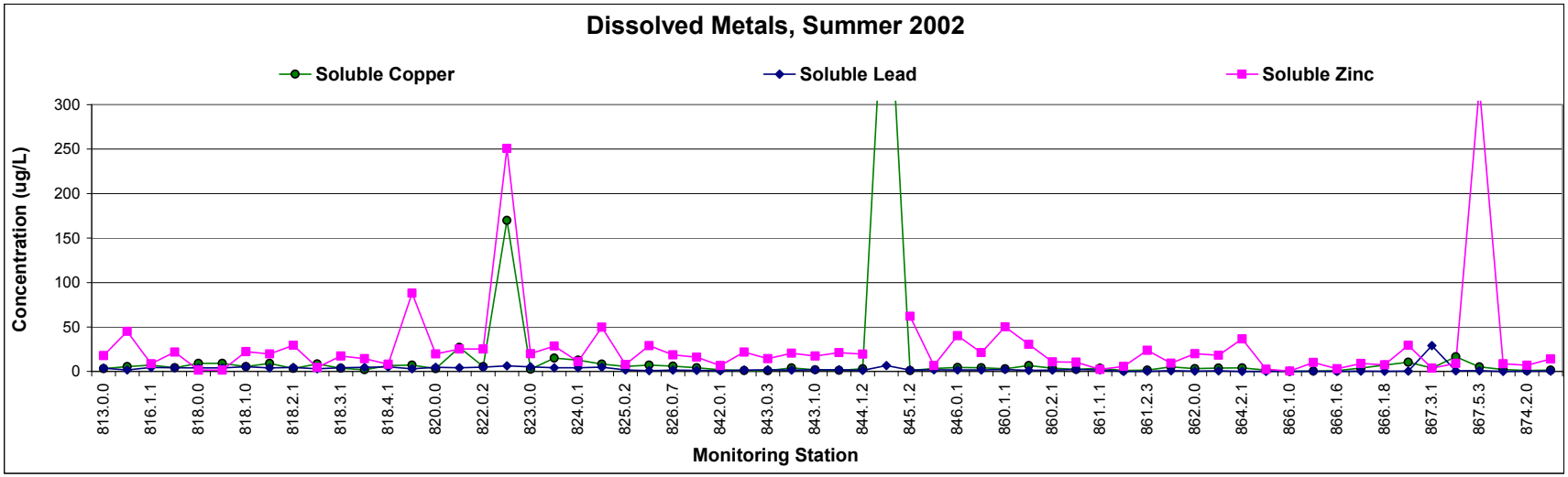


Figure 11-7. Dry-Weather Nutrient Monitoring, City of Escondido, Fiscal Year 2001–2002 and Fiscal Year 2011–2012



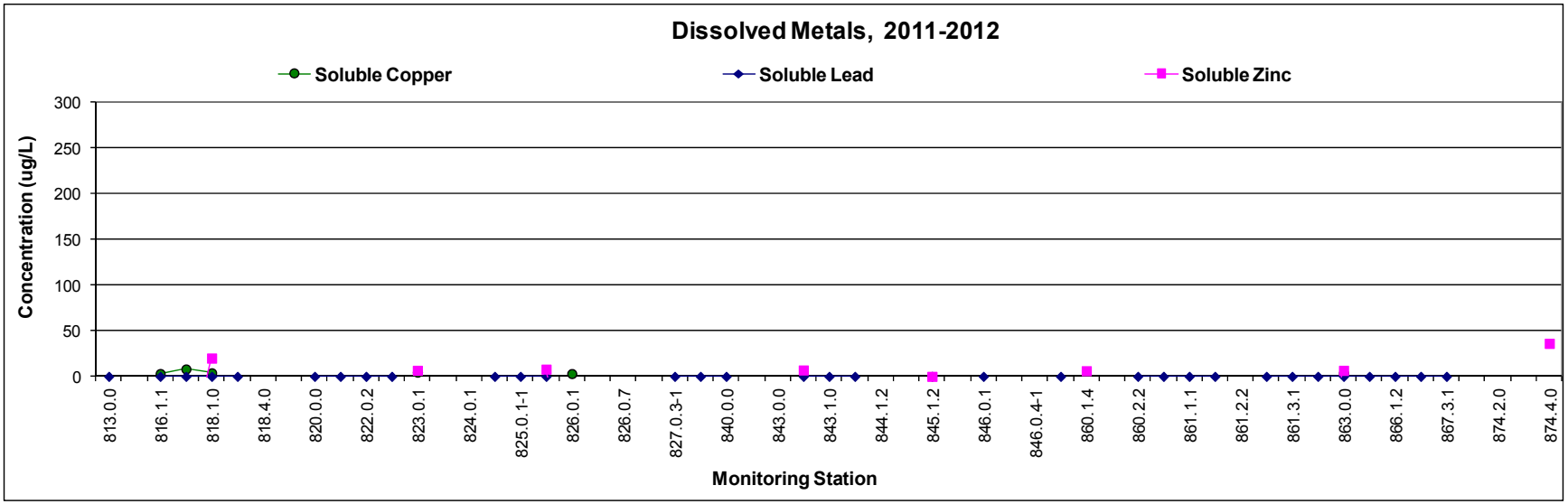


Figure 11-8. Dry-Weather Dissolved Metals Monitoring, City of Escondido, Fiscal Year 2001–2002 and Fiscal Year 2011–2012

At this 10-year benchmark, there are a number of core issues that can be addressed or assessed in determining the effectiveness of the program to date (Table 11-2).

Table 11-2. Key Management Questions for Urban Runoff Management Program Planning and Assessment

Program Activity	Annual (Core) Questions
Water Quality Assessment	What are the high-priority water quality problems? What is causing them (constituents/stressors of concern)?
Program Planning	What are the priority sources of constituents/stressors of concern contributing to water quality problems? What BMPs are needed to address key constituents/sources? What are the targeted outcomes for BMP implementation? What are the projected load reductions or other benefits of BMP implementation?
Program Assessment	Were targeted outcomes achieved? What are the estimated load reductions or other benefits of BMP implementation? What are the costs associated with program implementation?
Integrated Assessment	What is the basis for estimating the benefits of BMP implementation (assumptions, common knowledge, published research, monitoring, etc.)?

To date, the results of Escondido's urban runoff management program indicate improvements in dry-weather discharge water quality and that pollutants measured are generally low, with concentrations mostly below action levels. This indicates that the City's Clean Water Program (monitoring, public education, outreach, and enforcement) has been effective in achieving meaningful pollutant-load reductions. From 10 years of data collection under the JURMP, the following observations and improvement recommendations can be made:

Water Quality:

- Runoff data is consistently low, with few results over action levels. There are no water quality problems or significant stressors that can be associated with urban runoff as measured through the JURMP components.
- On occasion, total coliform bacteria and nitrate have been observed to correlate with naturally occurring conditions (e.g., riparian habitat). Some anthropogenic sources of bacteria and nitrate have been documented from unincorporated lands outside and upgradient of the City's jurisdictional boundaries under this program.
    - Bacteria concentrations appear to be declining. This reporting period there were no bacteria action levels were exceeded.
    - Historically high groundwater elevations and the potential for seepage throughout the City's MS4 may be influencing some of the elevated nitrate levels found within the infrastructure system (non-riparian areas). Overall the number and occurrence of stations with elevated nitrate have ranged from approximately four to 15 stations (about 3 percent to 13 percent of the total). Concentrations exceeding the action level have typically been between 11 mg/L and 25 mg/L.

Program Planning:

- Bacteria and nitrate data indicate that natural sources of these constituents exist in areas of the jurisdiction. The program should be modified to focus on the most important constituents, sources, and practices in the following ways:
    - Remove total coliform bacteria from the suite of analyses, as this parameter is not an accurate indicator of human-related bacteria, and the analytical results offer little useful information toward the program's purpose.
    - Integrate jurisdictional elements to help understand, document, and resolve runoff/run-on issues across entity boundaries. Evaluate all jurisdictional monitoring stations relative to upstream/downstream opportunities such that potential pollutant elevations can be measured through redundant, but separate, means (i.e., city vs. city; county vs. city).
- Cost/benefit sharing for BMPs to address key constituents and sources is not weighted proportionately among Copermittees. Coastal cities look to benefit more from bacteria/nutrient BMP measures that are implemented by others higher in the watershed (i.e., fewer beach postings and lagoon algae problems, improved ecotourism). Consideration to recreational and tourism tax bases should be evaluated relative to financial contribution to the urban runoff management program. Similar to pollutant-load cost sharing among tenants in port and harbor facilities, higher storm drain fee structures for lower watershed municipalities would improve normalizing the cost sharing relative to the benefits gained.
- Mass-loading and watershed-assessment stations should be placed higher in the watershed to better determine pollutant contributions and fill current geographical data gaps. Pollutant loads and potential cost sharing of resources could be gauged better with improved resolution of water quality data.

Program Assessment:

- Targeted outcomes have been achieved:
    - To date, the realized urban runoff water quality improvements reflect a change in human behavior, and that the JURMP has reduced concentrations of surface water pollutants.
    - Pollution prevention among municipal staff has also improved over the past 10 years at municipal facilities and through municipal maintenance practices and engineering designs.
    - The inspection of industrial facilities, commercial properties, and construction sites has substantially raised awareness levels and improved compliance since the JURMP began.
    - Field Engineering and Maintenance staff training continues to raise compliance awareness.
- The costs associated with program implementation totaled $1.55 million this program year ($117,000 more than last year). As the City continues to participate with regional and local stormwater program funding and expenditures, Copermittees' cost-sharing will likely result in mutual benefits. However, regional cost-sharing has not alleviated the significant cost of jurisdictional program implementation. The City is dedicated to local and regional watershed protection, but activities and staffing will continue to be analyzed and scrutinized for cost-effectiveness and fiscal responsibility relative to municipal stormwater permit compliance, water quality improvements, and pollution reduction.
- Urban runoff pollutant load reductions have been achieved in Escondido but are difficult to accurately estimate due to the instantaneous nature of grab-sampling under the IDDE

component. It is clear that water quality has improved in the City and that this is attributed to structural and non-structural BMPs that continue to be implemented as part of the JURMP.

Integrated Assessment:

- Estimating the benefits of the JURMP and its regional counterparts can be summarized by the low pollutant concentrations found within the City's jurisdiction, as described and quantified in this Annual Report, coupled with the results of the 2005–2010 Carlsbad Watershed long-term assessment (Weston et al. 2011). This regional study found that wet-weather receiving water data from mass loading stations at the bottom of Escondido Creek (i.e., close to the Pacific coast) and at temporary watershed assessment stations in the Escondido Creek Hydrologic Area contained the following:
    - High-priority constituents — turbidity, bifenthrin, and fecal coliforms
    - Medium-priority constituents — TSS and diazinon
    - Low-priority constituents — toxicity and nutrients
- The priority constituents found in the Escondido Creek Hydrologic Area during the regional dry-weather receiving water quality monitoring program (Weston et al 2011) were the following:
    - High-priority constituents — TDS and total nitrogen, enterococci, total nitrogen, and benthic algae
    - Medium-priority constituents — total phosphorus, fecal coliforms, and chemical oxygen demand
    - Low-priority constituents — metals, organics, and pesticides
- Relative to these observations and conclusions from regional long-term data collection, Escondido's JURMP is not contributing to the exacerbation of high- or medium-priority pollutants and the results of its implementation have significantly improved watershed pollution prevention. Although some nutrient sources have been identified and eliminated or significantly reduced through BMP implementation over the past 10 years, nutrient concentrations above action levels have been correlated to the presence of wildlife in semi-rural Escondido. The levels found do not indicate problematic sources but rather a characterization of background ambient water quality.

11.3 PROGRAM REVIEW AND MODIFICATION

The results of Escondido's urban runoff management program indicate measureable improvements in dry-weather discharge water quality and that the pollutants measured are generally low, with concentrations mostly below action levels. With continued JURMP implementation, improvements to urban runoff quality around the jurisdiction will likely begin to plateau (i.e., persistent low concentrations and few action level exceedances). However, with the adoption of the new Municipal Permit (expected in 2013), notable changes in surface water quality may become more evident on a watershed basis as Water Quality Improvement Plans evolve. Implementation of the JURMP since Order R9-2001-0001 was adopted is characterized by high expenses and moderate water quality improvement from baseline conditions. Although any water quality benefit is important to Escondido and the surrounding watershed, the cost/benefit ratio continues to exceed the water quality improvements that have been realized. For an improved return on investment, the City looks forward to collaborating with other Copermittees and environmental groups to obtain more state-sponsored grants for financial assistance, as well as additional cost sharing from coastal communities that benefit from BMPs upstream in the watershed.

The City will annually review, update, and present its effectiveness assessment in conformance with the San Diego Copermittees. These yearly reviews will serve to consolidate approaches and strategies for future JURMP revisions.

12 SPECIAL INVESTIGATIONS

On March 26, 2012, a chemical release of sodium hydroxide solution occurred at Escondido's water treatment plant as a result of a holding tank rupture. The amount of material released was estimated to be 3,000 to 5,000 gallons. The spill flowed down the plant's paved access road into an adjacent natural land area, primarily via three outfalls along the road's edge, where it then seeped into nearby soils. None of the material reached Escondido Creek, the closest receiving water to the incident. Because the spill occurred down-gradient of Lake Dixon, it did not impact the lake or drinking-water supply. Stormwater staff and an environmental contractor became involved to perform an environmental assessment and to ensure that no materials enter the creek as a result of cleanup efforts.

The environmental assessment involved characterizing the pollutant, sodium hydroxide, and its effect on the surrounding environment. Sodium hydroxide, also known as lye or caustic soda, is a strong base. A primary water-quality concern was high pH levels, which can harm aquatic biota. Immediately following the incident, pH sampling was conducted to determine the extent of the spill and to characterize soil and runoff conditions.

The principle area affected by the spill featured steep slopes with native scrub, chaparral, and riparian drainage areas. Immediately following the incident, emergency measures were employed to contain and capture the spilled material in areas where it had pooled. Emergency response crews pumped and collected the material into portable tanks for transport to an appropriate offsite location.

At the recommendation of the California Department of Fish and Game (DFG), and in collaboration with County HAZMAT and City officials, affected areas were flushed with potable water. The objective of the flushing was to dilute the contaminant (i.e., to reduce the pH level to below 9.0 in accordance with Basin Plan guidelines) (RWQCB 1994). Another objective of the flushing was to mobilize the residue for downstream collection and removal. Several test releases of potable water were conducted to determine appropriate flow rates, avoid erosion, and assess the best capture and containment approaches. Based on these tests, flushing consisted of the gradual release of water. The affected areas were flushed at approximately 20 gallons per minute, using 1,000 gallons per flush. Overall, approximately 11,000 gallons of potable water was used for the operation.

BMPs were employed to prevent runoff from flushing activities and potential precipitation. These measures included construction of two retention systems, acting as the first line of defense to prevent runoff from reaching the creek. Flushing activities were monitored continuously to ensure that all flush-water runoff was captured within the retention areas, pumped into tanks, and transported offsite for proper disposal. Natural drainage patterns were not altered as a result of the retention area construction. As a further precaution to prevent potentially contaminated runoff from discharging offsite, a sandbag barrier was installed down-gradient of the basins and up-gradient of culverts that convey drainage to Escondido Creek. The sandbags were left in place after flushing activities were completed to prevent potential rain runoff from discharging into the creek. To address sedimentation from excavation activities, crews installed fiber rolls and silt fencing during and after remediation efforts. Areas where excavation occurred and vegetation was removed were stabilized to prevent future erosion and sedimentation.

Several follow-up measures were conducted to ensure continued water-quality protection. Some of these measures included offsite disposal of contaminated soil, leaving retention systems in place until remediation was fully completed, sampling soil until runoff pH levels returned to acceptable levels (between 6.5 and 9.0) and/or until agencies were satisfied, returning retention areas to their natural topographic state, and leaving erosion and sediment controls until they were naturally reabsorbed by the restored landscape.

To prevent and/or reduce the recurrence of similar situations, several measures will be taken: assessing the tank storage system, including evaluating the installation of a remotely controlled isolation valve; evaluating and modifying secondary containment measures; and evaluating spill response measures and controls.

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13 NONEMERGENCY FIREFIGHTING

Order R9-2007-0001 requires that each Copermittee develop and implement a program to reduce pollutants from nonemergency firefighting flows (i.e., flows from controlled or practice blazes and maintenance activities). During the program year, inspection of the fire stations located within Escondido identified the following activities that create the potential for non-stormwater discharges and are not related to firefighting emergencies:

- vehicle washing,
- hose washing and testing, and
- fire response training.

Based on the risks associated with these activities, BMPs are implemented for each fire station to prevent or reduce pollutants associated with nonemergency urban runoff. These BMPs are summarized in Table 13-1.

Table 13-1. Escondido Fire Station BMPs for Nonemergency Flows

Station	Address	BMPs
Fire Station 1	310 North Quince Street	French drains around the training tower Berm along the property boundary parallel to Escondido Creek Vehicle washing limited to the enclosed bay area
Fire Station 2	421 North Midway Drive	Seal or plug in storm drains during dry periods Contain and recapture washwater on-site
Fire Station 3	1808 Nutmeg Street	Berm around wash areas to contain washwater (and at the fueling stations to contain drips or spills) Biofiltration system Media filters
Fire Station 4[1]	3301 Bear Valley Parkway	Berm around the fuel station Contain and recapture washwater with a berm and/or hydro-boom
Fire Station 5	2319 Felicita Road	Restrict vehicle and hose washing to within the bay area Contain and recover washwater Berm around the fuel station
Fire Station 6	1735 Del Dios Highway	Biofiltration system Berm around the fuel station Media filters
Fire Station 7	1220 North Ash	Biofiltration system Media filters

[1] Fire Station No. 4 closed during the reporting period.

As part of ongoing implementation of the JURMP, inspections were conducted during 2011–2012 to evaluate the use or existence of appropriate BMP practices or structures. During this process, the potential for various activities to create stormwater impacts was noted. These activities include washing and testing equipment, and practicing fire response procedures. As a result, BMPs for these practices were implemented such as washing vehicles within the fire station bays and containing and capturing firefighting water runoff during emergency response drills. Routine practices to prevent non-stormwater runoff from entering the storm drain system are understood and performed by firefighting staff. Structural improvements, such as catch basins to the sewer, constructing dedicated wash pads with a sewer drainage connection, constructing berms, and installing portable containment and recovery systems have

been reviewed, and many of them were implemented as part of new fire facilities construction or reconstruction of some older stations. For example, designed solely for emergency response practices, Fire Station 1 was retrofitted with a recycling system to prevent non-stormwater runoff from entering the storm drain system. In addition, the facility was re-plumbed to ensure that flows are directed to the sewer. Other stations feature biofiltration systems where runoff can be retained and infiltrated onsite. As resources become available, older fire stations will be evaluated for the installation of similar structural BMPs. During 2012–2013, facilities and operations will be reviewed to confirm that the appropriate practice and/or installation of the designated BMPs has occurred.

14 JURMP REVISIONS

Extensive modifications to the City's JURMP were completed in March 2008 to comply with the new and more comprehensive requirements of Order R9-2007-0001. The City began implementing its updated JURMP during the latter part of the 2007–2008 reporting cycle. This reporting period serves as the 5th full year of program implementation under Order R9-2007-0001.

Although no revisions to the JURMP occurred during the program year, the City continues to evaluate program elements, including dry-weather water-quality monitoring results and program effectiveness outcomes for future modifications. In addition, the City anticipates near-term program revisions in response to a new municipal stormwater permit that will be issued sometime in 2013.

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15 CONCLUSIONS AND RECOMMENDATIONS

With 10 years of JURMP implementation completed, there are a number of environmental, managerial, and fiscal conclusions that can be drawn from monitoring and administrative results.

15.1 ENVIRONMENTAL ASPECTS

Relative to the recent long-term effectiveness assessment conducted by the San Diego Copermittees (Weston et al. 2011), the following are evident in the City's JURMP database.

Watershed Health and Water Quality Issues

Wet-weather receiving water quality is not sufficiently characterized by the monitoring requirements of Order R9-2007-0001. Because wet-weather data is collected at lower points in the watershed, there are multiple land uses affecting wet-weather data that are below Escondido's municipal boundaries and the point of measurement. Therefore, drawing conclusions from wet-weather data relative to potential pollutant sources in Escondido would be conjecture.

Escondido does contribute to some of the watershed priority issues (such as storm event sediment transport [Weston et al. 2011]), but other issues such as fecal coliform bacteria and the detection of synthetic pyrethroid pesticides are not observed in Escondido data. Dry-weather data from Escondido show sporadic occurrences of fecal coliform bacteria over time, but tend to indicate a greater presence of total coliform bacteria rather than a strain associated with human or animal waste. Contrary to larger San Diego region receiving water quality priorities (Weston et al. 2011), the "countywide issue" with bacteria indicators (largely *Enterococci* and fecal coliform) is not present in Escondido dry-weather data, as shown by the table below.

Summary of Bacteriological Sampling, City of Escondido

Program Year	Percentage of Sites with Bacteria Exceedances[1]
2008–2009	35% (21 of 60 sites)
2009–2010	15% (8 of 55 sites)
2010–2011	12% (7 of 60 sites)
2011–2012	4% (2 of 57 sites)[2]

[1] Sites with exceedances during field standard and follow-up sampling.
[2] Evaluation based on original action levels for all years for comparison purposes.

Nutrients (nitrate but not orthophosphorus) have been detected each year since the program began, which indicates a spatial association with riparian habitat, agriculture, horticulture, and livestock activities inside and outside Escondido's jurisdictional boundaries. Several potential sources within the City's boundary have been investigated, and some were eliminated. Similar activities outside of the jurisdiction appear to be contributing to the detection of nitrate at some City monitoring stations. There have not been any detected pyrethroid pesticides since JURMP monitoring began.

Changes in Water Quality

Although the region's long-term effectiveness assessment (Weston et al. 2011) is unable to identify changes in discharge water quality, Escondido's JURMP data presented in this Annual Report (and earlier reports) clearly illustrates an improvement in water quality (both discharge points and receiving waters) since monitoring began in 2002 (see Figures 11-5 through 11-8). As noted above, some nitrate concentrations (ranging from approximately 3 percent to 13 percent of the total stations) have been above the action level. In contrast to the improvement in water quality seen from other pollutant parameters measured, the persistence of elevated nitrate occurrence appears to be largely associated with natural background sources.

Program Effectiveness

As detailed in Chapter 11, the effectiveness of Escondido's JURMP is demonstrated through measured results and community awareness. Consistent with countywide conclusions, the City and its Copermittees have made progress toward reducing pollutant loading and improvements to stormwater discharge quality and receiving water quality (Weston et al. 2011).

15.2 JURMP MANAGEMENT

Over the past 10 years, the City has participated in and led watershed stewardship activities in the Carlsbad and San Dieguito watersheds in the San Diego region. The City's dedication of staff and fiscal resources to manage, plan, implement, analyze, and evaluate the jurisdictional and watershed-based programs over these years represents an extensive commitment and investment, including extensive involvement in special water quality studies and wet-weather sampling for assessing eutrophication and sedimentation issues at Lake San Marcos.

Approximately $15.5 million of City funds have been expended for this purpose since 2001. As one of the largest cities in San Diego County, Escondido has committed approximately $1.5 to $2 million annually to urban runoff management. Like many municipalities in the county, the City is experiencing significant fiscal challenges, substantial staff reductions, and sizable revenue losses, yet it continues to maintain a dedicated stormwater budget to ensure that critical elements of the ongoing program continue uninterrupted.

15.3 COST/BENEFIT REALIZATIONS

Because JURMP planning and implementation costs are a significant portion of the City's resources, both fiscally and administratively, the City and its Copermittees continue to investigate and evaluate methods for improving the program's cost-effectiveness. Since JURMP implementation, water quality benefits have been quantified at a cost/benefit ratio that remains unbalanced relative to the stormwater program expense versus the nominal urban runoff water quality improvements that have been realized. The significant additional costs to comply with Order R9-2007-0001 and to address the ongoing development of extensive TMDL studies represent millions of additional dollars in municipal funding from the Copermittees that must come from residential and business fees. Current economics continue to significantly impact the City's tax-based revenue. As in earlier annual reports and communications to RWQCB through the San Diego Copermittees, the following recommendations are offered to improve the cost/benefit ratio.

15.4 RECOMMENDATIONS

As the San Diego Copermittees move toward adopting a new watershed-based municipal stormwater permit, monitoring parameters not detected (or seldom/randomly found above action levels) should be eliminated. For Escondido, this includes the following:

- total coliform bacteria;
- diazinon;
- dhlorpyrifos;
- dissolved cadmium, copper, and lead; and
- oil and grease.

Bacteria indicative of waste products and wastewater discharges (fecal coliform, *Enterococcus*, *E. coli*) are useful in detecting water quality concerns, albeit they are seldom found at Escondido monitoring stations. Dissolved metals (including zinc) are consistently well below action levels and should be monitored at tributary points rather than at each station. Total petroleum hydrocarbons (diesel, gas, and/or oil fractions) may be more useful than oil and grease analyses that often yield non-detection.

Because the City's JURMP annual analysis continues to confirm good water quality, JURMP data and activity information should be reported to the RWQCB for compliance evaluation rather than Copermittees

expending significant effort in developing compliance reports. This would allow municipalities to focus resources on water quality improvement priorities.

Grant monies for capital improvements for water quality projects should be better funded by the federal and state governments. Similar to the State of California and the rest of the United States, municipal governments are experiencing economic hardship and struggle to fund capital improvements, particularly for improvements outside of their jurisdiction that offer water quality benefits lower in the watershed (e.g., the Pacific coastline). Municipalities in San Diego County, as well as the state, would greatly benefit from improved grant funding to support such capital improvement projects; however, continued funding cuts for water quality and other environmental programs at the state level exacerbate this situation and reduce the willingness to financially contribute to non-jurisdictional projects.

15.5 EXPECTATIONS

The City looks forward to gaining an improved return on investment from the San Diego County-sponsored wet-weather monitoring program. Under Order R9-2007-0001, the bioassessment and mass-loading monitoring along Escondido Creek fails to assist the City in filling existing data gaps within its present environmental monitoring programs. In addition, the temporary watershed assessment station for Escondido should have considered water quality measurement higher in the watershed to complement the coastal dataset. A key to improving the measurability of Escondido's urban runoff management program is capturing information that correlates to the hydrological drainage associated with City lands, which cannot be accomplished through periodic wet-weather monitoring in Escondido Creek at the bottom of the watershed every-other-year over the 5-year permit term.

As emphasized throughout this document, the City has remained, and will continue to be, an effective and meaningful contributor to Copermittee and watershed planning, coordination, and implementation efforts aimed at improving surface water quality. The City's 2008 JURMP update is a key contribution to achieving long-term water quality improvements in the jurisdiction, and is a collaborating element in regional watershed protection. Being recognized by the Association of Environmental Professionals as an exemplary reference document, the Escondido JURMP continues to encourage compliance awareness of proper stormwater management.

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Appendix A

Supporting Information for the Development Planning Component

Contents:

1. Treatment Control BMP Inspection Form
2. Treatment Control BMP Inventory and Summary of Inspections

Appendix A

1. Treatment Control BMP Inspection Form

GPS locations must be logged for each treatment control BMP during initial inspections.

☐ **Maintenance Needed**

POST-CONSTRUCTION WATER QUALITY TREATMENT CONTROL BMP SITE INSPECTION CHECKLIST

Project ID:	Treatment Control ID:
Project Location:	
Date:	Time:
Inspector Name/Affiliation:	
Party Responsible for BMP O&M:	

Note: This section to be filled out for vegetated treatment controls (i.e. basins and swales) only.

DETENTION BASINS AND VEGETATED SWALES		
VEGETATION CONTROL/MANAGEMENT:		**Maintenance Req'd?**
Is vegetation coverage within the basin/swale inadequate for proper water quality treatment? Percent coverage floor _____ % slopes _____ %	☐ yes ☐ no	☐
Is vegetation growth excessive or inhibitive to the operation of the swale/basin?	☐ yes ☐ no	☐
Do weeds, leaves, or other organic debris interfere with the operation of the swale/basin?	☐ yes ☐ no	☐
Is there evidence of flattening of vegetation? If yes, describe.	☐ yes ☐ no	☐
SEDIMENT/EROSION CONTROL:		**Maintenance Req'd?**
Is there evidence of erosion, rilling, or undercutting?	☐ yes ☐ no	☐
Is there evidence of embankment slumping or cracking?	☐ yes ☐ no	☐
Are sediment deposits present that impede the flow of the basin/swale?	☐ yes ☐ no	☐
Is there standing water or other drainage problems? If yes, what is the depth, extent, and location of water?	☐ yes ☐ no	☐
Are seeps present?	☐ yes ☐ no	☐
ANIMAL CONCERNS:		**Maintenance Req'd?**
Is there evidence of small animals (burrows, mounds, etc) or bird nests within the BMP footprint? If yes, describe.	☐ yes ☐ no	☐

Note: This section to be filled out for structural water quality treatment controls only.

STRUCTURAL TREATMENT CONTROLS (e.g., storm drain filters or other drainage inserts)			
GENERAL OPERATION:			**Maintenance Req'd?**
Do any of the structural treatment control BMP components appear missing or in need of repair?	☐ yes	☐ no	☐
If applicable, do filters need to be replaced?	☐ yes	☐ no	☐
Does trash, debris or sediment interfere with the operation of the treatment control in any way?	☐ yes	☐ no	☐
Is there standing water or other drainage problems? If yes, what is the depth, extent, and location of water?	☐ yes	☐ no	☐

Note: This section to be filled out for ALL water quality treatment control BMPs.

AESTHETIC CONCERNS:			**Maintenance Req'd?**
Are trash and/or debris present? If yes, type, amount and location:	☐ yes	☐ no	☐
Other general aesthetic concerns:			
VECTOR CONCERNS:			**Maintenance Req'd?**
Are mosquitoes, larvae or other insects present?	☐ yes	☐ no	☐
NON-STORMWATER CONCERNS:			**Maintenance Req'd?**
Is their evidence of non-storm water discharge to the BMP (e.g., irrigation leaks)? If yes, contact Cheryl Filar at (760) 839-6315	☐ yes	☐ no	☐
If maintenance is required, explain:			

PHOTOGRAPHS (mandatory if maintenance is required):

Photograph No.	Description

(Inspector's Signature)	Information entered into database by: Name Date

Appendix A

2. Treatment Control BMP Inventory and Summary of Inspections

Treatment Control Inventory and Summary of Inspections, FY 2011-2012

Record No.	City Proj. ID	Location	Coordinates (N,W)	Project Type	Treatment Control ID	Treatment Control Type	Priority	Date Inspected	Status*	Maintenance Required	Findings
1	PRI-02-019	2044 S. Juniper Street	33.09975, 117.06502	Residential	New TC Site	Settling Basin (Dry Pond)	High	4/30/2012		No	BMP operational; no maintenance necessary.
2	PRI-02-025	1202 & 1216 N Fig (at Jets Place)	33.14036, 117.08035	Residential	New TC Site	Bioswale	Medium	5/3/2012		Yes	Reverse sidewalk under drain needs to be cleared of sediment and debris.
3	PRI-02-111	Tract 835/2020 S Escondido Blvd	33.09774, 117.07067	Residential	PRI020044-TC001	Settling Basin (Dry Pond)	High	4/24/2012		No	BMP operational; no maintenance necessary.
4	PRI-02-112	300-390 W. Valley Pkwy	N/A	Commercial	PRI020045-TC001	Media Filter	High	5/1/2012		N/A	Shopping center. Unable to locate storm drain inserts.
5	PRI-02-116	Tract 846/ 430 N. Citrus*	N/A	Residential	PRI030024-TC001	Media Filter	Medium	4/30/2012		N/A	Unable to locate storm water TC BMPs.
6	PRI-02-117	Tract 842/ 643 N. Fig	33.13060, 117.07632	Residential	PRI030025-TC001	Biofiltration/Gravel Swale	High	4/30/2012		Yes	Reverse sidewalk under drain and curb outlet need to be cleared of sediment and debris.
7	PRI-02-117	Tract 842/ 643 N. Fig	33.13082, 117.07646	Residential	PRI030025-TC002	Biofiltration/Gravel Swale	High	4/30/2012		Yes	Reverse sidewalk under drain and curb outlet need to be cleared of sediment and debris.
8	PRI-02-118	Tract 759/ Reed Road	33.134679, 117.026490	Residential	PRI040027-TC001	Bioswale	High	4/30/2012		Yes	Information provided by City prior to 2012 TC inspections shows Tract 759 to be a housing development located at Reed Rd. and Bellagio Rd. The TC BMP on site is a bioswale. Extensive erosion and sedimentation issues are present throughout the swale. Also, vegetation cover is insufficient.
9	PRI-02-119	Tract 853/ 1100 Blk W 15th Ave	33.10344, 117.08630	Residential	PRI040028-TC001	Biofiltration/Landscaping	Low	4/24/2012		No	Project consists of 14 single-family residences with biofiltration/site design BMPs incorporated into landscaping.
10	PRI-02-120	Tract 862/ Reed Rd. & Falconer	33.135.35, 117.03038	Residential	PRI040029-TC001	Bioswale	Medium	4/30/2012		N/A	Bioswale was removed and replaced with a concrete v-ditch. No TC BMPs observed at this site.
11	PRI-02-121	Tract 873/ Escondido & Citracado	N/A	Residential	PRI040030-TC001	Media Filter	Medium	4/24/2012		N/A	Unable to locate storm water TC BMPs.
12	PRI-02-122	1510 & 1520 Escondido Blvd	33.10745, 117.07470	Commercial	PRI040031-TC001	Biofiltration	Medium	4/24/2012		No	BMP operational; no maintenance necessary.
13	PRI-02-123	I-15 & Citracado	33.09175, 117.07953	Commercial	PRI040032-TC001	Storm Drain Insert Filter	Medium	5/2/2012		Yes	Replace insert filter.
14	PRI-02-123	I-15 & Citracado	33.09155, 117.07951	Commercial	PRI040032-TC002	Storm Drain Insert Filter	Medium	5/2/2012		Yes	Replace insert filter.
15	PRI-02-123	I-15 & Citracado	33.09123, 117.07966	Commercial	PRI040032-TC003	Storm Drain Insert Filter	Medium	5/2/2012		Yes	Replace insert filter.
16	PRI-02-123	I-15 & Citracado	33.09174, 117.07945	Commercial	PRI040032-TC004	Storm Drain Insert Filter	Medium	5/2/2012		Yes	Replace insert filter.
17	PRI-02-123	I-15 & Citracado	33.09172, 117.07928	Commercial	PRI040032-TC005	Storm Drain Insert Filter	Medium	5/2/2012		Yes	Replace insert filter.
18	PRI-02-123	I-15 & Citracado	33.091543, 117.079271	Commercial	PRI040032-TC006	Storm Drain Insert Filter	Medium	5/2/2012		Yes	Replace insert filter.
19	PRI-02-124	150 La Terraza Blvd. (Office Buil.)	33.11674, 117.09550	Commercial	PRI040033-TC001	Bioswale	High	4/24/2012		Yes	Standing water at bioswale influent (several inches deep).
20	PRI-02-124	150 La Terraza Blvd. (Office Buil.)	33.11631, 117.09579	Commercial	PRI040033-TC002	Bioswale	High	4/24/2012		Yes	No vegetation in bioswale, requires maintenance.
21	PRI-02-125	Tract 874/ 1321 S. Upas	33.10391, 117.08540	Residential	PRI050002-TC001	Bioswale	Medium	4/24/2012		No	BMP operational; no maintenance necessary.
22	PRI-02-125	Tract 874/ 1321 S. Upas	33.10391, 117.08540	Residential	PRI050002-TC002	Storm Drain Insert Filter	Medium	4/24/2012		Yes	Replace insert filter. Standing water observed in storm drain inlet.
23	PRI-02-126	Tract 901/ Purdum Lane	33.11310, 117.06266	Residential	PRI050003-TC001	Bioswale	Medium	4/30/2012		Yes	Sediment deposits in reverse sidewalk under drain are preventing runoff from entering bioswale.
24	PRI-02-126	Tract 901/ Purdum Lane	33.11274, 117.06303	Residential	PRI050003-TC002	Biofiltration	Medium	4/30/2012		Yes	Insufficient vegetation cover in biofiltration area. Replace gravel bags at effluent discharge point.
25	PRI-02-127	Tract 912/ Mosaic- 11th & Del Dios	33.10667, 117.10053	Residential	PRI050004-TC001	Hydrodynamic Device	Medium	4/24/2012		Yes	Remove trash, debris, and sediment from hydrodynamic device.
26	PRI-02-128	Tract 914/Citrus Glen	33.15053, 117.03661	Residential	PRI050005-TC001	Hydrodynamic Device	Medium	5/1/2012		Yes	Remove debris from hydrodynamic device.
27	PRI-02-128	Tract 914/Citrus Glen	33.15184, 117.03519	Residential	PRI050005-TC002	Hydrodynamic Device	Medium	5/1/2012		Yes	Remove debris from hydrodynamic device.
28	PRI-02-131	Tract 861/ 2031 Felicita Road	33.09543, 117.08376	Residential	PRI050008-TC001	Bioswale	Medium	4/24/2012		No	BMP operational; no maintenance necessary.
29	PRI-02-133	Tract 876/ Seven Oaks	33.13354, 117.10360	Residential	PRI050010-TC001	Bioswale	Medium	5/1/2012		Yes	Observed scouring of bioswale floor. Vegetation overgrown, needs to be trimmed.

Treatment Control Inventory and Summary of Inspections, FY 2011-2012

Record No.	City Proj. ID	Location	Coordinates (N,W)	Project Type	Treatment Control ID	Treatment Control Type	Priority	Date Inspected	Status*	Maintenance Required	Findings
30	PRI-02-134	Tract 881/ Washington Hills II	33.14736, 117.04456	Residential	PRI050011-TC001	Biofiltration	Medium	5/1/2012		Yes	Project drains to existing bioswale in City-maintained area along Escondido Creek channel. Organic debris and sediment deposits need to be removed from swale.
31	PRI-02-135	Tract 883/ El Norte & Midway	33.15119, 117.06214	Residential	PRI050012-TC001	Bioswale	Medium	5/1/2012		No	BMP operational; no maintenance necessary.
32	PRI-02-136	Tract 886/ 1998 E. Grand Ave	N/A	Residential	PRI050013-TC001	Media Filter	Medium	4/30/2012		N/A	Unable to locate storm water BMPs.
33	PRI-02-137	231 Lincoln Parkway	33.13464, 117.08280	Commercial	PRI060007-TC001	Bioswale	High	5/2/2012		No	BMP operational; no maintenance necessary.
34	PRI-02-137	231 Lincoln Parkway	33.13459, 117.08295	Commercial	PRI060007-TC002	Bioswale	High	5/2/2012		No	BMP operational; no maintenance necessary.
35	PRI-02-137	231 Lincoln Parkway	33.13455, 117.08311	Commercial	PRI060007-TC003	Bioswale	High	5/2/2012		No	BMP operational; no maintenance necessary.
36	PRI-02-137	231 Lincoln Parkway	33.13442, 117.08340	Commercial	PRI060007-TC004	Bioswale	High	5/2/2012		No	BMP operational; no maintenance necessary.
37	PRI-02-137	231 Lincoln Parkway	33.13427, 117.08362	Commercial	PRI060007-TC005	Bioswale	High	5/2/2012		No	BMP operational; no maintenance necessary.
38	PRI-02-137	231 Lincoln Parkway	33.13419, 117.08375	Commercial	PRI060007-TC006	Bioswale	High	5/2/2012		No	BMP operational; no maintenance necessary.
39	PRI-02-137	231 Lincoln Parkway	33.13384, 117.08360	Commercial	PRI060007-TC007	Bioswale	High	5/2/2012		No	BMP operational; no maintenance necessary.
40	PRI-02-137	231 Lincoln Parkway	33.13342, 117.08368	Commercial	PRI060007-TC008	Bioswale	High	5/2/2012		No	BMP operational; no maintenance necessary.
41	PRI-02-137	231 Lincoln Parkway	33.13344, 117.08396	Commercial	PRI060007-TC009	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
42	PRI-02-137	231 Lincoln Parkway	33.13364, 117.08421	Commercial	PRI060007-TC010	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
43	PRI-02-137	231 Lincoln Parkway	33.13345, 117.08413	Commercial	PRI060007-TC011	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
44	PRI-02-137	231 Lincoln Parkway	33.13338, 117.08431	Commercial	PRI060007-TC012	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
45	PRI-02-137	231 Lincoln Parkway	33.13347, 117.08440	Commercial	PRI060007-TC013	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
46	PRI-02-137	231 Lincoln Parkway	33.13368, 117.08450	Commercial	PRI060007-TC014	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
47	PRI-02-137	231 Lincoln Parkway	33.13353, 117.08473	Commercial	PRI060007-TC015	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
48	PRI-02-137	231 Lincoln Parkway	33.13318, 117.08522	Commercial	PRI060007-TC016	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
49	PRI-02-137	231 Lincoln Parkway	33.13294, 117.08562	Commercial	PRI060007-TC017	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
50	PRI-02-137	231 Lincoln Parkway	33.13286, 117.08578	Commercial	PRI060007-TC018	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
51	PRI-02-137	231 Lincoln Parkway	33.13277, 117.08545	Commercial	PRI060007-TC019	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
52	PRI-02-137	231 Lincoln Parkway	33.13268, 117.08561	Commercial	PRI060007-TC020	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
53	PRI-02-137	231 Lincoln Parkway	33.13251, 117.08589	Commercial	PRI060007-TC021	Storm Drain Insert Filter	High	5/2/2012		Yes	Remove trash and debris. Replace insert filter.
54	PRI-02-138	Tract 828/ 1277 Pacific Oaks Pl.	33.10815, 117.11691	Residential	PRI060008-TC001	Biofiltration	High	5/3/2012		No	BMP operational; no maintenance necessary.
55	PRI-02-138	Tract 828/ 1277 Pacific Oaks Pl.	33.10786, 117.11727	Residential	PRI060008-TC002	Biofiltration	High	5/3/2012		No	BMP operational; no maintenance necessary.
56	PRI-02-138	Tract 828/ 1277 Pacific Oaks Pl.	33.10799, 117.11719	Commercial	PRI060008-TC003	Biofiltration	High	5/3/2012		No	BMP operational; no maintenance necessary.
57	PRI-02-139	Tract 949/ 402 W. 6th Avenue	33.11552, 117.08279	Residential	PRI060009-TC001	Bioswale	Medium	4/24/2012		No	BMP operational; no maintenance necessary.
58	PRI-02-139	Tract 949/ 402 W. 6th Avenue	33.11552, 117.08279	Residential	PRI060009-TC002	Biofiltration	Medium	4/24/2012		No	BMP operational; no maintenance necessary.
59	PRI-02-140	Tract 865/125-133 Pennsylvania St.	33.12352, 117.08176	Residential	PRI040034-TC001	Bioswale	Medium	5/1/2012		No	Some scouring of bioswale floor. The bioswale is located within residential property.
60	PRI-02-141	Tract 857/ Falcon Crest	33.14191, 117.03173	Residential	PRI050014-TC001	Bioswale	Medium	4/30/2012		Yes	Pipes diverting runoff from the street to the bioswale are blocked with sediment and debris and need to be cleared.
61	PRI-02-141	Tract 857/ Falcon Crest	33.1418, 117.03210	Residential	PRI050014-TC002	Bioswale	Medium	4/30/2012		Yes	Pipes diverting runoff from the street to the bioswale are blocked with sediment and debris and need to be cleared.
62	PRI-02-141	Tract 857/ Falcon Crest	33.14154, 117.03299	Residential	PRI050014-TC003	Bioswale	Medium	4/30/2012		No	BMP operational; no maintenance necessary.
63	PRI-02-141	Tract 857/ Falcon Crest	33.14138, 117.03371	Residential	PRI050014-TC004	Bioswale	Medium	4/30/2012		Yes	Pipes diverting runoff from the street to the bioswale are blocked with sediment and debris and need to be cleared.
64	PRI-02-141	Tract 857/ Falcon Crest	33.14128, 117.03388	Residential	PRI050014-TC005	Bioswale	Medium	4/30/2012		Yes	Bioswale has no inlet structure.

Treatment Control Inventory and Summary of Inspections, FY 2011-2012

Record No.	City Proj. ID	Location	Coordinates (N,W)	Project Type	Treatment Control ID	Treatment Control Type	Priority	Date Inspected	Status*	Maintenance Required	Findings
65	PRI-02-141	Tract 857/ Falcon Crest	33.14151, 117.03285	Residential	PRI050014-TC006	Bioswale	Medium	4/30/2012	■	Yes	Pipes diverting runoff from the street to the bioswale are blocked with sediment and debris and need to be cleared.
66	PRI-02-141	Tract 857/ Falcon Crest	33.14169, 117.03210	Residential	PRI050014-TC007	Bioswale	Medium	4/30/2012	■	Yes	Pipes diverting runoff from the street to the bioswale are blocked with sediment and debris and need to be cleared.
67	PRI-02-141	Tract 857/ Falcon Crest	33.14187, 117.03159	Residential	PRI050014-TC008	Bioswale	Medium	4/30/2012	■	Yes	Pipes diverting runoff from the street to the bioswale are blocked with sediment and debris and need to be cleared.
68	PRI-02-142	426 N. Date Street	33.12948, 117.07134	Commercial	PRI060010-TC001	Bioswale	Medium	4/30/2012	■	Yes	Insufficient vegetation cover in bioswale. Storm drain inlet is blocked with sediment and debris.
69	PRI-02-144	600 La Terraza Blvd.	33.11196, 117.09583	Commercial	PRI060011-TC001	Bioswale	High	4/24/2012	■	No	BMP operational; no maintenance necessary.
70	PRI-02-144	600 La Terraza Blvd.	33.11155, 117.09573	Commercial	PRI060011-TC002	Bioswale	High	4/24/2012	■	No	BMP operational; no maintenance necessary.
71	PRI-02-144	600 La Terraza Blvd.	33.11142, 117.09574	Commercial	PRI060011-TC003	Bioswale	High	4/24/2012	■	No	BMP operational; no maintenance necessary.
72	PRI-02-145	Tract 924/ 338 Brotherton Road	33.09409, 117.07092	Residential	PRI060012-TC001	Biofiltration	Medium	4/24/2012	■	Yes	Insufficient vegetation cover in bioswale.
73	PRI-02-146	500 La Terraza	33.11201, 117.09610	Commercial	PRI060013-TC001	Bioswale	High	4/24/2012	■	Yes	Large, bare areas in bioswale; vegetation needs to be reestablished.
74	PRI-02-146	500 La Terraza	33.11276, 117.09649	Commercial	PRI060013-TC002	Bioswale	High	4/24/2012	■	No	BMP operational; suggest trimming overgrown vegetation for increased effectiveness.
75	PRI-02-147	1507 E. Valley Pkwy	33.13221, 117.05855	Commercial	PRI060014-TC001	Biofiltration	High	4/30/2012	■	Yes	Insufficient vegetation cover in bioswale. Remove trash.
76	PRI-02-147	1507 E. Valley Pkwy	33.13233, 117.05859	Commercial	PRI060014-TC002	Storm Drain Insert Filter	High	4/30/2012	■	Yes	Replace insert filter, clear insert of trash and debris.
77	PRI-02-148	1215/1223 Pacific Oaks Pl.	33.10919, 117.11644	Commercial	PRI060015-TC001	Biofiltration	High	5/2/2012	■	No	BMP operational; no maintenance necessary.
78	PRI-02-148	1215/1223 Pacific Oaks Pl.	33.10922, 117.11657	Commercial	PRI060015-TC002	Biofiltration	High	5/2/2012	■	No	BMP operational; no maintenance necessary.
79	PRI-02-148	1215/1223 Pacific Oaks Pl.	33.10927, 117.11682	Commercial	PRI060015-TC003	Biofiltration	High	5/2/2012	■	No	BMP operational; no maintenance necessary.
80	PRI-02-148	1215/1223 Pacific Oaks Pl.	33.10931, 117.11702	Commercial	PRI060015-TC004	Biofiltration	High	5/2/2012	■	No	BMP operational; no maintenance necessary.
81	PRI-02-148	1215/1223 Pacific Oaks Pl.	33.10879, 117.11660	Commercial	PRI060015-TC005	Biofiltration	High	5/2/2012	■	No	BMP operational; no maintenance necessary.
82	PRI-02-148	1215/1223 Pacific Oaks Pl.	33.10850, 117.11679	Commercial	PRI060015-TC006	Biofiltration	High	5/2/2012	■	Yes	Insufficient vegetation cover.
83	PRI-02-148	1215/1223 Pacific Oaks Pl.	33.10831, 117.11696	Commercial	PRI060015-TC007	Biofiltration	High	5/2/2012	■	No	BMP operational; no maintenance necessary.
84	PRI-02-149	W. 15th Avenue/Escondido Blvd	33.10829, 117.07439	Commercial	PRI060016-TC001	Biofiltration	Medium	4/24/2012	■	No	BMP operational; no maintenance necessary.
85	PRI-02-150	1357 W. 9th Avenue	33.10914, 117.10181	Commercial	PRI060017-TC001	Biofiltration	Medium	4/24/2012	■	No	BMP operational; no maintenance necessary.
86	PRI-02-150	1357 W. 9th Avenue	33.10917, 117.10184	Commercial	PRI060017-TC002	Hydrodynamic Device	Medium	4/24/2012	■	No	AquaShield structure.
87	PRI-02-151	600 W. Mission Avenue	33.12794, 117.09409	Commercial	PRI060018-TC001	Storm Drain Insert Filter	High	5/1/2012	■	No	Minor trash/debris present in catch filter.
88	PRI-02-151	600 W. Mission Avenue	33.12812, 117.09368	Commercial	PRI060018-TC002	Biofiltration	High	5/1/2012	■	Yes	Insufficient vegetation coverage within biofiltration area. Evidence of minor erosion near associated storm drain inlet.
89	PRI-02-151	600 W. Mission Avenue	33.12834, 117.09376	Commercial	PRI060018-TC003	Hydrodynamic Device	High	5/1/2012	■	Yes	Remove sediment, trash, and debris from swirl chamber.
90	PRI-02-151	600 W. Mission Avenue	33.12757, 117.09552	Commercial	PRI060018-TC004	Storm Drain Insert Filter	High	5/1/2012	■	Yes	Replace storm drain insert filters.
91	PRI-02-154	1556 Auto Parkway	33.11655, 117.10550	Commercial	PRI070010-TC001	Bioswale	High	5/3/2012	■	No	BMP operational; no maintenance necessary.
92	PRI-02-154	1556 Auto Parkway	33.11711, 117.10569	Commercial	PRI070010-TC002	Bioswale	High	5/3/2012	■	No	BMP operational; no maintenance necessary.
93	PRI-02-155	613 E. Lincoln Ave.	33.13575, 117.08034	Commercial	PRI070011-TC001	Biofiltration	Medium	5/1/2012	■	Yes	Insufficient vegetation cover in bioswale. Evidence of erosion on slopes.
94	PRI-02-155	613 E. Lincoln Ave.	33.13575, 117.08034	Commercial	PRI070011-TC002	Storm Drain Insert Filter	Medium	5/1/2012	■	Yes	Replace insert filter and remove trash and debris from storm drain inlet. Existing filter is partially detached from housing unit.
95	PRI-07-169	2435 Bernardo Ave.	33.09020, 117.09126	Residential	New TC Site	Bioswales	Medium	5/3/2012	■	No	BMP operational; no maintenance necessary.
96	PRI-07-169	2435 Bernardo Ave.	33.090071, 117.09060	Residential	New TC Site	Bioswales	Medium	5/3/2012	■	No	BMP operational; no maintenance necessary.

Treatment Control Inventory and Summary of Inspections, FY 2011-2012

Record No.	City Proj. ID	Location	Coordinates (N,W)	Project Type	Treatment Control ID	Treatment Control Type	Priority	Date Inspected	Status*	Maintenance Required	Findings
97	PUB-02-1	Bear Valley Parkway	N/A	Road	CIP030001-TC001	Media Filter	High	N/A		N/A	Need better project description/location. Cannot locate.
98	PUB-02-2	El Norte	33.14793, 117.06989	Road	CIP030002-TC001	Storm Drain Insert Filter	High	5/1/2012		Yes	Uncertain of project description. If referring to insert filters installed in curb inlets on El Norte Pkwy, insert filters need to be cleared of sediment, trash, and debris.
99	PUB-02-4	Tulip / Upas Street Improvements	N/A	N/A	CIP040002-TC001	Media Filter	High	N/A		N/A	Insufficient project description/location. Cannot locate.
100	PUB-02-10	Bear Valley Parkway From Boyle T	N/A	N/A	CIP040008-TC001	Media Filter	High	N/A		N/A	Insufficient project description/location. Cannot locate.
101	PUB-02-12	CCP Landscaping	N/A	N/A	CIP050001-TC001	Biofiltration	High	N/A		N/A	Insufficient project description/location. Cannot locate.
102	PUB-02-13	Grove Park	33.13668, 117.07124	N/A	CIP050002-TC001	Biofiltration	Medium	5/1/2012		No	BMP operational; no maintenance necessary.
103	PUB-02-14	S. Upas Street Imp.	33.10452, 117.08585	N/A	CIP050003-TC001	Storm Drain Insert Filter	High	5/3/2012		Yes	Storm drain inserts need to be cleared of trash, debris, and sediment.
104	PUB-02-14	S. Upas Street Imp.	33.10392, 117.08542	N/A	CIP050003-TC002	Storm Drain Insert Filter	High	5/3/2012		Yes	Storm drain inserts need to be cleared of trash, debris, and sediment.
105	PUB-02-14	S. Upas Street Imp.	33.10470, 117.08584	N/A	CIP050003-TC003	Storm Drain Insert Filter	High	5/3/2012		Yes	Storm drain inserts need to be cleared of trash, debris, and sediment.
106	PUB-02-14	S. Upas Street Imp.	33.10505, 117.08620	N/A	CIP050003-TC004	Storm Drain Insert Filter	High	5/3/2012		Yes	Storm drain inserts need to be cleared of trash, debris, and sediment.
107	PUB-02-14	S. Upas Street Imp.	33.10506, 117.08613	N/A	CIP050003-TC005	Storm Drain Insert Filter	High	5/3/2012		Yes	Storm drain inserts need to be cleared of trash, debris, and sediment.
108	PUB-02-14	S. Upas Street Imp.	33.10769, 117.08799	N/A	CIP050003-TC006	Storm Drain Insert Filter	High	5/3/2012		Yes	Storm drain inserts need to be cleared of trash, debris, and sediment.
109	PUB-02-14	S. Upas Street Imp.	33.10804, 117.08836	N/A	CIP050003-TC007	Storm Drain Insert Filter	High	5/3/2012		Yes	Storm drain inserts need to be cleared of trash, debris, and sediment.
110	PUB-02-14	S. Upas Street Imp.	33.10736, 117.08783	N/A	CIP050003-TC008	Storm Drain Insert Filter	High	5/3/2012		Yes	Storm drain inserts need to be cleared of trash, debris, and sediment.
111	PUB-02-14	S. Upas Street Imp.	33.10598, 117.08688	N/A	CIP050003-TC009	Storm Drain Insert Filter	High	5/3/2012		Yes	Storm drain inserts need to be cleared of trash, debris, and sediment.
112	PUB-02-15	Tract 845/ Juniper St	N/A	Traffic Si	CIP030003-TC001	ND	ND	N/A		N/A	New information provided by the City designates Tract 845 as a private project, and is now in this inventory under the project ID PRI-02-019. More information is needed to determine the location of this project.
113	PUB-02-17	Ryan Park	33.15168, 117.03127	New Park	CIP030005-TC001	Biofiltration	Medium	5/1/2012		No	BMP operational; no maintenance necessary.
114	PUB-02-19	Oakhill		City Project	CIP020019-TC001	Other	Medium	N/A		N/A	Insufficient project description/location. Cannot locate.
115	PUB-02-20	1828 Nutmeg St.	33.1494, 117.10553	Fire Station	CIP070001-TC001	Biofiltration	High	5/4/2012		Yes	Evidence of erosion in biofiltration area.
116	PUB-02-20	1828 Nutmeg St.	33.14929, 117.10574	Fire Station	CIP070001-TC002	Media Filter	High	5/4/2012		Yes	Hose drying rack does not drain properly. Water ponds and does not flow to inlet.
117	PUB-02-21	1735 Del Dios Hwy	33.10487, 117.10268	Fire Station	CIP070002-TC001	Biofiltration	High	5/4/2012		No	BMP operational; no maintenance necessary.
118	PUB-02-21	1735 Del Dios Hwy	33.10487, 117.10268	Fire Station	CIP070002-TC002	Storm Drain Insert Filter	High	5/4/2012		Yes	Replace insert filter (existing filter is torn and ineffective).
119	PUB-02-21	1735 Del Dios Hwy	33.10529, 117.10258	Fire Station	CIP070002-TC003	Biofiltration	High	5/4/2012		No	BMP operational; no maintenance necessary.
120	PUB-02-21	1735 Del Dios Hwy	33.10525, 117.10251	Fire Station	CIP070002-TC004	Storm Drain Insert Filter	High	5/4/2012		Yes	Replace insert filter (existing filter is torn and ineffective).
121	PUB-02-22	1220 N. Ash St	33.14307, 117.07629	Fire Station	CIP070003-TC001	Biofiltration	High	5/4/2012		No	BMP operational; no maintenance necessary.
122	PUB-02-22	1220 N. Ash St	33.14344, 117.07545	Fire Station	CIP070003-TC002	Media Filter	High	5/4/2012		No	BMP operational; no maintenance necessary.
123	PUB-02-22	1220 N. Ash St	33.14300, 117.07623	Fire Station	CIP070003-TC003	Media Filter	High	5/4/2012		No	BMP operational; no maintenance necessary.
124	PUB-02-22	1220 N. Ash St	33.14308, 117.07627	Fire Station	CIP070003-TC004	Biofiltration	High	5/4/2012		No	BMP operational; no maintenance necessary.
125	PUB-02-23	1161 N. Centre City Pkwy	33.13557, 117.09420	Esc. Police	CIP070011-TC001	Bioswale	High	5/4/2012		Yes	Swale vegetation overgrown; requires maintenance.
126	PUB-02-23	1161 N. Centre City Pkwy	33.13586, 117.09409	Esc. Police	CIP070011-TC002	Bioswale	High	5/4/2012		Yes	Swale vegetation overgrown; requires maintenance.

Treatment Control Inventory and Summary of Inspections, FY 2011-2012

Record No.	City Proj. ID	Location	Coordinates (N,W)	Project Type	Treatment Control ID	Treatment Control Type	Priority	Date Inspected	Status*	Maintenance Required	Findings
127	PUB-02-23	1161 N. Centre City Pkwy	33.13602, 117.09438	Esc. Police	CIP070011-TC003	Bioswale	High	5/4/2012	■	Yes	Swale vegetation overgrown; requires maintenance.
128	PUB-02-23	1161 N. Centre City Pkwy	33.13647, 117.09420	Esc. Police	CIP070011-TC004	Bioswale	High	5/4/2012	■	Yes	Swale vegetation overgrown; requires maintenance.
129	PUB-02-23	1161 N. Centre City Pkwy	33.13667, 117.09438	Esc. Police	CIP070011-TC005	Bioswale	High	5/4/2012	■	Yes	Swale vegetation overgrown; requires maintenance.
130	PUB-02-23	1161 N. Centre City Pkwy	33.13679, 117.09370	Esc. Police	CIP070011-TC006	Bioswale	High	5/4/2012	■	Yes	Swale vegetation overgrown; requires maintenance.
131	PUB-02-24	Valley Center Road	N/A	P.D. Firing	CIP070005-TC001	Biofiltration	Medium	N/A	■	N/A	Training facility/firing range. Need additional information regarding location of TC BMPs on site.
132	PUB-02-30	310 N. Quince	N/A	Fire Station	CIP070001-TC001	Biofiltration	High	N/A	■	N/A	No TC BMPs on-site. Storm water runoff from facility drains to pretreatment device.

ND - No Data; **N/A** - Not applicable.

***Status Key:**
Green - Facility is operational (48)
Red - Facility needs maintenance (71)
Black - Facility TC BMPs were not located/inspected (5)
Purple - Need additional facility information (8)

Note: Project "PRI-02-152" has been deleted from this inventory. It was a duplicate record of TC BMPs located at 402 W. 6th Avenue (Tract 949). Inspection results for this site are recorded under the project ID "PRI-02-139".

Appendix B

Supporting Information for the Construction Component

Contents:

1. Construction Site Inspection Checklist
2. Active Construction Site Inventory
3. Construction Site Inspection Records

Appendix B

1. Construction Site Inspection Checklists

CITY OF ESCONDIDO

Project:_____

Inspected By:_____**Date:**_____

DRY SEASON – MAY 1 through SEPTEMBER 30
CONSTRUCTION SITE INSPECTION CHECKLIST

Grading and clearing should be phased to reduce the amount and the duration of sediment exposure. Always be aware of forecasted weather conditions prior to any scheduled grading or clearing activities.

Y, N, NA

☐ Perimeter protection, sediment control and tracking BMP's must be installed and maintained to comply with performance standards.

☐ BMP's to control sediment tracking must be installed and maintained at entrances/exits to comply with performance standards.

☐ Material needed to install standby BMP's necessary to completely protect the exposed portions of the site from erosion, and to prevent sediment discharges, must be stored on site. Areas that have already been protected from erosion using physical stabilization or established vegetation stabilization BMP's are not considered to be "exposed" for purposes of this requirement.

☐ The owner / contractor must have an approved "weather triggered" action pland and have the ability to deploy standby BMP's as needed to protect exposed areas within 24 hours of prediction of a storm event (a predicted storm event is defined as a forecasted 40% chance of rain). On request, the owner / contractor must provide proof of this capability that is acceptable to the City of Escondido.

☐ Deployment of physical or vegetative erosion control BMP's must commence as soon as grading and/or excavation is completed for any portion of the site. The owner / contractor may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.

☐ The area that can be cleared or graded and left exposed at one time is limited to the amount of acreage that the owner / contractor can adequately protect prior to a predicted rainstorm. This will require grading to be phased at larger sites and in may be necessary to deploy erosion and sediment control BMP's inareas that are not completed but are not actively being worked before additional grading is done.

CITY OF ESCONDIDO

Project:_____

Inspected By:_____**Date:**_____

RAINY SEASON – OCTOBER 1 through APRIL 30
CONSTRUCTION SITE INSPECTION CHECKLIST

Grading and clearing should be phased to reduce the amount and the duration of sediment exposure. Always be aware of forecasted weather conditions prior to any scheduled grading or clearing activities.

Y,N, NA

- ☐ Perimeter protection, sediment control and tracking BMPs must be installed and maintained to comply with performance standards.
- ☐ Material needed to install standby BMPs necessary to completely protect the exposed portions of the site from erosion and to prevent sediment discharges must be stored on site.
- ☐ The owner/contractor must have an approved "weather triggered" action plan and have the ability to deploy standby BMPs as needed to completely protect the exposed portions of the site within 24 hours of prediction of a storm event (a predicted storm event is defined as a forecasted 40% chance of rain). On request, the owner/contractor must provide proof of this capability that is acceptable to the City of Escondido.
- ☐ Deployment of physical or vegetation erosion control BMPs must commence as soon as grading and/or excavation is completed for any portion of the site. The owner/contractor may not continue to rely on the ability to deploy standby BMP materials to prevent erosion of graded areas that have been completed.
- ☐ The area that can be cleared or graded and left exposed at one time is limited to the amount of acreage that the owner/contractor can adequately protect prior to a predicted rainstorm.
- ☐ Erosion control, perimeter protection and sediment control BMPs must be upgraded if necessary to provide sufficient protection for storms likely to occur during the rainy season.
- ☐ Adequate physical or vegetative BMPs must be installed, established and maintained for all graded areas prior to the start of the rainy season.
- ☐ All vegetative erosion control must be established prior to the rainy season.
- ☐ The amount of exposed soil allowed at one time shall not exceed that which can be adequately protected.
- ☐ Any disturbed area that is not completed but is not being actively graded must be fully protected if left for 7 or more consecutive calendar days during the rainy season. Standby BMPs are not sufficient; BMPs must actually be deployed.

Appendix B

2. Active Construction Site Inventory

Active Construction Inventory, FY 2011-2012

Project ID	Reporting Period	Project Status	Project Type	Project Description	Street Number	Street Direction	Street Name	Latitude	Longitude	Datum	Hydrologic Unit	Receiving Waterbody
PRI-04-153	2004	Completed	Residential Tract	Tract 833	3215		Walden Glen	33.1115	-117.0062	WGS84	San Dieguito	Lake Hodges
PRI-05-154	2005	Completed	Residential Tract	Tract 839	3355	E	Valley Pkwy	33.1559	-117.0315	WGS84	Carlsbad	Escondido Creek
PRI-06-156	2006	Active	Residential Tract	Tract 683-J	2024	S	Escondido Blvd	33.1811	-117.1173	WGS84	Carlsbad	San Marcos Creek
PRI-06-157	2006	Completed	Residential Tract	Tract 850	2600	E	Washington Ave	33.1328	-117.0690	WGS84	Carlsbad	Escondido Creek
PRI-06-160	2006	Active	Residential Tract	Tract 926	439	W	Washington Ave	33.1250	-117.0899	WGS84	Carlsbad	Escondido Creek
PRI-06-161	2006	Active	Residential Tract	Tract 921			Orange Street	33.1184	-117.0850	WGS84	Carlsbad	Escondido Creek
PRI-06-164	2006	Completed	Commercial	TPM 2007-11 Esc Adventist Academy	1301		Deodar Road	33.1405	-117.1064	WGS84	Carlsbad	Escondido Creek
PRI-07-169	2007	Completed	Residential Tract	Tract 947	2435		Bernardo Ave	33.0893	-117.0901	WGS84	San Dieguito	Lake Hodges
PRI-07-171	2007	Inactive	Commercial	City Plaza	328	S	Escondido	33.1184	-117.0825	WGS84	Carlsbad	Escondido Creek
PRI-08-172	2007	Completed	Commercial	Lexus Dealership	1205		Auto Parkway	33.1098	-117.0986	WGS84	Carlsbad	Escondido Creek
PRI-09-180	2009	Active	Hospital	Tract 834/ERTC Subarea 4	2185	N	Citracado Pkwy	33.1163	-117.1199	WGS84	Carlsbad	Escondido Creek
PRI-09-181	2009	Active	Office Bldg	Tract 834/ERTC Subarea 5	1800	N	Citracado Pkwy	33.1163	-117.1199	WGS84	Carlsbad	Escondido Creek
PRI-10-183	2010	Active	Residential TPM	TPM 2005-09 2 Parcel			Continental Lane	33.0941	-117.0998	WGS84	San Dieguito	Felicita/Lake Hodges
PRI-10-185	2010	Completed	Residential	Drainage, Erosion & BMP	2544		Bear Valle Pkwy	33.1400	-117.0405	WGS84	Carlsbad	Escondido Creek
PRI-10-188	2010	Completed	Residential	Elder Place 13 lots into 2 lots	715		Misson Grove	33.1325	-117.0755	WGS84	Carlsbad	Escondido Creek
PRI-11-189	2011	Completed	Commercial	Carmax Auto Super Store	830		Dan Way	33.1284	-117.0967	WGS84	Carlsbad	Escondido Creek
PRI-11-191	2011	Completed	Residential Single Family	Single Family Grading	15	S	Stonepointe Dr	33.0640	-117.0459	WGS84	San Dieguito	Lake Hodges
PRI-11-192	2011	Active	Residential Tract	Paramount Tract 858	511	N	Escondido Blvd	33.1239	-117.0868	WGS84	Carlsbad	Escondido Creek
PRI-11-193	2011	Active	Two single fam residences	Lots 84 & 85 Map 11686	700 - 718		Stoneybrae Pl	33.1532	-117.0431	WGS84	Carlsbad	Escondido Creek
PRI-11-196	2011	Active	Residential Single Family	Private Residence-Grading	3642		Monte Real	33.0612	-117.0761	WGS84	San Dieguito	Lake Hodges
PRI-11-204	2011	Completed	Residential Single Family	Grading Plan & Erosion Control	751		Gretna Green Way	33.0848	-117.0531	WGS84	San Dieguito	Lake Hodges
PUB-11-033	2010	Completed	CIP maintenance	Tulip Phase 3	N/A	N/S/E/W	Tulip Street	N/A	N/A	WGS84	Carlsbad	Escondido Creek
PUB-11-035	2011	Active	Capital Improvement	Maple Street Pedestrian Plaza	100 N	N/S	Maple Street	N/A	N/A	WGS84	Carlsbad	Escondido Creek
PUB-11-036	2011	Active	Capital Improvement	Ash St Pedestrian Bike Path	1201	E	Washington Ave	33.1332	-117.0681	WGS84	Carlsbad	Escondido Creek
PUB-11-037	2011	Active	CIP maintenance	Daley Ranch Road Rehab Project	End of La Honda	N/S	La Honda Drive	N/A	N/A	WGS84	Carlsbad	Escondido Creek

Active Construction Inventory, FY 2011-2012

Project ID	Project Owner	Project Area (Acres)	Disturbed Area (Acres)	Grading Plan Number	Grading Volume	MDA Applied	Construction Start Date	Construction End Date	Project Priority	Treatment Control BMP	Maint. Responsibility	Inspection Frequency	Advanced Treatment Required	Additional Controls Required	SUSMP Project	HMP Project	NPDES Permit Required
PRI-04-153	NUWI-Vistamonte	60 ac	40 ac	GP1868	150000	Yes	2004	2012	High	Bio/Grassy Swale + Water	H.O.A.	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-05-154	Eureka Escondido	200 ac	150 ac	GP1993	1225260	Yes	2005	2011	High	Bio/Water Quality Basin	P.O.A.	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-06-156	Capstone Escondido	300 ac	50 ac	GP2024	603640	Yes	2006	Present	High	Bio/Water Quality Basin	P.O.A.	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-06-157	Shea Homes	50 ac	40 ac	GP2008	14000	Yes	2006	2010	Medium	Storm Drain Filtration	H.O.A.	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-06-160	Continental Seri	1.5 ac	1.5 ac	GP05-0021	5600	No	2006	Present	Medium	echanical Filter and Grassy Swa	HOA	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-06-161	Barratt American	3.4 ac	3.4 ac	GP2064	5000	No	2006	Present	Medium	Bio Swale + Storm Drain Insert	H.O.A.	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-06-164	Southeastern CA	6.1 ac	6.1 ac	GP06-0126	86000	No	2006	2011	Medium	Bio/Water Quality Basin	Prop. Owner	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-07-169	Carmichael Inves	7.6 ac	7 ac	GP06-0159	40000	No	2007	2012	Medium	Bio & Grassy Swales	Prop. Owner	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-07-171	City Plaza	> 1 Ac	> 1 Ac	GP07-0063	11200	No	2007		Medium	Mechanical Filter, Bioswale	Prop. Owner	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-08-172	Lexus Escondido	9 ac	9 ac	GP07-0010		No	2007	Present	Medium	Bioswales	Prop. Owner	Bi-Weekly/ Monthly	No	No	Yes	No	
PRI-09-180	Palomar Medical Center	35 ac	35 ac	GP-08-0024	300000	No	2008	Present	Medium	Bioswales and basins	P.O.A.	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-09-181	Makena Medical	3.6 ac	3.6 ac	GP-09-0016	500	No	2010	Present	Medium	Bio filtration basins	P.O.A.	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-10-183	A R C W Inc,	0.95 ac	0.95 ac	GP09-0020	1500	No	2010	Present	N/A	N/A	Prop. Owner	Bi-Weekly/ Monthly	No	No	No	No	No
PRI-10-185	Frank L & Karen S Santa	0.21 ac	0.21 ac	GP10-0004	185	No	2010	2011	N/A	N/A	Prop. Owner	Bi-Weekly/ Monthly	No	No	No	No	No
PRI-10-188	UHC 00437 Escondido LP	2.6 ac	2.6 ac	GP09-0015	5000	No	2010	2012	Medium	Veg Swale/Sand/Org Filters	HOA	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-11-189	Sunset Centers II L P	5.5 ac	5.5 ac	GP10-0015	14720	No	2010	2011	Medium	Bioretention	Prop. Owner	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-11-191	Dallas E Cormier	1.09 ac	0.23 ac	GP10-0011	620	No	2011	2012	N/A	N/A	Prop. Owner	Bi-Weekly/ Monthly	No	No	No	No	No
PRI-11-192	yon Escondido Paramount L L	4.5 ac	4.5 ac	GP11-0001	5283	No	2011	Present	N/A	Infiltration/Catch Basin	PO/Prop Mgm	Bi-Weekly/ Monthly	No	No	Yes	No	Yes
PRI-11-193	Dale Andersen	10.31 ac	6.8 ac	GP07-0020	1500	No	2011	Present	N/A	Bio-Swale	Prop. Owner	Bi-Weekly/ Monthly	No	No	No	No	Yes
PRI-11-196	Tibor & Ligia Varga	1.22 ac	0.5 ac	GP09-0013	342	No	2011	Present	No	N/A	Prop. Owner	Bi-Weekly/ Monthly	No	No	No	No	No
PRI-11-204	Tod & Melissa Martin	0.9 ac		GP11-0005	300	No	2011	2012	No	N/A	Prop. Owner	Bi-Weekly/ Monthly	No	No	No	No	No
PUB-11-033	City of Escondido	0.8 ac	0.8 ac	N/A	N/A	No	2011	2011	Medium	Grass Swale/Infiltration/Inlets	City of Esc.	Bi-Weekly/ Monthly	No	No	No	No	No
PUB-11-035	City of Escondido	0.83 ac	0.83 ac	N/A	0	No	2012	2012	Yes	Filter/Catch Basin	City of Esc.	Bi-Weekly/ Monthly	No	No	Yes	No	No
PUB-11-036	City of Escondido	0.46 ac	0.46 ac	N/A	500	No	2011	2012	No	N/A	City of Esc.	Bi-Weekly/ Monthly	No	No	No	No	No
PUB-11-037	City of Escondido	2.75 ac	0 ac	N/A	0	No	2011	2012	No	N/A	City of Esc.	Bi-Weekly/ Monthly	No	No	No	No	No

Appendix B

3. Construction Site Inspection Records

Construction Site Inspection Records, FY 2011-2012

Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-04-153	INSP001 Tract 833	Routine Compliance	7/6/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP002 Tract 833	Routine Compliance	8/3/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INPS003 Tract 833	Routine Compliance	9/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP004 Tract 833	Routine Compliance	10/5/2011	Field Engineering	Yes	Compliant	N/A	Final Phase 6A
PRI-04-153	INSP005 Tract 833	Routine Compliance	10/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP006 Tract 833	Routine Compliance	10/19/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP007 Tract 833	Routine Compliance	10/26/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP008 Tract 833	Routine Compliance	11/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP009 Tract 833	Routine Compliance	11/9/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP010 Tract 833	Routine Compliance	11/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP011Tract 833	Routine Compliance	11/23/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP012 Tract 833	Routine Compliance	11/30/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP013 Tract 833	Routine Compliance	12/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP014 Tract 833	Routine Compliance	12/14/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP015 Tract 833	Routine Compliance	12/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP016 tract 833	Routine Compliance	12/28/2011	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP017 Tract 833	Routine Compliance	1/4/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP018 Tract 833	Routine Compliance	1/11/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP019 Tract 833	Routine Compliance	1/18/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP020 Tract 833	Routine Compliance	1/25/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP021 Tract 833	Routine Compliance	2/1/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP022 Tract 833	Routine Compliance	2/8/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP023 Tract 833	Routine Compliance	2/15/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP024 Tract 833	Routine Compliance	2/22/2012	Field Engineering	Yes	Compliant	N/A	

Construction Site Inspection Records, FY 2011-2012

Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-04-153	INSP025 Tract 833	Routine Compliance	2/29/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP026 Tract 833	Routine Compliance	3/7/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP027 Tract 833	Routine Compliance	3/14/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP028 Tract 833	Routine Compliance	3/21/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP029 Tract 833	Routine Compliance	3/28/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP030 Tract 833	Routine Compliance	4/4/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP031 Tract 833	Routine Compliance	4/11/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP032 Tract 833	Routine Compliance	4/18/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP033 Tract 833	Routine Compliance	4/25/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP034 Tract 833	Routine Compliance	5/2/2012	Field Engineering	Yes	Compliant	N/A	
PRI-04-153	INSP035 tract 833	Routine Compliance	5/3/2012	Field Engineering	Yes	Compliant	N/A	**PROJECT COMPLETE**
PRI-05-154	INSP001 839 Eureka Springs	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-05-154	INSP002 839 Eureka Springs	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-05-154	INSP003 839 Eureka Springs	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-05-154	INSP004 839 Eureka Springs	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-05-154	INSP005 839 Eureka Springs	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-05-154	INSP006 839 Eureka Springs	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	
PRI-05-154	INSP007 839 Eureka Springs	Routine Compliance	11/18/2011	Field Engineering	Yes	Compliant	N/A	
PRI-05-154	INSP008 839 Eureka Springs	Routine Compliance	12/2/2011	Field Engineering	No	Compliant	N/A	**PROJECT COMPLETE, NOC being filed**
PRI-06-156	INSP001 683J High Point	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP002 683J High Point	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP003 683J High Point	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP004 683J High Point	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	

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Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-06-156	INSP005 683J High Point	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP006 683J High Point	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP007 683J High Point	Routine Compliance	11/18/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP008 683J High Point	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP009 683J High Point	Routine Compliance	12/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP010 683J High Point	Routine Compliance	12/30/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP011 683J High Point	Routine Compliance	1/20/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP012 683J High Point	Routine Compliance	2/3/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP013 683J High Point	Routine Compliance	2/17/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP014 683J High Point	Routine Compliance	3/2/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP015 683J High Point	Routine Compliance	3/16/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP016 683J High Point	Routine Compliance	3/30/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP017 683J High Point	Routine Compliance	4/13/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP018 683J High Point	Routine Compliance	5/11/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-156	INSP019 683J High Point	Routine Compliance	6/15/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP001 850 Washington Hills	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP002 850 Washington Hills	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP003 850 Washington Hills	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP004 850 Washington Hills	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP005 850 Washington Hills	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP006 850 Washington Hills	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP007 850 Washington Hills	Routine Compliance	11/18/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP008 850 Washington Hills	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP009 850 Washington Hills	Routine Compliance	12/16/2011	Field Engineering	Yes	Compliant	N/A	

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Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-06-157	INSP010 850 Washington Hills	Routine Compliance	12/30/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP011 850 Washington Hills	Routine Compliance	1/20/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP012 850 Washington Hills	Routine Compliance	2/3/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP013 850 Washington Hills	Routine Compliance	2/17/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP014 850 Washington Hills	Routine Compliance	3/2/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP015 850 Washington Hills	Routine Compliance	3/16/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP016 850 Washington Hills	Routine Compliance	3/30/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP017 850 Washington Hills	Routine Compliance	4/13/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP018 850 Washington Hills	Routine Compliance	5/11/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-157	INSP019 850 Washington Hills	Routine Compliance	6/15/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	7/5/2011	Field Engineering	Yes	Compliant	N/A	Monthly BMP Inspection
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	8/9/2011	Field Engineering	Yes	Compliant	N/A	Monthly BMP Inspection
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	9/7/2011	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	10/5/2011	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	10/19/2011	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	10/26/2011	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	11/2/2011	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	11/15/2011	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	12/7/2011	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	12/14/2011	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	12/28/2011	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	1/11/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	1/18/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	2/8/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP

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Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	2/23/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	2/29/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	3/7/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	3/14/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	3/21/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	3/26/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	4/4/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	4/11/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	4/18/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	5/2/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	5/23/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	6/14/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	6/27/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-160	INSP001 Tract 926 Venue	Routine Compliance	7/3/2012	Field Engineering	Yes	Compliant	N/A	BMP INSP
PRI-06-161	INSP001 921 City Square	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP002 921 City Square	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP003 921 City Square	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP004 921 City Square	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP005 921 City Square	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP006 921 City Square	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP007 921 City Square	Routine Compliance	11/18/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP008 921 City Square	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP009 921 City Square	Routine Compliance	12/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP010 921 City Square	Routine Compliance	12/30/2011	Field Engineering	Yes	Compliant	N/A	

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Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-06-161	INSP011 921 City Square	Routine Compliance	1/20/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP012 921 City Square	Routine Compliance	2/3/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP013 921 City Square	Routine Compliance	2/17/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP014 921 City Square	Routine Compliance	3/2/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP015 921 City Square	Routine Compliance	3/16/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP016 921 City Square	Routine Compliance	3/30/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP017 921 City Square	Routine Compliance	4/13/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP018 921 City Square	Routine Compliance	5/11/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-161	INSP019 921 City Square	Routine Compliance	6/15/2012	Field Engineering	Yes	Compliant	N/A	
PRI-06-164	INSP001 1301 & 1305 Deodar	Routine Compliance	7/15/2011	Field Engineering	No	Compliant	N/A	Post construction BMP's in place
PRI-07-169	INSP001 947 Hamilton and Bernardo	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP002 947 Hamilton and Bernardo	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP003 947 Hamilton and Bernardo	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP004 947 Hamilton and Bernardo	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP005 947 Hamilton and Bernardo	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP006 947 Hamilton and Bernardo	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP007 947 Hamilton and Bernardo	Routine Compliance	11/18/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP008 947 Hamilton and Bernardo	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP009 947 Hamilton and Bernardo	Routine Compliance	12/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP0010 947 Hamilton and Bernardo	Routine Compliance	12/30/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP0011 947 Hamilton and Bernardo	Routine Compliance	1/20/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP0012 947 Hamilton and Bernardo	Routine Compliance	2/3/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP0013 947 Hamilton and Bernardo	Routine Compliance	2/17/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP0014 947 Hamilton and Bernardo	Routine Compliance	3/2/2012	Field Engineering	Yes	Compliant	N/A	

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Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-07-169	INSP0015 947 Hamilton and Bernardo	Routine Compliance	3/16/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP0016 947 Hamilton and Bernardo	Routine Compliance	3/30/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP0017 947 Hamilton and Bernardo	Routine Compliance	4/13/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP0018 947 Hamilton and Bernardo	Routine Compliance	5/11/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-169	INSP0019 947 Hamilton and Bernardo	Routine Compliance	6/15/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP001 City Plaza 328 S. Escondido Blvd	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP002 City Plaza 328 S. Escondido Blvd	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP003 City Plaza 328 S. Escondido Blvd	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP004 City Plaza 328 S. Escondido Blvd	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP005 City Plaza 328 S. Escondido Blvd	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP006 City Plaza 328 S. Escondido Blvd	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP007 City Plaza 328 S. Escondido Blvd	Routine Compliance	11/18/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP008 City Plaza 328 S. Escondido Blvd	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP009 City Plaza 328 S. Escondido Blvd	Routine Compliance	12/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP010 City Plaza 328 S. Escondido Blvd	Routine Compliance	12/30/2011	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP011 City Plaza 328 S. Escondido Blvd	Routine Compliance	1/20/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP012 City Plaza 328 S. Escondido Blvd	Routine Compliance	2/3/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP013 City Plaza 328 S. Escondido Blvd	Routine Compliance	2/17/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP014 City Plaza 328 S. Escondido Blvd	Routine Compliance	3/2/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP015 City Plaza 328 S. Escondido Blvd	Routine Compliance	3/16/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP016 City Plaza 328 S. Escondido Blvd	Routine Compliance	3/30/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP017 City Plaza 328 S. Escondido Blvd	Routine Compliance	4/13/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP018 City Plaza 328 S. Escondido Blvd	Routine Compliance	5/11/2012	Field Engineering	Yes	Compliant	N/A	
PRI-07-171	INSP019 City Plaza 328 S. Escondido Blvd	Routine Compliance	6/15/2012	Field Engineering	Yes	Compliant	N/A	

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Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-08-172	INSP001 Lexus 1205 Auto Pkwy	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-08-172	INSP002 Lexus 1205 Auto Pkwy	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-08-172	INSP003 Lexus 1205 Auto Pkwy	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-08-172	INSP004 Lexus 1205 Auto Pkwy	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-08-172	INSP004 Lexus 1205 Auto Pkwy	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-08-172	INSP004 Lexus 1205 Auto Pkwy	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	
PRI-08-172	INSP004 Lexus 1205 Auto Pkwy	Routine Compliance	11/18/2011	Field Engineering	Yes	Compliant	N/A	
PRI-08-172	INSP004 Lexus 1205 Auto Pkwy	Routine Compliance	12/2/2011	Field Engineering	No	Compliant	N/A	**PROJECT COMPLETE, NOC being filed**
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	7/5/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	7/11/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	7/18/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	7/25/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	8/1/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	8/8/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	8/15/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	8/22/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	8/29/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	9/6/2011	PPH / GST	Yes	Compliant	N/A	REAP
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	9/12/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	9/26/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	10/3/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	10/10/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	10/17/2011	PPH / GST	Yes	Compliant	N/A	

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Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	10/31/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	11/2/2011	PPH / GST	Yes	Compliant	N/A	Pre-storm Planning
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	11/7/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	11/9/2011	PPH / GST	Yes	Compliant	N/A	REAP
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	11/14/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	11/21/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	11/28/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	12/5/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	12/9/2011	PPH / GST	Yes	Compliant	N/A	REAP
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	12/12/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	12/19/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	12/27/2011	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	1/3/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	1/9/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	1/16/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	1/19/2012	PPH / GST	Yes	Compliant	N/A	REAP
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	1/23/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	1/25/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	2/8/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	2/29/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	4/23/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	4/26/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	4/30/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	5/7/2012	PPH / GST	Yes	Compliant	N/A	

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Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	5/14/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	5/21/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	5/29/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	6/4/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	6/18/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-180	2197 Citricado Parkway (PPH)	Routine Compliance	7/2/2012	PPH / GST	Yes	Compliant	N/A	
PRI-09-181	Tract 834/ERTC Sub-area 5 Makena Medical							No active construction
PRI-10-183	INSP001 TPM 2005-09 Continental Ln.	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP002 TPM 2005-09 Continental Ln.	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP003 TPM 2005-09 Continental Ln.	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP004 TPM 2005-09 Continental Ln.	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP005 TPM 2005-09 Continental Ln.	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP006 TPM 2005-09 Continental Ln.	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP007 TPM 2005-09 Continental Ln.	Routine Compliance	11/18/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP008 TPM 2005-09 Continental Ln.	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP009 TPM 2005-09 Continental Ln.	Routine Compliance	12/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP010 TPM 2005-09 Continental Ln.	Routine Compliance	12/30/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP011 TPM 2005-09 Continental Ln.	Routine Compliance	1/20/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP012 TPM 2005-09 Continental Ln.	Routine Compliance	2/3/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP013 TPM 2005-09 Continental Ln.	Routine Compliance	2/17/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP014 TPM 2005-09 Continental Ln.	Routine Compliance	3/2/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP015 TPM 2005-09 Continental Ln.	Routine Compliance	3/16/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP016 TPM 2005-09 Continental Ln.	Routine Compliance	3/30/2012	Field Engineering	Yes	Compliant	N/A	

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PRI-10-183	INSP017 TPM 2005-09 Continental Ln.	Routine Compliance	4/13/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP018 TPM 2005-09 Continental Ln.	Routine Compliance	5/11/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-183	INSP019 TPM 2005-09 Continental Ln.	Routine Compliance	6/15/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-185	INSP001 2544 Bear Valley Pkwy	Routine Compliance	6/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-185	INSP001 2544 Bear Valley Pkwy	Routine Compliance	7/19/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-185	INSP001 2544 Bear Valley Pkwy	Routine Compliance	8/24/2011	Field Engineering	Yes	Compliant	**PROJECT COMPLETE**	
PRI-10-188	INSP001 Mission Grove Place	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP002 Mission Grove Place	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP003 Mission Grove Place	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP004 Mission Grove Place	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP005 Mission Grove Place	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP006 Mission Grove Place	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP007 Mission Grove Place	Routine Compliance	11/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP008 Mission Grove Place	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP009 Mission Grove Place	Routine Compliance	12/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP010 Mission Grove Place	Routine Compliance	12/30/2011	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP011 Mission Grove Place	Routine Compliance	1/20/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP012 Mission Grove Place	Routine Compliance	2/3/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP013 Mission Grove Place	Routine Compliance	2/17/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP014 Mission Grove Place	Routine Compliance	3/2/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP015 Mission Grove Place	Routine Compliance	3/16/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP016 Mission Grove Place	Routine Compliance	3/30/2012	Field Engineering	Yes	Compliant	N/A	
PRI-10-188	INSP017 Mission Grove Place	Routine Compliance	4/13/2012	Field Engineering	Yes	Compliant	N/A	

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PRI-10-188	INSP018 Mission Grove Place	Routine Compliance	5/11/2012	Field Engineering	Yes	Compliant	N/A	**PROJECT COMPLETE, NOC being filed**
PRI-11-189	INSP001 Carmax 830 Dan Way	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-189	INSP002 Carmax 830 Dan Way	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-189	INSP003 Carmax 830 Dan Way	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-189	INSP004 Carmax 830 Dan Way	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-189	INSP005 Carmax 830 Dan Way	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-189	INSP006 Carmax 830 Dan Way	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	Post Rain Event
PRI-11-189	INSP007 Carmax 830 Dan Way	Routine Compliance	11/18/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-189	INSP008 Carmax 830 Dan Way	Routine Compliance	12/2/2011	Field Engineering	No	Compliant	N/A	**PROJECT COMPLETE, NOC being filed**
PRI-11-191	INSP001 15 Stonepointe	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-191	INSP002 15 Stonepointe	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-191	INSP003 15 Stonepointe	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-191	INSP004 15 Stonepointe	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-191	INSP005 15 Stonepointe	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-191	INSP006 15 Stonepointe	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-191	INSP007 15 Stonepointe	Routine Compliance	11/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-191	INSP008 15 Stonepointe	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-191	INSP009 15 Stonepointe	Routine Compliance	12/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-191	INSP010 15 Stonepointe	Routine Compliance	12/30/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-191	INSP011 15 Stonepointe	Routine Compliance	1/20/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-191	INSP012 15 Stonepointe	Routine Compliance	2/3/2012	Field Engineering	Yes	Compliant	N/A	**PROJECT COMPLETE**
PRI-11-192	INSP001 Tract 858 Paramount (Revised)	Routine Compliance	7/5/2011	Field Engineering	Yes	Compliant	N/A	Monthly BMP Inspection
PRI-11-192	INSP002 Tract 858 Paramount (Revised)	Routine Compliance	8/9/2011	Field Engineering	Yes	Compliant	N/A	Monthly BMP Inspection

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Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PRI-11-192	INSP003 Tract 858 Paramount (Revised)	Routine Compliance	9/7/2011	Field Engineering	Yes	Compliant	N/A	Monthly BMP Inspection
PRI-11-192	INSP004 Tract 858 Paramount (Revised)	Routine Compliance	10/5/2011	Field Engineering	Yes	Compliant	N/A	Monthly BMP Inspection
PRI-11-192	INSP005 Tract 858 Paramount (Revised)	Routine Compliance	10/19/2011	Field Engineering	Yes	Compliant	N/A	Monthly BMP Inspection
PRI-11-192	INSP006 Tract 858 Paramount (Revised)	Routine Compliance	11/2/2011	Field Engineering	Yes	Compliant	N/A	Monthly BMP Inspection
PRI-11-192	INSP007 Tract 858 Paramount (Revised)	Routine Compliance	11/15/2011	Field Engineering	Yes	Compliant	N/A	Monthly BMP Inspection
PRI-11-192	INSP008 Tract 858 Paramount (Revised)	Routine Compliance	12/7/2011	Field Engineering	Yes	Compliant	N/A	Monthly BMP Inspection
PRI-11-192	INSP009 Tract 858 Paramount (Revised)	Routine Compliance	12/14/2011	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0010 Tract 858 Paramount (Revised)	Routine Compliance	12/28/2011	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0011 Tract 858 Paramount (Revised)	Routine Compliance	1/11/2011	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0012 Tract 858 Paramount (Revised)	Routine Compliance	1/18/2011	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0013 Tract 858 Paramount (Revised)	Routine Compliance	2/8/2011	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0014 Tract 858 Paramount (Revised)	Routine Compliance	2/23/2011	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0015 Tract 858 Paramount (Revised)	Routine Compliance	2/29/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0016 Tract 858 Paramount (Revised)	Routine Compliance	3/7/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0017 Tract 858 Paramount (Revised)	Routine Compliance	3/14/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0017 Tract 858 Paramount (Revised)	Routine Compliance	3/21/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0017 Tract 858 Paramount (Revised)	Routine Compliance	3/26/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0017 Tract 858 Paramount (Revised)	Routine Compliance	4/1/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0017 Tract 858 Paramount (Revised)	Routine Compliance	4/11/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0017 Tract 858 Paramount (Revised)	Routine Compliance	4/25/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0017 Tract 858 Paramount (Revised)	Routine Compliance	5/2/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0017 Tract 858 Paramount (Revised)	Routine Compliance	5/23/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0017 Tract 858 Paramount (Revised)	Routine Compliance	6/14/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-192	INSP0017 Tract 858 Paramount (Revised)	Routine Compliance	6/27/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection

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PRI-11-192	INSP0017 Tract 858 Paramount (Revised)	Routine Compliance	7/3/2012	Field Engineering	Yes	Compliant	N/A	BMP Inspection
PRI-11-193	INSP001 700-718 Stoneybrae Pl.	Routine Compliance	7/15/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP002 700-718 Stoneybrae Pl.	Routine Compliance	8/12/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP003 700-718 Stoneybrae Pl.	Routine Compliance	9/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP004 700-718 Stoneybrae Pl.	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP005 700-718 Stoneybrae Pl.	Routine Compliance	10/21/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP006 700-718 Stoneybrae Pl.	Routine Compliance	11/4/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP007 700-718 Stoneybrae Pl.	Routine Compliance	11/18/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP008 700-718 Stoneybrae Pl.	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP009 700-718 Stoneybrae Pl.	Routine Compliance	12/16/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP010 700-718 Stoneybrae Pl.	Routine Compliance	12/30/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP011 700-718 Stoneybrae Pl.	Routine Compliance	1/20/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP012 700-718 Stoneybrae Pl.	Routine Compliance	2/3/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP013 700-718 Stoneybrae Pl.	Routine Compliance	2/17/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP014 700-718 Stoneybrae Pl.	Routine Compliance	3/2/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP015 700-718 Stoneybrae Pl.	Routine Compliance	3/16/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP016 700-718 Stoneybrae Pl.	Routine Compliance	3/30/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP017 700-718 Stoneybrae Pl.	Routine Compliance	4/13/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP018 700-718 Stoneybrae Pl.	Routine Compliance	5/11/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-193	INSP019 700-718 Stoneybrae Pl.	Routine Compliance	6/15/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-196	3642 Monte Real	Routine Compliance	9/8/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-196	3642 Monte Real	Routine Compliance	10/5/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-196	3642 Monte Real	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-196	3642 Monte Real	Routine Compliance	10/14/2011	Field Engineering	Yes	Compliant	N/A	

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PRI-11-196	3642 Monte Real	Routine Compliance	11/15/2011	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-196	3642 Monte Real	Routine Compliance	11/22/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-196	3642 Monte Real	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-196	3642 Monte Real	Routine Compliance	12/13/2011	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-196	3642 Monte Real	Routine Compliance	1/11/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-196	3642 Monte Real	Routine Compliance	1/27/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-196	3642 Monte Real	Routine Compliance	2/10/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-196	3642 Monte Real	Routine Compliance	2/15/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-196	3642 Monte Real	Routine Compliance	2/16/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-196	3642 Monte Real	Routine Compliance	2/28/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-196	3642 Monte Real	Routine Compliance	3/8/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-196	3642 Monte Real	Routine Compliance	3/22/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-196	3642 Monte Real	Routine Compliance	4/11/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-196	3642 Monte Real	Routine Compliance	4/26/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-204	751 Gretna Green Way	Routine Compliance	6/2/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	7/19/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	8/24/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	9/20/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	10/5/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-204	751 Gretna Green Way	Routine Compliance	10/14/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	11/15/2011	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-204	751 Gretna Green Way	Routine Compliance	11/22/2011	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	

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PRI-11-204	751 Gretna Green Way	Routine Compliance	12/13/2011	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-204	751 Gretna Green Way	Routine Compliance	1/11/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	1/27/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	2/10/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	2/15/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-204	751 Gretna Green Way	Routine Compliance	2/16/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-204	751 Gretna Green Way	Routine Compliance	2/28/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-204	751 Gretna Green Way	Routine Compliance	3/8/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	3/22/2012	Field Engineering	Yes	Compliant	N/A	
PRI-11-204	751 Gretna Green Way	Routine Compliance	4/11/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PRI-11-204	751 Gretna Green Way	Routine Compliance	4/26/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PUB-11-033	INSP001-Tulip Phase III	Routine Compliance	6/23/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-033	INSP002-Tulip Phase III	Routine Compliance	7/19/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-033	INSP003-Tulip Phase III	Routine Compliance	8/24/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-033	INSP004-Tulip Phase III	Routine Compliance	9/20/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-033	INSP005-Tulip Phase III	Routine Compliance	10/5/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-033	INSP006-Tulip Phase III	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-033	INSP007-Tulip Phase III	Routine Compliance	10/14/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-033	INSP007-Tulip Phase III	Routine Compliance	11/15/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-033	INSP007-Tulip Phase III	Routine Compliance	11/22/2011	Field Engineering	Yes	Compliant	N/A	**PROJECT COMPLETE**
PUB-11-035	INSP001 - Sports Center Office Expansion	Routine Compliance	6/23/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-035	INSP001 - Sports Center Office Expansion	Routine Compliance	7/19/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-035	INSP001 - Sports Center Office Expansion	Routine Compliance	8/24/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-035	INSP001 - Sports Center Office Expansion	Routine Compliance	9/20/2011	Field Engineering	Yes	Compliant	N/A	

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PUB-11-035	INSP001 - Sports Center Office Expansion	Routine Compliance	10/5/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-035	INSP001 - Sports Center Office Expansion	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	Post rain event
PUB-11-035	INSP001 - Sports Center Office Expansion	Routine Compliance	10/14/2011	Field Engineering	Yes	Compliant	N/A	**PROJECT COMPLETE**
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	9/20/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	10/5/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	10/7/2011	Field Engineering	Yes	Compliant	N/A	Post rain event
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	10/14/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	11/15/2011	Field Engineering	Yes	Compliant	N/A	Post rain event
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	11/22/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	12/2/2011	Field Engineering	Yes	Compliant	N/A	
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	12/13/2011	Field Engineering	Yes	Compliant	N/A	Post rain event
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	1/11/2012	Field Engineering	Yes	Compliant	N/A	
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	1/27/2012	Field Engineering	Yes	Compliant	N/A	
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	2/10/2012	Field Engineering	Yes	Compliant	N/A	
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	2/15/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	2/16/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	2/28/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	3/8/2012	Field Engineering	Yes	Compliant	N/A	
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	3/22/2012	Field Engineering	Yes	Compliant	N/A	
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	4/11/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PUB-11-036	INSP001-Ash Street Undercrossing	Routine Compliance	4/26/2012	Field Engineering	Yes	Compliant	N/A	Post rain event
PUB-11-037	INSP001 Maple Street	Routine Compliance	2.29.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP002 Maple Street	Routine Compliance	3.7.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP003 Maple Street	Routine Compliance	3.14.12	Field Engineering	Yes	Compliant	N/A	

Construction Site Inspection Records, FY 2011-2012

Project ID	Inspection ID	Inspection Type	Inspection Date	Inspecting Department	Construction BMPs Implemented	Inspection Results	Enforcement Action	Comments
PUB-11-037	INSP004 Maple Street	Routine Compliance	3.21.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP005 Maple Street	Routine Compliance	3.28.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP006 Maple Street	Routine Compliance	4.4.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP007 Maple Street	Routine Compliance	4.11.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP008 Maple Street	Routine Compliance	4.18.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP009 Maple Street	Routine Compliance	4.25.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP010 Maple Street	Routine Compliance	5.2.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP011 Maple Street	Routine Compliance	5.9.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP012 Maple Street	Routine Compliance	5.16.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP013 Maple Street	Routine Compliance	5.23.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP014 Maple Street	Routine Compliance	5.30.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP015 Maple Street	Routine Compliance	6.6.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP016 Maple Street	Routine Compliance	6.13.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP017 Maple Street	Routine Compliance	6.20.12	Field Engineering	Yes	Compliant	N/A	
PUB-11-037	INSP018 Maple Street	Routine Compliance	6.27.12	Field Engineering	Yes	Compliant	N/A	

Appendix C

Supporting Information for the Industrial & Commercial Component

Contents:

1. Industrial & Commercial Facility Stormwater Inspection Form
2. Notice of Correction Form
3. Updates to Industrial & Commercial Stormwater Inventory

Appendix C

1. Industrial & Commercial Facility Stormwater Inspection Form

SUPPLEMENTAL ANNUAL INSPECTION FORM

FY 2011 - 2012
CITY OF ESCONDIDO
STORMWATER PROGRAM
Commercial / Industrial / Municipal

201 North Broadway
Escondido, CA 92025-2525
Telephone 760-839-4528
Fax 760-739-7040

Potential Pollutants:

Bacteria: ☐
Gross Pollutants: ☐
Metals: ☐
Oil & Grease: ☐
Organics: ☐
Pesticides: ☐
Sediment: ☐
Trash: ☐

N

_____ Date_____ Time_____ AM / PM

ry Sewer	☐ Municipal	☐ Commercial	☐ Industrial	☐ MSE
	☐ Follow-up Inspection		☐ Hotline	

_____

☐ No ☐ Yes

☐ No ☐ Yes Description _____

☐ No ☐ Yes Description _____

☐ No ☐ Yes Description _____

☐ Inside ☐ Outside Describe if outside: _____

stored onsite?_____

inspection? _____

_____

_____

l Industrial Permit? ☐ No ☐ Yes WDID No. _____

required permit ☐ No ☐ Yes

☐ No ☐ Yes Is SWPPP adequate? ☐ No ☐ Yes

No ☐ Yes Is the facility compliant with stormwater monitoring? ☐ No ☐ Yes

ed monitoring? ☐ No ☐ Yes

re Certification (NEC) ☐ Sampling and Analysis Reduction Certification (SARC)

ermination (NOT) NEC/SARC/NOT Filed? ☐ No ☐ Yes

E/OUTREACH

(low) 2 ☐ 3 ☐ 4 ☐ 5 ☐ (High) Describe if low: _____

rench ☐ City BMP Brochure ☐ Ordinances ☐ General Industrial Permit Brochure

_____ ☐ Other: _____ ☐ None

❑Reidy Creek ❑Felicita Creek ❑Kit Carson Creek ❑ Lake Hodges

_____

STORMWATER BMP ASSESSMENT

Areas of Activity	Observations	Potential Discharge	Pollutant Exposure	Existing/Needed BMPs
Outdoor Processing & Manufacturing		☐ No ☐ Yes	☐ No ☐ Yes	
Activity conducted outside?	☐ No ☐ Yes ☐ N/A			
Activity conducted in covered area?	☐ No ☐ Yes ☐ N/A			
Outdoor Materials Storage		☐ No ☐ Yes	☐ No ☐ Yes	
Materials stored outside?	☐ No ☐ Yes ☐ N/A			
Adequate storage (covered area and secondary containment)?	☐ No ☐ Yes ☐ N/A			
Storage containers labeled?	☐ No ☐ Yes ☐ N/A			
Spill response kit onsite and accessible?	☐ No ☐ Yes ☐ N/A			
Is storage area free from spills and standing water?	☐ No ☐ Yes ☐ N/A			
Outdoor Waste Storage & Disposal		☐ No ☐ Yes	☐ No ☐ Yes	
Adequate trash/recycling containers provided?	☐ No ☐ Yes ☐ N/A			
Waste containers covered?	☐ No ☐ Yes ☐ N/A			
Trash/recycling areas free of litter/debris?	☐ No ☐ Yes ☐ N/A			
Drain inlets under or near waste area?	☐ No ☐ Yes ☐ N/A			
Outdoor Vehicle & Equipment Storage		☐ No ☐ Yes	☐ No ☐ Yes	
Parking lots free of significant leaks and spills?	☐ No ☐ Yes ☐ N/A			
Is vehicle maintenance conducted inside or under covered area?	☐ No ☐ Yes ☐ N/A			
Are vehicle-fueling areas covered?	☐ No ☐ Yes ☐ N/A			
Grounds Maintenance		☐ No ☐ Yes	☐ No ☐ Yes	
Is site and parking lot free of litter and debris?	☐ No ☐ Yes ☐ N/A			
Does facility do any washdown outdoors (e.g., parking lot, inside equipment, etc.)?	☐ No ☐ Yes ☐ N/A			
Are discharge locations free of sediment and debris?	☐ No ☐ Yes ☐ N/A			
Is soil or landscape waste stockpiled onsite?	☐ No ☐ Yes ☐ N/A			
Are irrigation systems programmed to minimize runoff?	☐ No ☐ Yes ☐ N/A			
Loading/Unloading Areas		☐ No ☐ Yes	☐ No ☐ Yes	
Loading areas covered?	☐ No ☐ Yes ☐ N/A			
Storm drain inlets in the docks?	☐ No ☐ Yes ☐ N/A			
Is loading area hosed down regularly?	☐ No ☐ Yes ☐ N/A			

Indicate BMP Types: Present: ❑EC ❑SE ❑SC ❑TC ❑NS ❑WM Needed: ❑EC ❑SE ❑SC ❑TC ❑NS ❑WM

Erosion Control (EC), Sediment Control (SE), Source Control (SC), Treatment Control (TC), Non SW (NS), and Waste Management (WM)

Description: _____

Appendix C

2. Notice of Correction Form

Facility: _____ **Date:** _____

NOTICE OF CORRECTION
Number _____

(*Section 22 of the City of Escondido Municipal Code)*

☐ **Sec. 22-8:** Unlawful discharge of sewage or other liquid waste.

☐ **Sec. 22-22:** Unlawful discharge into a storm water conveyance system.

☐ **Sec. 22-26:** Pollutant reduction required.

☐ **Sec. 22-37:** Unlawful discharge in the wastewater system.

☐ **Sec. 22-185:** Failure to install or maintain pretreatment equipment to an acceptable level.

☐ **Sec. 22-189:** You denied our authorized inspector access to your facility to observe, obtain information, and/or perform sampling on _____

ORDER TO COMPLY: You are hereby ordered to abate the preceding violations. Failure to comply may subject you to penalties and/or administrative fines, up to $1,000.00 per violation per day, as provided by law.

Complete the following by: 2 Weeks 4 Weeks 6 Weeks 8 Weeks Other _____
(circle one)

Specify corresponding date: _____ _____ _____ _____ _____

Comments/Requirements:

Business Name:_____ Business Phone:_____

Business Address:_____

Signed:_____ Date:_____

Inspector Signature:_____ Date:_____

For more information or questions call: (760) 839-6315

Appendix C

3. Updates to Industrial & Commercial Stormwater Inventory

Updates to the Industrial and Commercial Inventory, FY 2011-2012

BUSINESSES ADDED

Account	Business Name	Street Number	Street Prefix	Street Name	Suite No	NPDES Facility	Rank	NAIC/SIC Description	NAIC/SIC
20110124	Factory Transmissions	260	N	Juniper St		No	H	Auto Mech/Elec Repair Maint	81111
20110144	Jenkinson Concours & Customs	854		Metcalf St	B	Yes	H	Auto Repair and Maint	8111
20110068	Superior Pool Products LLC	2060		Aldergorve		No	H	Sport and Recr Goods and Supply Whsle	42191
20110052	Texmate Inc	450		State Pl		No	H	Other Elec Equip and Component Manuf	3359
20110033	Drewelow Remediation Equipment Inc	1523		Sterling Ct		No	H	Other Spec Trade Contr	23599
20110065	Valley Ornamental Iron	251	N	Vinewood St	E	No	H	Other Misc Manuf	3399
20110062	FT ENG INC	611		Rock Springs Rd		Yes	H	Other Misc Manuf	3399
20110116	Viva Express Pizza and Wings	1632	E	Valley Pkwy		No	H	Limited-Service Restaurants	722211
20110114	Pizza de La Comunidad	1815	E	Valley Pkwy	7	No	H	Limited-Service Restaurants	722211
20110043	Donut Broadway	675	N	Broadway		No	H	Retail Bakeries	311811
20110112	Happy Vegan	330	W	Felicita Ave	C7-9	No	H	Full-Service Restaurants	72211
20110115	Rancho Las Palmas Mex Grill&Seafood Bar	507	W	Washington Ave		No	H	Limited-Service Restaurants	722211
20110047	Esperanzas Tortilleria	1931		Commercial		No	H	Bread/Bakery Product Manuf	31181
20110087	Midway Mini Market	758	N	Midway		No	H	Grocery Store	4451
20110042	Belen Artisan Bakers	2250	S	Escondido Blvd	112	No	H	Retail Bakeries	311811
20110061	Bio TechPlex Corporation	926	S	Andreasen Dr	105	No	H	Other Misc Manuf	3399
20110117	Coker Bros LLC/dba: Snacktown	3333		Bear Vally Pkwy/Kit Carson	P	No	H	Snack and Nonalc Beverage Bars	722213
20110048	AFM	1145		Industrial Ave	A	No	H	Machine Shops	33271
20110054	Fastsigns	945	W	Valley Pkwy	J	No	H	Sign Manuf	33995
20110109	Mikes Pool Service	1001	S	Hale Ave	89	N/A	H	SVC to Bldgs and Dwellings	5617
20110082	San Clemente Auto Super Center	855	N	Broadway		No	H	Used Car Dealers	44112
20110123	So Cal Automotive Inc	859	N	Broadway		No	H	Auto Transmission Repair	811113
20110149	J H Heavy Equipment	851	W	Mission Ave		No	H	Comm/Ind Mach and Equip (Ex. Aut/Ele) Repmaint	81131
20110072	CarMax/CarMax The Auto Superstore	830		Dan Way			H	Used Car Dealers	44112
20110141	Escondido AAMCO	2040		Auto Park Way		No	H	Auto Repair and Maint	8111
20110049	T-GAZ Inc dba JR Competition	2080		Wineridge Pl	D	No	H	Machine Shops	33271
20110081	Power Image Auto	1433		Industrial Ave		No	H	Used Car Dealers	44112
20110080	North County Auto Wholesale	1002	S	Escondido Blvd		No	H	Used Car Dealers	44112
20110053	Sustainable Furniture Inc	640	S	Andreasen		No	H	Upholst House Furniture Manuf	337121
20110057	Acrylic Display Systems	620		Venture St	A	No	H	Other Misc Manuf	33999
20110152	Kit Wilson	1941		Don Lee Pl	C	No	H	Reupholster and Furn Repair	81142
20110064	Steichen Fine Woodworking	1421		Vaquero Glen		N/A	H	Other Misc Manuf	3399
20110113	Morrison Senior Living-Redwood Terrace	710	W	Thirteenth Ave		No	H	Limited-Service Restaurants	722211
20110071	Car Zone Pre-Owned Superstore	760	W	Mission Ave		No	H	Used Car Dealers	44112
20110099	2nd Time Around Furniture & Etc	1941		Don Lee Pl	A	No	H	Warehouse and Storage Facility	4931
20110148	Acacia Custom Guitars	1020		Hawaii Pl		No	H	Elec and Precision Equip Repair and Maint	81121
20110133	Escondido Smog Service LLC	615	W	El Norte Pkwy	320	No	H	Other Auto Repair and Maint	811198
20110086	The Grocier. com	1766	E	Valley Pkwy		No	H	Supermkt and Grocery (Esc Conv) Store	44511
20110070	Activated Ministries	735	S	Vinewood St		No	H	Used Car Dealers	44112
20110040	J T Young Construction Inc	1305		Simpson Way	G	No	H	Other Spec Trade Contr	2359
20110085	Window Solutions	344	E	Valley Pkwy		No	H	Other Bldg Mat Dealers	44419
20110032	Valley Glass and Showerdoor Inc	1313	E	Simpson		No	H	Glass and Glazing Contrs	23592
20110139	Chucks Mobile Service	138	S	Vinewood St	B		H	Auto Repair and Maint	8111
20110038	Coast 2 Coast Countertops	219	S	Andreasen Dr		No	H	Other Spec Trade Contr	2359
20110005	Life Construction	502	S	Quince St		No	H	Res Bldg Construction	2332
20110074	Easy Way Auto Sale	557	S	Escondido Blvd	A	No	H	Used Car Dealers	44112
20110140	Easy Auto Repair & Transmission	557	S	Escondido Blvd	B	No	H	Auto Repair and Maint	8111
20110119	Liberty Dawgz	1440	S	Escondido Blvd	A	N/A	H	Mobile Food Svc	722330
20110126	4 Lowest Price Auto Glass	1630	S	Escondido Blvd	D	No	H	Auto Glass Replacement Shops	811122
20110084	Metro Wall Works	2065	S	Escondido Blvd		N/A	H	Paint and Wallpaper Store	44412
20110014	Dominguez, G A	537	W	Grand Ave		No	H	Other Heavy Construction	2349
20110075	Escondido Auto Sales	1150	W	Mission Rd		No	H	Used Car Dealers	44112
20110063	Genesis Woodworking	125		Market Pl	B	No	H	Other Misc Manuf	3399

Updates to the Industrial and Commercial Inventory, FY 2011-2012

BUSINESSES ADDED

Account	Business Name	Street Number	Street Prefix	Street Name	Suite No	NPDES Facility	Rank	NAIC/SIC Description	NAIC/SIC
20110028	P Victor Roofing	218		Tampico Glen			H	Roof/Siding/Sheet Metal Contrs	23561
20110060	Big Fly Bat Company	505		Corporate Dr		No	H	Other Misc Manuf	3399
20110096	Sterling Rose Transportation/Mad DashLLC	625		Superior St	D	No	H	Limousine Service	48532
20110098	ASAP Towing Services	710		Rock Springs Rd		No	H	Motor Vehicle Towing	48841
20110145	Kuriata, Edward	727		Rock Springs Rd	H	No	H	Auto Repair and Maint	8111
20110035	Acampora Inc dba Ceilings Plus	740		Metcalf St	6	No	H	Other Spec Trade Contr	2359
20110125	Gutierrez Auto Electric	740		Metcalf St	28	No	H	Auto Mech/Elec Repair Maint	81111
20110051	Last Straw, The	1291		Pacific Oaks Pl	112	No	H	Other Fabr Metal Product Manuf	33299
20110058	Esco Dogs	1305		Simpson Way	A,B	No	H	Other Misc Manuf	33999
20110069	California Metal Services Inc	1428		Mission Rd			H	Recyclable Mat Whsle	42193
20110050	The Weld Shop Inc	1941		Don Lee Pl	E	No	H	Machine Shops	33271
20110143	Infamous Performance	1948		Don Lee Pl	6	No	H	Auto Repair and Maint	8111
20110031	Signature Paving Inc	2865		Progress Pl	A	No	H	Concrete Contrs	23571

BUSINESSES REMOVED

Account	Facility Type	Business Name	Street Number	Street Prefix	Street Name	Suite No	Reason Record Removed
	MSE	3W Truck and Equipment	847		Metcalf St		Closed/Vacant
	FSE	Acapulco Mexican Restaurant	1541	E	Valley Pkwy	15	Closed/Vacant
	MSE	Advanced Radiator	837		Metcalf St	B	Closed/Vacant
	MSE	Alan Taylor Co Inc	1220		Industrial Ave		vacant
	MSE	All Star Gas	555	W	Grand Ave		Closed/Vacant
	MSE	Closed/Vacant	670		Enterprise St		Closed/Vacant
55840	MSE	Cruz N Quality Discount	2121	E	Valley Pkwy	B	Closed/Vacant
	MSE	Escondido Auto Sales	541	N	Quince St		VACANT
	MSE	Felicita Mobil	501	W	Felicita Ave		Building gone, now
	MSE	Fidelity Auto Sales	557	S	Escondido Blvd		VACANT
	FSE	Four Season's Ice	635	W	Mission Ave	31	Closed/Vacant
	MSE	GMP Motors	1150	W	Mission Ave		Closed/Vacant
157795	Ind/Comm	H D Supply Plumbing/Hvac, Ltd.	480	N	Spruce St		Closed/Vacant
	FSE	Hawaiian Snow and Snacks	635	W	Mission Ave		Closed/Vacant
	MSE	Injecta-Max Corp	745	S	Vinewood St		CLOSED
	MSE	Kox Auto Sport	1175		Industrial Ave		Closed
	FSE	La Fiesta Mexicana	635	W	Mission Ave		Closed/Vacant
	FSE	La Tortuga	635	W	Mission Ave	4D	Closed/Vacant
	FSE	Lady Lasagna	200	E	Via Rancho Pkwy	4D	CLOSED
	FSE	Le's Food to Go	635	W	Mission Ave		Closed/Vacant
135207	MSE	Mechtech Motorsports Inc	1277		Simpson Way		MOVED
156737	Ind/Comm	Metro Iron Works Inc	1113		Industrial Ave		Vacant - Business Gone
	MSE	Mex-Cal Auto Sales	610	W	Ninth Ave	4	Not at this address
167681	MSE	Philo's Fast Service	2120		Harmony Grove		Closed/Vacant
	MSE	R &T Lodge Auto	2121	E	Valley Pkwy	A	Closed/Vacant
155105	Ind/Comm	R D R Machine Inc	2151		Enterprise St	C	Closed/Vacant
	Ind/Comm	Salvation Army	645		Metcalf St		No longer rents space
	MSE	Right Price Auto Sales	1408	S	Escondido Blvd		Vacant- owner of lot Ned Stojkovich
134756	MSE	Shahs Truck Rentals	1602	E	Valley Pkwy		CLOSED/VACANT
154598	Ind/Comm	So Cal Hot Tubs	1914		Mission Rd		Vacant - Business Gone
150875	Ind/Comm	Sonic View USA	1313		Simpson Way	F	Vacant - Business Gone
	MSE	Speed Dynamics			See File 1283		Closed/Vacant
	MSE	Star Metal Products	2275		Micro Pl		Closed/Vacant
126170	Ind/Comm	T R S Industries Inc	651	W	Fifth Ave		Vacant - Business Gone
	MSE	Tag Motor Sports	2181		Meyers Ave		Closed/Vacant
143562	Ind/Comm	T-Mar Construction Inc Dba Martin Corporation	2340		Meyers Ave		Vacant - Business Gone
142670	Ind/Comm	U-Haul Rentals	456	N	Quince St		Closed/Vacant
137790	MSE	Vehicle Store The Retail/Wholesale	900	W	Mission Ave		Closed/Vacant
147767	Ind/Comm	Walco Materials Group	2121		Chablis Ct	100	Vacant - Business Gone
	MSE	Wicked Wheels	2115	E	Valley Pkwy	E	Closed/Vacant
128319	Ind/Comm	Wise Enterprises	1861		Commercial St		Vacant - Business Gone
1200	Ind/Comm	Acme Drilling Co Inc	748	S	Vinewood St	B	Closed, New Business Present
	FSE	Aegis Senior Living	3012		Bear Valley		Closed, New Business Present
167419	Ind/Comm	Afdon Contracting CA Inc	115		Market Pl		Closed, New Business Present
	MSE	American Driveline Communications Corp	2040		Auto Park Way		Closed, New Business Present
157103	Ind/Comm	American Industrial Service	622	S	Vinewood St		Closed, New Business Present
146278	Ind/Comm	Americlean 2000/Mastercare Carpet & Upholstery	1433		Industrial Ave		Closed, New Business Present
	MSE	Andvantage Muffler	1630	S	Escondido Blvd	G & H	Closed, New Business Present
	MSE	Archer Roofing	2245		Micro Pl		Closed, New Business Present
168170	MSE	Asphalt Inc	610		Metcalf St		Closed, New Business Present
	MSE	Auto Innovations	545		Opper St		Closed, New Business Present
168477	Ind/Comm	Big Shaker Enterprises LLC	1150		Simpson Way		Closed, New Business Present
	MSE	Budget Car Sales and Service	855	N	Broadway		Closed, New Business Present
	MSE	C & E Auto Sales	760	W	Mission Ave		Closed, New Business Present
163181	Ind/Comm	C J R Concrete Inc	1230		Simpson Way	A	Closed, New Business Present
	MSE	California Recoveries Company	135		Engel St		Closed, New Business Present

BUSINESSES REMOVED

Account	Facility Type	Business Name	Street Number	Street Prefix	Street Name	Suite No	Reason Record Removed
	MSE	Coast Enclosure	2350		Myers Ave		Closed, New Business Present
18025	Ind/Comm	Convert A Phase Inc	1022	W	Mission Ave		Closed, New Business Present
162159	MSE	Craftec Machine	711	W	Fourth Ave		Closed, New Business Present
77460 &	MSE	Creative Fence Co, Inc	605		Venture St		Closed, New Business Present
142340	Ind/Comm	Custom Bedliners Of Escondido	2080		Wineridge Pl	B	Closed, New Business Present
145242	Ind/Comm	Detection Logic	1541		Simpson Way		Closed, New Business Present
68885	Ind/Comm	Easy Turf	2418		Auto Park Way		Closed, New Business Present
	FSE	El Rodeo Bar	426	N	Rose St		Closed, New Business Present
	MSE	Electra-City Motors	738	W	Washington Ave		Closed, New Business Present
	FSE	First Class Vending	2120		Harmony Grove		Closed, New Business Present
162442	MSE	Four Corners Concrete Inc.	2317		Auto Park Way		Closed, New Business Present
167490		G & R Motors	2245		Enterprise St	150	Closed, New Business Present
	FSE	Galaxy Diner	2250	S	Escondido Blvd		Closed, New Business Present
	FSE	Gloria's Cakes and Desserts/Cute Cakes	1320	E	Valley Pkwy	A	Closed, New Business Present
	MSE	Havic Motor Sports	740		Metcalf St	4	Closed, New Business Present
	MSE	ICS Cable	2161		Meyers Ave		Closed, New Business Present
2009272	MSE	Johnathan's Detail Service	549		Opper St		Closed, New Business Present
	FSE	Kindercare Learning Centers	3751		Mary Ln		Closed, New Business Present
	MSE	Luxury for Less Inc	350	S	Hale Ave		Closed, New Business Present
	FSE	Mariscos El Tio Max #2	636	N	Broadway		Closed, New Business Present
155846	Ind/Comm	Masterglass Windshield Repair & Replacement	316		State Pl		Closed, New Business Present
	MSE	Mobil @ Midway	2004	E	Valley Pkwy		Closed, New Business Present
	FSE	Morrison Senior Living	500	E	Valley Pkwy		Closed, New Business Present
129166	MSE	Motorcycle Dynamics	701		Andreasen		Closed, New Business Present
137196	Ind/Comm	Mountain Air	616	W	Third Ave		Closed, New Business Present
	FSE	Mr. Blues Donuts	675	N	Broadway	F	Closed, New Business Present
	MSE	Normans Auto Parts Inc	2444		Barham Dr	A & B	Closed, New Business Present
	MSE	Off Shore Model Basin	578		Enterprise St		Closed, New Business Present
135861	MSE	Pacific Oil Spreading Inc/ Weir Asphalt Const	610		Metcalf St		Closed, New Business Present
153260	MSE	Performance Plus Automotive And Transmissions	1630	S	Escondido Blvd	D	Closed, New Business Present
	FSE	Pescaderia 7 Mares	758	N	Midway Dr		Closed, New Business Present
156439	Ind/Comm	Precision Metalcraft	138	N	Vinewood St	A	Closed, New Business Present
167347	MSE	Quality Truck & Auto Repair of Escondido	2040		Auto Park Wy		Closed, New Business Present
	MSE	San Diego EZ Inc	851	W	Mission Ave	B	Closed, New Business Present
	FSE	Serenity House	123	S	Elm St		Closed, New Business Present
2009121	Ind/Comm	Solar Plus	2067		Windridge Pl	C & D	Closed, New Business Present
	MSE	Sunrise Staging	2210		Meyers Ave		Closed, New Business Present
167569	Ind/Comm	True Turf Inc	1924		Mission Rd	A,B & C	Closed, New Business Present
154223	Ind/Comm	U - Store - It	1531		Montiel Rd		Closed, New Business Present
134791	Ind/Comm	Unique Lighting Systems	1234		Simpson Way	A	Closed, New Business Present
138912	Ind/Comm	Villa Del Rey	1351	E	Washington Ave		Closed, New Business Present
	FSE	Washington Café	507	W	Washington Ave		Closed, New Business Present
137375	MSE	Rapid Transmission	260	N	Juniper St		Closed
160649	MSE	Pepe's Auto Service	740		Metcalf St	26	Moved
160947	Ind/Comm	G S C Concrete Const. Inc	1413-1419		Industrial Ave		
160330	MSE	Motorco	1602	E	Valley Pkwy		
2009002	Ind/Comm	A A A Paving & Grading	1426		Hollyhock Ave.		
134025	Ind/Comm	A.J. Cunningham	403	W	Fifth Ave	A	
2009227	Ind/Comm	Victors Towing	428	W	Sixth Ave		
	FSE	Westside Café	912		Redwood St		Vacant
162984	Ind/Comm	Bouchey's Heat & Air	324133		Jardin Ct		Not Esc. Business

Appendix D

Supporting Information for the IDDE Component

Contents:

1. Dry-Weather Monitoring and Trash Assessment Forms
2. IDDE Corrective Action Summary

Appendix D

1. Dry-Weather Monitoring and Trash Assessment Forms

DRY WEATHER MONITORING FIELD SHEET

☐ **Routine Investigation** ☐ **IC/ID Follow-Up For**_____

GENERAL SITE DESCRIPTION

Site ID: _____ **Latitude:** _____ (GPS coordinates recorded in NAD 83 decimal deg)
Location: _____ **Longitude:** _____ **HSA:**
Date/Time: _____ **Watershed:** Carlsbad San Luis Rey San Dieguito
Observer: _____ **TB Page/Grid:** _____

Land Use 1 (primary): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Rural Res. ☐ Open
Land Use 2 (sedondary): ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Rural Res. ☐ Open
Conveyance Type: ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Earthen Channel
☐ Nat. Creek ☐ Curb Gutter ☐ Other
Construction: ☐ Concrete ☐ Steel ☐ Plastic ☐ Natural Other Description

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog
Last Rain ☐ > 72 hours ☐ < 72 hours
Rainfall ☐ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor ☐ None ☐ Musty ☐ Rotten Eggs ☐ Chemical ☐ Sewage ☐ Other _____
Color ☐ None ☐ Yellow ☐ Brown ☐ White ☐ Gray ☐ Other _____
Clarity ☐ Clear ☐ Slightly Cloudy ☐ Opaque ☐ Other _____
Floatables ☐ None ☐ Trash ☐ Bubbles/Foam ☐ Sheen ☐ Fecal Matter ☐ Other _____
☐ Algae ☐ Trash/Algae
Deposits ☐ None ☐ Coarse particulate ☐ Fine Particulates ☐ Stains ☐ Oily Deposits ☐ Other
Vegetation ☐ None ☐ Limited ☐ Normal ☐ Excessive ☐ Other _____
Biology ☐ None ☐ Insects ☐ Algae ☐ Snails/Fish ☐ Mussels/Barnacles ☐ Other _____

Flow Observed ☐Yes ☐ No ☐ Ponded ☐ Dry
Flow Rate: _____ gpm

Does the storm drain flow reach Receiving Water? ☐ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☐ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☐ No **Picture #** _____

Field Measurement Type: ☐ Field Screening ☐ Confirmation ☐ ICID ☐ Field Dup ☐ Field Blank ☐ Field Standard

Water Temp (°C)		**NH_3-N** (mg/L)		**NO_3-N** (mg/L)		**React PO_4-P** (mg/L)	
pH (pH units)		**TURB** (NTU)		**COND** (mS/Cm)		**Salinity** (%)	
Dissolved Oxygen (mg/L)		**Chlorine** (mg/L)		**Surfactants** (mg/L)		**TDS** (mg/L)	

Analytical Lab Samples Collected? ☐ Yes ☐ No

COMMENTS: _____

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert*

Width		ft
Depth**		ft
Velocity		ft/sec
Flow		gpm

Bucket / Watch Method

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe*

Diameter		ft
Depth**		ft
Velocity		ft/sec
Flow		gpm

Sketch cross section below

Trash Assessment Form

SITE ID: _____ **DATE:** _____

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100 pieces). Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

- **Complete the following section for Marginal and Poor Evaluations ONLY**

TYPE	Ranking by Type *	Potential Route (check up to 2)				POTENTIAL SOURCE (CHECK UP TO 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Homeless	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash PRESENT in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent). DO NOT rank types of trash that are not present in evaluated area.

Comments: _____

_____

Appendix D

2. IDDE Corrective Action Summary

IDDE Corrective Action Summary, FY 2011-2012

Name	Address	Date	Facility Type	Stormwater Discharge	Violation Notes	Corrective Action	Corrective Action Completed
Montanas Del Sol Apartment	700 Park Place	6/26/2011	Residential	YES	Sewer overflow*	NOC	YES
Valley Max Supermarket	2040 E Valley Pkwy	6/27/2011	Commercial	YES	Sewer overflow*	NOC	YES
Attention To Detail	2164 Splendorwood Pl.	7/1/2011	Residential	YES	Contractor was washing down tile roof.	NOC	YES
Tower Carpet cleaning	1244 Tower Lane	7/1/2011	Commercial	YES	Carpet cleaning wash water.	Verbal	YES
Just Like New Mobile Detailing	36345 Rhine Ct.	7/29/2011	Commercial	YES	Mobile car washing business not using containment	NOC	YES
Miller Elementary School	1975 Miller St.	8/1/2011	Commercial	YES	Wash water from the carpet cleaning	NOC	YES
Villa La Paz Apartments	1240 N. Broadway	8/18/2011	Residential	YES	Sewerage From lateral*	NOC	YES
Residential	1145 Fern St	9/8/2011	Residential	YES	Water softener tank discharge	NOC	YES
Kenwood Townhouse	915-917 N Fig St.	10/17/2011	Residential	YES	Power wash waste (dried paint & wash water)	NOC	YES
Residential	1155 E. 5th Ave.	11/1/2011	Residential	YES	Used oil left in front of address.	N/A	N/A
Residential	204 E. 2nd Ave.	11/2/2011	Residential	YES	Power washing building	NOC	YES
Residential	120 E. Lincoln Ave.	11/3/2011	Commercial	YES	Wash water discharge	NOC	YES
Sterling Rose Transportation	625 Superior Ct.	11/14/2011	Commercial	YES	Wash water discharge	NOC	YES
John Herrod Automotive	1542 Sterling	11/17/2011	Commercial	YES	Wash water discharge	NOC	YES
LaBahn's Landscaping	5000 Thorne Dr Ste F La Mesa, CA	12/1/2011	Commercial	YES	Power washing activities that entered the storm drain.	NOC	YES
Tee Vega Enterprises	738 W. Washington	12/2/2011	Commercial	YES	Power washing activities that entered the storm drain.	Administrative Citation	YES
Andrew's Pressure Washing	525 W. El Norte Pkwy #111	12/6/2011	Residential	YES	Cleaning rain gutters at residential home	Verbal	YES
Grape Day Park	321 N. Broadway	12/14/2011	Residential/Park	YES	Fuel discharge (1-2 gallons) from a burning car that Fire Dept extinguish.	N/A	N/A
Bronze Artwork	1991 Don Lee Pl. # D	12/15/2011	Commercial	YES	Cooling water that discharged into the storm drain.	Verbal	YES
CertaPro Painters	1305 Simpson Way ste K	12/21/2011	Commercial	YES	Wash water discharge	NOC	YES
Residential	1764 Stillwater Gln	1/3/2012	Residential	YES	Private sewer lateral overflow from single family home*	NOC	
Residential	220 E 7th Ave	1/3/2012	Residential	YES	Washing machine discharge.	NOC	YES
CertaPro Painters	1305 Simpson Way ste K	1/5/2012	Commercial	YES	Wash water discharge	Administrative Citation	YES

IDDE Corrective Action Summary, FY 2011-2012

Name	Address	Date	Facility Type	Stormwater Discharge	Violation Notes	Corrective Action	Corrective Action Completed
Larry Makel	1040 Metcalf	1/5/2012	Commercial	YES	Wash water discharge	NOC	YES
Sam Beckett (resident)	2361 Cranston Dr.	1/10/2012	Residential	YES	Septic Tank Overflow*	Comply with NOC	N/A
Residential	2695 Pummelo Ct	1/31/2012	Residential	YES	Discharge of wash water from bbq activities.	Administrative Citation	YES
Golden State Tire	630 Rock springs rd.	2/8/2012	Commercial	YES	Wash water discharge	NOC	YES
AT&T Yard/Correia Contracting	5157 South Santa Fe San Diego CA	2/14/2012	Commercial	YES	Wash water discharge	NOC	YES
Farmer Boys/Seven Smith Landscape	1333 E. Valley Park wy	2/21/2012	Commercial	YES	Wash water discharge	NOC	YES
Vivian's Quality Furniture	845 E. Valley Pkwy	3/12/2012	Commercial	YES	Overflowing debris and refuse from dumpster.	NOC	YES
Westco trucking	1288 Auto Park Way	3/12/2012	Commercial	YES	Vehicle fire and Fire Department extinguished the fire. NRC Environmental Services cleaned the MS4 with supervision from County DEH.	N/A	N/A
Residential	1360 Alita Lane	4/2/2012	Residential	YES	Residential Pool Discharge	Verbal Warning	YES
Kunzik & Sara Construction INC	1699 La Costa Meadows Dr #102, San Marcos, CA 92078	4/11/2012	Commercial	YES	Wash water discharge	NOC	YES
Don Nguyen	500 Fig St.	4/30/2012	Residential	YES	Wash water discharge	NOC	YES
Baoshich Vojislava	410 Sheridan Ave.	5/30/2012	Residential	YES	Septic system pump failure*	N/A	N/A
Old Mill Pond	360 N. Midway	5/31/2012	Commercial	YES	Pond wash water discharge	NOC	YES
Residence	1744 W. Country Club Ln.	6/11/2012	Residential	YES	Tile cutting residue on street/curb	NOC	YES
Residential (Broadway Pines Condos)	1122-1130 N. Broadway	6/11/2012	Residential	YES	Sewer overflow from clean out*	Administrative Citation	YES
Christine Weldy	2414 Lake Forest St.	6/19/2012	Residential	YES	Dry paint in curb/gutter from discharge	N/A	N/A
San Dieguito Pool Center	1627 Highcrest Pl	6/27/2012	Residential	YES	Pool Discharge	N/A	N/A
Greg Marsh	445 Corporate Dr.	7/2/2012	Commercial	YES	Runoff from pressure washing	N/A	N/A
DeeAnn Kauhi-Borgner	710 N. Quince St. #8	7/2/2012	Residential	YES	Discharge from laundry machine dumping onto ground	Verbal	N/A
Jim Farley	1930 N. Ash St.	7/2/2012	Residential	YES	Discharge of septic tank*	N/A	N/A
Progressive Publishing	119 E. Grand Ave.	7/25/2012	Commercial	YES	Trail of liquid towards dumpster	Verbal	N/A

Appendix E

Supporting Information for the Fiscal Analysis Component

Contents:

1. Fiscal Analysis Report

SAN DIEGO COUNTY COPERMITTEES FISCAL ANALYSIS REPORT FOR JURISDICTIONAL, WATERSHED, AND REGIONAL URBAN RUNOFF MANAGEMENT PROGRAMS (JURMPS, WURMPS, RURMPS)

Copermittee:	City of Escondido
Date:	9/17/2012
Reporting Year:	FY 2011-2012

STORM WATER ADMINISTRATION	
Program Planning	$74,585
Municipal Staff Training	$10,840
Policy, Plan and Legal Updates	$19,020
BMP reviews and/or Updates	$5,000
Source Inventory Reviewsan/or Updates	$25,330
Treatment Control BMP Maintenance and Certifications	$8,500
Program Assessment and Reporting	$64,090
Certifications and Other Fees	$0
Equipment Maintenance and Operation	$98,770
Field Equipment and Supplies	$37,460
Office Supplies	$8,255
Professional Organization and Membership	$500
Safety Equipment	$0
Vehicle and Equipment Purchases/Leases	$0
Total	**$352,350**

PERMITTING AND LICENSING	
Counter Support	$50,000
Application Processing, Plan Checks, Permit Issuance, Materials	$21,825
Total	**$71,825**

PROJECT PLANNING AND ENGINEERING	
Project Design and Specifications	$63,315
Consultant Solicitation and Contract Management	$5,000
Materials, Supplies and Equipment Purchases	$115,490
Total	**$183,805**

COMPLIANCE INSPECTION AND ENFORCEMENT	
Residential/Business Complaint Investigation and Enforcement	$15,000
Construction Stie Inspections	$77,850
Municipal Inpsections	$8,080
Industrial/Commercial Inspections	$88,000
Total	**$188,930**

BMP IMPLEMENTATION	
Street and Parking Lot Sweeping	$135,580
MS4 Evaluation and Cleaning	$227,195
Installation/Maintenance of Storm Drain Inserts	$6,015
BMP Materials, Supplies, and Equipment Purchases	$7,935
Total	**$376,725**

SAN DIEGO COUNTY COPERMITTEES FISCAL ANALYSIS REPORT FOR JURISDICTIONAL, WATERSHED, AND REGIONAL URBAN RUNOFF MANAGEMENT PROGRAMS (JURMPS, WURMPS, RURMPS)

EDUCATION AND OUTREACH	
Materials Development	$500
Outreach Material Production	$6,420
Staffing Outreach Events	$51,820
Total	$58,740
WASTE COLLECTION AND RECYCLING	
Waste Disposal and/or Recycling	$129,915
Total	$129,915
WATER QUALITY MONITORING	
Dry Weather	$40,450
Field Sampling Equipment, Materials, or Supplies	$2,500
Special Investigations	$4,780
Total	$47,730
WATERSHED MANAGEMENT/SAN DIEGUITO WATERSHED	
Administration	$15,000
Wateshed Cost Share	$2,100
Total	$17,100
WATERSHED MANAGEMENT/CARLSBAD	
Administration	$12,000
Watershed Cost Share	$3,675
Total	$15,675
REGIONAL PROGRAM	
Administration	$12,000
Cost Share Contribution	$95,330
Total	$107,330
TOTAL COSTS	$1,550,125

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authorized Signatory(s)	Title	Phone No.	Date
Henry A Levin	Public Works Director	(619) 628-1369	1/25/08

CITY OF IMPERIAL BEACH

JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM

ANNUAL REPORT FY 2006-07

CITY OF IMPERIAL BEACH
FY 2006-07 JURMP ANNUAL REPORT

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EXECUTIVE SUMMARY

This Annual Report summarizes the activities implemented by the City of Imperial Beach (City) in fulfillment of the Jurisdictional Urban Runoff Management Program (JURMP) requirements of Order 2001-01 – the San Diego Municipal Storm Water Permit. With limited exception, the report covers activities conducted between July 1, 2006 and June 30, 2007 (FY 2006-07).

The purpose of the JURMP Annual Report is threefold: 1) to document the City's compliance with Municipal Storm Water Permit requirements, 2) to assess the effectiveness of program implementation, and 3) to serve as a program planning tool for directing future activities. The report reflects the organization of the Municipal Storm Water Permit, and is divided into several components corresponding to major sources of pollutants or areas of activity. The following are highlights and major accomplishments for each major JURMP component during this fiscal year.

Municipal Component

City employees, particularly field staff, continued to implement best management practices (BMPs) to prevent illegal discharge of water and pollutants to the storm drain system. Examples of BMPs implemented at municipal facilities included:

- Vehicle washing in wash bays that drain to the sanitary sewer.
- Preventive maintenance of City vehicles to prevent fluid leakage.
- Use of high-power vacuums to capture runoff from power washing activities (i.e., during graffiti abatement and spill cleanup).
- Hand weeding of street medians instead of herbicide application. Strict limitations on use of fertilizers and pesticides.
- Monitoring of sprinkler systems to prevent over-topping onto roadways.
- Completed the alarming of all sewage pump stations, thereby reducing the likelihood of a sewage spill to the storm drain system.
- Purchase and use of spill barriers, gravel bags, and absorbent rags for spill containment and cleanup at work sites.

Other notable accomplishments during FY 2006-07 were:

- Removed an estimated 8.25 tons of material through storm drain cleaning.
- Removed an estimated 148 tons of material through frequent street sweeping.
- Continued maintenance of below-ground storm water treatment devices, which trap debris before it reaches receiving waters (10th Street storm water interceptor; 12 storm drain inlet filters).
- Continued operation of the Date Avenue urban runoff diversion system, which diverts nuisance runoff to the sanitary sewer during low-flow conditions.
- Performed daily cleanup of trash, litter, and debris along the beach and tidelands area on Seacoast Drive.

Commercial & Industrial Components

The City is tasked with educating businesses about urban runoff management and overseeing their compliance with applicable Municipal Storm Water Permit requirements. Significant progress was made on this front during this fiscal year:

- Conducted 33 inspections of which 13 were high priority businesses, including automotive repair shops, restaurants, bars, gas stations, car washes, etc. Inspections identified a total of 18 deficiencies, half of which involved general housekeeping practices (trash on the ground, cigarette debris, etc.).
- Performed an additional 46 investigations of commercial businesses as a result of complaint referrals or staff observations in the field. This was up from 28 during FY 2005-06. A commonly observed violation was the use of water to hose down parking lots, sidewalks, and other impervious surfaces.
- Issued 13 notices of violation, 3 notices of abatement, and 15 written letters to businesses as part of the enforcement and case resolution process. Other deficiencies were resolved with verbal warnings.

Residential Component

The Residential Component involves 1) educating Imperial Beach residents about urban runoff management, 2) overseeing residential compliance with BMP requirements and discharge prohibitions, and 3) facilitating proper disposal and recycling of household hazardous waste and used motor oil. Major accomplishments during this reporting period included the following:

- Identified and mitigated 50 residential violations. This compares to 20, 18, 13, and 42 in the previous four years, respectively. The most commonly observed violations involved construction debris, automotive fluids, washwater, detergents or chemicals, chlorinated swimming pool water and green waste.
- Issued 14 notices of violation and 2 notices of abatement as part of the enforcement and case resolution process. Other deficiencies were resolved with verbal warnings and/or letters. No fines were issued to residents during this reporting period.
- Distributed educational brochures to residents throughout the year. Brochures target the following high priority activities: 1) pollution prevention around the home, 2) disposal of pet waste, 3) car washing, 4) proper disposal of motor oil, and 5) lawn and garden care.
- Educated residents on environmental issues including stormwater in the City's semi-annual newsletters and a quarterly newsletter distributed by EDCO.
- Approximately 9.36 tons of household hazardous waste was properly disposed of at the South Bay Household Hazardous Waste facility in Chula Vista.
- Imperial Beach residents recycled approximately 2,440 gallons of used oil and 1,000 used oil filters at Kragen Auto Parts on Palm Avenue and through EDCO's pick-up service.

Land Development Component

The Land Development Component involves incorporating storm water and urban runoff management into the development project review process. Major accomplishments during this fiscal year included the following:

- Conditioned 51 discretionary permit applications requiring developers to maximize infiltration, minimize impervious surfaces, install treatment devices, etc. This compares to 67 projects during FY 2005-06.
- Approved Storm Water Management Plans (SWMPs) for three (3) priority development projects subject to the Standard Urban Storm Water Mitigation Plan (SUSMP).
- Discussed urban runoff management requirements with all permit applicants at project intake.

Construction Component

The Municipal Storm Water Permit requires the City to oversee compliance with construction-phase BMPs at all construction projects in the City. Major accomplishments during FY 2006-07 included:

- Inspected 121 active discretionary permit projects for proper deployment of construction-phase BMPs. Approximately 242 inspections were performed, but this likely underestimates the total due to the way in which inspections are tracked.
- Performed oversight of construction BMP compliance at all three (3) capital improvement projects (CIPs) that were in active construction phase.
- Issued nine (9) notices of violation and one (1) notice of abatement to construction developers and contractors as part of the oversight and enforcement process.
- Discussed urban runoff management requirements with all applicants at project intake, and emphasized requirements again during follow-up inspections.

Illicit Discharge Detection and Elimination Component

The Illicit Discharge Detection and Elimination Component involves 1) water quality monitoring during the dry weather season (May through September) to detect illicit discharges to the storm drain system, and 2) year-round response to complaints and referrals of urban runoff discharge violations. The following were major accomplishments during the 2006 and 2007 calendar years.

- Conducted 226 site visits as part of the dry weather monitoring program.
- Collected 27 urban runoff samples for field screening analysis. Other sites were dry or tidally influenced and were not sampled as a result.
- Submitted 19 urban runoff samples to laboratories for additional analysis of water quality parameters.
- Conducted upstream investigations whenever dry weather monitoring results exceeded a dry weather action level.

- Identified and eliminated one significant illegal discharge as a result of dry weather monitoring investigations: an ongoing, approximately weekly, discharge of over 1,000 gallons of chlorinated swimming pool water from Mar Vista High School. The Sweetwater Union High School District subsequently closed the connection between its pool filter back flushing system and the City's storm drain. Pool water is now discharged to a holding tank and then to the sanitary sewer system.
- Performed 234 urban runoff investigations, up from 113 investigations during the previous reporting period (a 100% increase). This may be attributed to the recently implemented City Wide Inspection program. Staff confirmed the presence of an illicit discharge or BMP violation in 199 instances.
- City staff participated in the cleanup of 22 illicit discharges. Cost recovery was pursued in 3 of these cases, recouping approximately $700 in costs.
- Responded to 8 sewage spills during this reporting period.

1.0 INTRODUCTION

This Annual Report summarizes the activities implemented by the City of Imperial Beach (City) in fulfillment of the Jurisdictional Urban Runoff Management Program (JURMP) requirements of the National Pollutant Discharge Elimination System Municipal Stormwater Permit Order No. 2001-01 (Order No. 2001-01 or "San Diego Municipal Stormwater Permit"). The JURMP was developed to address water quality issues within the City of Imperial Beach (City). With limited exception, this annual report covers activities conducted between July 1, 2006 and June 30, 2007 (FY 2006-07).

1.1 Environmental Setting

The City of Imperial Beach comprises 4.5 square miles and a population of 29,180 (U.S. Census Bureau, 2000). Jurisdictional boundaries include:

- To the east: the City of San Diego
- To the west: the Pacific Ocean
- To the north: a U.S. Naval Communications Station within the City of Coronado's jurisdiction, the Otay River, and the southern shore of San Diego Bay
- To the south: Ream Field (a U.S. Navy helicopter training facility) and the U.S.-Mexico international boundary.

The City falls within two major watersheds, or drainage basins. The northern portion of the urbanized area drains to the Otay River and San Diego Bay, while the southern portion drains to the Tijuana River and Tijuana River Estuary. Within these watersheds, a small portion of the coastal area drains directly to the Pacific Ocean via ocean outfalls. Urban runoff impacts two protected wetland areas managed collaboratively by the U.S. Fish and Wildlife Service and other state, federal, and non-profit agencies. Much of the Tijuana Estuary is located within City limits to the south, while the San Diego Bay National Wildlife Refuge Complex sits just beyond the northern jurisdictional boundary. Both wetlands harbor an impressive array of sensitive habitat and wildlife potentially impacted by urban runoff.

1.2 Regulatory Framework

In 1972, Congress passed the Federal Water Pollution Control Act, subsequently known as the Clean Water Act (CWA), which established the National Pollutant Discharge Elimination System (NPDES). Regulatory action under the NPDES initially focused on permitting discharges from traditional point sources such as factories, sewage treatment plants, and other industrial facilities. In 1987, Congress passed the Water Quality Act, both broadening the scope of the CWA and subjecting urban runoff and storm water discharges from municipal separate storm sewer systems (MS4s) to NPDES regulations.

In California, regulatory authority under the CWA is delegated to the State Water Resources Control Board (SWRCB) and its regional branches, including the San Diego Regional Water Quality Control Board (SDRWQCB). The SDRWQCB issued its first regional NPDES permit for municipal stormwater discharges in the early 1990s. A Permit with significantly expanded requirements was re-issued on February 21, 2001. Imperial Beach is one of 21 Copermittees subject to Order 2001-01, also known as the San Diego Municipal Stormwater Permit.[1]

In response to the issuance of Order 2001-01, the City of Imperial Beach developed a JURMP, which was adopted by its City Council on February 6, 2002. The JURMP lays out the City's policies in regard to urban runoff management within its jurisdictional boundaries. Requirements are enforced locally through the City of Imperial Beach Municipal Code, particularly the Urban Runoff Management and Discharge Control Ordinance (Chapter 8.30.) and the Standard Urban Storm Water Mitigation Plan (Chapter 8.32.), both of which were also approved by City Council in 2002.

This report demonstrates City compliance during the FY 2006-07 reporting period. It also documents City efforts to reduce pollutants in urban runoff discharges to the maximum extent practicable (MEP).

1.3 Report Contents

This Annual Report serves multiple purposes. It is reviewed by SDRWQCB staff to evaluate the City's compliance with applicable Permit requirements and account for the accomplishments and achievements realized by the City during this reporting period. In addition to this regulatory function, the City uses the report as a management tool to preserve, enhance, and restore the quality of the water resources, assess program effectiveness, and to document past and future modifications to its JURMP.

The Annual Report is organized into the following sections:

1. Introduction
2. Municipal Component
3. Commercial and Industrial Components
4. Residential Component
5. Land-Use Planning for New Development Component
6. Construction Component
7. Illicit Discharge Detection and Elimination Component
8. Education and Public Participation Components
9. Assessment of JURMP Effectiveness Component
10. Fiscal Analysis Component
11. Special Investigations
12. Conclusions and Recommendations

[1] Other Copermittees include the County of San Diego, the Port of San Diego, the San Diego County Regional Airport Authority, and all incorporated cities within San Diego County.

Sections 2, 3, and 4 detail the programs and activities that have been implemented to address urban runoff from existing development, i.e., municipal facilities, commercial businesses, and residential areas. Programs to manage runoff from existing development generally consist of the implementation of best management practices (BMPs), education, and third-party oversight, including inspections and enforcement performed by City staff. Section 5 describes how the City incorporates urban runoff management requirements into its land-use planning, development review, and permitting processes. Section 6 describes the implementation of programs to address runoff from construction sites. Section 7 describes efforts to detect and eliminate illegal discharges and unauthorized connections to the MS4. Section 8 summarizes the education and public participation activities undertaken over the reporting period. Section 9 assesses the effectiveness of JURMP activities using an assessment strategy developed regionally by the Copermittees. Section 10 presents the City's stormwater program budget for FY 2007-08. Section 11 describes special investigations implemented in support of the City's urban runoff program. Section 12 summarizes conclusions and provides recommendations for improving the program during FY 2006-07. The last step in the annual review process is to present revisions and amendments to the City's JURMP that are necessary to maintain compliance with Order 2001-01, to reduce the discharge of pollutants to the MEP, and to ensure that urban runoff does not cause or contribute to a violation of water quality standards.

1.4 Participation in Regional and Watershed Activities

In addition to the jurisdictional activities described herein, the City also participates with regional and watershed partners to manage urban runoff through collaborative efforts. Regional activities undertaken during this reporting period are summarized under separate cover in the Common Activities Section submitted by the County of San Diego on behalf of all Copermittees. The City also participates in two Watershed Urban Runoff Management Programs (WURMPs). These efforts address urban runoff and shared water quality problems in the San Diego Bay and Tijuana River Watersheds. Various City activities implemented during FY 2006-07 are also described in the San Diego Bay and Tijuana River WURMP Annual Reports, which are submitted under separate cover.

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2.0 Municipal (Existing Development) Component

Order 2001-01 requires the City to prevent and reduce pollutants in urban runoff that may result from municipal activities and facility operations. The Municipal Component consists of the following elements:

- Identification of high priority municipal facilities and activities
- Establishment of minimum BMP requirements for municipal operations
- Training of municipal employees
- Implementation of BMPs
- Oversight of municipal BMP implementation

This section describes the activities conducted during FY 2006-07 in support of the City's Municipal Component. Attachment 2-1 and Section 9 of this report describe effectiveness assessment measures related to this program component.

2.1 Identification of high priority municipal facilities and activities

The City maintains and annually updates a prioritized inventory of municipal sites and activities with the potential to generate pollutants in runoff. In addition to the mandatory high priority sites called out by the Municipal Storm Water Permit, the City's JURMP outlines additional criteria for assigning high, medium, and low priority status to municipal facilities based on the following factors: 1) activities conducted on site, 2) materials used, 3) wastes generated, 4) facility size, 5) pollutant discharge potential, and 6) proximity to receiving water bodies. The City's municipal facility inventory has been reviewed and updated in preparing this report. There are currently 33 municipal facilities, the following 18 of which are designated high priority:

- 1 Corporate Yard
- 7 Parking Lots
- 3 Parks
- 1 Administration Building
- 1 Pier
- 4 Types of MS4 Structures
    - Catch Basins (Approximately 100)
    - Underground Pipes (Approximately 5 miles)
    - Brow Ditch Channels (Approximately 4,000 feet)
    - 1 Storm Water Pump Station
- All City Streets

Of the remaining 15 facilities, eight are ranked as medium priorities and seven as low priorities. An updated inventory is included as Attachment 2-2.

2.2 Minimum BMP requirements for municipal operations

JURMP Tables 2-4 through 2-8 lay out the minimum BMPs required to be implemented at all municipal facilities during this reporting period. Municipal BMP requirements were thoroughly reviewed in preparation of this report. No changes are necessary.

2.3 Training of municipal employees

Storm water training for municipal staff during FY 2006-07 consisted of the activities described in the table below.

Staff Training Events
FY 2006-07

Date	Training Session	# Attendees	Topics
8/22/06	Storm Water Program Training for New Public Works Employee	1	Overview of storm water components, JURMP elements, complaint reporting procedures. Ride-along to several construction sites, storm drain outfalls, etc. Emphasized need for "eyes and ears" in field and what constitutes a storm water violation.
8/23/06	Storm Water Program training for new Public Works employee	1	Overview of storm water components, JURMP elements, complaint reporting procedures. Ride-along to several construction sites, storm drain outfalls, etc. Emphasized need for "eyes and ears" in field and what constitutes a storm water violation.
10/4/06	Annual program training for Building Official and Building Inspector	2	Review of construction-related JURMP requirements, including BMPs, SWMP forms, inspection procedures, enforcement actions, and information tracking.
12/4/06	Environmental Program training for Council Member-elect	1	Overview of all elements of Imperial Beach's JURMP and WURMP programs.
3/27/07	Recycling and waste reduction information presented to Public Works Department	27	Proper recycling procedures for Municipal Staff and background on AB 939 requirements including importance of recycling by the City, its residents, and businesses in order to meet diversion rates and comply with local and state laws.
5/17/07	Integrated Pest Management (IPM)	2	Environmental Program Specialist and Parks and Facilities Supervisor attended IPM training. Topics included importance of IPM to environmental quality, landscape retrofitting for reducing pesticide and runoff, and implementing IPM practices on parks and tidelands areas.
5/30/07	Storm Water Program Training for New Public Works Employee and GIS consultant	2	Overview of storm water components, JURMP elements, complaint reporting procedures. Ride-along to several construction sites, storm drain outfalls, etc. Emphasized need for "eyes and ears" in field and what constitutes a storm water violation.

2.4 Implementation of BMPs

The following section summarizes municipal BMP implementation during FY 2006-07. It is not intended to be an exhaustive documentation of all BMPs implemented by the City. Rather, it focuses on particularly noteworthy BMPs, special projects, and other BMPs that are easily quantified.

2.4.1 Pollution Prevention BMPs

The City continues to emphasize pollution prevention (P2) as the first line of defense in its efforts to manage runoff from municipal areas and activities. P2 practices are distinct from traditional BMPs, and can be broadly categorized under the term "source reduction".[1] In contrast, traditional BMPs contain, capture, or treat pollutants after they have been generated or released to the environment. Some examples of ongoing P2 practices implemented by the City are listed in the table below.

Pollution Prevention Measures Implemented During Routine City Activities

Activity	Pollution Prevention Measures
Vehicle Maintenance	o Routine, preventive maintenance is conducted on all City vehicles to prevent leakage. o Recycled oil is purchased for use in all City vehicles. o Used oil, fluids, tires, batteries, and other hazardous wastes are properly recycled.
Graffiti Removal	o Dry methods such as scraping are attempted first in removing graffiti from buildings and other surfaces, limiting the use of water. o If dry methods fail, Bio-D, a non-toxic chemical is utilized to wipe graffiti from its surface. o Power washing is only used as a last resort, and graffiti removal staff carries a vacuum at all times to ensure that the residual wash water does not enter the storm water conveyance system.
Landscape Maintenance	o Grass cuttings and other landscape waste collected from parks, street medians, sidewalk parkways, and other public areas are recycled as green waste and used as alternative daily cover at the local landfill. o Soil is regularly aerated to encourage natural infiltration and reduce runoff. o The goal of municipal landscapers in complying with the City's Integrated Pest Management (IPM) Program is to avoid using pesticides or herbicides, and to minimize the use of fertilizers. Medians and sidewalks are hand-weeded as an alternative to pesticide use. o Any fertilizer application is performed during the dry season or when no rain is forecast. o Sprinkler systems are monitored weekly to ensure that they do not overtop roadways or other hardscape surfaces that drain into the storm drain conveyance system. o Watering schedules are routinely monitored and modified according to seasonal and weather conditions.

[1] Source reduction is defined as any practice which "reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment … prior to recycling, treatment, or disposal. The term includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control." *Pollution Prevention Act of 1990, United State Code Title 42, Chapter 133, 13101 Findings and Policy*

Activity	Pollution Prevention Measures
Sanitary Sewer Maintenance	o Sanitary sewer pipes are cleaned annually, or more frequently if necessary, to prevent blockages that may result in overflows or breaks. Preventive maintenance reduces the likelihood of sanitary sewer releases to the environment. o The City completed its goal of having all sewer pump stations alarmed to reduce the likelihood of an undetected system failure and subsequent sewer discharge to the environment. Currently, 10 of 11 sewage pump stations are alarmed. Effluent from the only unalarmed station would flow to another pump station if an overflow occurred, so in effect, all pump stations are now alarmed. o City staff performs daily pump station inspections as well as regularly scheduled preventive maintenance.
Street Maintenance	o The City continually inspects streets to determine if the current street sweeping schedule is sufficient to minimize storm water pollution. o Additional bi-monthly street inspections are conducted to identify, among other things, persistent or noticeable MS4 pollutant sources.

2.4.2 MS4 Maintenance, Street Sweeping, and Treatment BMPs

The following is an inventory of the City's municipal separate storm sewer system (MS4), including various structural treatment BMPs installed and maintained by the City:

- Approximately 5 miles of underground drainage pipes
- Approximately 100 catch basins / inlets
- Approximately 100 miles of streets
- 8 open drainage channels (approximately 4,000 feet)
- Storm Water Pump Station (Palm Avenue street end at Seacoast Drive)
- Low-Flow Urban Runoff Diverter (Date Avenue at Seacoast Drive)
- Vortechs System Storm Water Interceptor (10th St. at Imperial Beach Blvd.)
- 12 Storm Drain Filter Inserts at municipal facilities maintained by the City

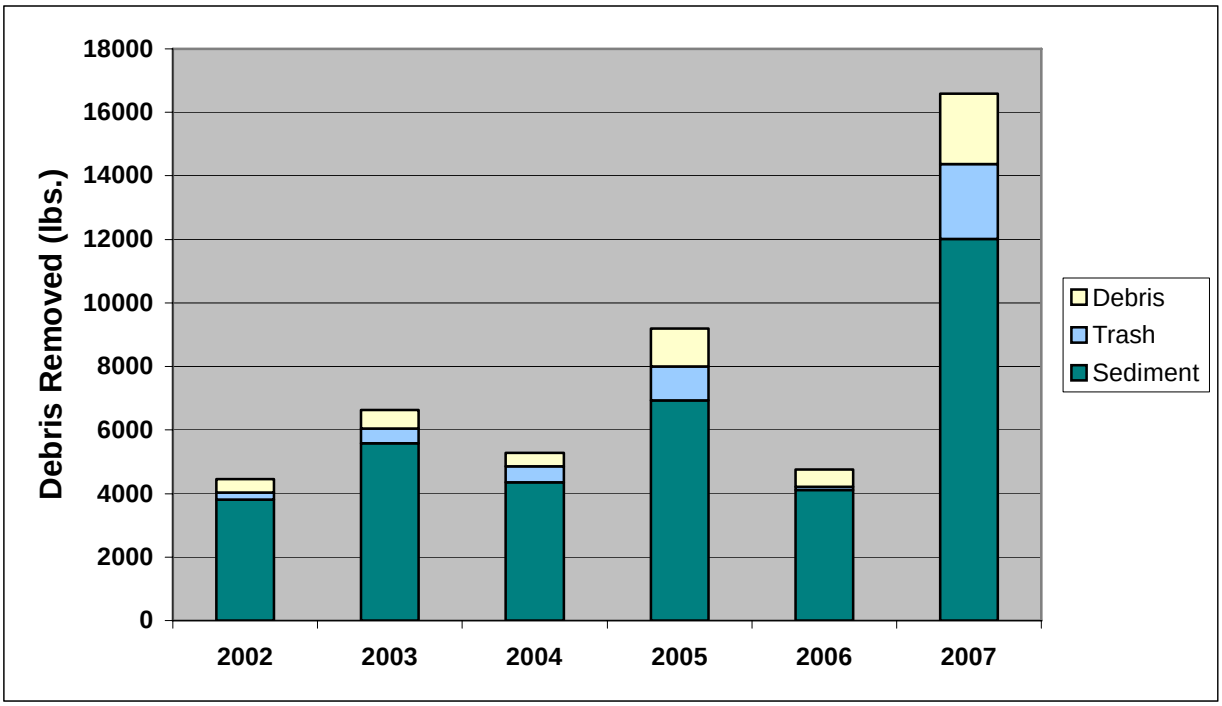
<u>Routine MS4 Maintenance (Catch Basins, Manholes, Underground Pipes, and Open Channels)</u>

Routine maintenance and cleaning keeps accumulated debris in the MS4 from reaching and impacting receiving waters. It also ensures that the storm water conveyance system is functioning properly for the purposes of flood control. The City's Public Works Sewer Division has an annual goal of cleaning 100% of the MS4 between May 1 and September 30, prior to the rainy season. Due to staffing shortages, storm drain cleaning was approximately 67% complete by the end of September 2006. The 100% cleaning target was met on November 14, 2006, prior to the onset of most of the significant rain events.

Following each cleaning event, Sewer Division staff completes Inspection Form 2-C, City of Imperial Beach Storm Drain Cleaning & Maintenance, which documents the condition of the MS4, and provides estimates of the quantity and type of material removed. The following are MS4 cleaning statistics from June 13 to October 30, 2007. The figure below compares the totals for 2007 to activity in previous years.

- Quantity of Material Removed[2] – 16,500 lbs. (8.25 tons)
- Type of Material – 73% Sediment, 14% Trash, 13% Debris (Rocks, Leaves, Wood, etc.)
- # Manholes / Inlets Cleaned – 168
- # Open Drainage Channels Cleaned – 8

Storm Drain Conveyance System Cleaning Totals (2002-2007)



Street Sweeping

Frequent sweeping of streets, alleys, and commercial areas is an important component of the City's urban runoff management program. The material that accumulates on streets is quickly washed through the MS4 and into receiving water bodies such as estuaries, bays, and the ocean. The City contracts street sweeping duties with EDCO Disposal Corporation, which sub-contracts actual implementation to Clean Streets, Inc. Sweeping frequencies vary by land use and location and are listed in the table below.

Street Sweeping Frequency
FY 2006-07

Area Type & Description	Details	Frequency & Schedule
Commercial o Palm Ave. / Hwy. 75 o Imperial Beach Blvd. o 13th St. (between Palm Ave. & I.B. Blvd.) o 9th St. (between Palm Ave. & I.B. Blvd.) o 3rd St. (all)	19.2 curb miles + 4 parking lots Civic Center Parking Area Parking Lot (Elkwood/Seacoast)	Weekly (Mondays)

[2] Quantities removed are estimates. Quantities estimated in 2007 may be due to transitions in personnel.

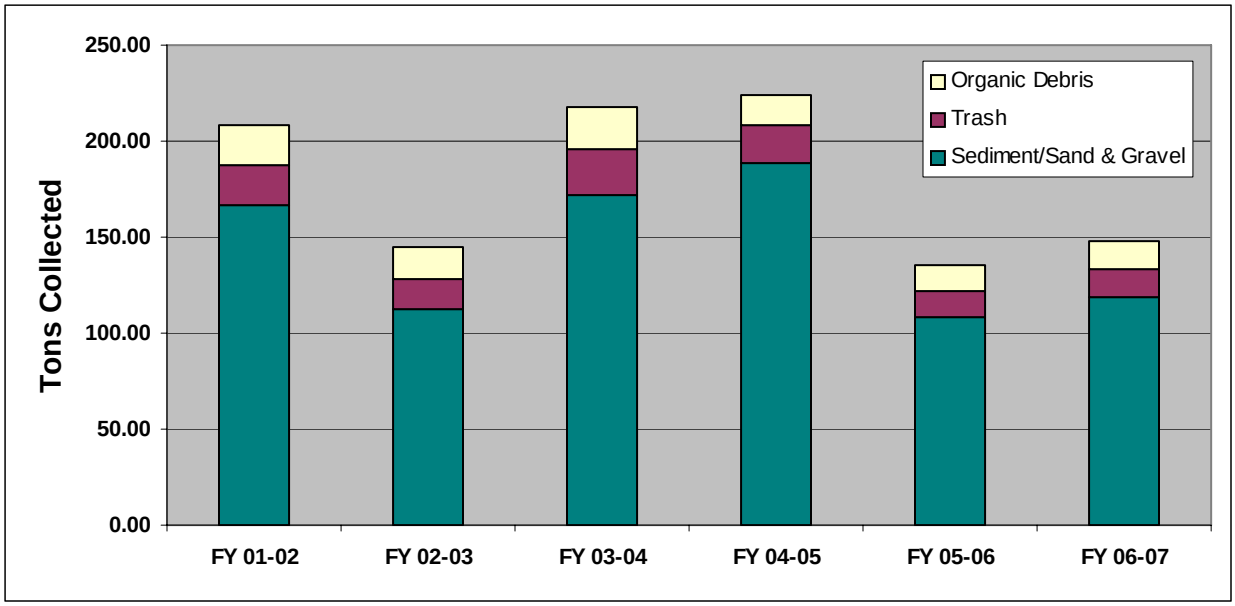
Area Type & Description	Details	Frequency & Schedule
o Elm Ave. (between Seacoast Dr. & 7th St.) o Seacoast Dr. (all)	Parking Lot (Seacoast/Elm) Dunes Park	
Beachfront Residential Streets o From Seacoast Drive to 3rd Street	9.6 curb miles	Twice Monthly (Alternate Mondays)
All Other Residential Streets	80.5 curb miles	Monthly (Varies by neighborhood)
Paved Alleys	18.6 curb miles	Monthly (Varies by neighborhood)
Total	**127.9 curb miles + 4 parking lots**	

Clean Streets, Inc. swept approximately 2,392 curb miles during FY 2006-07, resulting in the collection of 148 tons of material. Collected material was estimated as 10% sediment, 70% sand and gravel, 10% trash, and 10% organic debris (leaves, etc.). The figure below shows the trend in estimated street sweeping collection totals from 2002 to 2007. The City continues to conduct regular inspections of sweeper effectiveness on a monthly basis. Parking restrictions are in place in the residential areas from Seacoast Drive to 3rd Street from 7:00 to 11:00 a.m., which greatly assists in increasing sweeping effectiveness in this area. All identified deficiencies and public complaints regarding street sweeping during this reporting period were immediately investigated and corrected.

Vortechs System Storm Water Interceptor

The City installed a Vortechs System Storm Water Interceptor at the corner of 10th Street and Imperial Beach Boulevard in December 2002. The system is designed to remove sediment, floating hydrocarbons, and debris from storm water during all levels of flow. The City continued to perform regular maintenance on the interceptor during this fiscal year. During this reporting period, the interceptor trapped a total of 20 pounds of material, separate from the total MS4 cleaning quantities reported above. This cleaning solely encompassed the trash collection chamber, and collected material was estimated as 80% trash and 20% sediment.

Street Sweeping Removal Totals
2002-2007



Storm Drain Inlet Filters

The City has voluntarily installed twelve storm drain inlet filters at the municipal locations listed in the table below. A total of four additional inlet filters were installed during this reporting period. Each filter is designed to capture sediment, hydrocarbons, litter, foliage, etc., while allowing nuisance runoff and storm water to flow through. The City contracts with a maintenance company to regularly service the devices to ensure that they continue operating at peak efficiency. Maintenance involves quarterly cleaning and removal of accumulated debris, as well as the replacement of filtration booms as necessary. The following table presents a summary of filter cleaning and material removal during FY 2006-07.

Storm Drain Inlet Filter Locations & Maintenance
FY 2006-07

Name	Location	Installation Date	# Cleanings FY 06-07	Quantity Debris Removed	Materials Collected
SDF1	495 10th St. Rear of Public Works Yard	10/13/03	4	16 lbs.	Sediment, Organics
SDF2	495 10th St. Public Works Parking Lot	10/13/03	4	7.75 lbs.	Sediment, Organics
SDF3	825 Imperial Beach Blvd. City Hall Parking Lot	10/13/03	4	41.5 lbs.	Sediment, Organics
SDF4	825 Imperial Beach Blvd. Fire Station Parking Lot	10/13/03	4	4.5 lbs.	Sediment, Organics

Storm Drain Inlet Filter Locations & Maintenance
FY 2006-07

Name	Location	Installation Date	# Cleanings FY 06-07	Quantity Debris Removed	Materials Collected
SDF5	8th St. / Marina Vista Marina Vista Center	1/13/03	3	88 lbs.	Sediment, Organics
SDF6	Seacoast Drive / Palm Ave. City Parking Lot	1/13/03	3	0.88 lbs.	Sediment, Organics
SDF7	Hemlock Ave. / 15th St. Residential Neighborhood	1/12/05	4	0	
SDF8	839 10th St. Alley b/w Elm & Donax	11/3/05	4	14.5 lbs.	Sediment, Organics, Trash
SDF9	Alley abutting 8th St. 100 yd. South of Palm	2/5/07	2	3.25 lbs.	Sediment, Organics, Trash
SDF10	Alley b/w 8th St. / Delaware St. just south of Palm Commercial Ctr.	2/5/07	2	50 lbs.	Sediment, Organics
SDF11	Curb inlet at SW corner 9th St. / Palm Ave.	2/22/07	2	35 lbs.	Sediment, Organics, Trash
SDF12	740-798 Florida St. Alley behind apartment complex	5/17/07	1	15 lbs.	Sediment, Organics

Low-Flow Urban Runoff Diversion

The City completed construction of a low-flow urban runoff diversion system at the corner of Date Avenue and Seacoast Drive in September 2004. This project was financed in part through Proposition 13 Clean Beaches Initiative (CBI) grant funds. It is the second of three CBI projects intended to address elevated levels of bacteria at local beaches. The first project completed was the South Bay Coastal Ocean Observing System (SBCOOS), which is designed to provide real-time measurements of key oceanographic parameters relevant to understanding the complex coastal transport mechanisms present in the region. The Date Avenue Low-Flow Urban Runoff Diversion Project (Date Avenue Diverter) was the first of two planned low-flow urban runoff diversion systems designed to divert nuisance flows from the storm drain system to the sanitary sewer, thereby eliminating a potential source of bacteria during dry weather and other low-flow conditions.

A second diversion project is planned for the Palm Avenue street end at Seacoast Drive. In July 2006, the City received clearance to move forward with its project, and at this time, construction is in the planning and development stages. The City has been awarded an extension on the grant fund timeline and the project is scheduled for completion in 2008.

2.4.3 Sewer System Maintenance and Spill Prevention

The City conducts routine maintenance on its sanitary sewer system to prevent spills and discharges to the MS4. Most sanitary sewer pipelines are cleaned at least

annually, and known problem areas are cleaned more frequently throughout the year. Twelve sewage pump stations are monitored daily. All pump stations alarmed to reduce the likelihood of an undetected system failure and subsequent sewer discharge to the environment. During FY 2006-07, nearly all of the City's 39.5 miles of underground sewer pipes were cleaned.

In the event of a sewer spill, City staff follows procedures laid out in its Sanitary Sewer Overflow Response Plan. Response procedures include notifications and response requests, response activities, investigations, clean-up activities, reporting, record keeping, and education/enforcement. The Public Works Sewer Division is notified of any spills from private laterals and septic systems. Calls to report spills during non-business hours are routed to the Sheriff Dispatch number, and the on-call sewer personnel are notified to resolve the situation.

Eight sewage spills were reported in Imperial Beach during this reporting period, two of which originated at private laterals. The City responded to all eight spills. An estimated total of 1,134 gallons of sewage was spilled and an estimated 194 gallons (or 17%) was recovered within the City. This is a lower recovery percentage than the previous four reporting periods (87%, 86%, 64%, and 20%, respectively). However, a total of 268 gallons were spilled with an estimated 15 gallons recovered at the Imperial Beach Pier, which is under the jurisdiction and maintenance of the Port of San Diego (Port). These were reported by the City of Imperial Beach because the Port has no spill reporting mechanism in place with the State of California. Therefore, the City was responsible for an estimated 21% recovery during this reporting period, compared to 20% the previous reporting period. Required reports were filed and forwarded as required in the City's Sanitary Sewer Overflow Response Plan.

The City will continue to be proactive in identifying potential sewer maintenance problems and take corrective actions before an overflow occurs. Identified trouble spots are on a more frequent inspection and cleaning schedule. As new areas are identified, the list of trouble spots is modified accordingly. The City is currently in the process of conducting a sewer capacity study. In addition, a sewer system management plan is being developed, and one of the components is a Chain of Communication, which will be disseminated to the public for reporting of spills. It is anticipated this educational effort will allow the public to correctly report spills. During this reporting period, a spill occurred in which the public did not place the call to the correct number, which delayed the response effort and resulted in only 22% of the spill being recovered.

Lateral sewer overflows are addressed by educating homeowners and business owners about the causes of overflows and corrective actions for dealing with blockages or partial blockages.

2.4.4 Beach & Tidelands Maintenance

The City has a Tidelands Maintenance Division, funded by the Port of San Diego, whose mission it is to keep the beachfront area clean and free of trash and other debris. A crew of employees picks up trash, sand, seaweed, and other debris from the beach and one block inland of the beach seven days a week. This is in addition to a contract

with Partners With Industry (PWI), which employs disabled adults to pick up trash in the tidelands area. Prior to any forecasted storm event, Tidelands employees are instructed to concentrate their efforts on removing any accumulated trash and debris from the storm gutters in the vicinity of the Tijuana Estuary and the Pacific Ocean along Seacoast Drive. The City also maintains a contract with the Donovan Correctional Facility, a state prison which provides supervised labor to the City for various needs, including landscaping, trash cleanup, etc.

2.4.5 Management of Pesticides, Herbicides, and Fertilizers

Order 2001-01 identifies pesticides, herbicides, and fertilizers as storm water contaminants of concern. The City is responsible for a variety of municipal facilities including parks, landscaping areas, green ways, rights-of-way, and the tidelands area, which may require the application of these substances. As identified in the JURMP, the City has adopted and continues to comply with the Integrated Pest Management (IPM) Plan. IPM is the trend in pest management that supports moving away from reliance on pesticides, and toward an integrated approach using environmentally friendly pest control techniques.

The City limits its application of pesticides, herbicides, and fertilizers at all facilities. If necessary, the City has a qualified employee that applies these materials under the direction of a pest control advisor. The City employs various alternatives to pesticides, including hand weeding, using mulch and fabric for suppression, pruning, scheduling irrigation, etc. In addition, the use of native vegetation is encouraged to reduce the use of herbicides and fertilizer.

2.5 Oversight of municipal BMP implementation

The City has identified 18 high priority municipal facilities. All 18 high priority sites were inspected quarterly during this reporting period. Inspections included a review of activities and practices, review and inspection of site BMPs, and a review of the overall effectiveness of the BMPs.

Staff also inspected all 15 medium and low priority sites during the course of routine City activities. As indicated in the City's JURMP, follow-up inspections are to be conducted whenever non-compliance is observed. No significant issues of non-compliance were identified during this reporting period.

Revisions to the Municipal Component

The JURMP for the City of Imperial Beach is currently undergoing revision to align with the new Municipal Storm Water Permit, Order No. R9-2007-0001.

2.7 Looking Forward

The following is a list of activities that the City anticipates implementing as part of its Municipal Component during FY 2007-08.

Existing Activities

- Continue to inspect all municipal facilities for BMP compliance
- Continue to inspect and clean the entire MS4 between May 2007 and September 2007
- Continue to sweep streets at the frequencies described above
- Continue to limit the application of fertilizers, pesticides, and herbicides
- Continue to inspect and clean the entire sewer system annually
- Continue daily cleanups in the beach and tidelands area
- Continue to conduct annual storm water training for City employees
- Continue to inspect and maintain all treatment BMPs (interceptors, diverters, inlet filters)
- Install the second of two dry weather low-flow diversion systems at the Palm Avenue outfall

New Activities Under Consideration

- Research and identification of a location for a structural treatment control upstream of the H-3 outfall (behind Bayside Elementary in the Otay River Watershed) is still underway. This control is needed to address trash and debris originating from commercial uses in the upstream drainage area. Design and installation of this structural control are currently included in the City's capital improvement project budget for FY 2007-08.
- Complete sewer capacity study and development of Sewer System Management Plan. Educate the public including employees on proper reporting of spills, including Chain of Communication.

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3.0 Commercial and Industrial Components

The Commercial and Industrial Components consist of the following activities intended to reduce pollutants in runoff from businesses in Imperial Beach:

- Identification of high priority commercial and industrial businesses
- Establishment of best management practice (BMP) requirements for businesses
- Outreach and education to business owners and operators
- Oversight of commercial and industrial BMP implementation
- Enforcement of commercial and industrial non-compliance

The section describes the activities conducted in support of the City's Commercial and Industrial Components during FY 2006-07. Attachment 3-1 and Section 9 of this report describe effectiveness assessment measures related to this program component.

3.1 Identification of high priority commercial and industrial businesses

There were only two businesses classified as "industrial" actively operating in the City of Imperial Beach during FY 2006-07. TNT Surfboards, 536 13th Street, is considered a low priority industrial site since it operates under a Notice of Non-Applicability (NONA) issued by the SWRCB. City staff has spoken with TNT representatives all work is performed indoors. It should also be noted that an important industrial use within the City's jurisdictional limits, but one not subject to direct oversight by the local municipality, is the Naval Outlying Field (NOLF), a helicopter training facility operated by the United States Navy.

Order 2001-01 delineates several categories of commercial business as mandatory high priorities for the purposes of prioritization and inspection. Cities have the discretion to designate additional commercial businesses or business categories as high priorities based upon compliance history, proximity to receiving waters, and other relevant information. There are 93 high priority commercial businesses operating in the City of Imperial Beach. The table below summarizes the types of high priority commercial businesses in operation. A complete watershed-based inventory is included as Attachment 3-2 to this report.

Commercial business activity in Imperial Beach is primarily concentrated in three areas: the Palm Avenue corridor (Highway 75), along Seacoast Drive between Palm Avenue and Imperial Beach Boulevard, and 13th Street between Palm Avenue and Imperial Beach Boulevard. Most high priority businesses (84%) are located within the Otay River Watershed. Over half (56) are eating and drinking establishments or food markets. Other facility types include automotive repair shops (13), gas stations (6), etc. Overall, commercial land uses account for approximately 3% of total land use in Imperial Beach.[1]

[1] www.sandag.org

High Priority Businesses in Imperial Beach by Category & Watershed			
Commercial Business Category	**Tijuana Watershed**	**Otay Watershed**	**Citywide Total**
Eating & Drinking Establishments	8	43	51
Automotive Businesses	0	13	13
Gas Stations	2	4	6
Food Markets	2	4	6
Auto Sales	0	4	4
Car Washes	1	3	4
Large Retail	0	3	3
Trailer Parks	0	3	3
Industrial	0	1	1
Other Commercial	1	3	4
Total	**14**	**81**	**95**

3.2 Establishment of BMP requirements for businesses

Minimum BMP requirements for commercial and industrial businesses are described in two source documents: the City's *Urban Runoff Management and Discharge Control Ordinance* and the Imperial Beach JURMP. Commercial and industrial BMP requirements have been reviewed for applicability and no changes are necessary at this time.

3.3 Outreach and education to business owners and operators

The City recognizes the importance of educating business owners, operators, and employees about effective BMP implementation. Since adoption of the Permit, the City has utilized multiple methods to notify local businesses about their regulatory obligations. These include:

- Distribution of the *"Best Management Practices for Your Business"* brochure (see Attachment 3-3) during routine business inspections and complaint investigations. As previously reported, the City mailed this brochure, which summarizes BMP requirements in a simplified format, to all businesses (approximately 375) in September 2004. The brochure highlights several important BMPs, including tips for proper housekeeping, appropriate disposal of wash water, material storage and handling, and waste management. The City encourages business owners and operators to use the brochure as a training tool for all employees. The brochure has been slightly revised since initial printing and an additional 250 brochures were printed at the end of FY 2006-07. This brochure is also available for viewing on the City's Web site at www.cityofib.com.

- Distribution of the "*Green Wrench Guide*" and "*What's Cookin' Guide*" to automotive businesses and restaurants as appropriate (see Attachment 3-4). The City has ordered a supply of "*What's Cookin' Guides*" translated in Spanish to better serve the needs of its community.

- The JURMP, the Urban Runoff Management and Discharge Control Ordinance, and additional BMP guidance for businesses are available as a resource on the City's Web site.

Other business outreach initiatives during FY 2006-07 included:

- Face-to-face Interaction. The City met with personnel from over 47 high priority businesses during routine business inspections and other complaint investigations.

- City Website. There are several items of information available on the City's Environmental Division website. Materials include: 1) JURMP, 2) Urban Runoff Management and Discharge Control Ordinance, 3) BMPs for Commercial Businesses.

3.4 Oversight of commercial and industrial BMP implementation

The City uses three mechanisms to oversee BMP implementation at commercial and industrial businesses.

- Commercial Business Inspection Program. Routine inspections, which are scheduled in advance, consist of a face-to-face meeting with the business owner or operator, a walk-through of the facility, evaluation of BMPs, and development of a corrective action plan if necessary. At the end of each inspection, the City inspector reviews the "*Best Management Practices for Your Business*" brochure with site managers and encourages its use as a training tool for all on-site employees. Beginning in January 2006, the City began mailing out completed inspection reports to businesses. This is an attempt to memorialize the inspection results in writing.

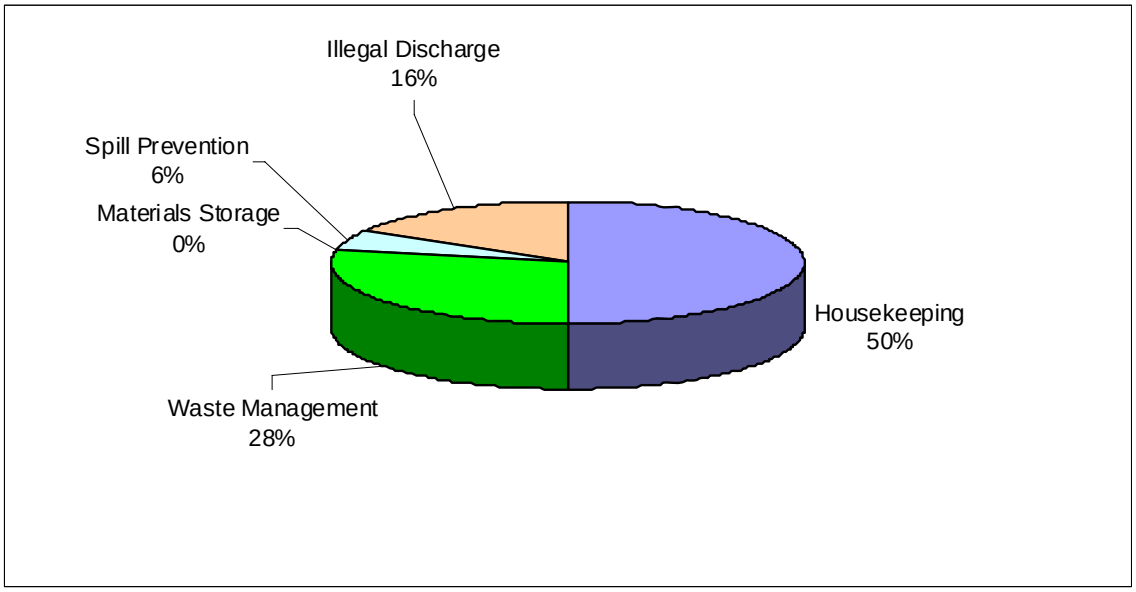
- Response to Complaints and Field Observations. The City is advised of non-compliant businesses (fixed and mobile) by many sources; residents, City staff, and other businesses are the most common referral sources. Some violations are visually observed by Stormwater staff in the course of day-to-day field activity.

- Review of structural treatment BMP maintenance records. The City requires certain commercial businesses, as part of the development / redevelopment process, to install and maintain structural treatment BMPs to detain and/or treat water runoff before it enters the storm water conveyance system. City staff endeavors to review commercial facilities' BMP maintenance records on a regular basis.

Commercial Business Inspection Program

The City conducted 53 scheduled inspections at 35 businesses during FY 2006-07. Inspections identified a total of 24 deficiencies. One-half of the deficiencies were housekeeping related as illustrated in the figure below. Inspection results are summarized in the table below and described in detail in Attachment 3-7.

Commercial Business BMP Deficiencies as Noted During Inspections FY 2006-07



Scheduled Inspections of Commercial Businesses

Category	# Businesses	# Follow-up Inspections	Total # Inspections
Automotive	9	4	13
Eating and Drinking	12	9	21
Gas Stations	6	2	8
Large Retail	1	0	1
Food Market	5	3	8
Other	2	0	2
Total	**35**	**18**	**53**

Response to Complaints and Field Observations

An additional 46 investigations of commercial businesses were conducted as a result of complaint referrals or staff observations in the field. As shown in the table below, field investigations involved 21 fixed businesses and 25 mobile businesses. Discharge types and pollutants of concern varied significantly from case to case, but a violation commonly encountered was the improper use of water to hose down parking lots, sidewalks, and other impervious surfaces, and discharge of wash water into the storm drain system. This will be the focus of future outreach efforts to businesses in Imperial

Beach. Attachment 7-3 presents detailed documentation regarding each illicit discharge investigation involving a commercial business.

Response to Complaints and Field Observations (Commercial Business)
FY 2006-07

FIXED COMMERCIAL BUSINESS	AUTO FLUIDS	1
	CHEMICALS	1
	COOKING OIL & GREASE	2
	DETERGENTS	1
	TRASH & DEBRIS	7
	WASHWATER	5
	SEWER SPILL	2
FIXED COMMERCIAL BUSINESS Total		**19**

MOBILE BUSINESS	AUTO FLUIDS	3
	SEDIMENT	4
	GREEN WASTE	1
	CONSTRUCTION DEBRIS	10
	PAINT	2
	POOL WATER	1
	WASHWATER	2
MOBILE BUSINESS Total		**23**

Review of Structural Treatment BMP Maintenance Records

The following is a summary of known structural BMPs currently in place at commercial businesses in Imperial Beach. Storm drain inlet filters have been installed at the following locations pursuant to either redevelopment conditions imposed by the City or City recommendations following inspection:

- Wally's IGA (836 Palm Avenue) – 4 storm drain filter inserts
- SavOn Drug Store (888 Palm Avenue) – 3 storm drain filter inserts
- 13th Street Market (1126 13th Street) – 4 storm drain filter inserts and 1 parking lot drain capture system
- Tunes & Lubes, Etc. (741 Palm Avenue) – 1 storm drain insert filter.

For those structural treatment BMPs installed pursuant to redevelopment conditions, the City conducts an annual review of maintenance records to verify that the filters are being properly cleaned out. According to the most recent documentation, the filters at the Imperial Beach Promenade (Wally's and SavOn Drug Store) are currently being serviced three times per year. The filters at the 13th Street Market were last serviced in September 2006. Maintenance records are not yet available for the Tunes & Lubes location.

3.5 Enforcement of commercial and industrial non-compliance

This section describes the enforcement actions taken against violating businesses during FY 2006-07. Totals include actions taken in response to observations made during scheduled inspections as well as complaint investigations. Verbal warnings were usually sufficient to encourage a quick return to compliance. Notices of Violation (NOVs) were issued in instances when the violation had a substantial impact on the storm drain conveyance system or receiving waters, or when return to compliance was expected to be more complex or time-consuming. In all cases, a City inspector verified return to compliance. A full accounting of enforcement actions can be found in Attachments 3-7 and 7-3.

Commercial Enforcement Actions (FY 2006-07)

Enforcement Action	# Actions Taken Against Businesses in FY 2006-07	
	Fixed Commercial Businesses	Mobile Businesses
Verbal Warnings	8	12
Written Letter & Brochure	6	9
Notice of Abatement	2	1
Notice of Violation	6	7
Total	**22**	**29**

3.6 Revisions to the Commercial and Industrial Components

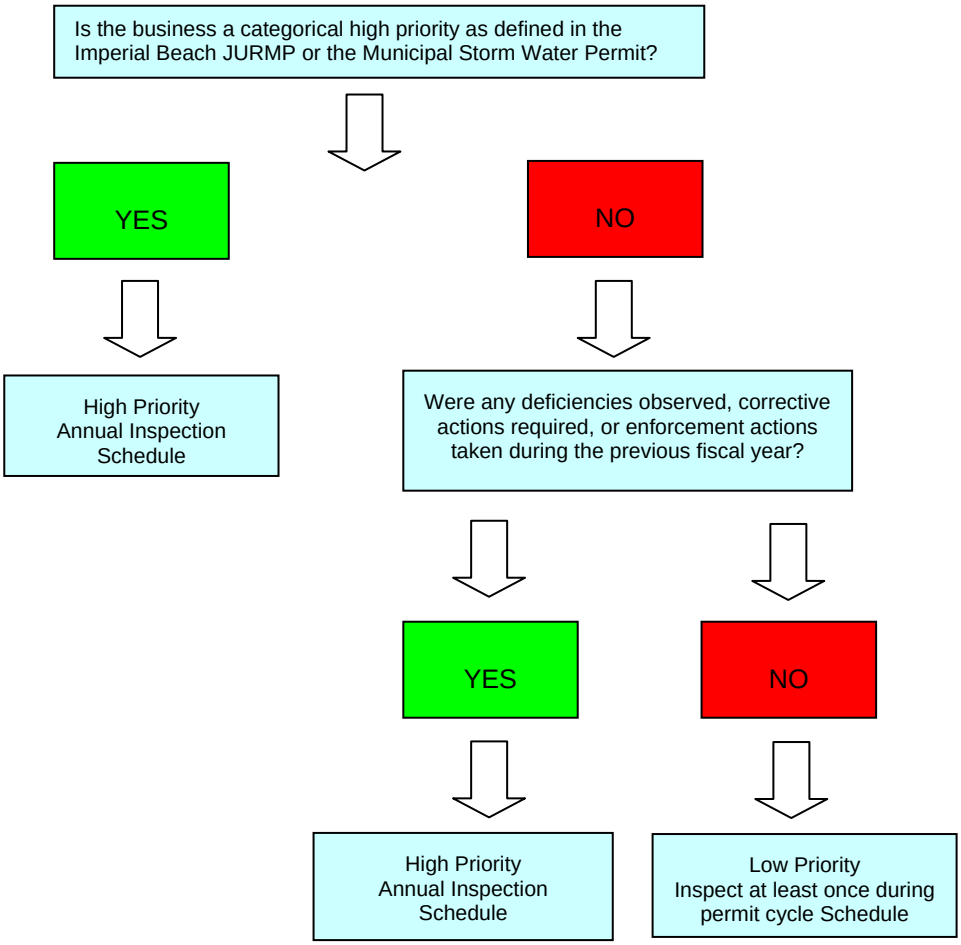
The JURMP for the City of Imperial Beach is currently undergoing revision to align with the new Municipal Storm Water Permit, Order No. R9-2007-0001.

3.7 Looking Forward

The following is a list of activities that the City anticipates implementing as part of its Commercial and Industrial Component during FY 2007-08.

Existing Activities

- The City will continue to focus on inspecting high priority commercial businesses. To simplify the process for determining which businesses to target for inspection, the City has developed the following flow diagram:



- City staff continues to respond to all complaints of illicit discharge and other non-compliance at commercial and industrial businesses. Enforcement measures are taken as necessary to ensure compliance.

- Continue pro-active surveillance program that entails driving or walking by commercial areas on a regular basis to identify illegal discharges and other violations. This approach supplements routine inspections, and takes advantage of the fact that business activity in Imperial Beach is clustered in a few dense pockets.

New Activities Under Consideration

- In addition to continuing with existing channels for educating businesses, the City is exploring a more permanent venue for distributing information on urban runoff and BMPs to all businesses. One identified venue might be through the business license renewal process.

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4.0 Residential Component

Implementation of the Residential Component involves the following activities intended to reduce pollutants in runoff from residential areas in Imperial Beach:

- Identification of high priority residential areas and activities
- Establishment of best management practice (BMP) requirements for residents
- Outreach and education to residents
- Facilitation of hazardous waste and used oil disposal
- Oversight of residential BMP implementation
- Enforcement of residential non-compliance

This section describes the activities conducted during FY 2006-07 in support of the City's Residential Component. Attachment 4-1 and Section 9 of this report describe effectiveness assessment measures related to this program component.

4.1 Identification of high priority residential areas and activities

Residential land uses in the City of Imperial Beach include single-family residences (542.6 acres), multi-family units (17.7 acres), and mobile homes (16.8 acres).[1] The total population was 29,180 as of 2000.[2] Order 2001-01 identifies the residential areas and activities that all cities must, at a minimum, designate as high priorities. These include automobile repair, maintenance, washing, and parking; home and garden care; disposal of household hazardous waste, pet waste, and green waste; and various other residential activities in close proximity to sensitive receiving water bodies. Since most of the City is in close proximity to sensitive receiving waters, all residences are considered high priorities for the purposes of managing urban runoff.

4.2 Establishment of BMP requirements for residents

The City encourages its residents, through public education and other mechanisms, to support and participate in pollution prevention (P2) activities. P2 is emphasized in nearly all outreach to the public (see Section 4.3 below for a complete accounting of residential education during FY 2006-07). The following are just a few examples of the P2 activities that are promoted in City brochures regularly distributed to Imperial Beach residents:

- Limit use of pesticides
- Regularly inspect and maintain vehicles
- Avoid excess lawn watering
- Recycle and buy recycled products (including motor oil)

[1] Figures from 2000 Census as reported on www.sandag.org.
[2] Figure from U.S. Census Bureau (2000)

The City's Urban Runoff Management and Discharge Control Ordinance establishes minimum BMP requirements for the following residential activities:

- Motor Vehicle and Boat Repair and Maintenance
- Motor Vehicle Washing
- Motor Vehicle Parking
- Home and Garden Care Activities and Product Use
- Home Care and Maintenance
- Manure and Pet Waste Management
- Private Sewer Laterals and On-site Wastewater Systems

4.3 Outreach and education to residents

The City recognizes the importance of educating residents about the impacts of urban runoff and the implementation of appropriate BMPs. Education ranges from personal interaction between City staff and residents to the publication of newsletter articles, formal presentations, and brochure distribution. Major educational initiatives targeting residents during FY 2006-07 are summarized below.

- **Personal Interaction** is a highly effective way to educate residents about storm water requirements. In response to complaints or as needed based on visual inspection, City inspectors conducted inspections of residences and provided verbal and written information on BMP implementation. City staff responded to 57 residential violations during FY 2006-07, summarized in Attachment 7-3.

- **BMP Brochures** - City inspectors regularly distribute the following BMP brochures targeting high priority residential activities: *Storm Water Runoff Pollution: Prevention Tips for Homeowners*; *Pet Waste*; *Car Washing*; *Motor Oil*; and *Lawn & Garden Care*. These brochures were made available to residents at libraries, public counters, and during various public events during this reporting period. They were also routinely distributed to homeowners and renters upon identification of non-compliance in the field. All five brochures are included as Attachment 4-2 to this report.

- **Imperial Beach City Newsletter** is a semi-annual publication mailed to all single-family homes in the City. The City has been diligent about ensuring that nearly every edition contains educational information about storm water, urban runoff, or BMPs. The Spring 2006 Newsletter contained an article on recycling. The Winter 2006 edition featured articles on the Tijuana River Watershed; Household Hazardous Waste Disposal Options; the Christmas tree recycling services offered by the City; the Citywide Garage Sale; and advertised the Annual Home Front Cleanup Event sponsored by both the City and EDCO. The Home Front Cleanup Event is an annual opportunity for residents to properly dispose of unwanted household items and debris at no cost, thereby discouraging illegal dumping. All newsletters from FY 2006-07 are included for reference in Attachment 4-3.

- **Habitat Heroes for the South San Diego Bay Wildlife Refuge Restoration Project** is a highly effective way to educate the younger residents of Imperial Beach through a hands-on learning experience out in the South San Diego Bay Wildlife Refuge. Students in grades 2 – 6 engage in discovering their local environment and how trash and other pollutants affect the flora and fauna at the receiving waters. This program operates throughout the school year and reaches approximately 1,000 students, who in turn take the message home to their parents and guardians.

- **Watershed Modeling** is a hands-on tool the local elementary school teachers use in their classrooms to depict the local watershed and teach BMP education. Teachers are allowed to borrow the watershed model from the City's Public Works throughout the school year.

Storm Water / Urban Runoff Educational Events
FY 2006-07

Date	Activity/Event	Topics
4/20/07	Distributed 77 Garage Sale Kits	Each set contains pest management tips for the following; spiders, termites, earwigs, lawn insects, gardening with good bugs, fleas and safe use and disposal of pesticides; proper disposal of Household Hazardous Waste; Car Washing brochures; a notepad and pencil advertising 1-800-RECYLING; and a pen encouraging reporting of illegal discharges

- **Special Cleanup and Waste Collection Events** – Cleanup events are excellent opportunities to engage City residents in the urban runoff management program. Not only do residents participate in cleaning up their neighborhoods, City staff is also on hand to educate residents about storm water and BMPs.

Special Cleanup and Waste Collection Events
FY 2006-07

Date	Activity/Event	Topics
4/28/07	I Love A Clean San Diego's Annual Creek to Bay Cleanup	The City participated with the San Diego Bay Watershed Work Group as a Program Sponsor and contributed $1,000 in sponsorship of this year's event.
4/21/07	Citywide Garage Sale	This annual event is sponsored by the City, and is intentionally scheduled prior to the Home Front Cleanup Event. Residents are encouraged to re-sell unwanted household items or donate them to charity organizations. The event is designed to reduce landfilling of bulky items and to discourage illegal dumping into City streets or waterways. 77 sellers participated in this year's event.

Date	Activity/Event	Topics
5/7/07	Citywide Home Front Cleanup Event	This annual event is sponsored by the City in cooperation with EDCO Disposal. Residents are encouraged to dispose of unwanted items, including bulky items, appliances, furniture, yard waste, metal, concrete, asphalt, and home-improvement debris at a centralized location free of charge. 735 residents participated in this year's event. The cleanup resulted in the removal of approximately 130 tons of material, including trash, green waste, furniture, concrete, etc. from residential yards, homes, and properties.

4.4 Facilitation of household hazardous waste and used oil disposal

Household hazardous waste (HHW) includes televisions, computer monitors, automotive fluids, batteries, household cleaners, pesticides, paints, and other materials that are unfit for disposal in traditional landfills. If not disposed of properly, these materials can greatly impact water quality. The City's HHW disposal program is available to all residents of Imperial Beach. The City partners with other jurisdictions in the South Bay to offer convenient, low-cost HHW disposal options. Imperial Beach residents are encouraged to dispose of hazardous materials by bringing them to the City of Chula Vista's Hazardous Waste Collection Facility located at 1800 Maxwell Road. The facility is open on Saturdays from 9 a.m. to 1 p.m., except holiday weekends. Residents must show a form of identification and are charged a nominal co-payment of $5 for the disposal of up to 15 gallons or 125 pounds of HHW. The City is billed for the remaining cost, which is then reimbursed by EDCO Disposal pursuant to their waste hauling franchise agreement. The HHW Collection Facility in Chula Vista received approximately 9.36 tons (18,720 pounds) of HHW from Imperial Beach residents during FY 2006-07.

The City also offers curbside pickup service for hazardous waste. Residents must call the South Bay HHW Hotline at (619) 691-5122 to arrange for curbside pickup. There is a $10 co-payment for this service. Curbside pickup of used oil, televisions, and computer monitors is handled separately by EDCO and is also subject to a $10 fee.

Residents of Imperial Beach can recycle used motor oil by one of three methods. Curbside pickup can be arranged by calling the South Bay HHW Hotline at the number above. Residents may also take the oil themselves to Kragen Auto Parts (1025 Palm Avenue) or the HHW Collection Facility in Chula Vista. The City also operates a used oil recycling promotion for City residents. The program includes free plastic containers and funnels, which are distributed at City Hall and by EDCO Disposal. These programs assist in the prevention of the illegal discharge and dumping of used motor oil. Approximately 2,440 gallons of used oil and 1,000 used filters were recycled in Imperial Beach during FY 2006-07.

4.5 Oversight of residential BMP implementation

Oversight of residential BMP implementation consists of 1) observations made by municipal employees working in or around residential areas, 2) public complaints received through the storm water reporting hotline, and 3) systematic inspection of residential areas. The latter is a program started in May 2006. Residential inspections consist of City staff physically walking and driving through residential neighborhoods to look for illegal discharges and non-compliance with BMP requirements. Violators are either educated or issued a Notice of Violation to ensure a timely return to compliance. The residential inspection program is designed to supplement the Illicit Discharge Detection and Elimination Component of the City's JURMP. There are 39 grid areas inspected, each of which measures ½-mile in length and width. The initial goal is to inspect each grid area once per month, but this may not always be possible given variable workload over the course of the year. Since the inception of the program, residential inspections led to the detection of 37 illegal discharges, the details of which are summarized in Attachment 7-3.

Through the three mechanisms listed above, City staff identified and mitigated 50 residential violations during FY 2006-07. This compares to 42, 20, 18, and 13 in the previous four years, respectively. A complete description of each violation as well as referral sources and associated enforcement and compliance actions are summarized in Attachment 7-3.

Residential Violations by Pollutant Type
FY 2006-07

AUTO FLUIDS	9
CHEMICALS	2
CONSTRUCTION DEBRIS	13
COOKING OIL & GREASE	0
DETERGENTS	3
GREEN WASTE	3
MULTIPLE	0
OVER IRRIGATION	0
PAINT	2
POOL WATER	1
POTABLE WATER	2
SEDIMENT	2
SEWER SPILL	0
TRASH & DEBRIS	3
UNKNOWN	0
OTHER	1
PET WASTE	3
WASHWATER	6
TOTAL	**50**

Residential Enforcement Actions
FY 2006-07

NOTICE OF VIOLATION	14
NOTICE OF ABATEMENT	2
NOT APPLICABLE	1
FINE/CITATION	0
VERBAL / WRITTEN WARNING	33
TOTAL	**50**

4.6 Revisions to the Residential Component

The JURMP for the City of Imperial Beach is currently undergoing revision to align with the new Municipal Storm Water Permit, Order No. R9-2007-0001.

4.7 Looking Forward

The following is a list of activities that the City anticipates implementing as part of its Residential Component during FY 2007-08.

Existing Activities

- Continue to include articles on pollution prevention, urban runoff issues, and residential BMPs in City newsletters.
- Continue to oversee residential BMP implementation through systematic inspection and as necessary based on observation and complaint referral.
- Continue to distribute residential BMP brochures as appropriate during investigation and community events.
- Continue to participate with other Copermittees in regional and watershed efforts to educate residents about urban runoff and water quality.
- Provide educational materials to large apartment buildings to be included in their internal newsletter or to be distributed by on-site managers.

New Activities Under Consideration

- Staff will assist in the development of a regional outreach plan targeting the residential population.

5.0 Land Development Component

The City ensures that the permitting of both new development and redevelopment projects occurs in an organized and orderly fashion that reflects the vision and needs of the community, assesses the environmental issues associated with the proposed projects, and meets all applicable regulatory standards. In order to protect local receiving waters, the City has put into place several local ordinances that outline the requirements for addressing urban runoff and water quality. All significant new development and redevelopment projects must incorporate appropriate BMPs at the planning phase to prove how they will minimize impervious surfaces on site, how flow and surface waters will be redirected to pervious areas to maximize infiltration, and how storm water runoff will be minimized.

This section describes the activities conducted during FY 2006-07 in support of the City's Land Development Component, including the Standard Urban Storm Water Mitigation Plan (SUSMP). Attachment 5-1 and Section 9 of this report describe effectiveness assessment measures related to this program component.

5.1 Assessment of General Plan

The General Plan has been assessed and modified to ensure that the water quality and watershed protection principles and policies required by Order 2001-01 are addressed. The amendments to the General Plan/Local Coastal Program were approved by the City Council in September 2002. The Coastal Commission has previously refused to certify the General Plan / Local Coastal Plan amendment including water quality and watershed protection principles and policies. Staff will seek certification with the revision of the JURMP under the new Municipal Storm Water Permit during the next reporting period. No amendments or revisions to the General Plan Elements were identified this reporting period.

5.2 New Development & Redevelopment Project Review

The City requires all new development and redevelopment projects to implement measures to reduce pollutants and runoff to the MEP. Until recently, the City's project review process had required that any new construction or property modification with a valuation of more than $25,000 be subject to implementing public improvements. During this reporting period, the valuation figure was increased to $50,000 to reflect rising home prices and to exclude very minor projects. Projects meeting the minimum valuation threshold are routed from the Community Development Department to the Public Works Department for review with regard to SUSMP applicability and potential storm water and urban runoff issues. Depending upon the nature of the project and the existing conditions on site, a combination of site design, source control, and/or treatment BMPs may be required as conditions of permit issuance. The following is a list of BMPs that the City most commonly requires as conditions of permit approval.

- **Divert Runoff to Pervious Surface**: This is a requirement imposed upon all development and redevelopment projects where applicable. It includes the following provisions:

    - Ensure that the hot water tank discharge is piped to discharge to the sanitary sewer system or a landscaped area. A design that has the water discharge directly into the storm drain conveyance system (onto an impervious surface that flows to the street) is in violation of the Municipal Storm Water Permit – Order 2001-01.

    - No building roof or landscape water drains may be piped to the street or onto impervious surfaces that lead to the street. A design that has these water discharges directly into the storm drain conveyance system (onto an impervious surface that flows to the street) is in violation of the Municipal Storm Water Permit – Order 2001-01.

    - Relocate site features to drain into landscaped area.

- **Storm Drain Improvements – Treatment BMP(s) Needed**: The City frequently requires non-priority development projects to install treatment BMPs. This determination depends entirely on the nature of the site, property layout, etc. Due to the small lot sizes in Imperial Beach, treatment BMP requirements usually consist of the installation and maintenance of storm drain inlet filters.

- **Minimize Impervious Surfaces**: This may involve reducing the amount of impervious surfaces on site by requiring the addition of landscaped areas or prohibiting an increase in impervious surface areas from the property's existing condition.

- **Notification on Construction / Post-Construction BMP Maintenance Requirements**: This requirement is imposed upon every development and redevelopment project in the City. It states as follows:

    - Require applicant to provide verification of post-construction BMP maintenance provisions through a legal agreement, covenant, CEQA mitigation requirement, and/or Conditional Use Permit.

    - Advise the property owner that he/she must institute BMPs to prevent contamination of storm drains, groundwater, and receiving waters during both construction and post-construction. The property owner or applicant must provide the following documents to the City of Imperial Beach before project work may begin: 1) checklist of selected BMPs and location of BMPs on project plans for review by the City, 2) certification of intent to maintain selected BMPs, 3) Storm Water Management Plan.

- Contain all construction water used in conjunction with the construction. Contained construction water is to be properly disposed in accordance with Federal, State, and City statutes, regulations, and ordinances.

- All recyclable construction waste must be properly recycled and not disposed in the landfill.

- Water used on site must be prevented from entering the storm drain conveyance system (i.e., streets, gutters, alley, storm drain ditches, storm drain pipes).

- All wastewater resulting from cleaning construction tools and equipment must be contained on site and properly disposed in accordance with Federal, State, and City statutes, regulations, and ordinances.

- Erosion Control – All sediment on the construction site must be contained on the construction site and not permitted to enter the storm drain conveyance system. Applicant is to cover disturbed and exposed soil areas of the project with plastic-like material (or equivalent product) to prevent sediment removal into the storm drain system.

The City imposed one or more of the conditions above on 51 discretionary project applications during FY 2006-07 (see Attachment 5-2 for a site-by-site listing). This includes three new "priority development projects" that will be subject to the City's SUSMP ordinance. All three SUSMP-eligible projects were notified of applicable SUSMP requirements, but none has submitted an adequate Storm Water Management Plan (SWMP) to date. Final permits will not be issued for these priority projects until acceptable SWMPs have been reviewed and approved by City staff. The City's FY 2004-05 Annual Report noted six SUSMP projects that were initiated in FY 2004-05 but were lacking an approved SWMP. Two of these were finalized during FY 2005-06:

- 646-686 Ocean Lane (New Multi-Family Complex)
- 1146 13th Street (New Mixed Use Development)

The City approved a SWMP for the third and fourth SUSMP projects during FY 2006-07:

- 684-686 Ocean Lane (New Multi-Family Complex)
- 198-200 Palm Avenue (New Mixed Use Development)

5.3 Environmental review process

JURMP Section 6.3 continues to accurately describe the City's environmental review process. No revisions to this process were made during FY 2006-07.

5.4 Education for development project applicants

Face-to-face meetings and inspections continued to be the primary mechanisms for imparting information about storm water and urban runoff requirements to development project applicants. At project intake, all applicants are required to file Form 7-A, a checklist used to determine the applicability of storm water requirements. Certain permits involve no outside work and/or no earth disturbance. Permits that involve construction activity are required to complete Form 7-B, which spells out specific storm water requirements, including which BMPs will be implemented. In addition, conditions imposed by various City departments explain in detail the steps necessary to ensure compliance with all applicable ordinance requirements.

A draft SUSMP manual has been prepared and is undergoing revision and modification for use as a "how to" guide for project applicants. It describes regulatory requirements as well as the City's project review and permitting process including BMP requirements and post-construction maintenance responsibilities.

5.5 Revisions to the Land Development Component

The JURMP for the City of Imperial Beach is currently undergoing revision to align with the new Municipal Storm Water Permit, Order No. R9-2007-0001.

5.6 Looking Forward

The following is a list of activities that the City anticipates implementing as part of its Land Development Component during FY 2007-08.

<u>Existing Activities</u>

- Continued compliance with the City's SUSMP ordinance for priority development and redevelopment projects.
- Continued compliance with the Urban Runoff Management and Discharge Control Ordinance for all projects within the City.
- Continued face-to-face meetings with applicants to educate them on the City's Storm Water urban runoff management program.

<u>New Activities Underway</u>

- The City is finalizing a SUSMP guide to be used by Community Development staff and contractors during plan review to help project applicants navigate the SUSMP regulatory process.

6.0 Construction Component

Order 2001-01 requires the City to implement a program to reduce pollutants in runoff from construction sites during all construction phases. The Construction Component consists of the following activities:

- Identification and prioritization of construction sites
- Establishment of minimum BMP requirements for construction sites
- Oversight of BMP implementation at construction sites
- Outreach and education to construction project applicants, contractors, etc.
- Enforcement of construction site non-compliance
- Reporting of non-compliant sites

This section describes the activities conducted during FY 2006-07 in support of the City's Construction Component. Attachment 6-1 and Section 9 of this report describe effectiveness assessment measures related to this program component.

6.1 Identification and prioritization of construction sites

Most construction projects in Imperial Beach are identified through the building and grading permit application process. At project intake, applicants are required to complete Form 7-A, the Storm Water Requirements Applicability Checklist (see Attachment 6-2). This form is also used to determine each project's threat to water quality, which results in the assignment of a priority designation. Prioritization takes into account several factors, including site slope, amount of disturbed area, proximity to receiving waters, and erosion potential. Since the City is largely built out, construction projects tend to be very small in scale, with most receiving a designation of low priority. Other types of construction projects include encroachment permits for work conducted within the public right-of-way and capital improvement projects (CIPs) that managed by the City.

6.1.1 Building/Grading Permits

In FY 2006-07, there were approximately 121 active discretionary permit projects with the potential to generate runoff and impact water quality as a result of construction activities (see Attachment 6-3 for a full inventory). Examples of projects not included in this inventory are electrical repair, plumbing repair, patio decks, and other projects with a very minor impact on the environment. All building and grading permits were subject to compliance with construction-phase BMPs as defined in the Ordinance, JURMP, and project-specific pollution control plans.

6.1.2 Encroachment Permits

Work performed in the public right-of-way requires prior approval by the City through an encroachment permit. The vast majority of encroachment permit projects are captured in the building / grading permit process described above. Exceptions to this include

work performed by utilities such as undergrounding and trenching. All encroachment permits were subject to compliance with construction-phase BMPs as defined in the Ordinance, JURMP, and project-specific pollution control plans.

6.1.3 Capital Improvement Projects

CIPs are construction projects managed by the City. They include the renovation, repair, or construction of City facilities and infrastructure. Attachment 6-3 contains a list of the three capital improvement projects (CIPs) that were in active construction-phase during FY 2006-07. All CIPs were subject to compliance with construction phase BMPs as defined in the Ordinance, JURMP, and project-specific pollution control plans.

6.2 Establishment of minimum BMP requirements for construction sites

The City requires contractors, homeowners, and other project applicants to comply with pollution prevention requirements and other BMPs throughout the entire course of on-site construction activities. Minimum BMPs are described in two primary source documents: the Imperial Beach JURMP and the Urban Runoff Management and Discharge Control Ordinance. The City requires all discretionary permit applicants to submit Form 7-B for review and approval prior to the start of any on-site construction activities. Form 7-B constitutes the site's Storm Water Management Plan and details the types of BMPs that will be used on site to control erosion and other types of prohibited discharges. Form 7-B was slightly modified this year to ensure ease of use and understanding for project applicants (see Attachment 6-4).

With regard to CIPs, City contractors are all required to provide written BMP plans to be implemented at their respective construction sites before the project was authorized to proceed. Pollution prevention and BMP requirements are re-emphasized at pre-construction meetings prior to the start of each construction project.

6.3 Oversight of BMP implementation at construction sites

During FY 2006-07, all 51 active discretionary permits with the potential to impact water quality were inspected for compliance with storm water BMP requirements. There were three construction sites designated as high priorities during this reporting period. An estimated 242 BMP compliance inspections were performed on these projects.[1] The number of storm water inspections per site ranged from one to three, with an average of two. Attachment 6-3 provides a list of construction inspections during this reporting period. Inspections generally included a review of BMP implementation, including erosion control practices, sediment control practices and sediment tracking controls, waste and disposal management practices, and evidence of past or present unauthorized non-storm water discharges. In addition, if there was evidence of non-

[1] This number includes the total number of inspections performed for BMPs. It occasionally happens that inspections are not entered into the City's tracking database until the end of the project. When this occurs, all inspections conducted on site are coded as occurring on the same date. In preparing this report, duplicate inspection dates were deleted in order to avoid double counting.

compliance, the City re-inspected the site to ensure compliance. All municipal construction projects (CIPs), including encroachment permits without associated building permits (i.e., utilities), were inspected daily by City staff.

6.4 Outreach and education to construction project applicants, contractors, etc.

A list of minimum BMPs addressing common construction activities has been developed and is included in the JURMP Construction Component. This information is provided to all prospective applicants. Additionally, City personnel routinely conduct face-to-face meetings with the contractors on larger projects to discuss implementation of construction BMPs prior to the start of project. All construction BMPs recommended in Forms 7-A and 7-B are also available on the City of Imperial Beach's Web site.

Three contractors performing CIP-related construction were educated about the City's JURMP requirements and minimum BMPs during pre-construction meetings. Specifications on minimum BMPs are always included in the City's public works CIP contracts. Environmental Division staff reviewed and approved all SWMPs prior to authorizing the start of work.

Finally, the City has developed a tri-fold brochure that is provided to all project applicants. The brochure provides an overview of the City's stormwater program and describes construction BMPs in some detail (see Attachment 6-5).

6.5 Enforcement of construction site non-compliance

Enforcement against construction sites typically results from observations during scheduled inspections and complaints about illegal discharges or inadequate BMPs. Through these methods, the City observed 37 violations at construction sites during FY 2006-07. Nine of these violations resulted in the issuance of a Notice of Violation and one in a Notice of Abatement. Verbal warnings or letters were sufficient to ensure a return to compliance in the remaining 27 cases. A description of each violation and the resulting enforcement action is described in full detail in Attachment 7-3.

6.6 Reporting of non-compliant construction sites

No construction sites were reported to the RWQCB as non-compliant during the FY 2006-07 reporting period.

6.7 Revisions to the Construction Component

The JURMP for the City of Imperial Beach is currently undergoing revision to align with the new Municipal Storm Water Permit, Order No. R9-2007-0001.

6.8 Looking Forward

The following is a list of activities that the City anticipates implementing as part of its Construction Component during FY 2007-08.

Existing Activities

- The City will continue to conduct routine inspections of construction sites. The inspector will document the results of the inspection and any follow up actions, if necessary. During these inspections, the City will provide verbal direction and written materials on pollution prevention, BMP implementation, and training of staff on urban runoff issues.

- The City will continue to participate with other Copermittees in regional outreach efforts to construction contractors by participating in workshops or by preparing written materials to target contractors.

- The City will continue to construct an annual inventory of construction sites and re-evaluate the priority of construction sites.

- The City will continue face-to-face meetings with applicants at the counter to increase their knowledge of construction BMPs.

- The City will continue face-to-face meetings with all public works contractors at pre-construction meetings to provide information about construction BMPs.

- Continue to make the construction BMPs tri-fold brochure available at the City Hall and Public Works business counters.

New Activities Underway

- Improve the tracking of storm water inspections at construction sites.

- Develop a new user-friendly construction BMP brochure.

7.0 Illicit Discharge Detection and Elimination Component

Illicit discharges and connections (ID/ICs) to the MS4 can be a significant source of pollutants. Order 2001-01 requires Copermittees to detect, investigate, and eliminate ID/ICs in a timely manner. This section describes implementation of the City's Illicit Discharge Detection and Elimination Program during FY 2006-07. Attachment 7-1 and Section 9 of this report describe effectiveness assessment measures related to this program component.

7.1 Dry Weather Monitoring Program

Dry weather urban runoff monitoring is one of several tools utilized by the City to identify ID/ICs to its MS4. Each year between May 1 and September 30 – the dry weather season – City staff collects samples from storm drain outfalls, street gutters, and other areas where urban runoff is commonly found. Where water volume is sufficient for collection, samples are analyzed in the field for several water quality parameters. This is referred to as "field screening". A sub-set of collected samples is also sent to a certified laboratory for additional analysis. Laboratory analysis is performed for pollutant concentrations that cannot be readily ascertained in the field.

Field Screening Water Quality Parameters

- Nitrate
- Ammonia
- Reactive phosphorous
- Temperature
- pH
- Turbidity
- Electrical conductivity

Laboratory Analytical Parameters

- Dissolved Cadmium
- Dissolved Copper
- Dissolved Zinc
- Dissolved Lead
- Oil & Grease
- Total Hardness
- Bacterial Indicators
- Organophosphate Pesticides
- MBAS (Surfactants)

Timely follow-up investigations are undertaken whenever a sample result exceeds pre-determined action levels that have been established regionally by the San Diego Municipal Storm Water Copermittees. Upstream investigations are intended to identify and eliminate the pollutant source if possible.

This report presents two full years of dry weather monitoring data (2006 and 2007). Consistent with the methods outlined in the JURMP, dry weather sample collection is organized according to a grid system. The City is divided into 39 grid sections (Grid A through Grid MM) each measuring one-quarter mile in length and width. In addition, there are approximately 30 outfalls throughout the City that convey urban runoff from the MS4 to receiving waters. Each grid section is visited at least once per year, and major storm drain outfalls are visited and sampled more frequently. Due to the small size of most drainage areas in the City, it is often the case that outfalls or entire grid

areas are found to be dry during monitoring investigations. Although staff typically schedules its dry weather monitoring activities to coincide with low tides, many outfalls are tidally impacted during both low and high tide conditions. Tidal influence frequently impacts staff's ability to collect urban runoff samples.

Summary of Dry Weather Monitoring Activity	**2006**	**2007**
# Outfalls/Grids Visited	30	11
# Outfall/Grid Visits	45	20
# Field Screening Samples Collected	17	10
# Samples Submitted for Lab Analysis	11	8

Attachment 7-2 presents all field screening and laboratory data for 2006 and 2007. The "Comments" field also summarizes the results of upstream investigations whenever a water quality parameter was observed to exceed its action level. Attachment 7-2 includes a map displaying sample locations.

2007 Dry Weather Field Screening Results

Total Samples = 12 0 Grid Samples 12 Outfall Samples	**Water Temp(C)**	**pH**	**Ammonia (mg/l NH3-N)**	**Turbidity (NTU)**	**Nitrate (mg/l NO2-N)**	**Conductivity (ms/cm)**	**Reactive Phosphorus (mg/l)**
# Exceedances / # Field Samples	N/A	0/11	5/11	N/A	0/11	N/A	4/11
Mean	21.0	0.0	3.3	6.4	0.0	2.5	2.9
Median	20.1	0.0	3.6	2.3	0.0	1.3	2.8
Max	26.6	0.0	5.06	25.2	0.0	8.9	3.9
Min	18.8	0.0	1.46	0.9	0.0	1.0	2.0

During the 2007 dry weather season, field screening exceedances were most commonly observed for ammonia (45% of samples) and reactive phosphorous (36% of samples). Not all constituents were sampled during follow up investigations.

2007 Dry Weather Laboratory Analytical Results

Total Samples = 9 0 Grid Samples 4 Outfall Samples 4 Manhole Samples 1 Other Sample	Oil & Grease (mg/l)	MBAS (mg/l)	Total Hardness (mg/l)	Cadmium (ug/l)	Copper (ug/l)	Lead (ug/l)	Zinc (ug/l)	Diazinon (ug/l)	Chlorpyrifos (ug/l)	TotColiform (mpn/100ml)	FecColiform (mpn/100ml)	Enterococcus (mpn/100ml)
# Exceedances / # Lab Samples	0/5	0/5	N/A	0/5	2/7	0/5	0/5	0/4	0/4	4/7	3/7	1/7
Mean	ND	ND	247	ND	24	ND	45	ND	ND	545185	43555	25400
Median	ND	ND	235	ND	30	ND	49	ND	ND	550150	80065	80250
Max	ND	ND	357	ND	51	ND	72	ND	ND	1100000	160000	160000
Min	ND	ND	169	ND	ND	ND	ND	ND	ND	300	300	500

2006 Dry Weather Field Screening Results

Total Samples = 17 5 Grid Samples 12 Outfall Samples	Water Temp(C)	pH	Ammonia (mg/l NH3-N)	Turbidity (NTU)	Nitrate (mg/l NO2-N)	Conductivity (ms/cm)	Org. Phosphorus (mg/l)
# Exceedances / # Field Samples	N/A	2/17	7/17	N/A	0/17	N/A	7/17
Mean	24.6	7.40	4.1	33	0.6	1.360	3.2
Median	23.8	7.18	3.0	9	0.0	1.280	2.7
Max	37.0	9.04	10.0	136	3.0	72.850	10.0
Min	17.8	6.35	0.0	0	0.0	0.051	0.0

2006 Dry Weather Laboratory Analytical Results

Total Samples = 11 1 Grid Samples 10 Outfall Samples	Oil & Grease (mg/l)	MBAS (mg/l)	Total Hardness (mg/l)	Cadmium (ug/l)	Copper (ug/l)	Lead (ug/l)	Zinc (ug/l)	Diazinon (ug/l)	Chlorpyrifos (ug/l)	TotColiform (mpn/100ml)	FecColiform (mpn/100ml)	Enterococcus (mpn/100ml)
# Exceedances / # Lab Samples	0/11	0/11	N/A	0/11	5/11	0/11	0/11	0/11	0/11	3/11	2/11	2/11
Mean	1.4	0.28	647	ND	34	ND	58	ND	ND	187535	26869	16428
Median	0.5	0.25	272	ND	46	ND	41	ND	ND	50000	ND	500
Max	6.2	0.60	4370	ND	126	ND	219	ND	ND	1600000	160000	160000
Min	ND	ND	153	ND	ND	ND	ND	ND	ND	ND	ND	ND

During the 2006 dry weather season, field screening exceedances were most commonly observed for ammonia (41% of samples) and reactive phosphorous (35% of samples). This is consistent with the 2005 results in which follow-up investigations failed to uncover a definitive source of these pollutants.[1] Laboratory analysis was performed for eleven samples. Dissolved copper was the parameter that most commonly exceeded its dry weather action level (45% of samples). However, it should be noted that four of the five dissolved copper exceedances were observed at a single location – Outfall E-1B, which drains urban runoff into the Tijuana River Estuary. One or more bacterial indicators exceeded dry weather action levels in a total of three samples.

A close look at the dry weather monitoring data reveals a few trends. Significant findings are presented by major outfall or pollutant source below.

- **Outfall E-1B (Grove & 5th Street) – Tijuana River Estuary Watershed**
  This outfall has been sampled on a regular basis since 2003. Sample results indicate consistently elevated levels of dissolved copper and periodic detection of chlorine. City staff conducted an in-depth investigation into this drainage area during FY 2006-07. The outfall drains primarily residential areas, portions of Imperial Beach Boulevard, and runoff from Mar Vista High School. On June 20, 2006, during routine dry weather monitoring activity, staff observed over 1,000 gallons of water emptying from the outfall into the Tijuana River Estuary. Sample results indicated high levels of chlorine and dissolved copper. Upstream investigation confirmed that Mar Vista High School maintenance staff had discharged chlorinated water as part of its weekly back flushing of the high

[1] Results from 2005 show that car washing was directly observed or suspected in three instances. Another case involved a resident draining pool water to the MS4. The City's provisional hypothesis is that persistent exceedances of ammonia and reactive phosphorous action levels may be the result of lawn irrigation (fertilizer wash off), car washing activities, or other sources yet to be determined. Too few laboratory samples were analyzed in 2005 to produce any definitive conclusions.

school's swimming pool filters. Subsequent discussions with staff from the Sweetwater Union High School District revealed that the pool maintenance room was designed with a pipe connecting the back flush system to a storm drain pipe that leads to Outfall E-1B. At the City's request, this connection was closed off in early July 2006. In its place, the District constructed a 600-gallon holding tank that now discharges back flush water directly to the sanitary sewer. The new system cost approximately $6,000 to construct and its operation was inspected and verified by City staff on July 13, 2006. It was hypothesized that this solution would remedy both the chlorine and dissolved copper issues (copper-based algaecides being a frequently used pool chemical). However, subsequent dry weather monitoring conducted on August 22, 2006 indicated no chlorine, but a dissolved copper concentration that continued to exceed its hardness-based dry weather action level. The City plans to continue its investigation of dissolved copper inputs in the E-1B drainage area during the FY 2006-07 reporting period.

- **Outfall S-1 (Southeast corner of Ream Field) – Tijuana River Watershed**
  This outfall has been visited regularly since 2003. It drains several blocks of residential neighborhoods in Imperial Beach, a small portion of the City of San Diego, and the eastern edge of Ream Field, a U.S. Navy helicopter training facility. Elevated levels of ammonia and reactive phosphorous have been frequently detected at this site. The City samples at the end of the outfall where runoff accumulates into a large pond of stagnant water. Upstream investigations have yet to be successful in pinpointing a specific source of the elevated pollutant levels; however, it would seem to be consistent with runoff from lawn irrigation (fertilizers). The City will continue to monitor and provide outreach in this area, but due the small size of the Imperial Beach contribution to this drainage basin, further study is not a high priority at this time.

- **Outfall H-3 (Behind Bayside Elementary School) – Otay River Watershed**
  This outfall has been visited on a regular basis since 2003. It is heavily influenced by tidal water and flushing is poor, both of which make isolating the outfall's urban runoff contribution a difficult task. A common observation over the last four years has been the presence of trash and debris around the outfall. It is unclear whether most trash is coming from tidal inputs after rain events, from upstream urban runoff, or from some other source. Potential upstream trash sources in this drainage area are the 9th and Palm shopping center (south of Palm Avenue), the Imperial Beach Promenade shopping center (north of Palm Avenue), and Palm Avenue itself from about 10th Street to Delaware Street. The Imperial Beach Promenade shopping complex installed six catch basin filters pursuant to redevelopment conditions imposed by the City several years ago. It continues to submit filter maintenance documentation to the City on a regular basis. Otherwise, investigation of this drainage area is ongoing. The City's capital improvement project (CIP) budget for FY 2007-08 has money set aside for installation of a structural treatment BMP. Although more study is needed, the H-3 Outfall is currently under consideration for installation of a treatment BMP that would capture trash from upstream sources.

7.2 Investigation of Illicit Discharges and Illicit Connections

Procedural Overview

The City of Imperial Beach Urban Runoff Management and Discharge Control Ordinance (I.B.M.C. 8.30) prohibits discharges and connections to the MS4 with only limited exception. City staff and members of the public are encouraged to report illicit discharges and other urban runoff violations to environmental staff for investigation. A storm water hotline, (619) 424-4095, continues to facilitate this type of reporting. Outside of business hours, the hotline's recorded message refers callers to the County Sheriff's 24-hour dispatch office. The following JURMP sections include an illicit discharge detection and elimination component:

- Municipal Component – The City relies heavily upon field staff to identify and mitigate illicit discharges and connections to the MS4. Especially given the small size of the City, there is ample opportunity for field staff to observe violations and report them to environmental inspectors. Field staff also plays an integral role in responding to spills and cleaning up discharged material.

- Existing Development Components – Routine inspection of residential and commercial areas may reveal illicit discharges resulting from operations and activities being conducted in these areas.

- Construction Component – Routine inspection of construction sites may reveal illicit discharges resulting from construction work being conducted throughout the City.

- Public Education – The City has developed a series of brochures addressing activities that may contribute pollutants to the storm drain system. All brochures publicize the City's storm water hotline to encourage the general public to report illegal discharges and spills.

The six-step procedure outlined in the JURMP is closely followed during all illicit discharge responses. The procedures, as well as a laminated map of the conveyance system, are on-hand in all City work vehicles. The City also boasts dedicated vehicles that are equipped with power washers and vacuum pressure units capable of recovering most spills. Notices of Violation or Abatement are often issued, both of which require the discharger to immediately cease the discharge and clean up discharged material if possible. If the responsible party is unable to clean up the material to the City's satisfaction in a timely manner, City staff will perform the clean up and then recover the cost of the clean up from the property owner.

ID/IC Investigations During FY 2006-07

The City performed 234 urban runoff investigations during FY 2006-07. Staff confirmed the presence of an illicit discharge or connection in 199 instances. A responsible party was identified in 156 cases. The following tables and charts summarize the types of violations observed and other informative statistics.

Referral Sources for Urban Runoff Investigations FY 2006-07

Non-Environmental City Staff	56
Environmental Staff	150
General Public	25
Business	3
Total	**234**

Violator and Pollutant Types for Urban Runoff Investigations FY 2006-07

Violator Type	Auto Fluids	Chemicals	Construction Debris	Cooking Oil & Grease	Detergents	Green Waste	Multiple	Over Irrigation	Paint	Pool Water	Potable Water	Sediment	Sewer Spill	Trash & Debris	Unknown	Other	Pet Waste	Wash Water
Construction			16				1					12		2				2
Commercial Business	1	1		2	1								2	7				5
Mobile Business	3		10			1			2	1		4						2
Unknown/Illicit	8					2			4			1		21	1		1	
Resident	9	2	13		3	3			2	1	2	2		3		1	3	6
Property Management	2		1			2		2	2		1			19				
Other	1		2			1						1	1			1		
Totals	**24**	**3**	**42**	**2**	**4**	**9**	**1**	**2**	**10**	**2**	**3**	**20**	**3**	**52**	**1**	**2**	**4**	**15**

Illicit Discharge Violator Classification
FY 2006-07
UNKNOWN/
ILLICIT
19%
OTHER
2%
RESIDENTS
25%
CONSTRUCTION
17%
COMMERCIAL
BUSINESS
10%
PROPERTY
MANAGEMENT
15%
MOBILE BUSINESS
12%

Pollutant Type Distribution by Violator Classification
FY 2006-07
Other
Resident
Unknown/Illicit
Mobile Business
Commercial Business
Construction
45
40
35
30
25
20
15
10

All urban runoff investigations were pursued until a satisfactory outcome could be attained. Usually, this involved remediation of spilled materials, elimination of illicit connections to the MS4, and/or installment of BMPs to prevent future discharges. Unless the illicit discharge is of immediate danger to public health or the environment, violators are typically given the first opportunity to clean up spilled materials. If unable or unwilling to do so, or if a violator cannot be identified, City staff is enlisted to perform the cleanup at the property owner's expense. During FY 2006-07, City staff participated in 22 illicit discharge cleanups. Cost recovery was pursued in three of these cases, recouping approximately $700 in costs.

Attachment 7-3 presents a detailed description of each ID/IC investigation, including remedial steps and enforcement actions if any were taken. The City relies on a host of tools to ensure compliance. The following is a summary of enforcement actions taken during FY 2006-07.

Enforcement Actions Resulting from ID/IC Investigations
FY 2006-07

Verbal Warning	79
Informational Letter	58
Notice of Abatement / Violation	56
Fine / Citation	1
Total	**194**

7.3 Prevention of and Response to Sewage Spills

The City responded to eight sewage spills during FY 2006-07. Approximately 194 gallons of the 1,134 gallons spilled were successfully recovered. Attachment 7.4 presents further details on each sewage spill and the City's response. Section 2 of this report describes the City's efforts to reduce sewage spills in greater detail.

7.4 Disposal of Used Oil and Toxic Materials

City-sponsored disposal and recycling programs resulted in the proper disposal and recycling of 2,440 gallons of used oil, 1,000 used oil filters, and 9.36 tons of household hazardous waste. Both programs are described in more detail in Section 4.3 of this report.

7.5 Revisions to the JURMP

The JURMP for the City of Imperial Beach is currently undergoing revision to align with the new Municipal Storm Water Permit, Order No. R9-2007-0001.

7.6 Looking Forward

The following is a list of activities that the City anticipates implementing as part of its Illicit Discharge Detection and Elimination Component during FY 2006-07.

Existing Activities

- Continue to conduct annual dry weather monitoring
- Continue to investigate ID/ICs, including appropriate mitigation of materials and enforcement action against violators where appropriate
- Continue to investigate and mitigate sewage spills throughout the City
- Continue to support the highly successful used oil recycling and household hazardous waste collection programs for residents

New Activities Underway

- Continue investigation of elevated dissolved copper levels at Outfall E-1B.
- Continue investigation of the persistent presence of trash at Outfalls E-1, F-1, and H-3.
- City staff is working with property management companies to reduce pollutants from their properties. This includes the installation and maintenance of structural treatment control BMPs and/or treatment control BMPs in the form of landscaping or retention basins to detain and/or treat water runoff before it enters the storm water conveyance system. Thus far, two companies have installed and are maintaining structural treatment control BMPs, and the City will monitor and report on materials collected in future reports.

8.0 EDUCATION & PUBLIC PARTICIPATION COMPONENTS

City efforts to educate target audiences about urban runoff, BMPs, and other aspects of water quality are described in Section 2, 3, 4, 5, and 6 along with a variety of public participation events held during FY 2006-07. In addition, the City conducted a public hearing on January 16, 2008 prior to approval of this JURMP Annual Report. The public hearing was noticed in the January 3, 2008 edition of the Imperial Beach *Eagle & Times* Newspaper. Public hearing notices were posted at City Hall and the Imperial Beach Public Library. Finally, a draft final report was made available for public viewing at Imperial Beach City Hall from January 2 through January 16, 2008.

Attachment 8-1 and Section 9 of this report describe effectiveness assessment measures related to the Education and Public Participation program components.

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9.0 EFFECTIVENESS ASSESSMENT

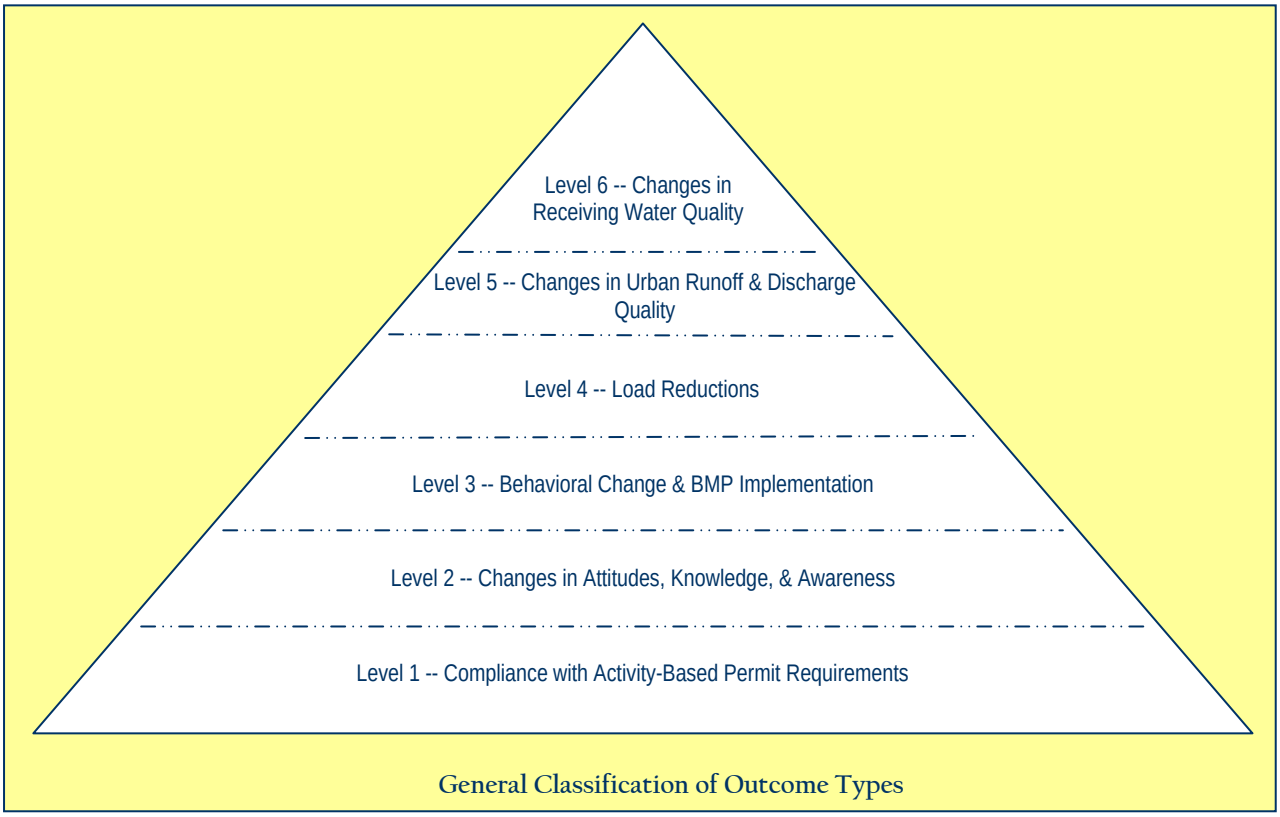
Order 2001-01 requires the City to evaluate the effectiveness of its urban runoff management activities over the short- and long-term. When JURMPs were initially developed in 2002, the San Diego Municipal Storm Water Copermittees agreed to report on a series of programmatic measures that would be tracked over time to demonstrate progress (see Attachments 2-1, 3-1, 4-1, 5-1, 6-1, 7-1, and 8-1). It quickly became apparent that simple measures of program activity, though useful in describing level of effort, were not helpful in describing the effect of program implementation on water quality change. Recognizing this, Copermittees set out to develop a framework that would provide guidance for refining and improving effectiveness assessment strategies. In October 2003, the Copermittees submitted to the RWQCB a *Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*. The purpose of this document was threefold. It defined the role of effectiveness assessment in the context of both program planning and implementation. It laid out key management questions that would assist Copermittees in asking and answering the right assessment questions. And perhaps most importantly, it described a hierarchy of program outcomes that attempts to link program implementation activities with other measures of effectiveness such as changes in awareness, behavior, pollutant loadings, and receiving water quality. The hierarchy of outcomes is shown graphically in the figure on the next page.

This section presents both qualitative and quantitative assessment measures for each JURMP component to provide an overall picture of program effectiveness. It is organized according to the hierarchy of outcomes described above. In general, Outcome Levels 1, 2, and 3 can be addressed on a jurisdictional basis. Some Level 4 measurements of load reductions can be addressed at this scale, but for the most part, assessment of changes to water quality (Levels 4, 5, and 6) are best addressed at the watershed or regional scale. It should be noted that methodologies to link lower level outcomes with higher level, water quality-based outcomes are still in their infancy. The Copermittees' first attempt at a long-term effectiveness assessment, which involved close analysis of water quality trends at the watershed and sub-watershed scale, was submitted to the RWQCB in August 2005 as part of the Report of Waste Discharge.

9.1 Municipal Component Effectiveness

Review of the City's Municipal Component reveals many strengths and very few weaknesses. A major strength is that field staff receives at least annual training on urban runoff management as it relates to their job duties. This is paying dividends in that 88% (206) of all illicit discharges investigated during FY 2006-07 were uncovered by City employees, up from 61% during the previous reporting period. All municipal facilities and activities are inspected at least annually, and many are inspected on a daily basis. The City has been extremely proactive in identifying opportunities for upgrading its infrastructure with pollution reduction in mind. Among the many treatment BMPs currently in place are: 1) a Vortechs storm water interceptor at 10th Street and Imperial Beach Boulevard; 2) a low-flow urban runoff diverter at Date Avenue and

Seacoast Drive; 3) storm drain inlet filters at twelve locations around the City; and 4) porous pavement incorporated or planned for incorporation into various CIP projects. Additional treatment BMPs are planned for implementation in the future. For example, a second low-flow diversion system is planned for Palm Avenue and Seacoast Drive. The City also conducts daily cleanups of the beach and tidelands area, which helps protect the Pacific Ocean and the Tijuana Estuary from excessive trash and debris. Finally, an intensive preventive maintenance program is in place for the sewer system, which involves daily inspections of pump stations and associated infrastructure, and the development of a Sewer System Management Plan is underway.



General Classification of Outcome Types

9.1.1 Level 1 Outcomes – Compliance with Activity-based Permit Requirements

The table below demonstrates compliance with all Order 2001-01 Municipal Component requirements:

Permit Section	Requirement	Compliance Measure
F.3.a.1	Municipal staff shall implement P2 methods where appropriate	17 municipal P2 methods were identified in JURMP Table 2-1
F.3.a.2	Annually update watershed-based inventory of municipal land use areas and activities	Municipal inventory updated and included as Attachment 2-2

Permit Section	Requirement	Compliance Measure
F.3.a.3	Prioritize municipal inventory according to threat-to-water quality	18 high priority municipal facilities and 15 medium/low priority facilities are identified in Attachment 2-2
F.3.a.4	Require and implement minimum BMPs for high, medium, and low priority municipal facilities	BMP requirements are specified in JURMP Tables 2-4 through 2-8. Minimum BMPs were implemented at all municipal facilities.
F.3.a.5	Inspection and removal of accumulated waste from MS4 between May 1 and Sept. 30; additional cleaning as necessary between Oct 1 and April 30; record keeping of cleaning and quantity of waste removed; proper disposal of waste; measures to eliminate waste discharge during MS4 maintenance and cleaning	MS4 cleaning completed between: June 2007 – Oct 2007 Quantity removed described in Section 2.4.2
F.3.a.6	Implement BMPs during pesticide, herbicide, and fertilizer application	No pesticides/herbicides used. BMPs used during all fertilizer applications.
F.3.a.7	Inspect all high priority municipal facilities at least annually	18 high priority sites inspected 15 medium and low priority sites inspected
F.3.a.8	Conduct enforcement for municipal violations	No enforcement required during this reporting period

9.1.2 Level 2 Outcomes – Changes in Knowledge and Awareness

No direct measurement of changes in municipal employee awareness was conducted during this reporting period. However, there are some indirect measures suggesting that field staff is knowledgeable about the principles and practices of urban runoff management. For example, 206 of the 234 illicit discharges and connections investigated during this reporting period (88%) were identified and reported by municipal staff. This compares to 69 of 113 reported by municipal staff during FY 2005-06 (61%). All field staff also received training on their in-the-field urban runoff management responsibilities. Direct measurement of employee awareness through the deployment of surveys is not a high priority for the City because of the time and cost that would be involved, and because sufficient oversight measures are in place to monitor BMP implementation on a daily basis.

9.1.3 Level 3 Outcomes – Changes in Behavior (BMP Implementation)

There are few simple methods for measuring changes in the level and quality of BMP implementation at municipal facilities. All employees are trained in appropriate urban runoff management practices related to their job duties. No violations were uncovered during routine inspection of municipal operations during this reporting period. Due to the small size of the City, oversight of employee activities is usually conducted on a daily basis. Infractions and non-compliance are therefore readily identified and remedied.

9.1.4 Level 4 Outcomes – Load Reductions

A number of municipal programs lend themselves to measurement of pollutant loads reduced during the course of routine activities. The table below presents a summary of load reduction estimates for the FY 2006-07 reporting period.

Activity	Total Load Reduction	Load Reduction for Sediment	Load Reduction for Trash	Load Reduction for Debris/Organics
MS4 Cleaning	16,500 lbs.	12,045 lbs.	2,310 lbs.	2,145 lbs.
Street Sweeping	296,000 lbs.	236,800 lbs.	29,600 lbs.	29,600 lbs.
Storm Drain Inlet Filters (12)	276 lbs.	127 lbs.	24 lbs.	125 lbs.
Sewage Spill Response	194 gallons	N/A	N/A	N/A

9.2 Commercial & Industrial Component Effectiveness

Significant improvements continue to be made to the Commercial and Industrial Components during FY 2006-07. A total of 42 inspections were conducted at 28 high priority businesses. Although some deficiencies continued to be identified, corrective measures were generally implemented in a thorough and timely manner. The City continues to explore innovative approaches for overseeing compliance at commercial businesses. The City began mailing business inspection results and related information on BMPs following each inspection in January 2006. This serves to memorialize the inspection in writing and serve as a guide for businesses in maintaining compliance over time. Staff also performed an additional 19 investigations of commercial businesses and 23 investigations of mobile businesses as a result of complaint referrals or staff observations in the field.

9.2.1 Level 1 Outcomes – Compliance with Activity-based Permit Requirements

The table below demonstrates compliance with all Order 2001-01 Commercial and Industrial Component requirements:

Permit Section	Requirement	Compliance Measure
F.3.b.1 F.3.c.1	Require implementation of P2 methods by industry and commercial businesses as appropriate	The City emphasizes P2 methods in all outreach to business, including during inspections.
F.3.b.2 F.3.c.2	Annually update inventory of all industrial sites and all high priority businesses	Updated industrial and commercial inventories included as Attachment 3-2.
F.3.b.3	Prioritize inventory of industrial sites	Industrial inventory in Attachment 3-2 is prioritized by threat to water quality
F.3.b.4 F.3.c.3	Require and implement minimum BMPs at industrial and high priority commercial businesses	BMP requirements are specified in the JURMP and Ordinance Sections 8.30.090 and 8.30.100. Minimum BMPs were evaluated during all 33 inspections conducted.
F.3.b.5	Require all high priority industrial facilities to conduct a runoff monitoring program	Monitoring at high priority industrial facilities is required by Ordinance Section 8.30.100. No high priority industrial sites were identified during FY 2006-07.
F.3.b.6	Inspect all high priority industrial sites annually and low/medium priority industrial sites as needed	No high priority industrial sites were identified during FY 2006-07
F.3.c.4	Inspect high priority commercial businesses as needed	42 inspections performed at 28 high priority businesses
F.3.b.7	Enforce storm water ordinance at all commercial and industrial sites	13 Notices of Violation and 3 Notices of Abatement were issued to businesses during FY 2006-07. All identified illicit discharges and connections were required to be stopped and cleaned up.

Permit Section	Requirement	Compliance Measure
F.3.b.8	Report non-compliant industrial sites determined to pose a threat to human or environmental health to the SDRWQCB within 24 hours of discovery of non-compliance	0 Notifications to SDRWQCB regarding non-compliant industrial sites

9.2.2 Level 2 Outcomes – Changes in Knowledge and Awareness

No direct measurement of changes in the awareness of commercial and industrial businesses was conducted during this reporting period. However, since 28 of those businesses were subject to inspection during this reporting period, it can be assumed that the level of awareness among the business community is greater than in previous years. Additionally, the City made contact with 23 mobile businesses regarding appropriate BMPs and discharge prohibitions. The mobile business sector continues to be an increased emphasis. Direct measurement of knowledge and awareness through the deployment of surveys is not a high priority for the City because of the time and cost that would be involved, and because sufficient oversight measures are in place to monitor BMP implementation.

9.2.3 Level 3 Outcomes – Changes in Behavior (BMP Implementation)

BMP implementation is assessed during routine inspections at commercial and industrial businesses. Over the course of 42 inspections at high priority commercial businesses, City staff observed 18 BMP deficiencies as summarized below. This year's totals are compared to the number of deficiencies observed during 51 inspections at 39 businesses during the previous reporting period (number in parenthesis).

- Illicit Discharge: 1 (1)
- Housekeeping/Waste Management: 14 (25)
- Material Storage/Cover: 0 (3)
- Spill Prevention: 1 (3)
- Grease Management: 1 (0)
- Other: 1 (0)

Another potentially useful measurement of the change in commercial/industrial behavior is the number of illicit discharges identified during a given year. There were a total of 42 illicit discharges identified at commercial or mobile businesses during FY 2006-07 as a result of complaint referrals or field observations. This compares to 28 in FY 2005-06, 10 in FY 2004-05, 13 in FY 2003-04, and 12 in FY 2002-03. As the City's oversight of commercial businesses increases, one would expect the number of identified violations to increase. This continues to be the case during this reporting period.

9.2.4 Level 4 Outcomes – Load Reductions

There were no direct measurements of load reductions as a result of BMPs implemented at commercial and industrial facilities during this reporting period. Several storm drain inserts have been installed as conditions on redevelopment imposed by the City; however, the City does not track the quantity of material removed during routine maintenance.

9.3 Residential Component

The City has a very effective program in outreaching to residents about the steps necessary to manage urban runoff from their properties. First, a series of educational brochures is regularly distributed to residents who are observed to be discharging water or pollutants from their property. A comprehensive hazardous waste and used oil disposal program is also made available at no or very low cost to residents. Finally, the City takes advantage of opportunities such as publication of the City Newsletter to remind residents about their obligations to manage runoff and implement BMPs.

The City continues its residential inspection program, which began in May 2005. It is anticipated that increased oversight of residential areas will not only improve the visibility of the City's urban runoff management program, but also lead to the abatement of a greater number of illegal discharges.

9.3.1 Level 1 Outcomes – Compliance with Activity-based Permit Requirements

The table below demonstrates compliance with all Order 2001-01 Residential Component requirements:

Permit Section	Requirement	Compliance Measure
F.3.d.1	Encourage residents to implement P2 methods	Examples of P2 methods included in residential outreach material are discussed in Section 4.3
F.3.d.2	Identify high priority residential areas and activities	All residential areas are considered high priority
F.3.d.3	Require residents to implement BMPs during all high priority residential activities	Residential BMPs are specified in the JURMP and Ordinance Section 8.30.080.
F.3.d.4	Enforce storm water ordinance for all residential areas and activities	16 Notices of Abatement or Violation were issued to residents during FY 2006-07. No citations were issued. All identified illicit discharges were required to be stopped immediately and cleaned up to the City's satisfaction.

9.3.2 Level 2 Outcomes – Changes in Knowledge and Awareness

No direct measurement of changes in the awareness of residents was conducted during this reporting period. Direct measurement of knowledge and awareness through the deployment of surveys is not a high priority for the City because of the time and cost that would be involved, and because sufficient oversight measures are in place to monitor BMP implementation. One indirect measure of knowledge change is the number of complaints received from the general public. This year, the City received 25 complaint referrals from City residents, which resulted in 14 notices of violation and 2 notices of abatement.

9.3.3 Level 3 Outcomes – Changes in Behavior (BMP Implementation)

BMP implementation is observed by field staff on a daily basis and in response to complaints of illicit discharges in residential areas. One potentially useful measurement of changes in residential behavior is the number of violations identified during a given

year. There were 50 illicit discharges identified in residential areas during FY 2006-07. This compares to 42 in FY 2005-06, 20 in FY 2004-05, 18 in FY 2003-04 and 13 in FY 2002-03. Violations covered a wide range of activities, but auto fluids (9), wash water (6), and construction debris (13) were the most commonly observed. There are many factors that can influence the total number of violations. For example, as the City's oversight of residential areas increases, one would expect the number of identified violations to increase. This appears to have been the case during this reporting period.

9.3.4 Level 4 Outcomes – Load Reductions

Residents recycled or disposed approximately 9.36 tons of household hazardous material and 2,440 gallons of used oil through City-sponsored programs during FY 2006-07.

9.4 Land Development Component Effectiveness

The City has been progressive in requiring all significant development and redevelopment projects to incorporate urban runoff management principles into their design, despite the fact that most projects in the City do not meet the SUSMP threshold. As explained in Section 5.0, all projects with a total valuation of greater than $50,000, and some others under that total, are required to implement a combination of site design and/or treatment BMPs to reduce runoff volumes and/or treat runoff from the site.

9.4.1 Level 1 Outcomes – Compliance with Activity-based Permit Requirements

The table below demonstrates compliance with all Order 2001-01 Land Use Planning Component requirements:

Permit Section	Requirement	Compliance Measure
F.1.a	Assess General Plan for inclusion of water quality and watershed protection principles	Amendments to the General Plan for inclusion of water quality/watershed protection principles was approved by City Council in 2002 and is awaiting approval by the Coastal Commission
F.1.b	Modify development project approval process to ensure that pollutant discharges and runoff flows are reduced to the maximum extent practicable and that receiving water quality objectives are not violated throughout the life of the project. Require SUSMPs on all "priority development projects".	Development project approval process has been modified and requires all projects to meet this standard. 51 Discretionary Projects required to implement site design and/or structural treatment BMPs 3 priority development project applications filed during FY 2006-07, all 3 with SWMPs approved. SWMPs for two additional SUSMP projects initiated in FY 2004-05 were also approved during this reporting period.
F.1.c	Revise environmental review process to include requirements for evaluation of water quality effects and identification of appropriate mitigation measures	Environmental review process was reviewed and updated for submittal of JURMP
F.1.d	Educate municipal planning staff and project applicants on regulations, requirements, etc.	All education conducted during project intake

9.4.2 Level 2 Outcomes – Changes in Knowledge and Awareness

No direct measurement of changes in the awareness of project applicants was conducted during this reporting period. Direct measurement of knowledge and awareness through the deployment of surveys is not a high priority for the City because of the time and cost that would be involved, and because it is the City's responsibility to dictate project conditions (including runoff management) during the permit issuance process.

9.4.3 Level 3 Outcomes – Changes in Behavior (BMP Implementation)

No direct measurement of changes in the behavior of project applicants was conducted during this reporting period. Direct measurement of behavioral through the deployment of surveys is not a high priority for the City because of the time and cost that would be involved, and because it is the City's responsibility to dictate project conditions (including runoff management) during the permit issuance process.

9.4.4 Level 4 Outcomes – Load Reductions

There were no direct measurements of load reductions resulting from site design and structural treatment BMPs implemented for development and redevelopment projects during this reporting period. It can be assumed, however, that the 51 projects required to maximize infiltration of runoff on-site and the 3 SUSMP projects required to install structural treatment BMPs will contribute to a reduction in flows and pollutant loadings.

9.5 Construction Component

The City conducted storm water inspections on 121 building permits during this reporting period. The City still needs to improve its tracking of construction inspection results. This is an area where the City hopes to improve under the new Municipal Storm Water Permit. Daily oversight on capital improvement projects ensures that contractors are meeting City objectives with regard to runoff management.

9.5.1 Level 1 Outcomes – Compliance with Activity-based Permit Requirements

The table below demonstrates compliance with all Order 2001-01 Construction Component requirements:

Permit Section	Requirement	Compliance Measure
F.2.a	Require construction site owners, developers, contractors to implement P2 practices where appropriate	P2 emphasized in all education to these audiences
F.2.b	Update Grading Ordinance to require runoff BMPs	Grading Ordinance updated with submittal of JURMP
F.2.c	Require construction permits to require runoff BMPs	Construction permitting process modified to incorporate runoff management BMPs
F.2.d	Annually update inventory of construction sites	Updated inventory presented in Attachment 6-2
F.2.e	Prioritize construction inventory based on threat to water quality	Vast majority of construction sites in the City are small and, therefore, low priorities.

Permit Section	Requirement	Compliance Measure
F.2.f	Require construction-phase BMPs at all construction sites year-round	Construction-phase BMPs are specified in the JURMP and Ordinance Section 8.30.140
F.2.g	Inspect high priority construction sites annually during the wet season and as needed in the dry season Inspect low/medium priority construction sites twice during the wet season and as needed in the dry season	At least 242 inspections were conducted at 121 sites during this reporting period. No building permits were ranked high priority. CIPs were all high priority and were inspected daily during FY 2006-07.
F.2.h	Enforce storm water ordinances at all construction sites	9 Notices of Violation were issued to construction sites during FY 2006-07. All identified construction site violations were required to be stopped and cleaned up.
F.2.i	Report non-compliant construction sites determined to pose a threat to human or environmental health to the SDRWQCB within 24 hours of discovery of non-compliance	0 non-compliant construction sites reported to SDRWQCB
F.2.j	Educate permit review staff and project applicants, contractors, etc. on applicable BMPs and storm water requirements	Education is conducted during project intake and during construction site inspections.

9.5.2 Level 2 Outcomes – Changes in Knowledge and Awareness

No direct measurement of changes in the awareness of residents was conducted during this reporting period. Direct measurement of knowledge and awareness through the deployment of surveys is not a high priority for the City because of the time and cost that would be involved, and because sufficient oversight measures are in place to monitor BMP implementation.

9.5.3 Level 3 Outcomes – Changes in Behavior (BMP Implementation)

BMP implementation is observed during routine construction inspections and in response to complaints of illicit discharges at construction sites. It has been observed that contractors are generally aware of storm water requirements, but there seems to be some resistance on the part of some contractors to fully implement BMPs. In response, the City has escalated its use of enforcement tools to ensure compliance. All 33 illicit discharges identified from construction projects during FY 2006-07 were required to immediately stop the discharge and mitigate the discharged material. This number is a significant increase compared to the 12 illicit discharges observed during the previous reporting period, which had been a significant reduction from the 20 illicit discharges reported during FY 2004-05. There are many confounding factors that can influence the total number of violations. For example, as the City's oversight of construction sites increases, one would expect the number of identified violations to increase. This appears to have been the case during FY 2006-07.

9.5.4 Level 4 Outcomes – Load Reductions

There were no direct measurements of load reductions as a result of construction site BMPs.

9.6 IC/ID Component

The City's Illicit Discharge Detection and Elimination Component consists of a variety of programs intended to identify and mitigate illegal discharges and connections to the MS4. The program was effective in identifying 199 violations as a result of inspection, observation by field staff, and complaints from residents during this reporting period. This is more than double last year's total of 98. Dry weather monitoring results instigated several follow-up investigations that led to the detection and elimination of several illicit discharges. The City will continue to advertise its storm water hotline to City residents and businesses.

9.6.1 Level 1 Outcomes – Compliance with Activity-based Permit Requirements

The table below demonstrates compliance with all Order 2001-01 Illicit Discharge Detection and Elimination Component requirements:

Permit Section	Requirement	Compliance Measure
F.5.a	Implement a program to seek and eliminate illicit discharges and connections to the MS4	199 illicit discharges and connections were identified following the investigation of 234 complaints, staff referrals, and field observations
F.5.b	Conduct dry weather monitoring to detect illicit discharges and connections to the MS4	See Section 7.1
F.5.c	Investigate and follow-up on dry weather monitoring results that indicate a reasonable potential for illicit discharges, connections, or other sources of non-storm water	See Section 7.1
F.5.d	Eliminate all detected illicit discharges, sources, and connections immediately	All detected illicit discharges and connections were required to be stopped immediately. Cleanup was either conducted by the responsible party or the City itself
F.5.e	Enforce storm water ordinance to prevent illicit discharges and connections	56 Notices of Abatement or Violation 1 Administrative Citation 79 Verbal Warnings 58 Informational Letters 194 required cleanups (includes all cases above)
F.5.f	Prevent and respond to sewage spills to prevent entry of spills into MS4	8 sewage spill responses 194 of 1,134 gallons spilled were recovered
F.5.g	Operate a public hotline for storm water complaints	Storm Water Hotline is (619) 424-4095 25 complaint referrals from general public
F.5.h	Facilitate disposal of used oil and toxic materials	City is a member of the South Bay HHW and Used Oil Recycling partnership, which provides a number of collection facilities and curbside pickup services for these materials
F.5.i	Limit infiltration from sanitary sewer to MS4. Conduct preventive maintenance of both	City conducts daily inspections and maintenance on sewage infrastructure and a minimum of annual inspection and maintenance of MS4 infrastructure. All sewer pump stations are now alarmed.

9.6.2 Level 2 Outcomes – Changes in Knowledge and Awareness

This outcome level is not applicable to the Illicit Discharge Detection and Elimination Component.

9.6.3 Level 3 Outcomes – Changes in Behavior (BMP Implementation)

This outcome level is not applicable to the Illicit Discharge Detection and Elimination Component.

9.6.4 Level 4 Outcomes – Load Reductions

There were no direct measurements of load reductions as a result of efforts to detect and eliminate illicit discharges and connections to the MS4.

9.7 Education & Public Participation Components

Assessment of the effectiveness of education and public participation activities is incorporated into the discussion above as it relates to municipal, business, residential, development, and construction target audiences.

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10.0 FISCAL ANALYSIS

Order 2001-01 requires the City to secure the financial resources necessary to implement its JURMP in compliance with all Permit requirements. It further requires the City to report on its projected program budget for the upcoming year. Below is a discussion of the City's budget for FY 2007-08. The total budget for this period is projected to be $1,189,524. A detailed breakdown, including funding sources, is provided in Table 10-1.

Recognizing the significant challenge of maintaining compliance while continuing to rely heavily on its General Fund, the City Council authorized staff to hire an outside consulting firm in November 2004 to seek a more secure funding source for its storm water program. It was estimated at the time that the City's General Fund subsidized slightly more than half of all storm water program costs. Staff determined that a storm water fee would be most appropriately correlated to solid waste collection rates, and initiated a study on that premise. The logic behind assigning a storm water fee to trash collection is that solid waste material collected from users of developed property correlates proportionately to pollutants that are not captured and that enter the MS4 as a result. Moreover, nearly all pollutants of concern are classified as solid waste by definition within existing state and local ordinances. The cost to eliminate, remove, transport, and dispose of such wastes is, therefore, a legitimate solid waste program expenditure recoverable through the collection of fees assessed to solid waste service users throughout the City.

The consulting firm was tasked with developing a rate model that would seek to recover $500,000 in program costs. This represents an approximation of the portion of the existing program that was being subsidized by the General Fund. Analysis of the rate model revealed the need to increase solid waste rates by 28.6% for both residential and commercial customers. Following a public hearing, the City Council approved the fee in October 2005 as recommended. Fee collection began January 1, 2006 and will help offset costs that were previously taken out of the General Fund. The budget estimates presented in the table below will be partially reimbursed through the storm water fee for FY 2006-07. EDCO Disposal, the City's franchise waste hauler, has agreed to collect the fee and reimburse the City at no charge, saving both the City and taxpayers money.

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Storm Water Program Budget for FY 2007-08

Line Item	Budget	% Total	Dedicated Funding Source	Notes on Budget Calculation
Enviro. Division Staff - Program Administration - Planning & Assessment - Training of Municipal Staff - Bus / Res Inspection - IC/ID Investigation - Dry Weather Monitoring - Public Education - Regulatory Reporting - Meeting Attendance	$93,710	10.5%	None	80% Environmental Program Mgr.[1] 60% Environmental Specialist
Sewer Maint. Division - Storm Drain Cleaning - Illicit Discharge Cleanup - Vehicle/Equipment Maint. - Waste Disposal Costs - Training	$359,100	29.2%	Sewer Enterprise Fund	20% Sewer Budget Less Metro Fees
Street Maint. Division - BMPs for Street Maint. - Materials/Supplies/Equip. - Training	$141,780	12.4%	Gas Tax / Prop A	15% Street Budget
Tidelands Division - BMPs for Trash Pickup - Public Education - Pressure Washing - Grafitti Removal BMPs - Haz Waste Disposal - Training	$81,768	6.7%	Port of San Diego	10% Tidelands Budget
Grounds/Facilities Div. - BMPs for Maintenance - IPM Compliance - Illicit Discharge Cleanup - Training	$36,200	3.0%	None	10% Grounds Budget
Graffiti Removal - Graffiti Removal BMPs - Illicit Discharge Cleanup	$17,800	1.4%	Community Development Block Grant (Partial)	10% Graffiti Budget

[1] Environmental Program Manager position had not been filled prior to the approval of this budget and is not calculated here.

Storm Water Program Budget for FY 2007-08

Line Item	Budget	% Total	Dedicated Funding Source	Notes on Budget Calculation
- Waste Disposal - Equipment Wear & Tear - Training				
Recreation Services - Sports Park Maint. BMPs - Public Education - Training	$1,900	0.2%	None	1% Recreation Budget
Fleet Maint. Division - BMPs for Vehicle Service - Maint Of Env Div Vehicle - Haz Waste Mgmt. - Training	$18,267	0.9%	None	2% Fleet Budget
Public Works Admin - Project Mgmt. BMPs - Complaints / Inquiries - Project Review - Site Plan Review - Encroachment Permits - Community Relations - Training - Etc.	$68,700	6.2%	None	15% PW Admin Budget - Public Works Director - PW Superintendent - Project Manager - Office Assistant - Admin Secretary II - Customer Service Spec.
Fire Department - Emergency Response - Administrative Costs - Haz Mat Management - Training	$83,500	6.8%	None	4.61% Fire Budget
Sheriffs Department - Haz Mat Mgmt/Disposal	$3,500	0.3%	Port of San Diego (Partial)	0.07% Sheriff Budget
Lifeguard Services - Haz Waste Disposal - Beach Posting	$14,500	1.2%	Port of San Diego	1.4% Lifeguard Budget
Community Dev Dept. - Project Intake & Review - Permit Processing - Construction Inspection - IC/ID Enforcement - Planning & Zoning	$86,500	7.0%	Permit Fees	15% Building Inspector 15% Code Enforce Officer 10% City Planner 7% Assistant City Planner 7% Development Director

Storm Water Program Budget for FY 2007-08

Line Item	Budget	% Total	Dedicated Funding Source	Notes on Budget Calculation
- Training				
Admin Department - Invoicing - Bill Collection - Contract Review - Bid Specification	$27,500	2.4%	None	5% Admin Budget
Personnel Department - Employee BMP Indoc - Related Discipline - Record Keeping - Training	$1,100	0.1%	None	0.5% Personnel Budget
City Attorney's Office - Legal Opinions - Document Reviews - Hearings	$11,300	0.9%	None	2.5% City Attorney Budget
City Manager's Office - Public Meetings/Hearings - Staff Reports to Council - Citizen Complaints - Training	$6,400	0.5%	None	2.5% City Manager Budget
City Clerk's Office - Docketing Agenda Items - Staff Reports to Council - Noticing Public Hearings - City Newsletters	$4,200	0.3%	None	1.66% City Clerk Budget
Mayor / City Council - Public Meetings/Hearings - Staff Reports - Citizen Complaints - Training	$2,100	0.2%	None	2.5% Council Budget
Professional Services - GIS/ Database Services - Evaluate Struct. BMPs	$15,000	0.5%	None	Includes Engineering Services Consultant

Storm Water Program Budget for FY 2007-08

Line Item	Budget	% Total	Dedicated Funding Source	Notes on Budget Calculation
Technical Services - Lab Analysis - Inlet Filter Maintenance - Monitoring of BMPs	$47,000	3.6%	None	
Fees & Licenses - NPDES Permit Fee	$7,500	0.7%	None	
Regional Shared Costs - Wet Weather Monitoring - Regional Outreach - Regional Assessment - Regional CASQA Fees	$28,000	2.0%	None	
Operating Supplies - Public Ed Supplies - Monitoring Field Test Kit - Replacement Chemicals - Safety Gear - Spill Cleanup Supplies	$12,800	1.3%	None	
Citywide Admin Costs ("Overhead")	$19,399	1.6%	None	
Total Budget	**$1,189,524**			

11.0 SPECIAL INVESTIGATIONS

The lone special investigation undertaken during this JURMP was a water quality monitoring study of the Date Avenue Low Flow Urban Runoff Diversion System. This monitoring project lasted from October 2004 through October 2005. Detailed results from that study were presented in the FY 2004-05 JURMP Annual Report. They are not repeated here.

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12.0 CONCLUSIONS & RECOMMENDATIONS

The City made outstanding progress in furthering its urban runoff management program during FY 2006-07. The activities and programs described above not only demonstrate compliance with regulatory mandates; they underscore the City's commitment to ensuring clean water and a healthy environment. In many cases the City has exceeded Permit requirements in crafting innovative and pro-active approaches to managing runoff.

Looking forward to FY 2007-08 and beyond, the City is committed to continuing with many of the programs and initiatives described in this report. Refining and redirecting existing efforts is also a high priority. The following is a compilation of the new activities the City is considering for implementation in future reporting periods.

Municipal Component

- Install the second of two dry weather low-flow diversion systems at the Palm Avenue outfall.

- Research and identify a location for a structural treatment control upstream of the H-3 outfall (behind Bayside Elementary in the Otay River Watershed). This control is needed to address trash and debris originating from commercial uses in the upstream drainage area. Design and installation of this structural control are currently included in the City's capital improvement project budget for FY 2007-08.

- Complete sewer capacity study and development of Sewer System Management Plan. Educate the public including employees on proper reporting of spills, including Chain of Communication.

- The City has an identified need to install treatment control BMPs at selected city outfalls to capture trash and other pollutants. Currently, this is an unfunded Capital Improvement Project that the City is actively pursuing grant funding for.

- Tijuana River Bacteria Source Identification Study – The City has received a Proposition 50 grant to identify the sources of bacterial pollution in the Tijuana River watershed and potential mitigation projects or BMPs to reduce or eliminate their introduction into the watershed.

Commercial Component

- In addition to continuing with existing channels for educating businesses, the City will explore identification of a more permanent venue for distributing information on urban runoff and BMPs to all businesses, regardless of priority status. One such venue might be through the business license renewal process.

Residential Component

- Continue working with property management groups to provide educational materials to large apartment buildings which will be included in their internal newsletter or to be distributed by on-site managers.

- Staff will assist in the development of a regional outreach plan targeting the residential population.

Land Use Planning Component

- The City is finalizing a SUSMP guide to be used by Community Development staff and contractors during plan review to help project applicants navigate the SUSMP regulatory process.

Construction Component

- Improve the tracking of storm water inspections at construction sites.

- Develop a new user-friendly construction BMP brochure.

Illicit Discharge Detection and Elimination Component

- Continue investigation of elevated dissolved copper levels at Outfall E-1B.

- Continue investigation of the persistent presence of trash at Outfall H-3.

Education & Public Participation Component

- Continue efforts to educate target audiences about urban runoff, BMPs, and other aspects of water quality through a variety of public participation events.

Attachment 2-1
Program Assessment Form - Municipal Component (FY 2006-07)
Effectiveness and Performance Measurements:

Activity	FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	Units	Comments
Number of high priority municipal facilities.	18	18	18	18	18	18	#	11 facilities and 7 parking lots
Number of high priority municipal facilities targeted for inspection	18	18	18	18	18	18	#	11 facilities and 7 parking lots
Number of high priority municipal facilities inspected.	18	18	18	18	18	18	#	11 facilities and 7 parking lots
Number of medium and low priority municipal facilities inspected.	8	8	8	15	15	15	#	Increase is seen because each pump station is now listed as a separate facility.
# of Municipal staff (Full Time)		57	55	65	65	74	Employees	
# of Municipal staff (Part Time)			50	66	66	81	Employees	
# of Municipal staff trained during this reporting period in pollution prevention.	20	70	59	28	>70	>70	Employees	
# of Municipal staff trained during this reporting period in storm water quality as it pertains to the Municipal Component.	20	70	59	28	22	36	Employees	
# of Street Miles swept.	2,392	2,392	2,392	2,521	2,392	2,392	Miles	
# of tons of material removed by street sweeping	208	144.4	218.13	223.91	135.45	148	Tons	
% of street material removed that was trash.	10	11	10	9	10	10	%	
% of street material removed that was sediment.	80	78	80	84	80	80	%	
% of street material removed that was organic debris.	10	11	10	7	10	10	%	
% of street material removed that was other.	0	0	0	0	0	0	%	
# of inlets in the City's jurisdiction.	Approx 100	Approx 100	Approx 100	Approx 100	Approx 100	Approx 100	#	The number of manholes and outlet and inlet boxes total 217.
# of manholes / inlets cleaned.	80	168	168	168	168	168	#	
Quantity of material removed as a result of MS4 cleaning. (tons)	1.9	6.1	2.4	4.6	2.4	8.25	Tons	Catch basins, brow ditches, and underground portions of the MS4 are cleaned from May 1 through September 30th
% of inlet material removed that was trash.	10	11	10	12	2	14	%	
% of inlet material removed that was sediment.	80	78	80	75	87	73	%	
% of inlet material removed that was debris.	10	11	10	13	11	13	%	
% of inlet material removed that was other.	0	0	0	0	0	0	%	
Amount of Pesticides used.	See comment	See comment		0	0	0	#	2002-03 15% of fertilizer used contained herbicide 2001-02 20 % of fertilizer used contained an herbicide
# of parking lots > 15 spaces.	6	6	6	6	6	6	#	
# of parking lots > 15 spaces retrofitted for SW BMPs.	4	4	4	4	4	4	#	4 retrofitted in 2002-03

Attachment 2-2. Municipal Facility Inventory

Facility Category	Facility	Address	WMA	Drainage Basin	Activity (A)	Materials Used (B)	Wastes Generated (C)	Pollutant Discharge Potential (D)	Non-Storm Water Discharges (E)	Size (F)	Proximity to Receiving Water Body (G)	Sensitivity of Receiving Water Body (H)	Rank (A+B+C+D+E+F+(G*H))	Priority Rank	Mandatory HIGH?	Parking Lot on Site?
Buildings	Public Works Yard	495 10th St.	Otay	A	10	5	5	3	5	3	5	5	56	H	Yes	Yes
	Fire Station	825 Imperial Beach Blvd.	Tijuana	B,D	10	5	5	3	5	3	2	5	41	M	No	Yes
	City Hall	825 Imperial Beach Blvd.	Tijuana	B,D	1	1	5	3	3	3	2	5	26	L	No	Yes
	Dempsey Holder Safety Center	950 Ocean Lane	Tijuana	B,C	10	5	5	3	5	3	5	5	56	H	No	No
	I.B. Boys & Girls Club	847 Encina Ave.	Tijuana	B,D	5	3	5	3	3	5	2	5	34	M	No	Yes
	Marina Vista Community Center & Senior Center	1075 8th St.	Tijuana	B,D	1	1	5	3	3	3	2	5	26	L	No	Yes
Streets / MS4	Catch Basins / Inlets (approx. 100)	N/A	All	All	10	3	5	3	5	3	3	5	44	H	Yes	No
	Underground Storm Drains (approx. 5 miles)	N/A	All	All	10	3	5	1	5	5	5	5	54	H	Yes	No
	Brow Ditch Channels (approx. 4,000 ft.)	N/A	All	All	10	3	5	3	5	3	3	5	44	H	Yes	No
	MS4 Pump Station	Palm Ave. street end	Otay	B,C	10	5	5	3	3	1	5	5	52	H	Yes	No
	Paved Streets (approx. 200 lane miles)	N/A	All	All	10	3	5	3	5	5	3	5	46	H	Yes	No
dscaped Areas	Reama Park	Elder Ave. / Elkwood Ave.	Tijuana	B,C	5	3	5	3	3	3	2	5	32	M	No	Yes
	Sports Park	425 Imperial Beach Ave.	Tijuana	B,D	5	3	5	3	3	5	5	5	49	H	No	Yes
	Teeple Park	Calla Ave. / Florida St.	Otay	A	5	3	5	3	3	3	2	5	32	M	No	Yes
	Triangle Park	7th St. / Palm Ave.	Otay	A	5	3	5	3	3	1	2	5	30	M	No	No

Attachment 2-2. Municipal Facility Inventory

Facility Category	Facility	Address	WMA	Drainage Basin	Activity (A)	Materials Used (B)	Wastes Generated (C)	Pollutant Discharge Potential (D)	Non-Storm Water Discharges (E)	Size (F)	Proximity to Receiving Water Body (G)	Sensitivity of Receiving Water Body (H)	Rank (A*B+C+D+E+F+(G*H))	Priority Rank	Mandatory HIGH?	Parking Lot on Site?
Sewage	Sewage Pump Station #1A (Underground)	862 Seacoast Dr.	All	All	5	5	5	1	1	1	0	1	18	L	No	No
	Sewage Pump Station #1B (Underground)	1098 Seacoast Dr.	All	All	5	5	5	1	1	1	0	1	18	L	No	No
	Sewage Pump Station #2 (Above ground)	1306 South Seacoast Dr.	All	All	5	5	5	1	1	1	0	1	18	L	No	No
	Sewage Pump Station #3 (Underground)	501 Elm Ave.	All	All	5	5	5	1	1	1	0	1	18	L	No	No
	Sewage Pump Station #4 (Underground)	755 Delaware Ave.	All	All	5	5	5	1	1	1	0	1	18	L	No	No
	Sewage Pump Station #5 (Underground)	133 Dahlia Ave.	All	All	5	5	5	1	1	1	0	1	18	L	No	No
	Sewage Pump Station #6 (Underground)	498 Rainbow St.	All	All	5	5	5	1	1	1	0	1	18	L	No	No
	Sewage Pump Station #7 (Underground)	504 Oneonta Ave.	All	All	5	5	5	1	1	1	0	1	18	L	No	No
	Sewage Pump Station #8 (Underground)	895 Imperial Beach Blvd.	All	All	5	5	5	1	1	1	0	1	18	L	No	No
	Sewage Pump Station #9 (Above ground)	1025 9th St.	All	All	5	5	5	1	1	1	0	1	18	L	No	No
	Sewage Pump Station #10 (Above ground)	814 Cypress Ave.	All	All	5	5	5	1	1	1	0	1	18	L	No	No
	Underground Sewage Pipes (39.5 miles)	N/A	All	All	5	5	5	1	1	1	0	1	18	L	No	No
Misc.	Pier	Evergreen St. / Seacoast Dr.	Tijuana	B,C	10	1	5	3	5	3	5	5	52	H	No	No
	Sandy Beach	Mexican Border to Camp Surf	All	All	1	3	5	3	3	3	5	5	43	M	No	No

Attachment 2-2. Municipal Facility Inventory - Parking Lots

			Curbing Directs Runoff Directly to Storm Drain (A	Proximity to 303(d) Water Body / ESA (B)	Pollutants ©	Pollutant Discharge Potential (D)	Non-Storm Water Discharges (E)	Lot Size (F)	Type of Municipal Area (G)	Total Rank (A+(B*C)+D+E+F+G)	Priority	Mandated High Priority (>15 spaces)
Parking Lots	Public Works Yard Parking Lot	495 10th St.	5	5	5	3	3	3	10	49	H	Yes
	City Hall / Fire Station Parking Lot	825 Imperial Beach Blvd.	5	2	5	3	3	3	10	34	H	Yes
	Reama Park Parking Lot	Elder Ave. / Elkwood Ave.	1	2	5	3	3	1	1	15	L	No
	Sports Park Parking Lot	425 Imperial Beach Ave.	5	5	5	3	3	5	1	42	H	Yes
	Teeple Park Parking Lot	Calla Ave. / Florida St.	5	2	5	3	3	3	1	25	L	No
	Veteran's Park Parking Lot	9th St. / Imperial Beach Blvd.	1	2	5	3	3	3	1	17	H	No
	Dunes Park Parking Lot	700 Seacoast Dr.	5	5	5	3	3	3	1	40	H	No
	I.B. Boys & Girls Club Parking Lot	847 Encina Ave.	1	2	5	3	3	3	1	17	L	Yes

Attachment 2-3

The Journal for Surface Water Quality Professionals

Stormwater

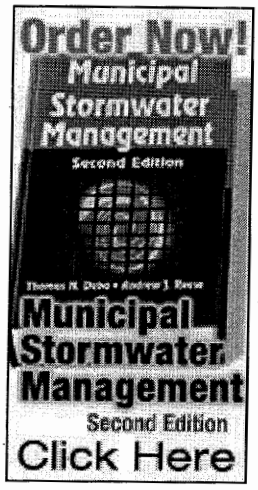
FEATURES

A Measure of PREVENTION

The state of NPDES around the country

By David C. Richardson

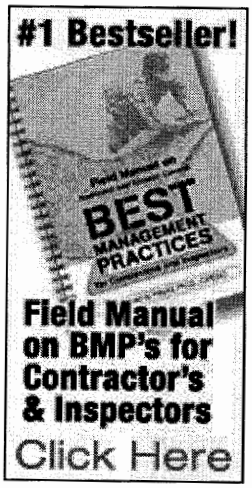
StormCon



Since earliest times, society has been concerned with issues of stormwater quantity, but only recently have a growing number of initiatives begun to focus attention on stormwater quality. The practice of improving stormwater quality presents a quandary arising from the very nature of water itself. Seeking its own level, water laden with pollutants, if left to its own devices, eventually drains away from its source and becomes, perhaps, someone else's problem. As a further paradox everyone is downstream of someone. Rain can fall anywhere, and anywhere rain falls there are likely to be people; anywhere there are people there is the potential for pollution.

Local Effort, Nationwide Goal

According to the year 2000 census report, 79% of the United States population now resides within urban areas. The National Pollutant Discharge Elimination System (NPDES) Phase I and Phase II permit processes, with their emphasis on controlling nonpoint-source pollution from these urban areas, represent an attempt to address the environmental effects of the current reality: It is not just the exceptional, large-scale, and industrial activities but also the everyday practices and habits of millions of individuals in their communities across the country that are gradually degrading our water resources. The NPDES program mandates that urban communities regulate and control what enters into the environment along with the flow of stormwater.The USEPA administers NPDES programs on a regional basis; however, in most instances, the states within each EPA-designated region in turn administer their respective stormwater pollution prevention programs. Under the states' NPDES permitting authorities, each community or municipality covered is required to develop its own stormwater-quality management plan. These plans contemplate a wide range of



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possibilities, each appropriate to the environmental, social, and economic conditions within their respective locales. Using the 10 EPA-designated regions as a rough guide, we will explore the implementation of NPDES-related stormwater pollution prevention programs across the country. This first installment provides a brief look at four diverse communities in the southwestern area of the country, in the area the EPA designates as Region 9 and which includes the states of Arizona, California, Hawaii, and Nevada. This series of snapshots is not intended to convey the full range of possible responses to pollution control through NPDES, but only to share a range of experiences and programmatic approaches enacted locally to protect the quality of the nation's water as a whole.

A Head Start in California

Many of the smaller municipalities in California got a head start in NPDES compliance. They were issued NPDES permits during Phase I of the program in the early 1990s, a decision Phil Bobel, manager of environmental compliance for the City of Palo Alto, CA, believes was made at the state level to avoid confusion of conflicting mandates across contiguous municipalities in highly urbanized parts of the state. With the goal of pollution prevention, the EPA suggests street sweeping as one of the recommended "good housekeeping" practices associated with NPDES; Bobel believes that is a good idea. "We know for many pollutants the principal source is the automobile. There are too many cars in California; they are polluting not only the air but also the water." However, Bobel is not entirely comfortable referring to street sweeping as a pollution prevention practice. "It's difficult to control what goes out on the streets," he says. "The pollution control results of the program are difficult to quantify because we don't have good data measuring what percentage of pollutants are removed by the practice. Street sweeping is more of a cleanup after the fact of the pollutants that have been introduced. Nevertheless, it represents a big part of what we do." Street sweeping operations had been initiated in Palo Alto many years before the implementation of NPDES, not because of laws mandating this specific practice, but initially for the care and grooming of Palo Alto's 50,000 street trees. According to Bobel, the city began street sweeping as a beautification measure, as well as to prevent flooding by keeping the storm drains clear of leaves. Dave Aro, manager of maintenance operations for the City of Palo Alto, says, "Street sweeping is a 24-hour operation, six days a week, stopping only for 'spare the air days.'" (These are days when smog levels run exceptionally high in the San Francisco Bay Area). The entire city is swept on a weekly basis, and heavily used downtown areas are swept almost daily. Aro says the city's fleet of six sweepers includes both mechanical

broom sweepers and some newer regenerative air sweepers. The department, he says, is moving toward the regenerative designs and has even deployed a compressed natural gas (CNG)–fueled sweeper, for which Aro is very enthusiastic. "We made the choice not to pollute the air while we clean up the streets," he says, adding that he believes this CNG unit "runs even cleaner than diesel."

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Unintended Benefits

Though the street sweeping program in Palo Alto was initially intended to prevent localized flooding with the start of the spring rainy season, there have always been other environmental benefits. Each fall the city collects 2,400 tons of leaf debris from its streets; Bobel says this debris would otherwise end up in streams and ponds and would eventually find its way to the San Francisco Bay. In many areas of the country, he says, this mass of biological material would pose a nutrient-loading threat. "However, in our area, because San Francisco Bay is not believed to be nutrient limited, we're less concerned about nutrient loading than we are about biological oxygen demand." He says that if the decaying leaves were to become trapped in certain localized areas such as ponds, choked-off streams, or storm drains, they could deplete enough oxygen as they decay to have negative impacts on the ecology of the Bay. Street sweeping, he says, takes care of this problem. "The street sweeping program did not originate for that purpose, but it does address it." He notes that as a side benefit, "80% of the leaves collected can later be used for composting."

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Next-Generation Technology

Steve Miller, fleet manager for nearby Mountain View, CA, which shares the San Francisco Bay watershed with Palo Alto, has a similar high regard for the efficacy of street sweeping. But he adds that the capabilities of newer, regenerative air sweepers make pollution control through street sweeping more efficient than ever. "You're able to pick up anything from talcum powder to bricks. A mechanical sweeper will not do that. They tend to spread around the small material and throw the big material up inside the hopper, and what you're left with is a buildup of fine material on the streets. A lot of cities, then, traditionally wash their streets down, and of course, that washes all the fine material, including the asbestos and the heavy metals from brakes and from vehicle exhaust, into the storm drain system and into the bays or rivers."



He adds, "We were one of the first in the San Francisco Bay Area to buy the regenerative sweepers, and since then almost every city in the Bay Area is buying them exclusively."According to Miller, regenerative air sweepers move more air, over a wider head, and the machines have a greater capacity. He says,

"They've even come out with a larger machine, the Schwarze A9000, which can collect 9 cubic yards of material." The mechanical sweepers the city had previously used had a capacity of only 4 cubic yards. "We've done numerous tests, and other cities have as well, and the Schwarze always comes out on top. It carries 440 gallons of water, which is more than most of the others, so you can sweep longer without the operator having to stop to take on water. All these things are important for sweeping cycle time. How fast can you pick it up? How often do you have to stop? How often do you have to dump? And how much does it carry?

"Miller says the manufacturers have been very responsive to suggestions from users in the field, and that he collaboratively had the opportunity to help develop several beneficial design features: "Schwarze incorporated many of our suggestions." He says one of the challenges of the regenerative air technology results from the intensive compression and compacting of the material within the collection hopper. "The debris gets packed into the sweeper so tightly that it won't dump. If you can, imagine 7 yards of leaves all packed in the back of the truck and they won't come out. I worked with Schwarze to completely redesign the configuration of the door so when it opens it all comes out much more quickly and easily, and that was incorporated into the new A9000 unit, which most of the cities around here are buying now."

He says mastering all the capabilities of the regenerative sweepers requires significantly more training than did the older mechanical broom sweepers, but, he adds, "They perform better over a wider range of operational conditions. If you know what you're doing you can do a pretty good job in every circumstance."

Seaside Diversions

Down the California coast in the City of Imperial Beach in the San Diego Bay area, stormwater managers face a different set of concerns. As environmental manager for Imperial Beach, a seaside community whose major attraction is its beachfront, Todd Snyder says during the months from May through September the city must monitor water quality daily at the outfalls to ensure its safety for recreational activities. In addition, the city must contract with laboratories when necessary for more in-depth analysis of its samples. Snyder says the city has installed diversion systems in its stormwater system to direct low flows, with highly concentrated pollutant loadings, away from the coastal outfalls and into the sanitary sewer system for treatment.

However, like Miller and Bobel, Snyder also attributes much of

his concern over urban pollution to the automobile in its various stages of operation or maintenance. He is also concerned about other commonplace sources of pollution that arise from business practices such as restaurant refuse. He says the biggest step a municipality can take to prevent pollution is public education. "The most important part is to get to a level of knowledge where your residents understand the distinction between the stormwater system and the sanitary sewer system."

From the Backyard to the World

A central component of the Imperial Beach approach to stormwater quality, Snyder says, has been the city's inspection program. "We're a relatively small city, so we do a lot of canvassing through the area, a lot of drive-by surveillance, and we'll stop and talk to people who we see are engaging in activities that are contributing pollutants. We also have inspection programs that help us pinpoint when these things are going on." Education alone can't resolve all of the issues. Snyder says the city operates an aggressive in-house preventive maintenance program to prevent leaks from city-operated vehicles. It also has a process to ensure that city vehicles are washed in special wash bays to prevent runoff from entering the storm drain system. Although residential car washing is exempt from regulation under Imperial Beach's permit, he says the inspector does go out to encourage individual residents to have their vehicles washed at commercial facilities, or to pull their cars onto their lawn for washing. He says that through efforts such as these, "Residents and business operators are becoming more aware of how their activities affect water quality." However, he says Imperial Beach shares the San Diego Bay watershed with communities across the border in Mexico, giving the challenge international dimensions over which he says his program has no control. With runoff from both sides of the border mixing in waters along the coast, Snyder says, it's even difficult to give a precise assessment of the progress of pollution control efforts in his own municipality. "Negotiations over those issues," he says, "are going to occur on a much higher level."

Infrastructure Maintenance

Proper maintenance of infrastructure can play an important role in reducing the exposure of receiving waters. By using in-house crews and capabilities, Snyder says, Imperial Beach has set "a goal every year to clean every storm drain in the city between the summer months. That amounts to over 100 catch basins and up to 5 miles of drainpipe." He adds that this cleaning effort is "most effective if you get in there before the first rainfall and clear out the debris."Rick Lewis of American Hydrovac is also a proponent of routine storm drain cleaning. "The last thing you

want is for storm drains to become anaerobic," he notes.

His firm sells HiVac Aquatec combination machines. "The more regularly you clean the drains, the less chance it will become hazardous," he says. "In addition, vector studies have shown that female mosquitoes will fly 1,000 feet down a storm drain to have their young. The longer debris sits, the more likely it is to become a nesting area for mosquitoes and pests. Then during the next storm it washes out as a much more potent pollutant than when it went in there in the first place." Lewis encourages municipalities to invest in the capability to clean storm drains on a regular basis, ideally four times a year. He says the majority of larger communities where his firm operates already have a combination truck or a small jetter that they can use for this purpose.

While the cost for the combination truck is about $205,000, he says small cities have made it affordable by collaborating to arrange lease-purchase deals over the seven- to 10-year serviceable lifespan of the vehicles. However, he suggests there are also options for municipalities with tighter budget constraints. "For about $35,000, they could invest in a unit such as the XVAC, which is a vacuum trailer that has a 500-gallon capacity. That would at least give them some capacity for jetting to dislodge things, and then vacuuming for anything that came back toward the unit."

A New View"

We have a wastewater crew dedicated to waste drainage who also maintains the storm drain inlets," says Dave Serge, utilities services manager for Mountain View. The crew of three work with a Vacon combination truck clearing storm drain inlets and pipes several times a year. But the program has also developed some innovative approaches to maintenance.

For example, Serge says Mountain View has initiated a program to conduct video inspection of its storm drain system. While TV systems are commonly used to evaluate sanitary sewer systems, he says it is unusual to see them used on storm drains. "We've TV'd 30% to 40% of the system over the past five years. We've been able to detect sand buildups, root infiltration, and laterals improperly tapped into the system. This enabled us to go in and change the methodology we used for cleaning. In one case," he says, "we had settling of a road above a storm drain. We TV'd the storm drain using sonar and found a void above the pipe. We injected the cavity with grout, and that saved us from having to excavate." The video system he uses is equipped with GPS and the cost to contract the work is about $1.20 per foot of pipe.

So far, the Mountain View stormwater program has examined about 15,000 feet of pipe using this system. But even the emerging technologies, Serge says, may eventually pose challenges for stormwater managers. In response to regulations, he says, "We're seeing a lot of CDS units going in on private property as developers try to meet their NPDES post-construction stormwater obligations. But it's not clear that the property owners are geared up to maintain them." As a result, he says, "There may come a time when there may be a strong push to have the city come in and maintain them."

Getting Organized

While the larger cities and those along the coastal areas have long been active in water-quality issues, some smaller inland communities are building brand-new stormwater-quality programs. "We've had a stormwater department for only a few years, and right now we're working on ordinances to be able to enforce the policies we've been coming up with," says Eileen Hamlin of the Flagstaff, AZ, Stormwater Department, who says her department received its first stormwater permit under NPDES Phase II. Flagstaff, she says, is a city that "bears few comparisons to others." Considered a gateway for tourism to the Grand Canyon, it stands isolated in high desert. It is an arid environment dotted with Ponderosa pine with few permanent streams. In fact, the waterways that do exist, referred to locally as washes, are dry most of the time.

When it does rain, "It rains hard," says Hamlin, adding that "Flagstaff can expect 7 inches of rain per year, not spread out over 12 months but typically in brief storms." She says these brief storms, known as monsoons, are typically characterized by "microbursts where parts of the city experience a huge downpour, while other areas get no rain at all."

Nevertheless, according to Peter McCullough, environmental manager for the city, wildlife such as blue heron can "occasionally be found within a few of the largest of the washes." He says the idea of a stormwater-quality program in a place like Flagstaff may sound like an unusual proposition. "People often think of it as really dry, but when you go for a month or two with no rain, that's when pollutants really build up, so it's important to keep it as clean as possible."

Diverse Issues, Common Solutions

Hamlin believes it was not leaf fall but snowfall that historically provided the rationale for Flagstaff's street sweeping program. The city, she says, receives about 100 to 110 inches of snow each year. The snow melts very quickly, leaving the roads covered with the cinders placed there to improve traction during icy conditions; the sweepers are employed to remove the

cinders. However, the sweepers continue to operate routinely throughout the year and play an important role in pollution control efforts. Hamlin says the Streets Division has four full-time mechanical Broom Bear sweepers and one backup. "They each have a quadrant of the city to keep clean. We sweep residential areas bimonthly, arterials weekly, and the downtown area is swept Mondays though Fridays."

She adds, "The same division also does drainage maintenance, signing, painting, sidewalk replacement, asphalt repair overlays—they have quite a comprehensive program." Hamlin says programs in many city departments and divisions play a role in stormwater quality. "We have an 'adopt a wash' program as well as a stream team program, managed by Environmental Services. They have 40 different volunteer groups who go out to the washes and do litter cleanup projects."

She says Environmental Services and the street maintenance function within Public Works work closely with the Stormwater Department, which is officially organized separately within the Community Development Department. "Some people think we should be in Public Works since we have an operations element to our program, other people think we should be in the Utilities Department because we have a utility element to our program, and yet we do grading inspections and final drainage reviews—that's a piece of what happens in Community Development. But there's any number of places where you could put a stormwater program." She says these complex relationships between the departments work smoothly, "partly because we're a small community and everybody knows everybody else."

Money Matters

As with many public policy mandates, NPDES compliance can present a funding dilemma for municipalities. In Palo Alto a small fee is levied on all property holders, with a sliding scale for larger parcels. "Stormwater is a relative newcomer to environmental programs," says Bobel. "We have a special fee, fairly small, which mostly covers repairs. It is not enough for pollution prevention or treatment, not enough to do all the things we'd like to do."

However, Bobel says it is often not useful to separate out the cost of stormwater programs from the city's many other operations. He says, "Our program is built up from street sweeping and elements of other programs, some of which were ongoing and others which didn't exist before. We have not tried to add that up to say what the total costs for stormwater would be, because that would make it appear that there was this whole new cost area for government, and that's not the case.

"Dave Serge of Mountain View says there are numerous ways to consider funding for stormwater programs. "When you first start out, as long as you have a good nexus as to why the charges are where they are, then people are pretty reasonable." He says there are multiple benefits to consider as well, even when you look at a specialized activity such as street sweeping. "The drivers are out there, and because they're moving slowly over the pavement they have a chance to observe things: problems with the pavement, cars that have spilled oil, graffiti, abandoned shopping carts, street lights that are out. It's another set of eyes and ears on the street."

After three years of research, discussions, and community outreach, Flagstaff finally settled on a stormwater utility fee as a funding mechanism for its programs. Hamlin says a rate increase, enacted in June 2006, has provided the city with the opportunity to target drainage improvement projects. "The funding allows us to implement some of the stormwater action plans that we've been looking forward to for a long time."

McCullough agrees, adding that Flagstaff has invested in some oil and water separators for its maintenance operations and that it is considering upgrading deicing facilities at the airport. But for now, he says, "A lot of it is behavioral, like at a vehicle shop getting them not to store paint outside in order to prevent spills that eventually end up in the washes." Phil Bobel amplifies the importance of the behavioral component; he says Palo Alto's stormwater programs have had their greatest success through collaborative efforts, when the target group is convinced there is a worthwhile goal.

"Stormwater is largely a low-tech program. It's all about people and their practices. But," he adds, "it's not just telling people what not to do but always talking about what they can do. It's changing people's practices from one set of relatively low-tech practices to a different set of relatively low-tech practices."The next installment in this series will explore the response to NPDES and good housekeeping practices in EPA Region 5, focusing on municipalities surrounding the Great Lakes.

David C. Richardson is a writer based in Baltimore, MD.

SW November/December 2006

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Information for the regulated community

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Monitoring Water Quality Across the Country

Water Quality and Land Use

Bar Raised on Phase I ESA's

Improving Stormwater Quality in EPA-designated Region 9

This article is adapted from the first in a series in *Stormwater* magazine describing the implementation of stormwater pollution prevention programs across the country. As reported in the November/December 2006 issue of *Stormwater*. a growing number of initiatives have begun to focus on stormwater quality in urban areas—where, according to the 2000 census, 79% of the U.S. population now resides. Undertaken in accordance with the National Pollutant Discharge Elimination System (NPDES) Phase I and Phase II permit processes, which emphasize controlling nonpoint-source pollution from urban areas, the initiatives are an attempt to address the everyday practices of people that affect water quality. This first article offers a look at four communities in the area designated by the Environmental Protection Agency (EPA) as Region 9, including Arizona, California, Hawaii and Nevada. Although the USEPA administers NPDES programs on a regional basis, in most instances, the states within each EPA-designated region administer their respective stormwater pollution prevention programs.



The City of Palo Alto initiated street sweeping, one of the recommended good housekeeping practices, to groom the city's 50,000 streets and prevent flooding.

In California, many municipalities were issued Phase I permits in the early 1990s. Years before this, however, the City of Palo Alto had initiated street sweeping, one of the recommended good housekeeping practices associated with NPDES, to groom the city's 50,000 street trees and prevent flooding by keeping the storm drains clear of leaves. Street sweeping is performed 24 hours a day, six days a week, stopping only for "spare the air" days, when smog levels are exceptionally high. Using this cycle, the entire city is swept over the course of six days, with heavily used downtown areas swept daily, using a fleet of six sweepers that includes both mechanical broom sweepers and some newer regenerative air sweepers, such as a compressed natural gas (CNG)-fueled sweeper. Each fall, the city collects 2,400 tons of leaf debris that would otherwise eventually find its way to San Francisco Bay. According to Phil Bobel, manager of environmental compliance, the concern is less about nutrient loading than biological oxygen demand, as trapped decaying leaves in ponds and storm drains could deplete enough oxygen to have a negative impact on the ecology of the Bay.

In nearby Mountain View, fleet manager Steve Miller says that regenerative air sweepers, which move more air and have greater capacity than mechanical broom sweepers, are now being purchased by almost every city in the Bay Area. He touts the Schwarze A9000, developed with input from Mountain View, which can collect nine cubic yards of material, compared to four cubic cards with mechanical sweepers. Mastering all the capabilities of regenerative sweepers requires more training than did the older sweepers, but "they perform better over a wider range of operational conditions," says Miller.

In the City of Imperial Beach in the San Diego Bay area, water quality must be monitored at coast outfalls daily during May-November, to ensure the safety of the beachfront for recreational activities. Diversion systems in the city's stormwater system direct low flows, with highly concentrated pollutant loadings, away from the coastal outfalls and into the sanitary sewer system for treatment. Todd Snyder, environmental manager for Imperial Beach, says the most important step a municipality can take to prevent pollution is public education, which the city accomplishes in part through an inspection program that involves a lot of outreach to citizens. Imperial Beach also operates an in-house preventive maintenance program to prevent leaks from city-operated vehicles. The vehicles are washed in special bays to prevent runoff from entering the storm drain system, and individual residents are encouraged to wash their own cars at commercial facilities or on their lawns.

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Illicit Discharge Detection: The Need for Community Compliance



Dry weather may be the worst time for debris to collect.

As described in an article in the November/December issue of *Stormwater* maga zine, community compliance regarding illicit discharge detection requires public education, cooperation between regulatory authorities and residents, and using the right tools. On the national level, there has been growing popularity for a suggestion that a small tax be levied on the products (mostly personal care) that cause many of the problems, and the money raised put into a national fund. In the meantime, tougher enforcement of federal regulations has resulted into at least two recent cases where violators have agreed to pay large penalties.

For failing to provide adequate stormwater controls for a large highway project, the Idaho Transportation Department and a contractor agreed to pay a penalty of $850,000 and to send their engineers and environmental inspectors for certified stormwater training. To avoid future violations, ITD also agreed to implement new construction management practices. For failing to implement, adequately fund and adequately staff its stormwater management system, the City of Dallas agreed to spend more than $3.5 million to decrease the amount of pollution entering the system. The settlement requires the city to build two wetlands at an estimated cost of $1.2 million, pay a penalty of $800,000, and increase storrmwater staff positions, inspect hundreds of industrial facilities and construction sites, and improve the management systems at several facilities.

Many cities, such as Minneapolis, have made great efforts to meet the requirements of National Pollutant Discharge Elimination System (NPDES) Phase II regulations. Minneapolis's Rainleader Ordinance, passed two years ago, required the disconnection of all roof and area drains or other stormwater or clearwater connections to the city's sanitary sewer system by 2007. Along with sewer separation and sanitary main restoration, projects include the use of hydraulic modeling to identify improvements in the sanitary sewer system that would make the best of storage capacity. Tom Frame, P.E., supervisor of the city's environmental program, notes that it is easier to detect illicit discharges due to faulty systems than those caused by irregular dumping.

The cities under 10,000 that make up most of the nation are also grappling with compliance. In Ohio, many of the state's more than 260 small municipalities have responded by developing a stormwater utility. In Michigan's Upper Peninsula, many communities with under 1,000 inhabitants must deal with a legacy of bad sanitation and water infrastructure from departed mining companies. Huge snowfalls with subsequent quick thaws pose an additional challenge. Although it is difficult, these small communities, many of them low-income, are doing what they can to comply, states the Michigan Department of Environmental Compliance.

Accurate inspections are essential to finding illicit discharges, and tools to find leaks and unwanted flows are available. Envirosight provides visual inspection equipment, from crawlers to portable zoom cameras, that has been used successfully by municipalities, departments of transportation, contractors and engineering companies. The City of Calgary in Alberta, Canada, reports success with closed-circuit television video pipeline inspection systems from Ratech Electronics. Aerial thermal mapping, such as the Thermal MapIR service offered by Stockton Infrared Thermographic Services, Inc. in California, identifies sources of pollution by their thermal infrared signatures and is being used to detect stormwater drain discharges and leaking sewage collector lines and water mains.

Some equipment is helping users save money while controlling stormwater discharges. According to the Dearborn Times-Herald, the City of Dearborn, MI, will save $120 million over original cost estimates by revising its plan for a combined sewer overflow control project. The new plan employs a compact vertical treatment shaft process using the CDS Raked Bar Screen fine screening system. The design of the system relies on gravity, eliminating the need and costs for pumping stations, tunnel and associated shafts and ventilation structures; surge control tanks and screening buildings; and water infiltration. Parker West Mobile Systems, which provides mobile wastewater processing with automatic containment and collection and no storm drain runoff, serves a wide range of customers that have problems of discharge from sites like parking lots. According to one major oil company, Parker West not only helps customers to stay in compliance, but offers prices that are more than fair.

As construction sites have come under increasing scrutiny, and New York City has instituted a "no track-out" policy for vehicles that visit and work on city job sites, Wheelwash has developed Rhino Multi, a self-contained onsite wheel cleaning system, to address the problem of debris on construction sites. According to an environmental engineering firm using the system on a site visited by 60 trucks per day, Rhino Multi cleans a truck's wheels and tires in 30 seconds, and 92% of the water used is recycled.

Dry weather may be the worst time for debris such as pop cans, newspapers, and plastic bags to collect. When the rain finally comes, the debris is washed away along with soil mixed with chemicals, oil, grease, metals and solvents. For this reason, "don't litter" is good advice. Dry weather causes the worst problems for beaches, which often must be closed for health reasons, and one of the states most affected is California. There the Surfrider Foundation has been trying to collect information on the possible reduction in dry-weather flows due to outreach efforts by municipalities and environmental groups. Although little data seems to be available, the environmental group reports there is some evidence of success. Since the City of Dana Point installed an ozone treatment system for Salt Creek, for instance, there have been no dry-weather postings at adjacent beaches.

Whatever equipment and technologies are used to control and detect illicit discharges, the attitude and education of the people involved remain critical. Derek Huff at the Drain Commissioner's Office of Livingston County, MI, says that with a little education, contractors soon understand it's easier to stay in compliance than not. He estimates the number of regulation breakers in his county at no more than 1% to 2%.

Julie Coulter

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Pervious Concrete Pavement: Reducing Stormwater Runoff

In use for more than 150 years, pervious concrete is becoming increasingly popular with developers, permitting agencies, engineers and owners seeking new ways to reduce stormwater runoff and build low-impact, sustainable communities.

According to an article in the October issue of *Stormwater* magazine, typical pervious concrete consists of cement, gravel and water. The absence of fine aggregate permits properly placed concrete to consist of 15% to 20% void space, allowing stormwater to pass through the pavement. This percolation allows for a recharge of groundwater tables, making pervious concrete a key tool in reducing stormwater runoff. Placed within the drip-lines of trees, pervious concrete pavement allows for the passage of air to the tree roots, allowing them to grow out rather than up, thus preventing the surface of the pavement from popping up. Many permitting agencies permit pervious pavements to be used to contribute to the impervious surface ratio, with typical values ranging from 50% to 100%, depending on local regulations.

When using pervious concrete, proper design is essential. A key consideration is the thickness of the concrete, with requirements based on traffic conditions, stormwater storage, or even subgrade conditions. Sections typically vary from six to eight inches, and the higher stress levels around the free edge of pavements may call for a thickened edge or curbing. When the pavement, as well as the subgrade and volume above the pavement, are used to retain a volume of water, curbing may be necessary around the perimeter of the pavement. Local regulations must be consulted to determine what credits can be achieved for each application. Pervious concrete pavement is typically used in light-duty to heavy-duty traffic applications, such as parking lots and sidewalks, but future advances in technology may permit heavier-duty applications. The design must also take into account the minimum percolation rate of a subgrade, which generally controls the overall infiltration rate of a pervious concrete system. An overcompacted subgrade will lead to lower percolation rates. In some cases, a layer of clean rock will need to be installed on top of the subgrade to increase infiltration capacity.



Typical pervious concrete consists of cement, gravel and water.

Successful placement also requires correct installation procedures. Before placement, the properties of the subgrade should be verified for compliance with project plans and specifications. The concrete should be placed as close to its final location as possible, by any method but pumping. After placement, the concrete should be struck off with a vibratory screed to allow for compaction. When rolling the pavement with a steel pipe, care must be taken not to overcompact, which can reduce void space. Joints are typically cut at the time of placement with a hand tool. Curing is the final step, in which pavement should be covered within twenty minutes of the strike-off step and remain covered for at least seven days. (The 522R-06 document from the American Concrete Institute 522 is a guide to the use of pervious concrete. The committee is working to complete the 522.1 specification, which will provide guidance for specifiers incorporating the material into their projects.)

Proper maintenance requires only vacuum sweeping or power washing and will improve the infiltration rate of a pervious concrete system. Some permitting agencies require periodic inspections and maintenance to keep the system running at higher performance levels.

As to the future, many improvements in both the design and construction of pervious concrete have been made in a short time. Extensive research is under way on various aspects of pervious concrete pavements, including freeze/thaw performance, pollutant treatment, and long-term performance.

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Stormwater Quality:

continued from page 1

To maintain its infrastructure, Imperial City has set a goal to clean every storm drain—more than 100 catch basins and up to five miles of drainpipe—during the summer months each year. According to Snyder, cleaning is most effective when debris is cleaned out before the first rainfall. American Hydrovac, which manufactures HiVAc Aquatec combination machines, recommends cleaning storm drains four times a year. The cost for a combination truck is about $205,000, but smaller cities have arranged collaborative lease-purchase deals to obtain them. For $35,000, cities can buy the XVAC, a vacuum trailer with a 500-gallon capacity that provides jetting to dislodge debris.

In Mountain View, a wastewater crew dedicated to waste drainage also maintains the storm drain inlets, clearing them and pipes several times a year with a Vacon combination truck. The city's GPS-enabled video inspection of its storm drain system has changed the methodology used for cleaning. When a road settled above a drain and the video system found a void above the pipe, for example, the cavity was injected with grout, eliminating the need to excavate. At a cost of about $1.20 per foot of pipe, the system has examined about 15,000 feet of pipe.

Further inland, some smaller communities are building brand-new stormwater-quality programs. The high-desert town of Flagstaff, Arizona, instituted a stormwater department a few years ago. Although Flagstaff receives only seven inches of rain per year, Peter McCullough, environmental manager for the city, points out that pollutants really build up when there are periods of a month or more between storms. With four full-time mechanical broom sweepers and one backup, Flagstaff sweeps residential areas bimonthly, arterials weekly, and the downtown area Monday through Friday. The city also has an "adopt a wash" program and a stream team program, which uses 40 volunteer groups to do litter cleanup at the washes (local waterways that are usually dry).

Funding for NPDES compliance can be difficult for municipalities. Dave Serge, utilities manager for Mountain View, says that peo-

continued on page 4



Q & A with John Folchetti

Q: ***What is the status of stormwater pollution prevention programs in our area?***

A: To the best of our knowledge, the bulk of communities are compliant. In some instances, there are monthly meetings on the progress of MS4 programs, and an abundance of fliers and posters are being put up to fulfill the public education requirement. The DEC is emphasizing the adoption of illicit discharge detection and elimination ordinances this year, so that communities can commence implementation before the March 2008 Phase II Stormwater Management Plan deadline.

Q: ***What areas of stormwater pollution prevention are most important to address in our area?***

A: The contaminants that occur most frequently and in the highest volume in our area. These include sand and salt, which typically are used heavily in the winter, leaves in the fall, and because of the high density of motor vehicles in our area, grease and oil year round.

Q: ***What kinds of low-technology, everyday practices are useful here?***

A: Public education on everyday practices is perhaps the most important low-tech component. On the municipal level, simple maintenance, like cleaning catch basins on a regular basis and performing street sweeping, which is still done by hand in some communities, are basic useful practices.

Please give us your suggestions for future Q & A topics and future articles, by emailing them to john.folchetti@jrfa.com.

Stormwater Quality: *continued from page 3*

ple will usually accept charges that are well explained at the outset of a stormwater program. Palo Alto levies a small fee on all property holders, which is not enough for all the pollution prevention that the department of environmental compliance would like to do. Since the stormwater program is built on other city programs, however, the department is reluctant to make stormwater appear as a separate cost. After three years of discussions, Flagstaff decided on a stormwater utility fee as a funding mechanism. Since a rate increase in June 2006, the city has invested in oil and water separators for its maintenance operations and is considering upgrading deicing facilities at the airport. Whatever the source and size of the funding, managers agree that stormwater is primarily a low-tech program in which success depends on getting people to change their daily practices to prevent stormwater pollution.

John Folchetti, CEO, P.E.
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THE FUNDING CALENDAR

Grant Name	Funding Agency	Eligible	Deadline	Goals
Local Government Management Improvement Fund	New York State Department of Education	Local governments: municipalities, fire districts, school districts, boards of cooperative educational services	February 1, 2007	Improve record management: inventory and planning, active records: inactive records; historical records and educational uses of local government records projects
Low Income Housing Credit Program	NYS Division of Housing and Community Renewal	Persons and firms that construct and/or rehabilitate rental housing that is reserved for low income households may apply	February 26, 2007	Promote low income housing
Agricultural Fairground Infrastructure Improvements	New York State Department of Agriculture and Markets	Agricultural or Horticultural Corporations and County Extension Service Associations	March 30, 2007	Costs of construction, renovation, alteration, rehabilitation, improvements or repair of fairground buildings or facilities used to house and promote agriculture
Greenway Communities Grant Program	The Hudson River Valley Greenway Communities Council	Approved Greenway Communities	Open	Community planning grants to help communities develop a vision for their future and tools to achieve it by balancing economic development and resource protection objectives
Small Cities - Economic Development Program	New York State Governor's Office for Small Cities	Municipalities With Populations Under 50,000 Excluding Metropolitan Cities, Urban Counties And Indian Tribes	Open	General economic development activities that create and/or retain permanent, private sector job opportunities principally for low and moderate-income persons, through the expansion and retention of business and industry in New York State
Community Facilities Program	US Department of Agriculture, Rural Development	Rural Towns, Villages and Cities of 20,000 people or less	Open	A community facilities loan/and or grant would be approved to finance the following types of activities: Health Care, Public Safety, and Public Services

For more information on programs mentioned in our newsletter, please refer to our website, www.jrfa.com
To subscribe to the newsletter, call 914.232.2500 or register online at www.jrfa.com

Attachment 3-1
Program Assessment Form - Commercial & Industrial Components
Effectiveness and Performance Measures

Activity	FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	Units	Explanations (if needed)
COMMERCIAL								
Number of high priority commercial facilities inspected.	0	0	10	32	39	33	#	
Number of medium and low priority commercial facilities inspected.	0	0	0	0	0	0	#	Medium and low priority commercial businesses are inspected on a complaint-only basis.
Number of facilities in compliance or on a compliance schedule.	N/A	N/A	10	32	39	33	#	
# of staff supporting the Commercial Component.			2	3	3	3	#	1 Code Compliance Officer 2 Public Works Employees
# of staff supporting the Commercial Component trained in pollution prevention.			2	3	3	3	#	1 Code Compliance Officer 2 Public Works Employees
# of staff supporting the Commercial Component trained in storm water quality as it pertains to the Commercial Component.			2	3	3	3	#	1 Code Compliance Officer 2 Public Works Employees
# of Commercial facilities covered under Order 2001-01.	165	150	127	105	93	94	#	21 businesses eliminated from inventory for the following reasons: Port of SD jurisdiction (4), out of business (5), all operations indoors (4), no food service (5), single family home (3)
# of high priority facilities.	165	150	127	105	93	94	#	See above
# Commercial businesses contacted regarding storm water requirements	0	0	10	375	52	79	#	
# of high priority facilities with enforcement actions.	0	0	5	7	9	16	#	Includes only Notices of Abatement and Notices of Violation
INDUSTRIAL								
Number of high priority facilities identified.	2	1	0	0	0	0	#	
Number of high priority facilities targeted for inspection.	2	1	0	0	0	0	#	
Number of high priority facilities inspected.	0	0	0	0	0	0	#	
Number of medium and low priority industrial facilities inspected.	0	0	1	1	1	1	#	Site has a valid Certificate of Non Exposure from the SDRWQCB
Number of facilities in compliance or on a compliance schedule.	2	1	1	1	1	1	#	

Attachment 3-1
Program Assessment Form - Commercial & Industrial Components
Effectiveness and Performance Measures

Activity	FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	Units	Explanations (if needed)
Number of facilities referred to RWQCB for enforcement of State General Industrial Permit.	0	0	0	0	0	0	#	
# of staff supporting the Industrial Component.			2	3	3	3	#	1 Code Compliance Officer 2 Public Works Employees
# of staff supporting the Industrial Component trained in pollution prevention.			2	3	3	3	#	1 Code Compliance Officer 2 Public Works Employees
# of staff supporting the Industrial Component trained in storm water quality as it pertains to the Industrial Component.			2	3	3	3	#	1 Code Compliance Officer 2 Public Works Employees
# of Industrial sites reported to SDRWQCB.	0	0	0	0	0	0	#	

ATTACHMENT 3-2
INVENTORY OF COMMERCIAL BUSINESSES IN THE CITY OF IMPERIAL BEACH

	BUSINESS	ADDRESS	CLASSIFICATION	WATERSHED	FY 02-03		FY 03-04		FY 04-05		FY 05-06			FY 06-07			INSPECTION SCHEDULED FOR (FY 07-08)
					INSPECT DATE	# COMPLAINT INVEST-IGATIONS	INSPECTION DATE FY 03-04	# COMPLAINT INVEST-IGATIONS	INSPECTION DATE FY 04-05	# COMPLAINT INVEST-IGATIONS	INSPECTION DATE FY 05-06	REPORT/LETTER SENT	# COMPLAINT INVESTIGATIONS	INSPECTION DATE FY 06-07	REPORT/LETTER SENT	# COMPLAINT INVESTIGATIONS	
1	ANCHOR MOTORS	740 PALM	AUTO SALES	OTAY										12-Sep-06	18-Sep-06		
2	IMPERIAL BEACH MOTOR CARS	942 PALM	AUTO SALES	OTAY													
3	HS CARS COMPANY INC. (FORMERLY LA COSTA AUTO FINAN	1333 PALM	AUTO SALES	OTAY										23-Aug-06	31-Aug-06		
4	SANTANA MOTORS	942 PALM	AUTO SALES	OTAY										18-Oct-06	30-Oct-06		
5	AL'S AUTOMOTIVE SERVICES	200 PALM	AUTOMOTIVE	OTAY							14-Feb-06	7-Mar-06					
6	DEPENDABLE CARBURETOR EXCHANGE	660 EMORY	AUTOMOTIVE	OTAY							18-Jan-06	16-Feb-06					
7	ECONO LUBE N' TUBE	772 13TH	AUTOMOTIVE	OTAY					9-Feb-05					5-Dec-06	19-Dec-06		
8	GENES' AUTOMOTIVE	1085 PALM	AUTOMOTIVE	OTAY				1			18-Jan-06						YES
9	GENE'S TOWING & STORAGE	753 10TH	AUTOMOTIVE	OTAY							18-Jan-06	16-Feb-06					YES
10	HAWKINS AUTO BODY	519 FLORIDA	AUTOMOTIVE	OTAY					15-Nov-04					20-Sep-06	27-Aug-06		
11	IMPERIAL BEACH AUTOMOTIVE	989 PALM	AUTOMOTIVE	OTAY							18-Oct-05			24-Apr-07	18-May-07		
12	L & M TIRE CO./ EXPRESS TIRE	950 PALM	AUTOMOTIVE	OTAY					24-Jun-04					3-Aug-06	15-Aug-06		
13	M & M TRANSMISSIONS	1335 PALM	AUTOMOTIVE	OTAY					24-May-05					20-Sep-06	27-Sep-06		
14	MASON'S ALIGNMENT-BRAKE-MUFFLE	975 PALM	AUTOMOTIVE	OTAY							22-May-06	5-Jun-06					YES
15	PRECISION FOREIGN	1240 PALM	AUTOMOTIVE	OTAY							5-Jan-06		1	24-Apr-07	10-May-07		
16	SOPHISTICATED AUTO	987 PALM	AUTOMOTIVE	OTAY							10-Jan-06	9-Feb-06					YES
17	TUNES LUBES ETC.	741 PALM	AUTOMOTIVE	OTAY			22-Jun-04		8-Jul-04					29-Aug-06	11-Sep-06		
18	ALL AMERICAN CAR WASH	1158 PALM	CAR WASH	OTAY							2-Jun-06	19-Jun-06					YES
19	MIKE'S CAR WASH (FORMERLY "SELF SERVE CAR WASH")	1117 PALM	CAR WASH	OTAY							14-Feb-06	7-Mar-06					YES
20	RJ's CAR WASH	730 10TH	CAR WASH	OTAY							16-Feb-06	7-Mar-06					YES
21	7-ELEVEN	657 PALM	EATING / DRINKING	OTAY			16-Oct-03						1				
22	7-ELEVEN	197 PALM	EATING / DRINKING	OTAY													
23	AROMA THAI	757 SEACOAST	EATING / DRINKING	OTAY					23-Mar-05								
24	AVATAR HOSP GP DBA SUBMARINA	894 PALM	EATING / DRINKING	OTAY					14-Dec-04								
25	BASKIN 31 ROBBINS	801 PALM	EATING / DRINKING	OTAY					1-Mar-05								
26	BEACH CLUB GRILLE	710 SEACOAST, SUITE F	EATING / DRINKING	OTAY			21-Jan-04										YES
27	BULLPEN TAVERN	706 SR-75	EATING / DRINKING	OTAY					22-Jun-05								
28	BURGER KING #806	1180 PALM	EATING / DRINKING	OTAY							3-Aug-05						
29	CARL'S JR. #585	700 13TH	EATING / DRINKING	OTAY			7-Jan-04										
30	CHAND CORONADO LP DBA SUBWAY	876 SEACOAST	EATING / DRINKING	OTAY			16-Jan-04										YES
31	IMPERIAL BEACH COFFEE & BOOKS (FORMERLY COFFEE BR	704 SEACOAST, SUITE A	EATING / DRINKING	OTAY					5-Aug-04								YES
32	El CILANTRO (FORMERLY COCKTELERIAS)	764 13TH	EATING / DRINKING	OTAY							28-Feb-06	21-Mar-06	1				
33	EL TAPATIO RESTAURANT INC	260 PALM	EATING / DRINKING	OTAY			24-Jun-04										YES
34	FAR EAST ROCK	992 PALM	EATING / DRINKING	OTAY							20-Oct-05						
35	GIANT PIZZA KING #5	600 PALM, SUITE 100	EATING / DRINKING	OTAY					20-Apr-05				1	11-Jan-07	24-Jan-07		
36	IMPERIAL DONUTS	1002 PALM	EATING / DRINKING	OTAY							10-Oct-05			3-May-07	10-May-07		
37	INTERNATIONAL BLENDS	208 PALM	EATING / DRINKING	OTAY					12-Aug-04								YES
38	JACK IN THE BOX #12	890 PALM	EATING / DRINKING	OTAY		1	7-Jan-04										YES
39	KFC CORPORATION	1056 13TH	EATING / DRINKING	OTAY					20-Oct-04				1	11-Jan-07	24-Jan-07		
40	ALIBERTO'S MEXICAN FOOD	1183 13TH	EATING / DRINKING	OTAY					20-May-05								
41	**LA CEIBITA**	1051B 13TH	EATING / DRINKING	OTAY										31-Jul-06	8-Aug-06		
42	LITTLE BONANZA	940 PALM	EATING / DRINKING	OTAY							19-Jun-06	19-Jun-06					
43	MAYRA'S TACO SHOP (FORMERLY LOS NACHOS TACO SHOP)	1004 PALM	EATING / DRINKING	OTAY							10-Oct-05			23-Mar-07	16-Apr-07		
44	LOS PANCHOS TACO SHOP	690 SR-75	EATING / DRINKING	OTAY					9-Mar-05				1	13-Feb-07	1-Mar-07		
45	MARCO'S FAMILY RESTAURANT	763 PALM	EATING / DRINKING	OTAY							10-May-06	5-Jun-06					
46	MCDONALDS/SCAROB INC.	1135 PALM	EATING / DRINKING	OTAY			16-Oct-03						1	8-Aug-06	15-Aug-06		

Bold indicates a new addition to the inventory.

ATTACHMENT 3-2
INVENTORY OF COMMERCIAL BUSINESSES IN THE CITY OF IMPERIAL BEACH

	BUSINESS	ADDRESS	CLASSIFICATION	WATERSHED	FY 02-03		FY 03-04		FY 04-05		FY 05-06			FY 06-07			INSPECTION SCHEDULED FOR (FY 07-08)
					INSPECT DATE	# COMPLAINT INVEST-IGATIONS	INSPECTION DATE FY 03-04	# COMPLAINT INVEST-IGATIONS	INSPECTION DATE FY 04-05	# COMPLAINT INVEST-IGATIONS	INSPECTION DATE FY 05-06	REPORT/LETTER SENT	# COMPLAINT INVESTIGATIONS	INSPECTION DATE FY 06-07	REPORT/LETTER SENT	# COMPLAINT INVESTIGATIONS	
47	MEIJO SUSHI	600 PALM, SUITE 300	EATING / DRINKING	OTAY							13-Sep-05			23-Mar-07	16-Apr-07		
48	MI RANCHITO TACO SHOP	805 SEACOAST	EATING / DRINKING	OTAY							23-Sep-05			7-Apr-07	23-Apr-07		
49	MICKIES BAR AND GRILL	220 PALM	EATING / DRINKING	OTAY					6-Jun-05								
50	MZM SEACOAST BISTRO, LP	875 SEACOAST	EATING / DRINKING	OTAY					22-Jun-05								
51	RED HAWK STEAKHOUSE	1205 PALM	EATING / DRINKING	OTAY					9-Dec-04								
52	RODRIGO'S MEXICAN FOOD	600 PALM	EATING / DRINKING	OTAY							1-Mar-06	21-Mar-06					
53	SEACOAST PIZZA	807 SEACOAST	EATING / DRINKING	OTAY			10-Oct-03										YES
54	SILVER SANDS	995 PALM	EATING / DRINKING	OTAY							15-Nov-05						
55	SILVER SEA CHINESE RESTAURANT	600 PALM, SUITE 117	EATING / DRINKING	OTAY					26-May-05								
56	SOMBRERO MEXICAN FOOD	189 PALM	EATING / DRINKING	OTAY							22-Sep-05			7-Apr-07	20-Apr-07		
57	STARDUST DONUT SHOP	698 SR-75	EATING / DRINKING	OTAY							7-Sep-05						
58	TACO BELL#133/ST MAR ENTERPRIS	1337 PALM	EATING / DRINKING	OTAY							24-Aug-05						
59	THE SCOREBOARD	951 PALM	EATING / DRINKING	OTAY							4-Oct-05						
60	THE WAVE CAFE	809 SEACOAST	EATING / DRINKING	OTAY							4-Oct-05						
61	WIENERSCHNITZEL #358	1253 PALM	EATING / DRINKING	OTAY			11-Jan-04										
62	WOODIES	710 SEACOAST, SUITE E	EATING / DRINKING	OTAY							15-Nov-05						
63	YE OLDE PLANK INN	24 PALM	EATING / DRINKING	OTAY							4-Apr-06	24-Apr-06					YES
64	MERCADO SHORES	639 7TH, SUITE A-B	FOOD MARKET	OTAY										4-Dec-06	6-Dec-06		
65	SAVE U FOODS	805 PALM	FOOD MARKET	OTAY										7-Nov-06	14-Nov-06		
66	WALLY'S IGA	836 PALM	FOOD MARKET	OTAY										18-Oct-06	6-Nov-06		
67	WY MARKET	1200 PALM	FOOD MARKET	OTAY										1-Nov-06	6-Nov-06		
68	7-ELEVEN	1311 PALM	GAS STATION	OTAY							3-Aug-05			4-May-07	18-May-07		
69	BEACH SIDE STATION	681 SR-75	GAS STATION	OTAY		1			1-Jun-05				1	15-May-07	1-Jun-07		
70	BP WEST COAST P DBA ARCO 9755	1185 PALM	GAS STATION	OTAY					8-Apr-05					6-Mar-07	15-Mar-07		
71	PALM (SB) #2 EXXON	907 PALM	GAS STATION	OTAY					7-Apr-05					6-Mar-07	15-Mar-07		
72	GOODWILL	849 PALM	LARGE RETAIL	OTAY									1				
73	KRAGEN AUTO PARTS	1025 PALM	LARGE RETAIL	OTAY									1	8-Mar-07	21-Mar-07		
74	SAVEON DRUGS	888 PALM	LARGE RETAIL	OTAY									1				
75	IMPERIAL BEACH PET HOSPITAL	538 12TH	ANIMAL FACILITIES	OTAY													
76	CALIFORNIA-AMERICAN WATER COMPANY	600 3RD	OTHER	OTAY							8-Sep-05						
77	EPISCOPAL COMMUNITY SERVICES	1340 IMPERIAL BEACH	OTHER	OTAY									1				
78	TUCK'S CARPET, INC.	532 FLORENCE	OTHER	OTAY									1				
79	BERNARDO SHORES RV RESORT	500 HWY 75	TRAILER PARK	OTAY							13-Sep-05						
80	IMPERIAL TRAILER PARK	674 PALM	TRAILER PARK	OTAY							30-Aug-05						
81	SIESTA RV PARK	409 PALM	TRAILER PARK	OTAY							22-Sep-05						
82	ANGELA'S MEXICAN FOOD (FORMERLY LA ROSA)	1293 IMPERIAL BEACH	EATING / DRINKING	TIJUANA							11-Aug-05						
83	MARRERO'S CAR WASH (FORMERLY "COIN-OPERATED CAR	1257 IMPERIAL BEACH	CAR WASH	TIJUANA							20-Apr-06	10-May-06					YES
84	C.H. DONUTS	1070 13TH, SUITE A	EATING / DRINKING	TIJUANA					12-May-05								
85	GIANT PIZZA KING #4	1070 13TH, SUITE B	EATING / DRINKING	TIJUANA					14-Apr-05								
86	IB FORUM	1079 SEACOAST	EATING / DRINKING	TIJUANA					23-Mar-05								
87	K-C'S CHINESE FOOD	1299 IMPERIAL BEACH	EATING / DRINKING	TIJUANA					21-Oct-04								
88	OFFICE LOUNGE COCKTAILS	1133 13TH	EATING / DRINKING	TIJUANA							10-Aug-05			23-May-07	7-Jun-07		
89	PIZZA INDUSTRY/DOMINO'S PIZZA	1307 IMPERIAL BEACH	EATING / DRINKING	TIJUANA							10-Jan-06	9-Feb-06					
90	13TH STREET MARKET	1126 13TH	FOOD MARKET	TIJUANA													
91	LA POSTA MARKET (FORMERLY "MARINA VILLAGE MARKET"	1268 IMPERIAL BEACH	FOOD MARKET	TIJUANA									1	13-Feb-07	1-Mar-07		
92	7-ELEVEN	1303 IMPERIAL BEACH	GAS STATION	TIJUANA							18-Aug-05			15-May-07	23-May-07		

Bold indicates a new addition to the inventory.

ATTACHMENT 3-2
INVENTORY OF COMMERCIAL BUSINESSES IN THE CITY OF IMPERIAL BEACH

	BUSINESS	ADDRESS	CLASSIFICATION	WATERSHED	FY 02-03		FY 03-04		FY 04-05		FY 05-06			FY 06-07			INSPECTION SCHEDULED FOR (FY 07-08)
					INSPECT DATE	# COMPLAINT INVEST-IGATIONS	INSPECTION DATE FY 03-04	# COMPLAINT INVEST-IGATIONS	INSPECTION DATE FY 04-05	# COMPLAINT INVEST-IGATIONS	INSPECTION DATE FY 05-06	REPORT/LETTER SENT	# COMPLAINT INVESTIGATIONS	INSPECTION DATE FY 06-07	REPORT/LETTER SENT	# COMPLAINT INVESTIGATIONS	
93	FAR EAST ROCK	1300 IMPERIAL BEACH	GAS STATION	TIJUANA					21-Mar-05					21-Mar-07	3-Apr-07		
94	COLWELL REALTY	1398 SEACOAST	OTHER	TIJUANA									1				

Bold indicates a new addition to the inventory.

Storm Water Compliance Inspections

The City of Imperial Beach has developed an inventory of all existing commercial and industrial businesses and has prioritized them according to the type of business, proximity to a receiving water and potential threat to water quality.

Based on these prioritization, the City will be conducting storm water compliance inspections of commercial and industrial facilities within the City.

These inspections will include a meeting with the business owner or operator, a walk through of the facility, a review and evaluation of current best management practices and recommendations for additional measures that may be required to comply with the storm water permit and ordinance.

For additional information or clarification of storm water best management practices call (619) 424-4095

Report all spills immediately to the Storm Water Hotline: (619) 424-4095 or the Sheriff Dispatch at (619) 585-7232

REMEMBER
ONLY RAIN IN THE STORM DRAIN!

City of Imperial Beach
Storm Water Protection Program
825 Imperial Beach Boulevard
Imperial Beach, CA 91932

Storm Water Hotline:
(619) 424-4095

Printed on recycled paper

Best Management Practices for your Business

ONLY RAIN IN THE STORM DRAIN!



City of Imperial Beach
Storm Water Protection Program

Storm Water Hotline:
(619) 424-4095

Did you know that urban storm water is the biggest contributor to coastal water pollution?

Whether your business is 2 blocks or 2 miles from the coast, you can unknowingly contribute to storm water pollution through improper housekeeping and maintenance practices.

One of the most common types of pollution from businesses is contaminated water runoff, usually from cleaning and maintenance activities. Simple best management practices (BMPs) can prevent storm water pollution, and prevention is good business. It means clean water, clean beaches and shows your customers you care about the community.

What is storm water pollution?

Storm water pollution is urban runoff water that has picked up pollutants as it flows through the storm drain system–a network of channels, gutters and pipes that collect runoff from city streets, neighborhoods, construction sites, parking lots, etc. –and empties directly into receiving waters.

In the City of Imperial Beach, these receiving waters are the Pacific Ocean, Tijuana Estuary, Tijuana River, Otay River and San Diego Bay.



What can your business do to help?

The following are some ideas on steps you can take in and around your business. They are measures that do not take a lot of time or cost a lot of money, but can do a lot to prevent water pollutants from entering the storm drain.

Good Housekeeping

- Use brooms or mops to clean dumpsters, loading docks, pavements, and sidewalks, instead of using a hose or pressure washing.
- Never disposed of any wash water down the storm drain, streets, sidewalks, parking lots or driveways. Use the sanitary sewer.
- Use non-toxic products for cleaning and gardening maintenance. Avoid or minimize the use of pesticides, herbicides chemicals and toxic cleaning solutions.

Materials Storage and Handling

- When possible store materials indoors or under cover areas not exposed to rain and water.
- Store liquids, oil, hazardous waste, and other chemicals in a designated area with secondary containment.
- Keep liquid waste segregated. Many fluids can be recycled through hazardous waste disposal companies, as long as they are not mixed.

Spill Response

- Use absorbents such as cat litter to clean up small spills and disposed properly.
- Keep rags and absorbents readily accessible.
- Keep a spill response plan current and ensure that employees are trained properly.

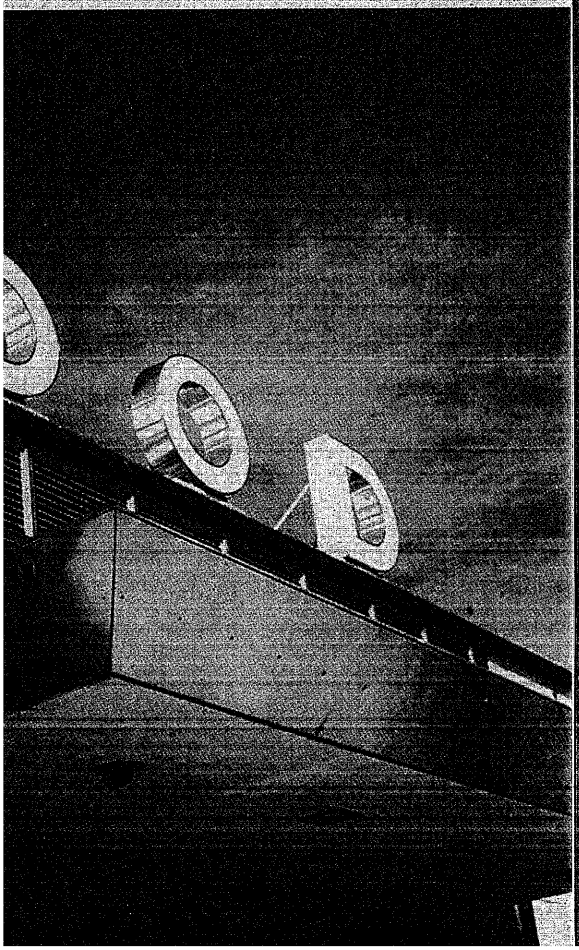
Waste Management

- Keep property free of trash and debris. Keep all trash inside dumpsters or containers until it can be hauled away.
- Dumpsters should always be kept closed to prevent rainwater from entering.
- Never place hazardous waste in dumpster or trash bin.
- Recycle cans, bottles, paper, cardboards, and newspaper.
- Recycle motor oil, oil filters, anti-freeze, batteries, solvents, lubricants, tires, etc. These items are not trash, and are illegal to dump. Contact a hazardous waste hauler for proper disposal.

Employee Training

- Conduct regular training with all employees. Train employees on good housekeeping practices and the importance of pollution prevention.
- Inform employees of materials that can be recycled and those that have special disposal requirement. Identify and label containers.
- Post good housekeeping tips and best management practices on visible places such as the kitchen, or employee bulletin boards.
- Inform subcontractors, property managers, gardeners, and maintenance or cleaning crews about the storm water requirements and pollution prevention measures.

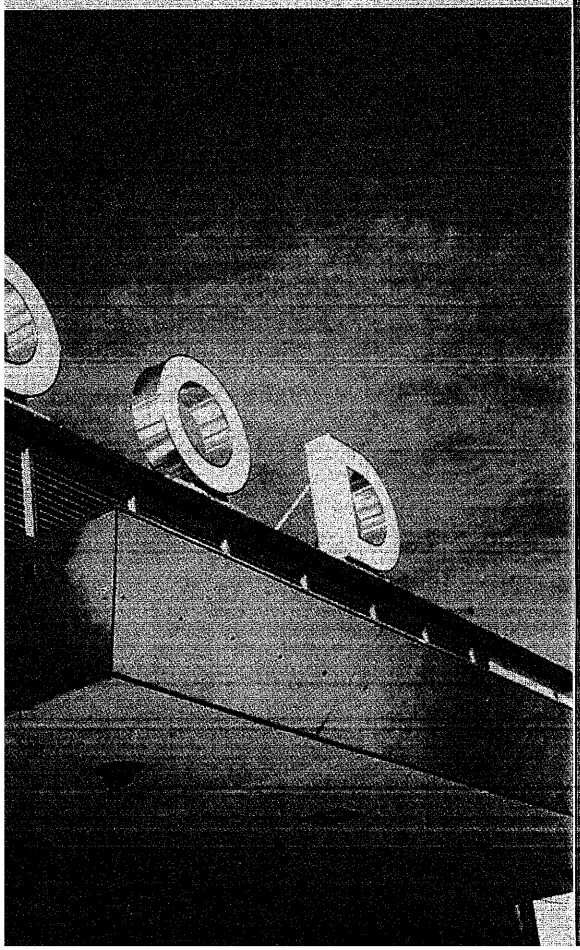
Eating and Drinking Establishments: Stormwater Best Management Practices



The Green Wrench Guide

Stormwater Best Management Practices for the Automotive Industry

Eating and Drinking Establishments: Stormwater Best Management Practices



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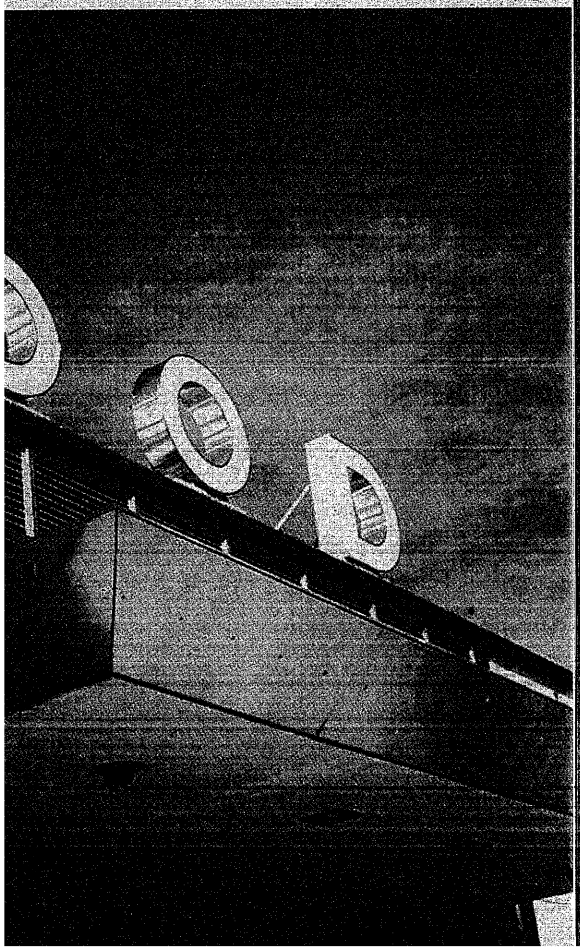
Stormwater Best Management Practices for the Automotive Industry

Eating and Drinking Establishments: Stormwater Best Management Practices



The Green Wrench Guide

Stormwater Best Management Practices for the Automotive Industry

City of Imperial Beach, California

OFFICE OF THE CITY MANAGER

December 12, 2005

Dear Residents & Business Owners:

The purpose of this letter is to tell you about a new fee included on this month's EDCO billing statement. The fee appears as "Imperial Beach Storm Water Management Fee." The fee was placed on the billing statement at the request of the City of Imperial Beach to help fund its storm water management program, required by the Federal government.

The Federal Clean Water Act, regulated by the State of California Regional Water Quality Control Board – San Diego Region, requires all cities in the County to operate storm water management programs. The requirement for the program comes with no Federal or State funds. Rather, cities are expected to bear the full cost of the programs.

The City of Imperial Beach created a monthly fee* to help offset the program's expense—as have most cities in the San Diego County. The City will continue to keep program costs as low as possible. EDCO's willingness to collect the fee, saving the City, residents, and businesses mailing and collection costs, also helps keep the fee lower. The revenue generated from the fee is expected to cover approximately 50 percent of the program's cost in 2006. With this fee, Imperial Beach will do its part to ensure that water in our bays, beaches and ocean are cleaner and healthier.

For more information regarding the City's storm water program, please visit our web site. On our www.cityofib.com home page, click City Departments - Public Works – Environmental - Storm Water. If you have any questions about this fee, please call Mr. Hank Levien, Public Works Director at (619) 423-8311. If you would like to help make a difference in keeping our water clean, please contact Todd Snyder, Environmental Programs Manager, at the number above.

Sincerely,

Gary Brown

Gary Brown, City Manager

*The fee went into effect December 2, 2005. The Jan/Feb/Mar, 2006 solid waste billing reflects the first billing for this service.

825 Imperial Beach Boulevard • Imperial Beach, California • 91932 • (619) 423-8303 • Fax (619) 429-9770

The City of Imperial Beach

(619) 423-8311
(619) 429-4861 Fax

PUBLIC WORKS
825 IMPERIAL BEACH BOULEVARD • IMPERIAL BEACH, CALIFORNIA 91932

January 24, 2007

Joan Jetty
Jetty's Famous Roast Beef Restaurant
800 13th Street
Imperial Beach, CA 91932

Dear Ms. Jetty:

Enclosed is the Commercial Inspection Report that summarizes the results of the urban runoff inspection of Jetty's Famous Roast Beef Restaurant on January 11, 2007. The City appreciated the steps your facility took to maintain compliance with the City's **Urban Runoff Management and Discharge Control Ordinance (Municipal Code 8.30)**. To remain in compliance, please ensure that all employees utilize the required best management practices (pollution prevention methods) listed in the report and in the brochure, "Best Management Practices for Your Business" that was provided to you during the inspection.

The following were positive attributes of your facility's management of urban runoff:

- Housekeeping: Most outside areas were free from trash and debris.
- Waste Management: Jetty's utilizes trash and grease recycling services. Covers to both containers were closed which prevents material contact with rainwater and potential runoff of pollutants.
- Spill Prevention and Response: Jetty's retains frialator grease and management personnel stated that they recently incorporated a maintenance procedure to reduce the grease that enters the sanitary sewer system.

However, the City made the following recommendations in order for your facility to remain in compliance:

- Housekeeping: The City observed trash on the ground within the trash enclosure area and requested that it be picked up to prevent a discharge into the nearby alley. On January 12th, 2007 the City verified that the trash was cleaned up.

Additionally, the City requires that **all employees** be trained annually on best management practices and the importance of pollution prevention. The City recommends that the inspection report and best management practices brochure be used in employee training.

If I can be of further assistance in explaining the City's urban runoff management requirements or for any matter concerning the City's Pollution Prevention program, please don't hesitate to call me at 619-424-4095.

Sincerely,

_____
Doug Coppi
Environmental Program Specialist

cc. Property Owner

Printed on 100% Post Consumer Recycled Paper

ATTACHMENT 3-7
COMMERCIAL INSPECTION LOG
FY 2006-07

	BUSINESS_N	ARC_STREET	SUITE	CLASSIFICATION	WATERSHED	INSPECTION DATE	CORRECTIVE ACTIONS REQUIRED							ENFORCEMENT ACTIO	CORRECTIVE ACTIONS VERIFIED	# RE-INSPECTIONS	COMMENTS
							Illegal Discharge	Pollutant	Housekeeping	Waste Mgmt.	Materials Storage	Spill Prevention / Control	Other (See Comments)				
1	El Cilantro	764 13th St.		Eating & Drinking Facility	OTAY	07/14/06				1				VW	07/20/06	1	Trash was observed on the ground in and around the trash enclosure located in the back parking lot. Trash enclosure gate is kept locked during non-business hours. City consulted with property management to initiate the removal of the trash and debris.
2	La Ceibita	1051 13th St.	Suite B	Eating & Drinking Facility	OTAY	07/31/06											Recommended locks on dumpster to address scavenging problem in dumpsters.
3	McDonald's	1135 Palm Ave.		Eating & Drinking Facility	OTAY	08/08/06				1				VW	08/10/06	1	Cooking grease is stored within the trash area, but the City found the grease bin to have significant grease accumulation on top of the bin. The grease was removed to avoid potential contact with rain water.
4	Express Tire	950 Palm Ave.		Automotive	OTAY	08/03/06											Mop and bucket is used to clean inside areas. A 3-yard cubic bin and blue recycling container is used for trash and recycling. Used oil and engine coolant is stored inside and with proper containment. Absorbent materials are kept on site and are used for any leaks or

ATTACHMENT 3-7
COMMERCIAL INSPECTION LOG
FY 2006-07

	BUSINESS_N	ARC_STREET	SUITE	CLASSIFICATION	WATERSHED	INSPECTION DATE	CORRECTIVE ACTIONS REQUIRED							ENFORCEMENT ACTIC	CORRECTIVE ACTIONS VERIFIED	# RE-INSPECTIONS	COMMENTS
							Illegal Discharge	Pollutant	Housekeeping	Waste Mgmt.	Materials Storage	Spill Prevention / Control	Other (See Comments)				
10	Hawkin's Auto Body	519 Florida St.		Automotive	OTAY	09/20/06											City observed a powdery polymer primer substance on the ground towards the front of the facility that was the result of sanding operations that were occurring. City recommends continuing with daily sweeping to prevent pollutant discharges into the street. City recommended conducting sanding operations under the outside roofed work area to minimize the potential for pollutant runoff. Auto wastes are properly stored in a sealed drum with secondary containment.
11	Santana Motors	942 Palm		Automotive	OTAY	10/18/06											City recommends continuing with dry sweeping methods on impervious areas. Covers to trash and recycling containers are kept closed when not in use. Businesses does not store any materials outside. Automobiles are cleaned mainly with rags and towels. Back loading dock area contains significant trash and debris which may enter the storm drain. Covers to trash and recycling dumpsters

ATTACHMENT 3-7
COMMERCIAL INSPECTION LOG
FY 2006-07

	BUSINESS_N	ARC_STREET	SUITE	CLASSIFICATION	WATERSHED	INSPECTION DATE	CORRECTIVE ACTIONS REQUIRED							ENFORCEMENT ACTIO	CORRECTIVE ACTIONS VERIFIED	# RE-INSPECTIONS	COMMENTS
							Illegal Discharge	Pollutant	Housekeeping	Waste Mgmt.	Materials Storage	Spill Prevention / Control	Other (See Comments)				
20	General Los Panchos	1337 Palm Ave.		Eating & Drinking Facility	OTAY	02/13/07											The City observed that outside areas including (eating, drive thru and parking lot) were free from trash and debris. Outside areas are maintained by sweeping methods and water is not used in cleaning. The City did not observe any materials that were stored outside. Los Panchos services their grease trap every two weeks or more frequent when necessary.
21	Arco Gas Station	1185 Palm Ave.		Retail Fueling	OTAY	03/06/07											Outside areas were free from trash, debris, and other pollutants. Outside areas are swept 3 times per day. Water is not used to clean outside surfaces. Used gasoline pump filters, absorbent material, and rags are properly stored in 55-gallon drums. Arco utilizes both absorbent material and rags to contain and remove gasoline and automotive fluid spills. Employees are trained annually on proper spill recovery procedures.
																	Outside areas were free from trash, debris, and other pollutants. Employees sweep up trash and debris on a daily basis. A steam

ATTACHMENT 3-7
COMMERCIAL INSPECTION LOG
FY 2006-07

	BUSINESS_N	ARC_STREET	SUITE	CLASSIFICATION	WATERSHED	INSPECTION DATE	CORRECTIVE ACTIONS REQUIRED							ENFORCEMENT ACTIC	CORRECTIVE ACTIONS VERIFIED	# RE-INSPECTIONS	COMMENTS
							Illegal Discharge	Pollutant	Housekeeping	Waste Mgmt.	Materials Storage	Spill Prevention / Control	Other (See Comments)				
25	Meijo Restaurant	600 Palm Avenue		Eating & Drinking Facility	SD BAY	03/23/07			1				1		03/24/07	1	The City observed that most of the outside areas including the front eating section were free from trash, debris and other pollutants. However, the inspector observed an employee throw a cigarette into the parking lot. The City also observed cigarette and other debris on the ground within the trash enclosure area. Manager stated that recyclables are taken to an outside facility for proper recycling. Manager stated that the grease interceptor is serviced regularly per the required maintenance program. Mr. Nguyen immediately instructed one of his employees to pick up the debris that was on the ground within the trash enclosure area (Photo #2). City recommended employee training on the importance of pollution prevention and BMPs to ensure pollutants are prevented from entering the storm water conveyance system. All employees were trained on March 24, 2007.
																	The City observed that outside areas including the front section and

ATTACHMENT 3-7
COMMERCIAL INSPECTION LOG
FY 2006-07

	BUSINESS_N	ARC_STREET	SUITE	CLASSIFICATION	WATERSHED	INSPECTION DATE	CORRECTIVE ACTIONS REQUIRED							ENFORCEMENT ACTIO	CORRECTIVE ACTIONS VERIFIED	# RE-INSPECTIONS	COMMENTS
							Illegal Discharge	Pollutant	Housekeeping	Waste Mgmt.	Materials Storage	Spill Prevention / Control	Other (See Comments)				
29	Precision Foreign Car Service	1240 Palm Ave		Automotive	OTAY	04/24/07						2		VW	04/26/07	1	The City observed a small antifreeze leak and some used absorbent material on the ground which the City requested that it be removed. Precision utilizes both absorbent material and drip pans to contain and remove automotive leaks.
30	Precision Autobody Collision	989 Palm Ave.		Automotive	OTAY	04/24/07						1	1	VW	05/16/07		Outside areas were free from trash and debris. Periodic sweeping of debris is conducted in outside work areas. Operational wastes are stored in a secure drum inside the facility. Paint is stored in a secured 55 gallon drum within secondary containment. City observed employees working on a vehicle that resulted in paint spillage onto the ground. City recommended drip pans. City observed storm water outlet in outside work area. City discovered this outlet conveys facility runoff through a PVC pipe to the sanitary sewer system at the adjacent business. A sewer cleanout exists within adjacent business

Attachment 4-1
Program Assessment Form - Residential Component
Effectiveness and Performance Measurements:

Activity	FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	Units	Comments
Quantity of HHW materials collected.	15	5.1	2.2	1.66	3.27	9.36	Tons	
Quantity of used oil collected.	Unknown	Unknown	Unknown	2,911	4,359	2,440	Gallons	1,000 used oil filters also recycled
# of staff supporting the Residential Component.			2	3	3	3	#	1 Code Compliance Officer 2 Public Works Employees
# of staff supporting the Residential Component trained in pollution prevention.			2	3	3	3	#	1 Code Compliance Officer 2 Public Works Employees
# of Residential communities.	6	6	6	6	6	6	#	The City has 6 identified neighborhoods in its General Plan
# of high priority Residential communities.	6	6	6	6	6	6	#	All residential areas considered high priority
# of Residential areas requiring minimum BMPs.	6	6	6	6	6	6	#	
# of Residential areas with minimum BMPs.	6	6	6	6	6	6	#	
# of Education Events				5	8	1	#	
# Attendees at Education Events				698	N/A	325,000	Attendees	
# of Public Participation Clean up Events				3	3	2	#	
# of Participants in Clean up Events				1,163	926	137	Attendees	
# Residential Enforcement Actions				6	15	16	#	2 Notices of Abatement 14 Notice of Violation 0 Citations

A clean environment is important to all of us!

Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to carry rainwater away form developed areas to prevent flooding. Untreated storm water and the pollutants it carries, flows directly into creeks, lagoons and the ocean.

In recent years, sources of water pollution, like industrial waters from factories, have been greatly reduced. However, now the majority of water pollution occurs from things like: cars leaking oil; fertilizer from farms, lawns and gardens; failing septic tanks; pet waste; and residential car washing into the storm drains and into the ocean and waterways.

All these sources add up to a pollution problem! But each of us can do small things to help clean up our water and that adds up to **pollution solution!**

Car washing photo is used courtesy of the Water Quality Consortium, a cooperative venture between the Washington State Department of Ecology, King County and the Cities of Bellevue, Seattle and Tacoma.

Dead fish photo © BBC News World Edition

The content is used courtesy of the City of Carlsbad

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Car Washing

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City of Imperial Beach
Storm Water Protection Program

Storm Water Hotline:
(619) 424-4095

What's the problem with car washing

There's no problem washing your car. It's just how and where you do it.

Most soap contains phosphates and other chemicals that harm fish and water quality. The soap, together with the dirt, metal and oil washed from you car, flows into nearby storm drains which run directly into lakes, rivers or marine waters.

The phosphates from the soap can cause excess algae to grow. Algae looks bad, smells bad, and harms water quality. As algae decays, the process uses up oxygen in the water that fish need.



© BBC News World Edition

How can YOU help keep our environment clean?

Having a clean environment is of primary importance for our health and economy. Clean waterways provide commercial opportunities, recreation, fish habitat and add beauty to our landscape. YOU can help keep our ocean, creeks and lagoons clean by applying the following tips:



- Use soap sparingly.
- Use a hose nozzle with a trigger to save water.
- Pour your bucket of soapy water down the sink when you're done, not in the street.
- Avoid using engine and wheel cleaners or degreasers.
- Take your car to a commercial car wash, especially if you plan to clean the engine or the bottom of your car. Most car washes reuse wash water several times before sending it into the sewer system for treatment.
- Hire only mobile detail operators that will capture wash water and chemicals. It is unlawful for commercial vehicle washing operators to allow wash water to enter the storm drain system.

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In recent years, sources of water pollution, like industrial waters from factories, have been greatly reduced. However, now the majority of water pollution occurs from things like: cars leaking oil; fertilizer's from farms, lawns and gardens; failing septic tanks; pet waste; and residential car washing into the storm drains and into the ocean and waterways.

All these sources add up to a pollution problem! But each of us can do small things to help clean up our water and that adds up to **pollution solution!**

What's the problem with fertilizers and pesticides?

Fertilizer isn't a problem - **IF** it's used carefully. If you use too much fertilizer or apply it at the wrong time, it can easily wash off your lawn or garden into storm drains and then flow untreated into lakes or streams.

Just like in your garden, fertilizer in lagoons and streams makes plants grow. In water bodies, extra fertilizer can mean extra algae and aquatic plant growth. Too much algae harms water quality and makes boating, fishing and swimming unpleasant. As algae decay, they use up oxygen in the water that fish and other wildlife need.

Fertilizer photo is used courtesy of the Water Quality Consortium, a cooperative venture between the Washington State Department of Ecology, King County and the Cities of Bellevue, Seattle and Tacoma.

The content is used courtesy of the City of Carlsbad

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Lawn & Garden Care

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City of Imperial Beach
Storm Water Protection Program

Storm Water Hotline:
(619) 424-4095

How can YOU help keep the environment clean?

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- Don't blow or rake leaves and other yard waste into the street or gutter.
- Recycle yard waste or start your own compost pile.
- Don't over irrigate. Use drip irrigation, soaker hoses or micro-spray system and water early in the morning.
- If you have a spray head sprinkler system, consider adjusting your watering method to a cycle and soak. Instead of watering for 15 minutes straight, break up the session into 5 minutes intervals allowing water to soak in before the next application.
- Keep irrigation system well maintained and water only when needed to save money and prevent over-watering.
- Use fertilizers and pesticides sparingly.
- Have your soil tested to determine the nutrients needed to maintain a healthy lawn.
- Consider using organic fertilizers - they release nutrients more slowly.
- Leave mulched grass clippings on the lawn to act as natural fertilizer.
- Use pesticides only when absolutely necessary. Use the least toxic product intended to target a specific pest, such as insecticide soaps, boric acid, etc. Always read the label and use only as directed.
- Use predatory insects to control harmful pests when possible.
- Properly dispose of unwanted pesticides and fertilizers at Household Hazardous Waste collection facilities.

For more information on landscape irrigation , please call **(619) 423-8311**.

Master Gardeners

San Diego County has a Master Gardener program through the University of California Cooperative Extension. Master Gardeners can provide good information about dealing with specific pests and plants.

You may call the Master Gardener Hotline at (858) 694-2860 or visit their website at

http://www.mastergardenerssandiego.org

The hotline is staffed Monday - Friday, 9 am - 3 pm, by experienced gardeners who are available to answer specific questions. Information from Master Gardeners is free to the public.



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In recent years, sources of water pollution, like industrial waters from factories, have been greatly reduced. However, now the majority of water pollution occurs from things like: cars leaking oil; fertilizer from farms, lawns and gardens; failing septic tanks; pet waste; and residential car washing into the storm drains and into the ocean and waterways.

All these sources add up to a pollution problem! But each of us can do small things to help clean up our water and that adds up to **pollution solution!**

Motor oil photo is used courtesy of the Water Quality Consortium, a cooperative venture between the Washington State Department of Ecology, King County and the cities of Bellevue, Seattle and Tacoma.

Oiled duck photo is used courtesy of the Exxon Valdez Oil Spill Trustee Council

The content is used courtesy of the City of Carlsbad

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Motor Oil

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City of Imperial Beach
Storm Water Protection Program

Storm Water Hotline:
(619) 424-4095

What's the problem with motor oil?

Oil does not dissolve in water. It lasts a long time and sticks to everything from beach sand to bird feathers. Oil and other petroleum products are toxic to people, wildlife and plants.

One pint of oil can make a slick larger than a football field. Oil that leaks from our cars onto roads and driveways is washed into storm drains, and then usually flows directly to a creek or lagoon and finally to the ocean.

Used motor oil is the largest single source of oil pollution in our ocean, creeks and lagoons. Americans spill 180 million gallons of used oil each year into our waters. This is **16 times** the amount spilled by the Exxon Valdez in Alaska.



How can YOU help keep our environment clean?

Having a clean environment is of primary importance for our health and economy. Clean waterways provide commercial opportunities, recreation, fish habitat and add beauty to our landscape. YOU can help keep our ocean, creeks and lagoons clean by applying the following tips:



- Stop drips. Check for oil leaks regularly and fix them promptly. Keep your car tuned to reduced oil use.
- Use ground cloths or drip pans beneath your vehicle if you have leaks or are doing engine work.
- Clean up spills immediately. Collect all used oil in containers with tight fitting lids. Do not mix different engine fluids.
- When you change your oil, dispose of it properly. Never dispose of oil or other engine fluids down the storm drain, on the ground or into a ditch.
- Recycle used motor oil. There are several locations in Imperial Beach that accept used motor oil.
- Buy recycled ("refined") motor oil to use in your car.
- Free recycling of oil and filter call 1-800-237-2583 - **OR** -
- Pick up a free funnel and gallon jug at City Hall to recycle your oil!

A clean environment is important to all of us!

Did you know that storm drains are NOT connected to sanitary sewer systems and treatment plants? The primary purpose of storm drains is to carry rainwater away form developed areas to prevent flooding. Untreated storm water, and the pollutants it carries, flows directly into creeks, lagoons and the ocean.

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Pet Waste photo is used courtesy of the Water Quality Consortium, a cooperative venture between the Washington State Department of Ecology, King County and the Cities of Bellevue, Seattle and Tacoma

Pet Waste clip art is used courtesy of the City of Grand Rapids and The Center f or Environmental Study

The content is used courtesy of the City of Carlsbad

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Pet Waste

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City of Imperial Beach
Storm Water Protection Program

Storm Water Hotline:
(619) 424-4095

What's the problem with pet waste?

Pet waste is a health risk to pets and people, especially children. It's a nuisance in our neighborhoods. Pet waste is full of bacteria that can make people sick. This bacteria gets washed into the storm drain and ends up in our creeks, lagoons, and ocean. The bacteria ends up in shellfish living in these water bodies. People who eat those shellfish may get very sick.

Preliminary studies show that dog and cat waste can contribute up to 25% of the harmful bacteria found in our local lagoons.

Be responsible and clean up after your pets.

It's easy as **1-2-3!**

1. Bring a bag.
2. Clean it up.
3. Dispose of waste properly in toilet or trash.



How can YOU help keep our environment clean?

Having a clean environment is of primary importance for our health and economy. Clean waterways provide commercial opportunities, recreation, fish habitat and add beauty to our landscape. YOU can help keep our ocean, creeks and lagoons clean by applying the following tips:



- Carry a plastic bag when walking pets and be sure to pick up after them.
- Clean up pet waste in your yard frequently.
- Pick up after your pets before cleaning patios, driveways, and other hard surface areas. Never hose pet waste into the street or gutter.

The best way to dispose of pet waste is to flush it down the toilet because it gets treated by a sewage treatment plant.

Other disposal methods for pet waste include sealing it in a bag and placing the bag in trash or burying small quantities in your yard to decompose. Be sure to keep it away from vegetable gardens.

Storm Water Hotline:
(619) 424-4095

City of Imperial Beach

Public Works Department
495 10th Street
Imperial Beach, CA 91932
Mailing Address:
825 Imperial Beach Blvd.
Imperial Beach, CA 91932
(619) 424-4095
OR
(619) 423-8311
Website: www.cityofib.com

E-mail: ibpworks@cityofib.org

Printed on recycled paper

City of Imperial Beach

STORM WATER RUNOFF POLLUTION

ONLY RAIN IN THE STORM DRAIN!

Prevention Tips for Homeowners

What is Storm Water Pollution?

When it rains or when water flows out of yards over pavement and into streets, it flows through the storm drain system directly into receiving waters. In the City of Imperial Beach, these receiving waters are the Pacific Ocean, Tijuana Estuary, Tijuana River, Otay River and San Diego Bay. The storm drain system consists of driveways, sidewalks, streets, gutters, storm drainpipes and any other structure that directs water to the receiving waters. Obviously, when it rains, water needs to be channeled to these receiving waters to avoid flooding in our streets. However, as water flows through the storm drain system, it picks up pollutants left by us, the residents, visitors and businesses located throughout the City, and deposits them into the receiving waters creating harmful and devastating conditions for wildlife, fish and humans. It also doesn't make Imperial Beach look beautiful. Have you ever seen trash floating in our rivers? This could have been a result of trash being left on the street only to be carried by rainwater to the nearest river!!!



"I spend most of my time in the Tijuana Estuary and depend on clean water for survival."

Storm water pollutants include but are not limited to:

- Leaves, grass, sediment, dirt, and lawn clippings.
- Household toxics used to maintain your home.
- Trash and debris.
- Your pet waste.
- Hazardous waste (oil, antifreeze, etc) from your car.
- Soap you use to wash your car.

Where Does Storm Water Pollution Come From?

AUTOMOTIVE OIL, ANTIFREEZE, GREASE AND EXHAUST Automotive fluids which are hazardous wastes can spill onto the ground during routine maintenance and from leaks, and the air borne pollutants from your car's exhaust. These pollutants then settle onto the ground to be washed into storm drains.

HOUSEHOLD CLEANING PRODUCTS
Household cleaning products contain detergents, solvents, aerosol propellants, dyes, perfumes and other chemicals that are hazardous to the environment when allowed to wash into the storm drain system or soak into the ground. (Note: products are considered hazardous if the label contains any of the following words: hazard, caution, danger, poison or flammable.)

PAINTS & SOLVENTS Paints and solvents are hazardous wastes and pollute soil and water if not disposed of properly. Washing brushes, rollers and buckets out in your yard, street or sidewalk causes pollutants to eventually make their way to the storm drain system and pollute storm water.

TRASH, DEBRIS, AND PET WASTE Trash, pet waste, leaves, grass clippings, and sediment which is not either picked up, contained or recycled and left on your property will eventually make its way to the storm drain system by rain or wind. They can clog waterways and degrade water quality. High levels of bacteria are produced which can make people sick and cause beach closures.

LAWN & GARDEN PRODUCTS When pesticides, herbicides and fertilizers are overused, they can wash off your yard and into storm drains. Pesticides can accumulate in fish at levels that threaten their health and our health when we eat them.

Clean Water!! It is the Law

The City of Imperial Beach is regulated by a municipal permit (Order 2001-01) issued to us by the San Diego Regional Water Quality Control Board. Essentially, this permit is a legal mandate that requires us, the City, to prevent storm water pollution to the maximum extent practicable.

Our City's Municipal Code, Section 8.30 "Urban Runoff Management and Discharge Control" mirrors this permit and holds everyone accountable for preventing pollutants from being discharged into the storm drain system.

What can YOU do?

CARING FOR YOUR CAR

1. When you wash your car at home, wash your car on a pervious layer like your yard; use biodegradable soap and water sparingly.
2. Support our Storm Water Program by washing your vehicle at commercial car washes that recycle water and/or discharge into the sanitary sewer.
3. Don't pour used oil or any other fluids onto the ground or into storm drains.
4. Regularly inspect and maintain your car to prevent leaks of oil, antifreeze and other fluids, and tune up your car regularly to reduce emissions.

IN YOUR HOME

1. Whenever possible, use safer substitutes instead of hazardous cleaning products and use only what you need.
2. Contain outside work areas, such as painting areas, where spills might occur by using drop cloths and wash painting equipment in your sink or toilet and never on your yard, driveway or sidewalk.
3. Use kitty litter or other absorbent material to clean up spills and dispose of it as hazardous waste.
4. Recycle when possible.
5. Dispose of household hazardous wastes at our designated facility in Chula Vista or through the curbside household hazardous waste pick up program (call **619-691-5122** for service).

IN YOUR YARD

1. Follow directions (use only what you need!) when using pesticides, herbicides and fertilizers. Preferably, use environmentally safer alternatives, such as soapy water and traps, to control ants rather than using chemicals.
2. Use a broom to sweep lawn debris including grass, leaves, yard clippings and sediment and recycle appropriate items in your green waste bin. Never hose down these pollutants onto your sidewalk or into the street.
3. Do not over water your lawn. Excess water will wash pollutants including sediment and dirt from your yard and into the streets and storm drains.
4. Clean up after your pet and flush waste down the toilet or place it in the trash. Take a disposable litterbag with you when you take your pet for a walk in other areas such as parks.
5. Pick up litter and debris and always contain them by keeping lids on bins as rainwater can wash away these pollutants if there are no covers.
6. Keep the gutter in front of your house clear of leaves, grass and trash and any other pollutants that could pollute storm water.

In addition, Businesses conducting any contractual work on your home need to be aware and educated about how their activities could potentially pollute storm water and what measures they are required to take in order to prevent storm water pollution. The homeowner is responsible for any contractor spills or illegal discharges.

There are many other activities that could pollute, but just remember that only storm water should enter storm drains.



We Need Everyone's Help

We ask and strongly encourage you to educate your neighbors, friends and family members about storm water pollution prevention. Preventing pollutants from entering our rivers, bay and ocean will require every citizen to follow the simple pollution prevention tips presented in this brochure. Keeping our rivers, bay and ocean clean will take a concerted effort by every citizen in our community and we appreciate your help.

For any questions and/or inquiries about our Storm Water Pollution Prevention Program or to report a storm water violation please call the Environmental Programs office at **619-424-4095 or 619-423-8311.**

City of Imperial Beach



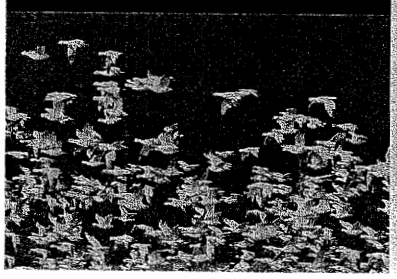
Workforce Housing

Workforce housing is a relatively new term that is increasingly popular among planners, government administrators and housing activists, and is gaining status with homebuilders, developers, and lenders.

A workforce housing unit is a home that is affordable to the workforce. The home must not consume more than 30 percent of the household's income (for rental) or fall within owner affordability standards common among lenders in today's mortgage environment. Subsequently, a workforce housing unit is either a rental unit with monthly rent for 3 bedrooms between $1,328 and $2,603 per month, or a single-family home, townhouse, or condominium priced between $185,000 and $411,000.

Workforce housing is intended to appeal to key members of the workforce, such as police officers, teachers, nurses, construction workers, medical technicians, and office and retail workers — the backbone of any successful community.

Workforce housing aims to satisfy the housing needs of a four person household earning between $55,520 and $104,100. Ideally, workforce housing aims to provide for-ownership single-family homes priced and financed in 30-year fixed-rate monthly terms equal to approximately 15 percent to 45 percent of median household income within a given Standard Metropolitan Statistical Area. A lack of affordable workforce housing has a negative effect on quality of life issues, such as the economic development, individual well-being, and community vitality. To effectively solve the affordable workforce housing crisis does not mean addressing the needs of just the poor; it also means addressing the needs of the business community, working and middle class families, and the broader population as a whole.



Onward Ho at the Seacoast Inn

To expedite project approval and construction of the Seacoast Inn, Pacifica Companies, the hotel's owner, has hired a new Project Manager, Allison Rolfe. Ms. Rolfe's responsibilities are to ensure that the hotel receives necessary approval as quickly as possible. She has already met with California Coastal Commission staff and they were enthusiastic about the hotel plans, particularly the additional beach area that will be returned for public use.

The existing hotel will be demolished and a brand new "curvilinear" shaped hotel will be constructed in its place. The project not only provides an innovative architectural design, but also will improve views to and along the beach. Amenities in the new hotel design include conference facilities, a fine dining restaurant, and a cocktail lounge with an ocean view. All improvements will incorporate energy-saving and "ecologically" friendly design concepts. The Seacoast Inn's "eco" approach will utilize cutting-edge techniques that lessen the impact on the environment and mark Imperial Beach as an eco-tourism destination. The hotel will be located further east from its current location with underground parking, a design factor that allows the area presently used as a terrace on the beach to become public beach for all visitors. The new hotel will have 78 rooms, compared to the current 38 units. Each room will have an excellent view of either the Coronado Islands or Point Loma.

Ms. Rolfe and Pacifica hope to submit environmental documents so the public review of the Draft Environmental Impact Report (EIR) can begin by the end of July and end by early September. City Council, the Tidelands Advisory Committee, and the Design Review Board will also have a chance to review and comment on the plans during this period. The Final EIR should be completed by the end of October. City Council will have meetings in November to review the new hotel's Specific Plan and Development Agreement. They will also consider certification of the EIR.

There will be plenty of notice about all public meetings and we hope all people interested in the hotel can attend. If all goes well, Pacifica hopes to start construction in July 2008.

Avoid Traffic Hassles, Save Fuel

If you want to avoid the morning traffic rush or are searching transit routes, connect to www.511sd.com, or dial 511. 511 is a free phone and web service that consolidates the San Diego region's transportation information into one source. 511 provides up-to-the-minute information on traffic conditions, driving times, public transportation, rail, carpool and vanpool referrals, bicycling information, airport, border crossing, weather, and more.

511 is available 24 hours a day, 7 days a week, but some operators have limited hours. Hearing impaired individuals can call 711,to be conected to 511 via to the Telecommunications Relay Services (TRS). Give it a try. It can help you save time, money, fuel, and wear and tear on your car.

Graffiti: Public and Private Nuisance

Imperial Beach Municipal Code states that the existence of graffiti in any public place or in any place open to the public or exposed to public view, within the City limits of the City of Imperial Beach, is determined to be a public and private nuisance. Graffiti may be abated in accordance with the nuisance abatement procedures.

The Graffiti Division is responsible for the removal of graffiti in the City's rights-of-way, streets, sidewalks, parks, and signs. Due to the new laws in the disposal of paint products, the recycled paint once available to the City is no longer being distributed to the graffiti abatement programs.

For further information please contact:

- The Graffiti Hotline (619) 575-3745
- Public Works (619) 423-8311
- Public Works Fax (619) 429-4861
- Code Compliance Division (619) 628-1359/ 628-1358

THE FOLLOWING ARE GRAFFITI ABATEMENT GUIDELINES ADOPTED BY THE CITY:

1. Graffiti on private property is the responsibility of the property owners and property managers. It is unlawful for a responsible person to permit property that is defaced with graffiti, to remain so defaced for a period of three days.
2. Property management companies and HOAs are responsible for the removal of graffiti on their property.
3. If a person can demonstrate by a preponderance of evidence financial or physical inability to remove the graffiti from the property, he or she can sign a release form and the City will remove the graffiti.
4. Property owners who wish to provide the paint (to match existing color) to the Graffiti Division for their property can sign a release form (provided by the City) and the graffiti will be removed with the paint provided and the paint will be stored for future graffiti removal.
5. Removal is limited to fences and walls.
6. Trash dumpsters are maintained by EDCO. Please contact EDCO to report graffiti on dumpsters by calling (619) 287-7555.

Seeds Sown for a Farmer's Market

Dozens of fruits and vegetables, plants, flowers, bows, and handcrafted goodies, vendors for local businesses, live musical performances under the sun, water, wind, or all in all a mouth-appealing, "It Beautiful" is a small group of citizens residents who recently planted the monogram in Triangle Park and created the ultimate garden in Veterans Park. Green thumbs, determination, and collective thought is now establishing a weekly Farmer's Market.

The success of a Farmer's Market, according to board member Kevin Hill, will depend on its residents and their willingness to volunteer and actively participate in the planning and implementation of a weekly market.

It Beautiful's board of directors is now in the process of securing approvals from the City of Imperial Beach. Members have explored different possibilities that will make it easier for the market to accommodate.

Volunteers are needed for a variety of subcommittees, such as management, fundraising, marketing, and participation in special events related to the Farmer's Market.

For information, please go to www.ibbeautiful.org or call IB Beautiful President, Pam Fabusuyi at (619) 426-9343.

A Better Bike Plan for IB

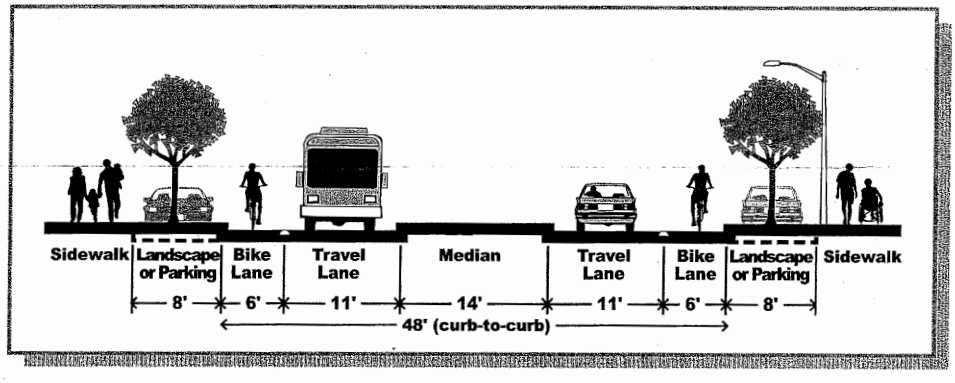
The City's Bicycle Transportation Plan (BTP) is currently in the policy development phase. The focus of this project is to improve designated bicycle lanes and connect these lanes between the City's open space and environmental reserves, commercial destinations and the Bayshore Bikeway.

Bicycle riding on Palm Avenue will become a calmer experience as a result of the proposed construction of a new Class II (2) bike lane with traffic calming measures on Palm Avenue between 3rd & 7th Streets. Currently this section of Palm Avenue is designated as a sidewalk bicycle route. Sidewalk bicycle routes are no longer recognized within the State of California. The project is designed to reduce the existing four vehicle lanes to one lane east bound and one lane west bound plus a striped Class II bike lane on the shoulders of the two vehicle lanes with pop-outs at intersections intended to reduce the time that pedestrians are exposed to vehicles. The plan includes a pedestrian crosswalk at 5th Street. Consultants are working with the City to develop this new BTP. They will also prepare contract documents for the construction of the Class II bike lanes and traffic calming measures.

Consultants held community meetings and met with the San Diego County Bicycle Transportation Coalition to obtain design comments that will be used for the comprehensive citywide Bicycle Transportation Plan.

For additional information, including existing and proposed bikeways, please visit the City's website at www.cityofib.com.

Bicycle riding on Palm Avenue will become a calmer experience as a result of the proposed construction of a new bike lane with traffic calming measures.



Projected Bicycle riding on Palm Avenue.

The Port of San Diego sponsors annual City of Imperial Beach Concert in the Park.

Saturday, September 29, 2007 at Veterans Park

5:00 to 7:00 p.m. **Society Beat** (Big Band style)

7:30 p.m. to 9:30 p.m. **Liquid Blue** (Top 40)

Bring the Family!
Bring a Picnic!
Bring a Blanket!

IMPERIAL BEACH classic southern california

Unified Port of San Diego

EDCO A WASTE & RECYCLING COMPANY

MIE Event Productions, Inc.

birds in your backyard

If you live in Imperial Beach, the Tijuana Estuary may literally be your backyard. There are 1,100 acres of salt marshes and tide channels in the Estuary and its unique location on the Pacific Flyway attracts over 370 species of birds; 50 of these are resident birds. Right now is the beginning of the nesting season for many of these birds.



For these birds there exists a very real threat to this cycle of life. Off-leash dogs, cats left out of doors, feral dogs and cats and other abandoned pets and wildlife may kill native and migratory species found in the estuary and refuges. Animals released or abandoned in the refuges and the reserve may starve and die and many carry diseases that can harm native wildlife.

What can you do? Keep pets out of our natural habitats. Do not release pets or wildlife anywhere. Dogs on leashes that are less than six feet in length are allowed only on the designated refuge trails south of the 5th and Iris Streets trailhead, and on the beach south of Seacoast Drive, west of the dunes. There is no off-leash recreational beach for dogs within the City of Imperial Beach. It is important that residents of Imperial Beach take responsibility and take an active role to protect the resources unique to the threatened, endangered, and sensitive bird species that inhabit the reserve and refuges. IB's urban environment places wildlife under significant stress.

U.S. Fish and Wildlife and California State Parks contract with Wildlife Services to trap and remove animals that may kill threatened, endangered, and sensitive species at the reserve and refuges. Predator removal occurs year round with emphasis from March to September. All domestic animals that are live-trapped are taken to the Chula Vista Animal Care Facility at 130 Beyer Way. You may call them at (619) 691-5123. Please contact the refuge at (619) 575-2704 or the reserve at (619) 575-3613 if you have any questions.



fiscal fitness

Two years ago, the City used its reserve funds, its savings account, in order to balance the two-year budget. This is not a practice that can be continued for long. The financial outlook was gloomy, and it seemed likely that the City would have to reduce services or ask voters to approve a tax increase. But now City Council has held its budget hearings and adopted a budget that is balanced for the next two fiscal years, July 1, 2007 through June 30, 2009, without using reserves, without severe service cuts, and without a tax increase.

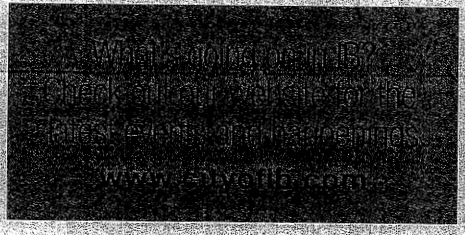


Over the last two years, City Council and staff constantly sought ways to reduce costs, reduce staff, and raise revenues. Some examples are: City employees, except Firefighters, did not receive salary increases yet everybody brought forth many ideas on reducing costs and increasing revenues. We signed a new contract with the City's ambulance service that provided an additional $144,000 for paramedic services. The Finance Department carefully reviewed allocated costs and found an improved way to property charge Redevelopment for services. We reduced staffing costs in Finance, Fire, and the City Manager's Office. We also had a good claims record that kept down risk management and workers compensation costs.

General fund expenditures will be held to approximately $14.2M and $14.9M for the two fiscal years and total expenditures will be $28.6M and $29.3M, thus total costs will rise about 2.4% over two years. This is less than inflation. The one big uncertainty is the contract for Sheriff's services. Several months ago, the Sheriff suggested a new formula for charges that would increase our costs by $1,000,000 per year; this would be a 20% increase! Since then, all cities that contract with the Sheriff have been negotiating for a better basis to allocate costs. We've budgeted with the assumption that reason will prevail. If the Sheriff's initial suggestion is adopted, our budget will be thrown for a loop, and we'll have to reduce Sheriff's services.

Though the next two-year budget looks balanced, long-term fiscal health is still not sound. Revenues barely meet expenses over the long run. We must constantly seek greater efficiencies and new revenues. The strategic vision must be to broaden the City's economic base. We've got to expand job opportunities, tourism, and revenues through key projects like the new Seacoast Inn, redevelopment at 9th and Palm, and ecotourism. We've also got to review potential increases in small revenue sources, like service fees, and keep our eyes open for grants.

Budgeting is far more than a numbers exercise. It's a way for a community to express its hopes and dreams. Over the next two years, there will be plenty of challenges, but this budget allows the City to preserve its unique small town character and quality of life that people enjoy.



preparing for the worst

Are you prepared to evacuate your home in fifteen minutes or less? If you answered yes, it means you must have an easily accessible and portable "go-kit", including important documents, treasured items, medication, toiletries, and everything you may need to survive outside of your home for an indefinite period of time. A survey recently released by the County Office of Emergency Services shows that many people in our community have neglected simple actions that can protect life and property in the event of a crisis.

By all accounts, experts are predicting a worse than normal fire threat in Southern California this year. Remembering the devastation caused by the Cedar and Paradise Fires in 2003, these warnings are a call to action for Imperial Beach residents to prepare our families, and ultimately the entire community, for a disaster.

Despite the fact that two out of three county residents say they are likely or highly likely to be affected by a disaster, and 96 percent feel it is either somewhat or very important to be prepared for a catastrophic event, merely half of county residents report having a formal family disaster plan, according to a survey of 1,200 county residents commissioned by the Office of Emergency Services. Family Disaster Plans can be downloaded at www.readysandiego.org, or you may request a copy in the mail by calling the Office of Emergency Services, (858) 565-3490.

Prepared and provided by the County of San Diego's Office of Emergency Services.

SUMMER SAFETY TIPS FROM IB LIFEGUARDS



It is almost time to pack up the Radio Flyer wagon and head to the beach. The following are essential safety reminders from your Imperial Beach lifeguards:

1. **Learn to Swim:** Learning to swim is the best defense against drowning. Teach children to swim at an early age – children who are not taught when they are very young tend to keep away from learning how to swim, as they get older.

2. **Swim near a Lifeguard:** Statistics over a ten-year period show that the chance of drowning at a beach without Lifeguard protection is almost five times as great as drowning at a beach with Lifeguards *(source: United States Lifesaving Association Website; www.usla.org, Public Education)*.

3. **Wear sunscreen & cover up:** Always wear sunscreen and cover-up with a hat and t-shirt when coming to the beach. The sun's powerful rays can damage and sunburn skin and may cause sunstroke.

4. **Swim with a friend:** Many drownings involve single swimmers. When you swim with a friend, if one of you has a problem, the other may be able to help, or signal for assistance from others. Children should always have a responsible adult onshore watching them!

5. **Ask a Lifeguard:** Have a question? Just ask! Feel free to approach a Lifeguard tower or vehicle and ask questions ... they're always happy to help.

Call the Imperial Beach Lifeguard Service at (619) 423-8328. For year-round beach, weather, and surf reports, updated daily at 8:00 a.m., call (619) 595-3954.

Shop Local

The Chamber of Commerce is the driving force in Imperial Beach to organize business people and advance their interests. The bottom line purpose of the Chamber is to encourage IB residents to shop local and, above all, support our community. The Chamber also serves as the IB Visitors Bureau and is an important part of the Business Improvement District.

As a Chamber member, the organization is able to showcase and promote the growth of your business. At the same time your business supports the well being of the community. The IB Chamber of Commerce website, www.IB-Chamber.com is full of up-to-date information about members, monthly meetings, and upcoming community events. If you are not currently a member, please consider becoming one. Currently the Chamber needs volunteers for the August 26, 2007 Triathlon/Duathlon.

For more information, please visit the Chamber office at 702 Seacoast Drive. They may also be reached by phone at (619) 424-3151, by fax at (619) 424-3008,

REDUCE, REUSE, RECYCLE, REPEAT!

Save Money on Your Trash Bill

If you are a resident of a single-family home in IB, you can save up to $1.19 per month on your trash bill. How? Increase your recycling efforts and switch to a smaller trash cart. One time a calendar year, at no charge, EDCO allows you to downsize your gray refuse cart. The standard refuse cart holds 90 gallons, and there are two smaller sizes, 35 and 65 gallons. If you decide to downsize, please make sure that the trash you generate each week will fit into the smaller cart. If your gray cart overflows, or if your blue cart contains non-recyclable materials, you will be asked to switch back to a larger size at your expense. Call EDCO at (619) 287-7555 if you are interested in downsizing.

Blue Recycle Cart Guidelines

- Recycle all plastic containers marked with a 1 or 2 inside the chasing arrows symbol.
- Recycle bottles marked with a 3, 4, 5, 6, or 7. Bottles must have a label such as California Redemption Value or CA Cash Refund.
- Do not put plastic grocery bags in your cart. They can be recycled at most large supermarkets.
- Remove plastic shrink-wrap from cardboard boxes and carrying cases before recycling.
- Other materials that can be recycled in your blue cart include: glass bottles, glass jars, aluminum cans, tin cans, newspapers, all varieties of mixed paper, cereal boxes, cake boxes, flour bags, frozen dinner boxes, paper egg cartons, paper grocery bags, gift boxes, shoe boxes, paper gift wrap, calendars, and core tubes from paper towels.

Fast Find

ALL IN THE 619 AREA CODE

City Hall Fax	628-1395
Beach / Ocean Safety	423-8328
Bike and Dog Licenses	628-1365
Building Inspections	628-1360
Business Licenses	628-1423
City Clerk	423-8301
City Manager	423-8303
Code Compliance	628-1359
Community Development	628-1356
Fire Department	423-8223
Garage Sale Permits	628-1365
Job Hotline	338-4331
Mayor & City Councilmembers	423-8303
Parking Tickets	628-1365
Public Safety	423-8223
Public Works	423-8311
Fleet Division	628-1375
Graffiti Hotline	575-3745
Grounds & Facilities Division	628-1374
Sewer Division	628-1372
Storm Water Hotline	424-4095
Street Division	628-1373
Sports Park / Recreation Center	628-1385
Animal Control (Chula Vista)	691-5123
Chamber of Commerce	424-3151
Dead Animal Removal (Chula Vista)	390-8204
Library (IB Branch)	424-6981
Sheriff's Station (IB Branch)	498-2400
Trash Service (EDCO)	287-7555

Don't Drink and Drive

Last year in Imperial Beach 211 drunk drivers were caught, apprehended, and charged with DUI. In addition, close to 20% of the traffic collisions investigated in the city were alcohol related. Over the past three years the number of Driving under the Influence (DUI) arrests in Imperial Beach has continued to gradually rise.



The Sheriff's Department has received a grant from the California Office of Traffic Safety for DUI enforcement in the City of Imperial Beach. Through this grant, traffic deputies will conduct five random DUI checkpoints during the upcoming summer months. In addition to the checkpoints, there will be "saturation DUI patrols" in the city. Saturation patrols, which are legal in all 50 states, are concentrated DUI enforcement by traffic deputies that target impaired drivers by observing moving violations, in an effort to reduce DUI drivers.

DON'T DRINK AND DRIVE! For more information, please contact the Imperial Beach Sheriff's Station, by visiting 845 Imperial Beach Blvd., or calling (619) 498-2400.



City of Imperial Beach
E Mail:
City Manager, Mayor, City Council:
ibcmanager@cityofib.org
City Clerk:
ibcclerk@cityofib.org
Community Development:
ibcomdev@cityofib.org
Finance (Administrative Services):
ibadmsrvcs@cityofib.org
Public Safety:
ibpsafety@cityofib.org
Public Works:
ibpworks@cityofib.org
Redevelopment Agency:
ibrda@cityofib.org
Website:
http://www.cityofib.com

City Council:

Jim Janney, Mayor
Mayda Winter, Mayor Pro Tempore
Patricia McCoy, Councilmember
Lorie Bragg, Councilmember
Fred McLean, Councilmember

Community Newsletter
The City of Imperial Beach/Redevelopment Agency
825 Imperial Beach Boulevard
Imperial Beach, California 91932

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City of Imperial Beach

SMART GROWTH

Smart Growth is a topic that all local governments have been discussing as members of the San Diego-area regional government organization, known as SANDAG. It is a compact, efficient, and environmentally sensitive pattern of development that provides people with additional travel, housing, and employment choices.

Smart Growth's options include planning future growth away from rural areas and closer to existing and planned job centers and public facilities. In order of priority, most growth in the region should occur primarily in these locations: in the cities, in unincorporated suburban communities adjacent to cities, and in unincorporated village centers, as opposed to rural or agricultural areas. Smart Growth accommodates higher residential densities and locations that offer frequent transit service.

Smart Growth reduces sprawl by focusing future growth in the cities and in the appropriate unincorporated suburban communities and village centers through new development, redevelopment, infill, emphasizing pedestrian-friendly design, and mixed-use development.

Smart Growth provides a variety of housing types for residents of all incomes. Smart Growth protects the environment by conserving open space and habitat areas, provides environmentally sensitive development that conserves water and energy, protects water quality, and promotes the use of alternative energy sources.

Incorporating Smart Growth designs into new development is paying off for a number of cities and communities throughout the region.

In September 2005, SANDAG approved 14 local projects to receive $19 million in funding as part of the agency's Pilot Smart Growth Incentive Program. The City of Imperial Beach received a $1 million Smart Growth Grant for the Old Palm Avenue Revitalization Project.

This innovative pilot program is using funding incentives to encourage local jurisdictions to bring transit service, housing, and employment together in Smart Growth development. Beginning in 2008, a longer-term Smart Growth Incentive Program, totaling $280 million, will be funded through the local TransNet half-cent sales tax program.

Source: SANDAG

Tijuana River Shed

Keep it clean!

In North America a watershed is a region of land where water from rain (or snow) drains downhill into a body of water such as a river, dam, estuary, wetland, sea, or ocean. The watershed acts like a funnel—it collects all the water within the specific watershed area and channels it into a waterway.

The Tijuana River Watershed covers approximately 1,750 square miles on both sides of the California-Baja California border. About 27% of the Tijuana River Watershed lies within California and discharges to the Tijuana Estuary and Pacific Ocean. The cities of Imperial Beach and San Diego, and the County of San Diego have portions of their jurisdictions within the watershed. On the Mexican side, Tijuana and Tecate are the most important urban centers.



Soon you will see this sign but no "sign" of water, nor for that matter a shed. What is a Watershed? How do we keep it clean?

In terms of water quality, degradation of the Tijuana Watershed is the most severely impacted watershed in San Diego County. Population growth and land use changes have brought a number of environmental problems to the Tijuana Watershed. The negative environmental impacts include decline in local groundwater, dependence on imported water, increased land erosion and flood dangers, increased air pollution and the reduction of the amount of open, safe, green areas for urban residents, and an increased number of threatened and endangered plants and animals.

In Imperial Beach there will be signs on southbound Seacoast Drive at Ebony Avenue, on southbound 9th Street at Evergreen Avenue, and on westbound Imperial Beach Boulevard at Florence Avenue. These signs indicate entry into the watershed and remind the public that the ocean, Imperial Beach's most valued natural resource, is at the end of this watershed. This natural resource demands the attention of every IB resident. Anything done within the 1,750 square mile watershed has the potential to affect that resource.

In 2005 the City of Imperial Beach received a grant from the Coastal Conservancy to create an ecotourism program. The City and the Agency seek to thoughtfully and carefully draw on the natural amenities that surround Imperial Beach to stimulate the local economy through tourism. Through Community participation and awareness of the environmental issues, such as the watershed, the City will be a step forward in its efforts to enhance and create a vitality that will draw San Diegans, Californians, and out-of-state visitors to IB.

A Finely Balanced Budget

A balanced budget is one of the City's greatest challenges. Significant steps to close the gap between revenues and expenses have been identified and implemented this year. We have reduced staffing in the Finance Department, cut the public relations contract by 50%, combined the City and Redevelopment Agency newsletters and decreased the number of issues from 4 to 2 per year, and trimmed down the prison labor contract for grounds maintenance by half, for an estimated total savings of $137,300. In the long run, we hope to generate additional funds through an increase in sales and transient occupancy taxes from projects such as the new Seacoast Inn and the development at the southwest corner of 9th Street and Palm Avenue.

In order to identify opportunities to reduce costs and increase income, we will need to continue to be alert and cautious. Uncertainties the City currently faces include the cost of Sheriff's services, the impact of state initiatives, imposed mandates (costs) from state agencies like the Regional Water Quality Control Board, and the need to meet state recycling and air quality goals.

Additional sources of revenue include $140,000 in ambulance rates to pay for paramedics. We are also leasing space in the Fire Station to our ambulance provider, American Medical Response (AMR) for $27,600. The amount of interest paid for a loan from the City to the Redevelopment Agency is $224,000, bringing the combined savings and increased revenue come to a net positive impact of $528,900. There are other measures under review that could bring potential additional revenues of $200,000. Though not completely out of the woods and home free for the next two years (budget 7/01/2007 - 6/30/2009), continued strategic planning and attention to detail will enable us to have a balanced budget. If subsequent budget cuts need to be made, it may be necessary to reduce some selected services.

A Pictorial History of Imperial Beach

"The Birth of a City", "Coastal Issues and Coastal Renaissance", "The Landmark Pier", "Wetland of International Importance", and "Legends of Surfing" are titles of just a few chapters in the City's recently published coffee table-style book Imperial Beach, A Pictorial History. It's filled with historic and current photographs and illustrations… you might be surprised to find yourself, your family or friends in this "picture perfect" history of IB. The book is available at City Hall for $24 and on Amazon.com for $35 plus shipping.

For more information please contact Tessa Wright at (619) 423-8303.

Hazardous Waste Disposal Options

Upcoming Special Events in Imperial Beach

(Park closed) Public Works 423-8311

1st Friday of each month
Sports Park 628-1385

Sports Park 628-1385

and 3rd Saturday of each month
Sports Park 628-1385

Sports Park 628-1385

(date to be determined)
Senior Center 424-7077

(date to be determined)
Senior Center 424-7077

Public Works 424-4095

Chamber of Commerce 424-3151

Public Works 424-4095

(date to be determined)
Senior Center 424-7077

Public Works 424-4095

Senior Center 424-7077

The BRIDGE 429-6621

US Open Sandcastle Committee
www.usopensandcastle.com
424-6663

Christmas Trees

Imperial Beach offers two ways to recycle Christmas trees: Residents of single-family homes can cut the tree in 4-foot lengths and put them in the "Green Waste" recycling containers.

Please do not put trash in the recycle bin; it is for trees and green waste only. Remove all tinsel and ornaments from the trees. Remove plastic or metal stands. Wood stands may be left on the trees. The second way to recycle the trees is to drop them off. Trees may be dropped off at the following locations until January 16, 2007:

Public Works Yard - 495 10th Street
Sports Park - 425 Imperial Beach Boulevard
Imperial Beach Boys & Girls Club -
847 Encina Avenue

Hazardous Waste: What is it and Why and Where to Dispose of it Properly

Hazardous waste is quite simply any material that creates substantial or potential threats to public health or the environment. A state law passed in 2006 now makes it illegal to dispose of common items, such as batteries, electronic equipment, computer equipment, fluorescent light bulbs, and mercury thermometers in household trash. Following are suggestions for proper disposal of universal hazardous wastes:

Universal Waste

Common Batteries
Fluorescent Light Tubes
Thermostats Containing Mercury
Electric Switches/Relays Containing Mercury
Aerosol Cans That Are Not Empty
Televisions
Cell Phones
Telephones
Radios
Microwaves

DROP-OFF LOCATIONS

South Bay HHW Collection Facility
1800 Maxwell Rd., Chula Vista
(619) 691-5122
HOURS: Saturdays,
9:00 a.m. - 1:00 p.m.
ID Required
COST: $5

DOOR-TO-DOOR PICKUP
- Televisions Only -
Call EDCO at (619) 287-7555
COST: $10

Computer Equipment

Hard Drives
Laptops
Monitors
Flat-panels
Keyboards
Mice
Cables
etc.

DROP-OFF LOCATIONS

Goodwill Industries
849 Palm Ave., Imperial Beach
(619) 429-6766
DONATION CENTER HOURS:
8:00 a.m. - 4:30 p.m.,
7 days a week
COST: Free

South Bay HHW Collection Facility
1800 Maxwell Rd., Chula Vista
(619) 691-5122
HOURS: Saturdays,
excluding holidays
9:00 a.m. - 1:00 p.m.
ID Required
COST: $5

DOOR-TO-DOOR PICKUP
- Monitors Only -
Call EDCO at (619) 287-7555
COST: $10

Used Motor Oil & Filters

Used motor oil & filters

DROP-OFF LOCATIONS

Kragen Auto Parts
1025 Palm Ave., Imperial Beach
(619) 628-8103
COST: Free

South Bay HHW Collection Facility
1800 Maxwell Rd., Chula Vista
(619) 691-5122
HOURS: Saturdays, excluding holidays
9:00 a.m. - 1:00 p.m.
ID Required
COST: $5

Other Hazardous Wastes

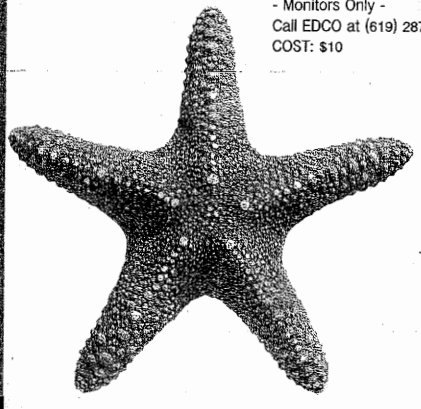
Paint
Antifreeze
Car Batteries
Brake Fluid
Drain Cleaners
Solvents
Fertilizers
Pesticides
Herbicides
Household Cleaners
Paint Strippers
Photo Chemicals
Pool Chemicals
Resins
Epoxy
Gasoline
Glue
Adhesives
etc.

DROP-OFF LOCATIONS

South Bay HHW Collection Facility
1800 Maxwell Rd., Chula Vista
(619) 691-5122
HOURS: Saturdays,
excluding holidays
9:00 a.m. - 1:00 p.m.
ID Required
COST: $5

DOOR-TO-DOOR PICKUP
- Excluding TV's & Computers Monitors -
Call the city of Chula Vista
(619) 691-5122
COST: $10

Businesses can call: 1-800-CLEANUP



Clean Up 2007

Citywide Garage Sale is planned for Saturday, April 21, 2007 from 8 a.m. to 2 p.m. Remember that "one man's trash is another man's treasure." Participation in the garage sale is encouraged. Items that are resold and reused will not find their way into the landfill to take up valuable space. Registration is free and sellers must register between Monday, April 2nd and Friday, April 6th. To register for the Citywide Garage Sale please call (619) 424-4095.

Home Front Cleanup Event, sponsored by City staff and EDCO, is scheduled for Saturday, May 5, 2007 from 7 a.m. to 2 p.m. at Mar Vista High School on Elm Avenue. EDCO accepts appliances, furniture, yard waste, metal, concrete, asphalt, and home improvement debris. There is no charge for the Home Front Cleanup. Absolutely no items containing hazardous waste, such as gasoline in old lawn mowers, will be accepted unless the hazardous waste is removed from the item.

Hazardous wastes must be properly disposed of at Imperial Beach's designated Household Hazardous Waste facility in Chula Vista.

Single-family residential customers are entitled to two bulky item pickups per calendar year, with a maximum of three items per pickup (call EDCO at (619) 287-7555 for this service). Before you transport your bulky items to Mar Vista High School, consider donating usable items to the local Goodwill or Boys & Girls Club. This helps limit the City's waste and puts the items to good use! Recycle whenever possible. Recycling helps preserve the life of our landfills, reduces pollution, and conserves natural resources.

For more information regarding these events, please call the Public Works Department at (619) 424-4095.

City of

Frequently Asked Questions About Redevelopment

What is redevelopment?

Redevelopment is a process authorized under California law that enables local government entities to identify deteriorated and blighted areas in their jurisdictions in need of revitalization.

Why is redevelopment needed?

Redevelopment serves as a catalyst for private investment by providing the initial plan and seed money that ultimately breathes new life into areas in need of economic revitalization.

What is a redevelopment agency?

State law gives a local government (city or county) the authority to form a redevelopment agency with the specific goal of revitalizing a deteriorated area. In Imperial Beach, City Council acting as the Redevelopment Agency (RDA) oversees redevelopment.

What types of projects do redevelopment agencies take on?

- Build and upgrade roads, water systems, and other public works and infrastructure;
- Build and rehabilitate community centers, parks, libraries, public safety buildings and other community facilities;
- Issue low-cost loans or grants to small businesses that pay for physical improvements to their properties;
- Clear an area of environmental hazards that make the project unattractive to the private sector; and
- Build or rehabilitate affordable housing and helping low- and moderate-income poeple become new homeowners.

How are redevelopment agencies funded?

When redevelopment agencies improve deteriorated areas, property values within those areas rise, thus increasing property tax revenues. The increased property taxes resulting from redevelopment activity are referred to as "tax increment." State law allows redevelopment agencies to pledge tax increment so that they can repay bonds and other types of debt incurred to initiate projects.

What rights do redevelopment agencies have to use eminent domain?

The redevelopment law provides strict guidelines governing when and if eminent domain can be used. A redevelopment agency must first engage in good faith negotiations with the property owner. Only after negotiations break down is the use of eminent domain an option. Eminent domain is a last, not a first, resort; and under all circumstances a property owner must be paid fair market value for his or her property, as well as be provided relocation benefits and assistance. The use of eminent domain is restricted under the Palm Ave./Commercial Redevelopment Plan. The Redevelopment Agency in Imperial Beach cannot use eminent domain on residential uses.

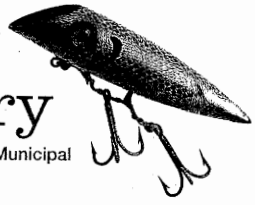
How does redevelopment affect other local jurisdictions (counties, cities, school districts, special districts)?

When a redevelopment project area is established, other taxing jurisdictions continue to receive property taxes levied on the assessed value of property in the project area at the time the redevelopment plan was adopted. Additionally, jurisdictions share in a fixed percentage set by Redevelopment Law of the increase in property tax revenues resulting from redevelopment activities.

What about Schools?

School districts receive a portion of the redevelopment-induced property tax increase the same way that other jurisdictions do.

A Fish Story



Recreational Use of the Imperial Beach Municipal Fishing Pier

If you are a fish, or fish for fish, or swim like a fish, there are rules of the water designed for your safety. If you fish from the pier, watch out for people in the water. Underhand cast your lines at all times. Overhead casting is not allowed as you may cause your hook to injure a person in the water or standing on the pier.

Be polite and courteous to swimmers and surfers near the pier. Use common sense—weights and hooks can be dangerous. It is illegal to cast a fishing line, lobster trap, crab trap, any mussel hook, or any other such device in the water, adjacent to the pier or on the pier because it could cause harm to swimmers, waders, surfers, skin divers, and those using self-contained underwater breathing apparatuses (SCUBA).

Swimmers, waders, surfers, skin divers, or SCUBA divers near the pier must never be within 20 feet of any side of the pier by law but it's recommended that they stay at least 150 feet from the pier and swim only when lifeguards are on duty.

Swimmers should check in with the lifeguards prior to a pier swim as there may be unforeseen or overlooked hazards. Likewise, divers (SCUBA or skin) need to check in with the lifeguards before any attempted dive to assess and discuss conditions and abilities.

For a full listing of the Municipal Codes referring to the beach and pier, please visit the online database at http://www.cityofib.com. If you have a question, please call the Imperial Beach Lifeguard Service at (619) 423-8328.

Own a piece of history

Please contact Tom Ritter at (619) 423-8615 or Tessa Wright at (619) 423-8303.



What's New with the Street

Revitalization

The City of Imperial Beach Community Development Department received a $150,000 Caltrans grant for Master Planning of the State Route 75/Palm Avenue Corridor. The Redevelopment Agency (RDA) is processing Caltrans documentation and will issue a request for qualifications in January 2007.

Old Palm Streetscape Project

The construction plans are at a 60% completion level and the anticipated start date of construction is May 2007. Staff anticipates requesting authorization to bid the project in January 2007.

Beachfront Hotel Development

In response to a Request for Proposals for Hotel Development at 1080 Seacoast Drive, the RDA received four submissions. The development of a visitor serving facility is a goal of both the Five-Year Implementation Plan (Implement the Eco-Tourism Study) and the Economic Development Plan (Goal #3: Increase Visitor Serving Uses and Expand the Transient Occupancy Tax Base).

If the owner and the development team proceed with a proposed project, a formal public participation/workshop schedule would be developed to allow opportunities for the public to learn about the proposed project, provide comments, and ask questions. All public participation events will be noticed with date, time and location. Staff anticipates that these next steps could occur in the next four to six months.



Why, What and How: Neighborhood Watch

Did you know that property crime accounts for about three-quarters of all crimes in the United States?

Did you know that in 6 out of 10 successful burglaries, the burglar came through an unlocked door or open window?

Why Neighborhood Watch?

As part of the community, the Sheriff's Department plays an important role in keeping the community safe. However, there cannot be a deputy on every corner, so citizen involvement is essential to combat crime. You and your neighbors are the people who really know what is going on in your neighborhood. With mutual cooperation between law enforcement and community members, crime can be effectively stopped before it starts. Stickers placed in the windows of Neighborhood Watch members and signs on streets warn criminals that they are in an Active Neighborhood Watch community and that neighbors are watching out for each other.

How Does Neighborhood Watch?

The Neighborhood Watch is one of the most successful and least costly crime prevention programs available. Through the program, you will learn how to identify and report suspicious activity and better safeguard your home and property.

How to Start a Neighborhood Watch?

To start a Neighborhood Watch in your area you need to:

- Talk to your neighbors and encourage them to participate in the program.
- Plan your meeting time, date, and location.
- Call the Crime Prevention Unit at least two weeks in advance.
- Publicize your meeting. Printed flyers/invitations are available from the San Diego Sheriff's Department.

Once your Neighborhood Watch is established, continue to watch out for one another and hold regular meetings or neighborhood events at least once or twice a year. It's a great way to get to know your neighbors.

For more information, contact the Crime Prevention Unit at the Imperial Beach Sheriff's Station at (619) 498-2435.

TO REPORT A CRIME IN PROGRESS
DIAL 9-1-1

FOR NON EMERGENCIES
DIAL (619) 585-7232

Fast Find

ALL IN THE 619 AREA CODE

City of *Imperial Beach*

Community Newsletter

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ibcclerk@cityofib.org
Community Development:
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Public Safety:
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Public Works:
ibpworks@cityofib.org
Redevelopment Agency:
ibrda@cityofib.org
Website:
http://www.cityofib.com

City Council:
Jim Janney, Mayor
Mayda Winter, Mayor Pro Tempore
Patricia McCoy, Councilmember
Lorie Bragg, Councilmember
Fred McLean, Councilmember

The Community Newsletter is published biannually by the City of Imperial Beach and Redevelopment Agency. Please direct any questions or comments to the City Clerk at 423-8301. Printed on Recycle Paper.

Attachment 5-1
Program Assessment Form - Land Use Planning Component (FY 2006-07)
Effectiveness and Performance Measurements:

Activity	FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	Units	Comments
Number of projects subjected to SUSMP requirements.	0	3	5	6	3	3	Projects	
Total number of projects subjected to SUSMP reviewed for SUSMP requirements.		3	5	6	3	3	Projects	
Number of SUSMP projects requiring Treatment BMPs.	0	3	5	6	3	3	Projects	
Number of SUSMP projects with Treatment BMPs requiring groundwater protection.	0	0	5	6	3	3	Projects	
Percent of Project Review Staff trained in SUSMP requirements.			83	100	100	100	%	The project review staff includes selected members of the Community Development and Public Works Departments. Currently there are 5 employees involved in that review process, all of whom are fully trained in the SUSMP program.
Number of project applicants, developers, contractors, property owners, and community planning groups contacted or educated concerning storm water quality.	280	289	382	287	171	175	#	

Attachment 5-2

Public Works Conditions Required on Development and Redevelopment Projects (FY 2006-07), Including SUSMP Projects

	File No.	Plan Check No.	SUSMP	Address 1	Address 2	Address 3	Project Type 1	#	Project Type 2	#	Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff into Landscaped Area	Permanent Post-Construction BMP Needed	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Construction / Post-construction BMP Notification
1	MF839		No	481 Palm Ave.			Condo Conversion	10				X							X	X
2	MF847		No	581 Florence St.			New SFR	2	Demolition	2		X							X	X
3	MF858		No	1497 13th St.			Commercial Addition(s)	1			Addition to an existing market building	X							X	X
4	MF861			1009 13th St.			Condo Conversion	2				X				X			X	X
5	MF864		No	162-168 Elm Ave.			New SFR	4	Demolition	2		X							X	X
6	MF868		No	1140 Georgia St.			New SFR	1				X							X	X
7	MF870		No	175 Carnation Ave.			New SFR	1	Demolition	1		X							X	X
8	MF872		No	323, 343, 363, 383 Palm Ave.	702 4th St.	705 3rd St.	Condo Conversion	69				X			X				X	X
9	MF876		No	169 Elkwood Ave.	171 Elkwood Ave.		Condo Conversion	2				X				X			X	X
10	MF877		No	174 Elkwood Ave.	176 Elkwood Ave.		Condo Conversion	2				X				X			X	X
11	MF878		No	1037 Seacoast Dr.	1047 Seacoast Dr.		Condo Conversion	37				X							X	X
12	MF887		No	555 Delaware St.			New SFR	1				X							X	X
13	MR818		No	817 Florida St.			New SFR	3	Demolition	2		X							X	X
14		05-512	No	341 Calla Ave.			Residential Addition(s)	5			Kitchen remodel. New shop. New Laundry. New Master Bedroom. Bathroom addition.	X							X	X
15		05-558	No	1220 Palm Ave.			New Commercial	1			Proposed new coin operated laundry.	X				X			X	X
16		06-158	No	234 Daisy Ave.			Condo Conversion									X			X	X
17		06-192	No	1220 Palm Ave.			New Commercial	1			New coin laundry	X							X	X
18		06-211	No	24 Palm Ave.			Other	1			Modifications for ADA access and trash enclosure along Ocean Lane								X	X
19		06-219	No	989 Palm Ave.			Other	1			Installation of spray booth within an existing commercial structure	X				X			X	X
20		06-241	No	600 Palm Ave.			Other	1			Installation of cell tower on top of Powerhouse gym. Soil disturbance involves installation of condensate drywell and grounding rods.				X				X	
21		06-242	No	137 Carnation Ave.			Residential Addition(s)	1			Second floor addition	X							X	X
22		06-255	No	285 Palm Ave.			Other	1			Improvements to existing commercial	X					X	X	X	X
23		06-258	No	816 Iris St.			Other	1			First and second story addition	X				X			X	X
24		06-276	No	1111 Seacoast Dr.			Other	1			Exterior property renovation	X							X	X
25		06-290	No	573 Florence St.			Other	1			Second floor addition with balcony	X				X	X		X	X
26		06-346	No	811 Corvina St.			Residential Addition(s)	1			Bedroom and bath addition	X							X	X
27		06-361	No	852 Delaware St.			Residential Addition(s)	1			Bedroom and bath addition	X							X	X
28	MF885		No	777 Seacoast Dr.			Condo Conversion	16				X							X	X
29		06-316	No	637 10th St.			Residential Addition(s)	2			Bedroom and bath additions	X							X	X
30	MF873		No	150 Palm Ave.			New Commercial	1			Training center in existing commercial	X							X	X
31		06-303	No	363 Date St.			Residential Addition(s)	1			2-car garage addition	X							X	X
32		06-357	No	1340 Imperial Beach Blvd.			Other	1			Convert office building to dentist office	X							X	X

Attachment 5-2

Public Works Conditions Required on Development and Redevelopment Projects (FY 2006-07), Including SUSMP Projects

	File No.	Plan Check No.	SUSMP	Address 1	Address 2	Address 3	Project Type 1	#	Project Type 2	#	Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff into Landscaped Area	Permanent Post-Construction BMP Needed	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Construction / Post-construction BMP Notification
33	MF871		No	916 13th St.	918 13th St.	920 13th St.	New SFR	3	Demolition	3		X							X	X
34	MF863			1120 13th St.	1150 13th St.		Other	2			2 new mixed use buildings	X		X		X			X	X
35		06-371	No	861 10th St.			Residential Addition(s)	1			2nd floor addition	X							X	X
36	MF893		No	137 Ebony Ave.			New SFR	2	Demolition	1		X							X	X
37		06-362	No	567 Dahlia Ave.			Residential Addition(s)	1			1st and 2nd floor additions	X							X	X
38	MF891		No	522 7th St.			Condo Conversion	5				X		X			X		X	X
39	MF898		No	1115 Louden Ln.			New SFR	1			Currently vacant lot.	X							X	X
40	MF894		No	254 Elm Ave.			New SFR	2	Demolition	1		X							X	X
41	MF897		No	1186 15th St.			New SFR	1			New SFR behind existing SFR	X							X	X
42	MF896		No	1331 Holly Ave.			New SFR	4	Demolition	1		X				X			X	X
43	MF854		No	854 10th St.			Condo Conversion	2				X							X	X
44	MF907		No	1180 Florida St.			New SFR	1			New SFR with existing SFR	X							X	X
45	MF618/762		No	569 9th St.	571 9th St.		Condo Conversion	2				X								
46	MF799		No	123 Dahlia Ave.	125 Dahlia Ave.		Condo Conversion	2				X				X			X	X
47	MF919		Yes	1335 Imperial Beach Blvd.			New Commercial	2	New MFR	6		X							X	X
48	MF900		No	1278 14th St.			New SFR	2			Currently vacant lot.	X							X	X
49		07-101	No	349 Elkwood Ave.			Residential Addition(s)	1			Add bath, bed, fam rooms and garage	X							X	X
50	MF913		No	136 Donax Ave.			Condo Conversion	2				X							X	X
51	MF924		Yes	1008 Ocean Lane			New SFR	1	Other	2	Renovate 2 existing SFRs	X							X	X

Attachment 6-1
Program Assessment Form - Construction Component (FY 2006-07)
Effectiveness and Performance Measurements:

Activity	FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	Units	Explanations (if needed)
Number of high priority construction sites identified.			0	7	6	3	#	All CIPs
Number of high priority construction sites targeted for inspection.			0	7	6	3	#	All CIPs
Number of high priority construction sites inspected.			0	7	6	3	#	All CIPs
Number of medium priority construction sites identified.			0	7	6	3	#	All CIPs
Number of medium priority construction sites targeted for inspection.			0	7	6	3	#	All CIPs
Number of medium priority construction sites inspected.			0	7	6	3	#	All CIPs
Number of low priority construction sites identified.	280	42	86	162	171	121	#	
Number of low priority construction sites targeted for inspection.	280	42	86	162	171	121	#	
Number of low priority construction sites inspected.	280	42	86	162	171	121	#	
Total number of construction sites in compliance or on a compliance schedule.	280	42	86	162	171	121	#	
Number of facilities referred to RWQCB for enforcement of State General Construction Permit.	0	0	0	0	0	0	#	
# of City staff supporting the Construction Component			9	9	9	9	#	5 in Community Development Department; 3 in Public Works Department Several administrative and operational staff on an intermittent basis in other Departments
# of City staff trained in pollution prevention as it pertains to construction sites			17	25	25	25	#	
# of City staff trained in storm water quality as it pertains to the Construction Component.			9	25	25	25	#	
Total # of permitted projects.			331	287	171	121	#	

Attachment 6-1
Program Assessment Form - Construction Component (FY 2006-07)
Effectiveness and Performance Measurements:

Activity	FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	Units	Explanations (if needed)
# of permitted projects with a SWPPP.			0	0	0	0	#	Projects conducted in Imperial Beach are less than 1 acres and therefore were not subject to the State General Construction Storm Water Permit
# of permitted projects required to have BMPs.			331	287	171	121	#	All outside projects or projects with a potential to effect storm water quality or have no storm water discharges (e.g., store materials outside);
# of permitted projects inspected for BMPs.				170	171	121	#	
# of permitted projects inspected for sediment and erosion controls.				170	171	121	#	
# of permitted, inspected projects with enforcement actions			10	15	12	0	#	
# of permitted, inspected projects referred to the SDRWQCB.			0	0	0	0	#	

Form 7-A
City of Imperial Beach
Storm Water Requirements Applicability Checklist for Building, Grading, and Encroachment Permits

Location of Proposed Project	Permit Type (Building, Grading, or Encroachment)
Owner Name	**Contractor**

A. Site Slope	B. Disturbed Area of Proposed Project
☐ < 3% (1) ☐ 3% - 5% (3) ☐ > 5% (5)	☐ < 5,000 ft^2 (1) ☐ 5,000 - 20,000 ft^2 (5) ☐ 20,000 ft^2 - 1 acre (10) ☐ > 1 acre (15)
C. Receiving Water Body	**D. Distance from Receiving Water Body**
☐ Otay River (5) ☐ Tijuana River (5) ☐ Pacific Ocean (5) ☐ Tijuana Estuary (5) ☐ San Diego Bay (5)	☐ > 1 mile (1) ☐ 200 ft. - 1 mile (3) ☐ < 200 ft. (5) ☐ Direct discharge or adjacent (10)

E. Soil Erosion Potential (Which of the following statements best describes your project?)

- ☐ No grading, sub-surface extractions, or outside demolition/building activities will occur (1)
- ☐ Less than 50% of the site will be graded at any one time and all outside building, demolition, and earthwork will occur between May 1 and September 30 (5)
- ☐ Greater than 50% of the site will be graded at any one time and all outside building, demolition, and earthwork will occur between May 1 and September 30 (10)
- ☐ Less than 50% of the site will be graded at any one time and outside building, demolition, or earthwork will occur between October 1 and April 30 (10)
- ☐ Greater than 50% of the site will be graded at any one time and outside building, demolition, and earthwork will occur between October 1 and April 30 (15)

F. Potential for Non-Stormwater Discharges	Site Prioritization Formula (A+B+(C*D)+E+F)
☐ Site is fully contained (0) ☐ BMPs are proposed to prevent/control non-storm water discharges (1) ☐ Sources of non-stormwater discharges observed without BMPs implemented, but no discharges (3) ☐ Observed/known non-stormwater discharge (5)	☐ > 45 = HIGH PRIORITY ☐ 35 – 45 = MEDIUM PRIORITY ☐ < 35 = LOW PRIORITY *High priority sites will be subject to weekly construction-phase stormwater BMP inspections between October 1 and April 30.* *Medium and low priority sites will be subject to a minimum of two construction-phase stormwater BMP inspections between October 1 and April 30.* *All sites will be subject to construction-phase stormwater BMP inspections as necessary throughout the year.*

Complete Sections A and B of the following checklist to determine your project's construction-phase and permanent, post-construction stormwater best management practice (BMP) requirements.

Section A - Construction-Phase Storm Water BMP Requirements

If the answer to Question A.1 below is "YES", your project is subject to the General Permit for Discharges of Storm Water Associated with Construction Activity issued by the State Water Resources Control Board. You must prepare a Storm Water Pollution Prevention Plan (SWPPP) pursuant to the requirements of that permit. If the answer is "NO", but the answer to any of the remaining questions is "YES", you must complete Form 7-B (Stormwater Management Plan Instructions to Accompany All Construction, Grading, and Encroachment Permit Applications) to indicate which construction-phase BMPs will be implemented as part of your project.

	YES	NO
1. Will your proposed project disturb one or more acres of soil? Or is it part of a larger common plan of development that in total disturbs one or more acres of soil?		
2. Does the project propose grading or soil disturbance?		
3. Would stormwater or urban runoff have the potential to contact any portion of the construction area?		
4. Would the project use any construction materials that could negatively affect water quality if discharged from the site (such as paints, solvents, concrete, stucco, etc.)?		

Section B – Permanent, Post-Construction Stormwater BMP Requirements

If your proposed project fits one or more of the "Priority Project Categories" below, you are subject to the requirements of Imperial Beach Municipal Ordinance Chapter 8.32, and must prepare, and submit for approval, a Standard Urban Storm Water Mitigation Plan (SUSMP) prior to permit issuance.*

Priority Project Categories	YES	NO
1. Detached Residential Development of 10 or more units		
2. Attached Residential Development of 10 or more units		
3. Commercial Development greater than 100,000 square feet		
4. Automotive Repair Shop		
5. Restaurant		
6. Hillside Development greater than 5,000 square feet		
7. Project discharging to receiving waters within Environmentally Sensitive Areas		
8. Parking Lots greater than or equal to 5,000 square feet or with at least 15 parking spaces and potentially exposed to urban runoff		
9. Streets, Roads, Highways & Freeways which would create a new paved surface that is 5,000 square feet or greater		
10. Significant Redevelopment projects over 5,000 square feet		

** Limited Exclusion: Trenching and resurfacing work associated with utility projects are not considered priority projects. Parking lots, buildings and other structures associated with utility projects are priority projects if the project fits one or more of Categories 1-10 above.*

Name of Owner or Agent *(Please Print):* **Title:**

Signature: **Date:**

Attachment 6-3
BUILDING PERMIT / CONSTRUCTION SITE INVENTORY AND INSPECTIONS
(FY 2006-07)

#	PERMIT NUMBER	INSPECTION DATES	# INSPECTIONS (FY 06-07)		ADDRESS		HUNAME	HANAME	RANK
1	0500000038	70306	1	816	DELAWARE	ST	OTAY	Otay Valley	LOW
2	0500000084	60810	1	1004	7TH	ST	TIJUANA	Tijuana Valley	LOW
3	0500000212	60724	2	419	DELAWARE	ST	OTAY	Otay Valley	LOW
	0500000212	60725							
4	0500000213	60726	1	1145	GEORGIA	ST	OTAY	Otay Valley	LOW
5	0500000369	60828	1	1111	SEACOAST	DR	TIJUANA	Tijuana Valley	LOW
6	0500000404	61018	2	577	BONITO	AVE	OTAY	Coronado	LOW
	0500000404	61019							
7	0500000449	70111	1	813	CYPRESS	AVE	OTAY	Otay Valley	LOW
8	0500000453	60718	1	753	ELM	AVE	OTAY	Otay Valley	LOW
9	0500000478	60714	1	364	CALLA	AVE	OTAY	Coronado	LOW
10	0500000504	60718	2	517	9TH	ST	TIJUANA	Tijuana Valley	LOW
	0500000504	60726							
11	0500000512	70130	1	341	CALLA	AVE	OTAY	Coronado	LOW
12	0500000529	60906	2	839	CAROLINA	ST	OTAY	Otay Valley	LOW
	0500000529	70503							
13	0500000534	60919	3	856	CALLA	AVE	OTAY	Coronado	LOW
	0500000534	61019							
	0500000534	70109							
14	0500000538	60706	2	1227	GRANGER	ST	TIJUANA	Tijuana Valley	LOW
	0500000538	60720							
15	0500000560	60919	3	1135	11TH	ST	TIJUANA	Tijuana Valley	LOW
	0500000560	70110							
	0500000560	70307							
16	0500000561	70327	1	1280	GRANGER	ST	TIJUANA	Tijuana Valley	LOW
17	0500000562	70327	1	1282	GRANGER	ST	TIJUANA	Tijuana Valley	LOW
18	0500000563	60823	1	1278	GRANGER	ST	TIJUANA	Tijuana Valley	LOW
19	0500000577	61212	1	574	10TH	ST	OTAY	Otay Valley	LOW
20	0500000603	60906	2	569	9TH	ST	OTAY	Otay Valley	LOW
	0500000603	61012							
21	0500000604	60906	2	571	9TH	ST	OTAY	Otay Valley	LOW
	0500000604	61012							
22	0600000023	60719	1	1065	11TH	ST	OTAY	Otay Valley	LOW
23	0600000024	70529	2	714	CHERRY	AVE	OTAY	Otay Valley	LOW
	0600000024	70531							
24	0600000026	70124	1	642	OCEAN	LN	OTAY	Coronado	LOW
25	0600000118	60921	1	1352	SEACOAST	DR	TIJUANA	Tijuana Valley	LOW
26	0600000119	60718	2	1430	CALIFORNIA	ST	TIJUANA	Tijuana Valley	LOW
	0600000119	60906							
27	0600000127	61006	1	253	ELM	AVE	OTAY	Otay Valley	LOW
28	0600000128	61006	1	255	ELM	AVE	OTAY	Otay Valley	LOW
29	0600000136	60725	1	947	12TH	ST	OTAY	Otay Valley	LOW
30	0600000147	70227	1	1277	14TH	ST	OTAY	Otay Valley	LOW
31	0600000154	61005	2	908	FLORENCE	ST	OTAY	Otay Valley	LOW
	0600000154	70104							
32	0600000155	70104	2	1247	ELM	AVE	OTAY	Otay Valley	LOW
	0600000155	70109							
33	0600000156	70104	2	1249	ELM	AVE	OTAY	Otay Valley	LOW

Attachment 6-3
BUILDING PERMIT / CONSTRUCTION SITE INVENTORY AND INSPECTIONS
(FY 2006-07)

#	PERMIT NUMBER	INSPECTION DATES	# INSPECTIONS (FY 06-07)	ADDRESS			HUNAME	HANAME	RANK
	0600000156	70109							
34	0600000158	70226		234	DAISY	AVE	OTAY	Coronado	LOW
35	0600000164	60802		367	ELDER	AVE	TIJUANA	Tijuana Valley	LOW
36	0600000192	70110	2	1220	PALM	AVE	OTAY	Otay Valley	LOW
	0600000192	70226							
37	0600000200	60919		1560	SEACOAST	DR	TIJUANA	Tijuana Valley	LOW
38	0600000216	60831	2	589	11TH	ST	OTAY	Otay Valley	LOW
	0600000221	60828							
39	0600000222	60814	2	1450	IRIS	AVE	TIJUANA	Tijuana Valley	LOW
	0600000222	60825							
40	0600000225	70109	1	1229	GRANGER	ST	OTAY	Otay Valley	LOW
41	0600000226	60831	3	144	IMPERIAL BEACH	BLVD	TIJUANA	Tijuana Valley	LOW
	0600000226	70104							
	0600000226	70122							
42	0600000227	60724	2	1340	HOLLY	AVE	TIJUANA	Tijuana Valley	LOW
	0600000227	60810							
43	0600000230	70629	1	1049	FLORIDA	ST	TIJUANA	Tijuana Valley	LOW
44	0600000238	60825	1	120	ELDER	AVE	TIJUANA	Tijuana Valley	LOW
45	0600000241	70504	1	600	PALM	AVE	OTAY	Otay Valley	LOW
46	0600000242	70227	1	137	CARNATION	AVE			
47	0600000247	60724	2	532	CALLA	AVE	OTAY	Coronado	LOW
	0600000247	60919							
48	0600000252	70226	2	133	ELDER	AVE	TIJUANA	Tijuana Valley	LOW
	0600000252	70301							
49	0600000255	70110	2	285	PALM	AVE	OTAY	Coronado	LOW
	0600000255	70131							
50	0600000264	60705	1	1548	SEACOAST	DR	TIJUANA	Tijuana Valley	LOW
51	0600000265	60705	1	1540	SEACOAST	DR	TIJUANA	Tijuana Valley	LOW
52	0600000272	60711	1	159	DATE	AVE	OTAY	Coronado	LOW
53	0600000274	61117	3	621	FLORENCE	ST	OTAY	Otay Valley	LOW
	0600000274	61205							
	0600000274	61213							
54	0600000280	70314	1	633	5TH	ST			
55	0600000281	70109	1	748	CALLA	AVE	OTAY	Coronado	LOW
56	0600000287	70504	1	1085	CHERRY	AVE	OTAY	Otay Valley	LOW
57	0600000301	61019	1	162	ELM	AVE	OTAY	Otay Valley	LOW
58	0600000303	70226	2	363	DATE	AVE	OTAY	Coronado	LOW
	0600000303	70306							
59	0600000305	60808	1	947	12TH	ST	TIJUANA	Tijuana Valley	LOW
60	0600000308	60831	1	169	EBONY	AVE	TIJUANA	Tijuana Valley	LOW
61	0600000311	61128	1	667	SILVER STRAND	BLVD	OTAY	Coronado	LOW
62	0600000320	60811	1	1239	DELAWARE	ST	OTAY	Otay Valley	LOW
63	0600000325	70504	1	1254	FLORENCE	ST	OTAY	Otay Valley	LOW
65	0600000332	70110	1	1266	IMPERIAL BEACH	BLVD	TIJUANA	Tijuana Valley	LOW
66	0600000337	70501	1	575	7TH	ST	TIJUANA	Tijuana Valley	LOW
67	0600000345	61129	2	1154	10TH	ST	TIJUANA	Tijuana Valley	LOW
	0600000345	70521							
68	0600000346	61207	3	811	CORVINA	ST	OTAY	Coronado	LOW

Attachment 6-3
BUILDING PERMIT / CONSTRUCTION SITE INVENTORY AND INSPECTIONS
(FY 2006-07)

#	PERMIT NUMBER	INSPECTION DATES	# INSPECTIONS (FY 06-07)		ADDRESS		HUNAME	HANAME	RANK
	0600000346	70416							
	0600000346	70529							
69	0600000347	61012	3	854	10TH	ST	OTAY	Otay Valley	LOW
	0600000347	61019							
	0600000347	61213							
70	0600000350	70627	1	874	SEACOAST	DR	TIJUANA	Tijuana Valley	LOW
71	0600000357	70110	1	1340	IMPERIAL BEACH	BLVD	TIJUANA	Tijuana Valley	LOW
72	0600000361	61122	2	852	DELAWARE	ST	OTAY	Otay Valley	LOW
	0600000361	70104							
73	0600000364	61207	1	614	ALABAMA	ST	OTAY	Coronado	LOW
74	0600000371	70521	1	861	10TH	ST	OTAY	Otay Valley	LOW
75	0600000380	70521	1	211	DATE	AVE	OTAY	Coronado	LOW
76	0600000385	70521	1	817	FLORIDA	ST	OTAY	Otay Valley	LOW
77	0600000386	70521	1	819	FLORIDA	ST	OTAY	Otay Valley	LOW
78	0600000387	70521	1	821	FLORIDA	ST	OTAY	Otay Valley	LOW
79	0600000388	61212	2	543	5TH	ST	OTAY	Coronado	LOW
	0600000388	70419							
80	0600000395	61213	1	1290	5TH	ST	TIJUANA	Tijuana Valley	LOW
81	0600000398	70226	2	162	ELM	AVE	OTAY	Otay Valley	LOW
	0600000398	70227							
82	0600000407	70109	1	1229	GRANGER	ST	OTAY	Otay Valley	LOW
83	0600000409	61116	1	339	DAHLIA	AVE	OTAY	Coronado	LOW
84	0600000414	70521	1	211	ELM	AVE	OTAY	Otay Valley	LOW
85	0600000420	70214	2	538	CITRUS	AVE	OTAY	Otay Valley	LOW
	0600000420	70627							
86	0600000424	70226	1	387	EBONY	AVE	TIJUANA	Tijuana Valley	LOW
87	0600000425	70111	1	100	PALM	AVE	OTAY	Coronado	LOW
88	0600000426	70122	2	1255	ELM	AVE	OTAY	Otay Valley	LOW
	0600000426	70227							
89	0600000430	61212	1	690	HIGHWAY 75		OTAY	Coronado	LOW
90	0600000431	70227	1	1320	EAST	LN	TIJUANA	Tijuana Valley	LOW
91	0600000433	61212	1	511	DAHLIA	AVE	TIJUANA	Tijuana Valley	LOW
92	0600000439	70131	1	1243	9TH	ST	TIJUANA	Tijuana Valley	LOW
93	0600000440	70509	2	1472	14TH	ST	TIJUANA	Tijuana Valley	LOW
	0600000440	70627							
94	0600000451	70301	1	1340	IMPERIAL BEACH	BLVD	TIJUANA	Tijuana Valley	LOW
95	0600000452	61221	1	880	DONAX	AVE	OTAY	Coronado	LOW
96	0600000456	70122	1	857	HOLLY	AVE	TIJUANA	Tijuana Valley	LOW
97	0600000468	70110	1	540	11TH	ST	OTAY	Otay Valley	LOW
98	0600000469	70227	2	1270	FLORENCE	ST	OTAY	Otay Valley	LOW
	0600000469	70306							
99	0600000473	70226	1	1250	CALIFORNIA	ST	TIJUANA	Tijuana Valley	LOW
100	0700000002	70501	1	1046	8TH	ST	TIJUANA	Tijuana Valley	LOW
101	0700000004	70227	1	175	CARNATION	AVE	OTAY	Coronado	LOW
102	0700000008	70406	1	559	10TH	ST	OTAY	Otay Valley	LOW
103	0700000009	70108	2	110	ELDER	AVE	TIJUANA	Tijuana Valley	LOW
	0700000009	70130							
104	0700000010	70314	1	1140	EBONY	AVE	TIJUANA	Tijuana Valley	LOW

Attachment 6-3
BUILDING PERMIT / CONSTRUCTION SITE INVENTORY AND INSPECTIONS
(FY 2006-07)

#	PERMIT NUMBER	INSPECTION DATES	# INSPECTIONS (FY 06-07)		ADDRESS		HUNAME	HANAME	RANK
105	0700000012	70130	2	1154	10TH	ST	OTAY	Otay Valley	LOW
	0700000012	70521							
106	0700000019	70112	1	1049	FLORIDA	ST	OTAY	Otay Valley	LOW
107	0700000043	70227	1	769	PALM	AVE	OTAY	Coronado	LOW
108	0700000051	70301	1	1031	IMPERIAL BEACH	BLVD	TIJUANA	Tijuana Valley	LOW
109	0700000053	70226	1	708	BASSWOOD	AVE	TIJUANA	Tijuana Valley	LOW
110	0700000058	70530	1	425	IMPERIAL BEACH	BLVD	TIJUANA	Tijuana Valley	LOW
111	0700000061	70627	1	1235	12TH	ST	TIJUANA	Tijuana Valley	LOW
112	0700000087	70314	1	319	IMPERIAL BEACH	BLVD	TIJUANA	Tijuana Valley	LOW
113	0700000088	70406	3	962	12TH	ST	TIJUANA	Tijuana Valley	LOW
	0700000088	70416							
	0700000088	70523							
114	0700000091	70416	2	1163	BOULEVARD	AVE	TIJUANA	Tijuana Valley	LOW
115	0700000091	70504							
116	0700000098	70501	2	458	8TH	ST	OTAY	Otay Valley	LOW
	0700000098	70509							
117	0700000109	70509	1	1610	SEACOAST	DR	TIJUANA	Tijuana Valley	LOW
118	0700000126	70501	1	519	8TH	ST	OTAY	Otay Valley	LOW
119	0700000129	70523	1	1252	14TH	ST	TIJUANA	Tijuana Valley	LOW
120	0700000189	70627	1	1070	13TH	ST	TIJUANA	Tijuana Valley	LOW
121	0700000190	70620	1	1360	SEACOAST	DR	TIJUANA	Tijuana Valley	LOW

Capital Improvement Projects In Active Construction Phase (FY 2006-07)

Project #	Name	Location	Watershed	Contractor	Start Construction	Notice of Completion	Rank
S04-107	Street Improvements Phase II	Various locations citywide	OTAY/TIJUANA	Portillo Concrete	3/6/2006	9/18/2006	High
S05-301	Street Improvements	Reconfiguration of NOLF entrance	TIJUANA	Coch Armstrong	10/1/2006	2/2/2007	High
W05-103	Pump Station 1B Upgrade	Seacoast Drive	TIJUANA	Newest Construction, Inc.	6/8/2006	8/15/2006	High

Form 7-B
City of Imperial Beach
Storm Water Management Plan Instructions to Accompany
All Construction, Grading & Encroachment Permit Applications

In compliance with the federal Clean Water Act, the State Water Code, and local ordinances, the City of Imperial Beach requires property owners to complete a Storm Water Management Plan prior to issuance of any Construction, Grading, or Encroachment Permit. The purpose of the Storm Water Management Plan is to document the Best Management Practices (BMPs) that will be implemented in order to prevent pollutants (e.g., sediment and other wastes) caused by land disturbance and construction from entering storm water conveyances and receiving waters. It also certifies that the project proponent will maintain BMPs once installed to ensure their continued effectiveness. Upon City approval, the Storm Water Management Plan becomes an important part of the Construction, Grading, or Encroachment Permit, and is subject to enforcement by City of Imperial Beach inspectors and others.

The following is an overview of the three sections of the Storm Water Management Plan as well as resources that may be useful in completing the Plan.

Section 1: Required Information - This section is used to provide the City with basic information necessary to evaluate and prioritize project activities. Each of the items in this section must be completed, with the exception that projects with less than 1 acre of disturbed area are not required to provide a Waste Discharge Identification Number (WDID). WDIDs apply only to projects that are subject to the Statewide General Construction Permit issued by the State Water Resources Control Board. These larger sites require a Notice of Intent (NOI) to be filed and a Storm Water Pollution Prevention Plan (SWPPP) to be prepared for the State.

Section 2: Best Management Practices - This section is used to indicate which BMPs will be implemented as part of the project. BMPs must be implemented to prevent erosion and construction-related materials, sediment, wastes, and other spills from entering storm water conveyances and receiving waters. It is the responsibility of the property owner and the contractor to determine the specific types of BMPs that will be used, as well as the levels of application necessary to comply with the City of Imperial Beach's Storm Water, Construction, and Grading Ordinances. Failure to prevent soil erosion and discharges of sediment and other pollutants from construction sites is a violation subject to enforcement by the City and others.

Section 3: Certification Statement - The property owner must sign this statement certifying that he or she understands the City's minimum requirements for storm water and urban runoff management as applicable to construction and land disturbance activities. The signature also certifies that all BMPs proposed in the Storm Water Management Plan will be implemented, monitored, and maintained to ensure their continued effectiveness throughout the life of the project.

Resources for Completing the Storm Water Management Plan

- The City's *Urban Runoff Management and Discharge Control Ordinance (I.B.M.C. 8.30)* establishes the discharge prohibitions and minimum BMP requirements applicable to construction and land disturbance activities. The ordinance can be located on the Internet at http://municipalcodes.lexisnexis.com/codes/imperial/.
- Section 2 of the Storm Water Management Plan contains references to California Stormwater Quality Association (CASQA) guidance manuals, which contain information on appropriate uses for individual BMPs as well as installation and maintenance specifications. Applicants are encouraged to consult these guides in preparing their Storm Water Management Plan. CASQA's *Stormwater Best Management Practice Handbook for Construction* can be accessed free of charge on the Internet at www.cabmphandbooks.com/Construction.asp. Use of the Cal Trans BMP guides is also acceptable.

City of Imperial Beach
Storm Water Management Plan

This form must be submitted with all Construction, Grading, and Encroachment Permit Applications.

SECTION 1. Required Information

Construction/Grading Permit Application Number:

Project Name:

Name of Project Contact Person:

Project address or location:

Title:

Phone #:

APN #:

Start date:

Finish date:

Project start date:

Project finish date:

Estimated amount of disturbed acreage:_____ acre(s) (If equal to or greater than 1 acre, you must also provide a WDID number from the SWRCB.) WDID (if applicable): _____

Are there any watercourses or waterbodies within 50 feet of the limits of soil disturbance? YES _____ NO _____

Does the soil type have high erosion potential (fine grain soil like sand, silt, fine disintegrated granite)? YES _____ NO _____

Does the project site have or propose slopes higher than 25 feet or steeper than 1:1? YES ____ NO _____

Will the project require any dewatering operations? YES ____ NO _____

Will the project involve any paving or grinding operations? YES ____ NO _____

Construction / Grading Plan BMP Checklist – The following information shall be shown on the Construction / Grading plans:

- The project boundaries
- The footprint of any existing structures and facilities
- The footprint of all structures and facilities to be constructed
- The limits of grading
- The existing and proposed grades of the site, along with any intermediate grades that will significantly affect site drainage patterns
- The location(s) where runoff from the site may enter storm drain(s), channel(s), and/or receiving waters

Section 2: Best Management Practices (BMPs)

Best Management Practices	CASQA Storm Water Handbook Detail	✔ BMP Selected	Comments
Erosion Control BMPs (choose at least one):			
Geotextiles, Plastic Covers, or Erosion Control Blankets *This BMP consists of using plastic, visqueen, or other materials to cover disturbed soil and/or dirt stockpiles to reduce erosion from rainfall impact. The material used for cover must be firmly held in place with sandbags or otherwise keyed into the soil as described in BMP specifications.*	**EC-7**		
Mulch, Straw, Wood Chips, Soil Binders *This BMP consists of applying mulch or other binding material to temporarily protect exposed soils from erosion by rainfall impact or wind. These are temporary methods of protection that must be inspected and reapplied on a frequent basis.*	**EC-3, EC-5, EC-6, EC-8**		
Other Erosion Control BMP (please describe and attach a copy of the BMP specification):			
Perimeter Control BMPs (choose at least one):			
Silt Fence *Silt fences are made of filter fabric that has been entrenched, attached to supporting poles, and is sometimes backed by a plastic or wire mesh for support. The silt fence detains sediment-laden water, promoting sedimentation behind the fence. It is primarily used as a perimeter control and is not effective unless trenched and keyed into the soil.*	**SE-1**		
Fiber Roll / Straw Waddle *Fiber rolls consist of straw, flax, or other similar materials bound into a tight, tubular roll. They are often used on the face of slopes to intercept runoff. They may also be effective as perimeter controls for sites with little to no slope. Fiber rolls are not effective unless properly installed (trenched and staked into the soil per specifications).*	**SE-5**		
Gravel Bag / Sandbag Barrier* *This BMP consists of placing a series of gravel- or sand-filled bags on a level contour to intercept sheet flows. Gravel bags pond sheet flow runoff, allowing sediment to settle out, and release runoff slowly as sheet flow. Sandbags also pond sheet flow runoff, but allow little if any runoff to be released. These BMPs are often used around stockpiles or as a perimeter control.*	**SE-6, SE-8**		
Other Perimeter Control BMPs (please describe and attach a copy of the BMP specification):			
Storm Drain Inlet Protection (must implement this BMP if applicable):			
Storm Drain Inlet Protection *Storm drain inlet protection consists of filter fabric covering the opening of the storm drain, drop inlet, or curb inlet. The fabric must be held in place securely with either sandbags or gravel bags. Frequent inspection and maintenance is required.*	**SE-10**	✔	
Tracking Control BMPs (must implement this BMP or other equivalent):			
Stabilized Construction Entrance *This BMP consists of a pad of aggregate underlain with filter cloth at the entrance of a construction site where traffic will be entering and leaving to or from a public right of way. The purpose is to reduce the tracking of sediment onto streets. A stabilized construction entrance is unlikely to be 100% effective, and must be used in conjunction with sweeping and good housekeeping practices to ensure that sediment tracked off-site does not enter the storm drain system.*	**TC-1**	✔	
Other Tracking Control BMPs (please describe and attach a copy of the BMP specification):			

Section 2: Best Management Practices (BMPs)

Best Management Practices	CASQA Storm Water Handbook Detail	✔ BMP Selected	Comments
Wind Erosion Control BMP (must implement this BMP):			
Wind Erosion Control *This BMP consists of applying water or other dust palliatives as necessary to prevent or alleviate dust nuisance generated by construction activities. Care should be taken so that water used for dust control is not allowed to move off site.*	**WE-1**	✔	
General Site Management BMPs (must implement all of the following if applicable):			
Good Housekeeping *Good housekeeping ensures that the construction site is kept tidy and free of excessive debris. It also includes ensuring that any sediment or trash tracked from the site onto the public right of way (through whatever means) is swept up or otherwise collected at the end of the business day.*	**-**	✔	
Employee & Sub-contractor Training *All employees and sub-contractors working on site shall be trained with regard to applicable storm water management requirements. Training shall also be provided on proper techniques for installing and maintaining BMPs.*	**-**	✔	
Material Delivery, Storage, & Use *Minimize the storage and use of hazardous materials on site, and store materials in a designated area with secondary containment if appropriate.*	**WM-1, WM-2**	✔	
Stockpile Management *Stockpiles of soil, asphalt, concrete rubble, "cold mix", and wood pressure-treated with metallic products should be covered with plastic or a comparable material at all times during the rainy season, and prior to the onset of precipitation during the dry season.*	**WM-3**	✔	
Spill Prevention & Control *Reduce the chance for spills, cleanup leaks and spills immediately, and report spills to City personnel.*	**WM-4**	✔	
Waste Management *These are a series of BMPs that address the appropriate management of solid wastes, hazardous wastes, contaminated soils, concrete wastes, sanitary wastes, and liquid wastes as specified in the BMP specifications listed to the right.*	**WM-5, WM-6, WM-7, WM-8, WM-9, WM-10**	✔	
Water Conservation *Avoid using water in a way that is likely to cause erosion and/or the transport of pollutants off site.*	**NS-1**	✔	
Vehicle & Equipment Cleaning, Fueling & Maintenance *On-site cleaning, fueling, and maintenance of vehicles is discouraged.*	**NS-8, NS-9, NS-10**	✔	
Additional BMPs (please describe):			
1.			
2.			
3.			
4.			

* Secondary perimeter control (i.e., sandbags or gravel bags placed in gutters on either side of the project) is highly recommended and may be required on projects where applicable.

Section 3: Certification Statement

The following certification must be signed before a Construction, Grading, or Encroachment Permit will be issued.

I have read and understand that the City of Imperial Beach has adopted minimum requirements for prohibiting non-storm water discharges urban runoff and for managing storm water runoff from sites associated with construction and other land disturbance activities. I certify that the BMPs proposed in Section 2 of this Storm Water Management Plan will be implemented to effectively prevent off-site runoff as well as any of this project's potentially negative impacts on the environment. I further agree to install, monitor, maintain, or revise the selected BMPs to ensure their effectiveness throughout the life of the project.

I also understand that non-compliance with the City's Storm Water and Construction / Grading Ordinances may result in enforcement by the City, including fines, citations, stop-work orders, cease and desist orders, or other actions.

Property owner _____ *Date* _____

CITY'S GOAL

The City's goal is to gain compliance with all regulations and requirements through a cooperative approach between the City and the business community. The City is providing this information to you to help guide businesses to remain in compliance. We are also available to meet with business owners.

All of these Best Management Practices (BMPs) along with our programs in other parts of the community will help keep the bay and the ocean clean for all of us. For additional information about storm water pollution and prevention, or to report a violation, contact: **Imperial Beach's Department of Public Works Hotline (619)575-3745.**

PLEASE TAKE THE TIME TO SHARE THIS INFORMATION WITH ALL EMPLOYEES AND OTHERS WHO WORK ON YOUR SITE.

Working together we can make a difference!

City of Imperial Beach
PUBLIC WORKS DEPARTMENT
495 10th Street
Imperial Beach, CA 91932
Phone: 619-423-8311
Fax: 619-429-4861
Website: www.cityofib.com
Email: ibpworks@cityofib.org

City of Imperial Beach

STORM WATER POLLUTION PREVENTION AND THE CONSTRUCTION INDUSTRY

Presented by
Public Work Department

The City of Imperial Beach is educating residents, guests, and businesses about how to control discharges of pollutants into our storm drain systems, San Diego Bay, Tijuana Estuary and River, Otay River and the Pacific Ocean. Unfortunately, storm drains do not filter water or debris, so anything that flows into the storm drain ends up in our rivers, ocean or bay. The construction industry is an important part of our economy and community. Oftentimes, the construction industry unknowingly contributes to storm water pollution by allowing paint, dirt, trash, building materials or liquid building materials to flow into the street, gutter or storm drain. These discharge not only pollute our environment but they are prohibited by law. These and other types of pollutants discharged to the rivers, ocean and bay and can lead to beach closures and additional regulatory requirements. Below are some recommended **Best Management Practices (BMPs)** for the construction industry that we need you to implement these practices on job sites, if you haven't done so already. If you have questions or need additional information sent to you, please contact **Environmental Division at (619)628-1370 or (619) 628-1370.**

EMPLOYEE TRAINING

Most construction firms have employee-training programs. These programs address such areas as health and safety training and fire protection. Training on storm water management and BMPs can be incorporated into these programs. Your employees can be trained by posters, employee meetings, courses, and bulletin boards. Bulletin boards containing messages about storm water management, potential contaminant sources, and prevention of contamination in surface water runoff are very helpful. An employee-training program should be an on-going, yearly process.



EMPLOYEE TRAINING



The City highly recommends that all staging areas be located on the work site or other private property. In all cases, staging areas need to be protected to ensure that materials or any pollutants are contained within the area.

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DIRT/GRADING

Exposed dirt piles are not allowed in the "right-of-way" (street, parkway, gutter and sidewalk). If you must temporarily remove soil, make sure to leave it in a contained, covered area where it cannot be tracked onto the street. If permanently removing dirt, a disposal location must be found prior to excavation. Numerous commercial businesses, listed in the Yellow Pages, are available to handle disposal needs or purchase your clean soil. Vacant lots and lots under construction must be protected to ensure that all dirt remains on the lot under any weather or working condition. Tracking dirt off the site or dirt carried off the site from runoff will, in most cases, be considered a violation and subject to an enforcement action.



TRASH/DEBRIS STORAGE

PAINT/STUCCO

Painting, concrete or stucco tools should never be rinsed out in the street or any area that might flow to the street. If you use a water-based paint, wash all paint brushes, pans, sprayer and other equipment in a sink connected to the sewer. Although we don't recommend their use, oil-based paints and solvents can only be disposed of at a hazardous waste collection site. When you are ready to dispose of any hazardous waste, call the County of San Diego Hazardous Materials Management Division, at (619)338-2222 or (800)253-9933. They will refer you to a list of private companies that will dispose of your hazardous waste for a fee.



BUILDING MATERIALS

Materials and equipment which require

BUILDING MATERIALS (CONTINUED)

These materials and the equipment and tools used to apply these materials should be cleaned in such a manner so as to keep the runoff and residue on the construction site. Additionally, such materials as pipes, flooring, dry wall, wood, bricks, metal bracings, tarpaper, spackle, and asphalt should be covered when rain is expected. All chemicals should be stored either in an enclosed area or at least under cover when not in use.

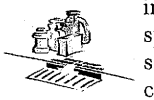


GROUNDWATER DEWATERING

More and more, the City is receiving requests to discharge groundwater from construction sites. In most cases, the City will not allow groundwater to be pumped into the City's storm drain

SPILLS

If an accidental spill of any liquid material, building material or hazardous waste occurs, absorbents must be applied immediately to prevent the spill from entering the City's street/storm drain conveyance system. When the spill is controlled and absorbed, the absorbent must be cleaned up and disposed of properly. Please have available at all times a spill kit including absorbents.



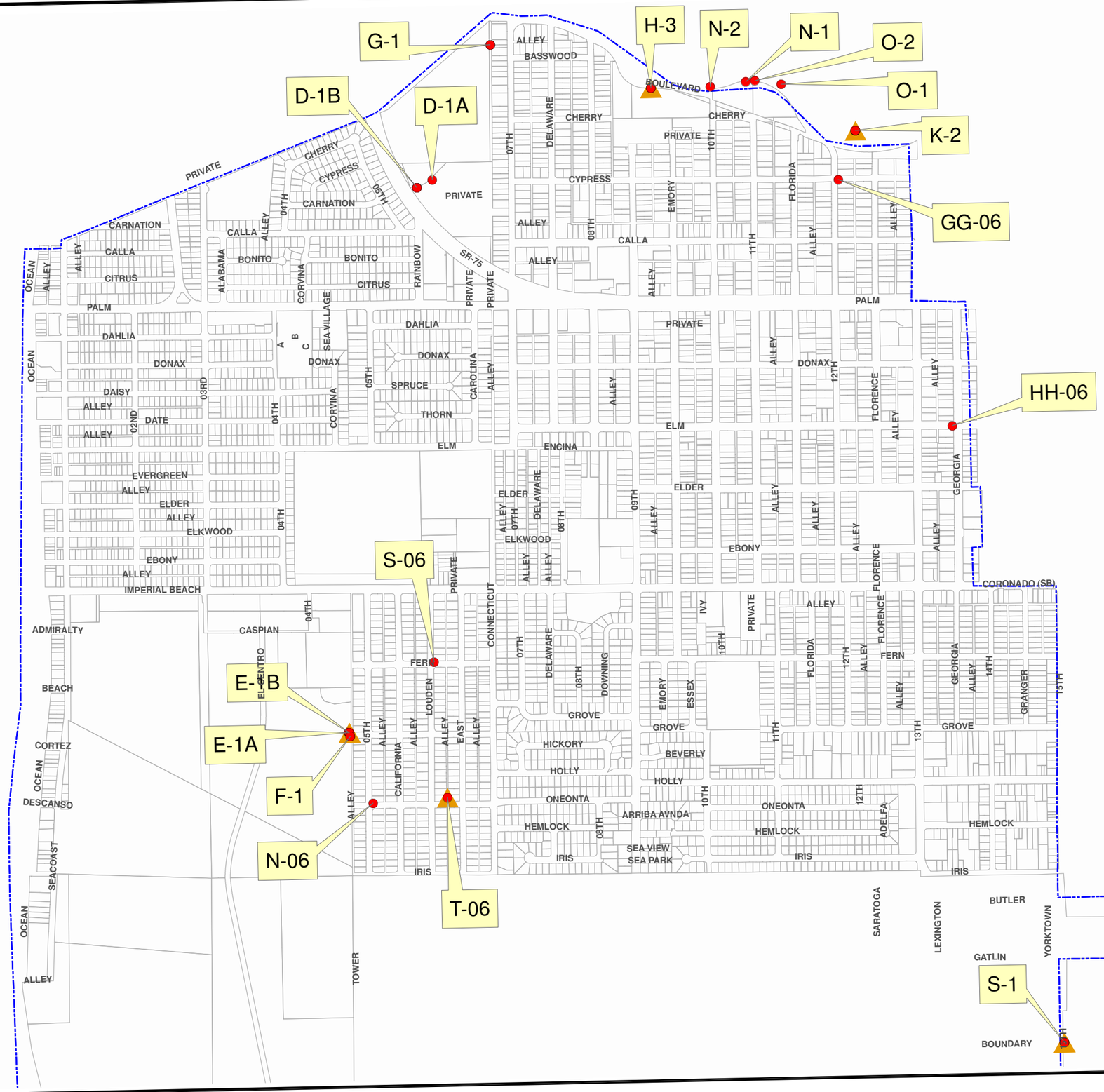
INSPECTION & ENFORCEMENT PROGRAM

The City is required to maintain an inspection and enforcement program to ensure that all businesses operating within the City are in compliance with the City of Imperial Beach's Municipal Code, Chapter 8.30, regarding storm water run-off system



Attachment 7-1
Program Assessment Form - Illicit Discharge Detection and Elimination Component
Effectiveness and Performance Measures

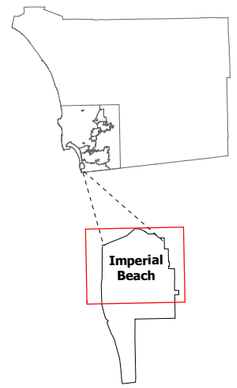
Activity	FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	Units	Comments
Number of dry weather sampling locations monitored.	11	48	50	49	50	17	#	
Number of dry weather locations requiring a field investigation.	0	0	8	17	15	7	#	
Number of storm water complaints / referrals received.	52	23	41	45	113	234	#	
Number of storm water complaints / referrals that were verified by field investigation.		23	41	52	98	199	#	
Number of illicit connections eliminated or on a compliance schedule.	2	0	3	3	2	0	#	
# of gallons of used oil recycled from City's recycling program.	368	5,713	4,650	2,911	4,359	2,440	Gallons	
# of illicit discharges requiring enforcement.	18	23	41	45	98	156	#	Includes verbal and written warnings.
# of sewage spills.	4	14	11	12	7	8	#	
# of total gallons sewage spilled.	67	2,312	1,051	971	503	1,134	Gallons	
# of total gallons sewage recovered	9.5	1,472	901	802	103	194	Gallons	
# of tons of HHW properly disposed	1.5	5.1	2.2	1.7	3.27	9.36	Tons	
# of mile of sewer lines			84	39.5	39.5	39.5	Miles	More accurate estimate of sewer line miles obtained in FY 04-05
# of miles of sewer lines cleaned.			>84	39.5	39.5	39.5	Miles	More accurate estimate of sewer line miles obtained in FY 04-05
# of miles of sewer lines replaced.	2		0	0.25	0.1	0	Miles	Several hundred feet of pipe replaced as part of pump station construction project FY05-06.



LEGEND

- Parcel Boundary
- Lab Sample Site
- City Boundary
- Field Screening Site

Vicinity Map



0 250 500 1,000 1,500 Feet

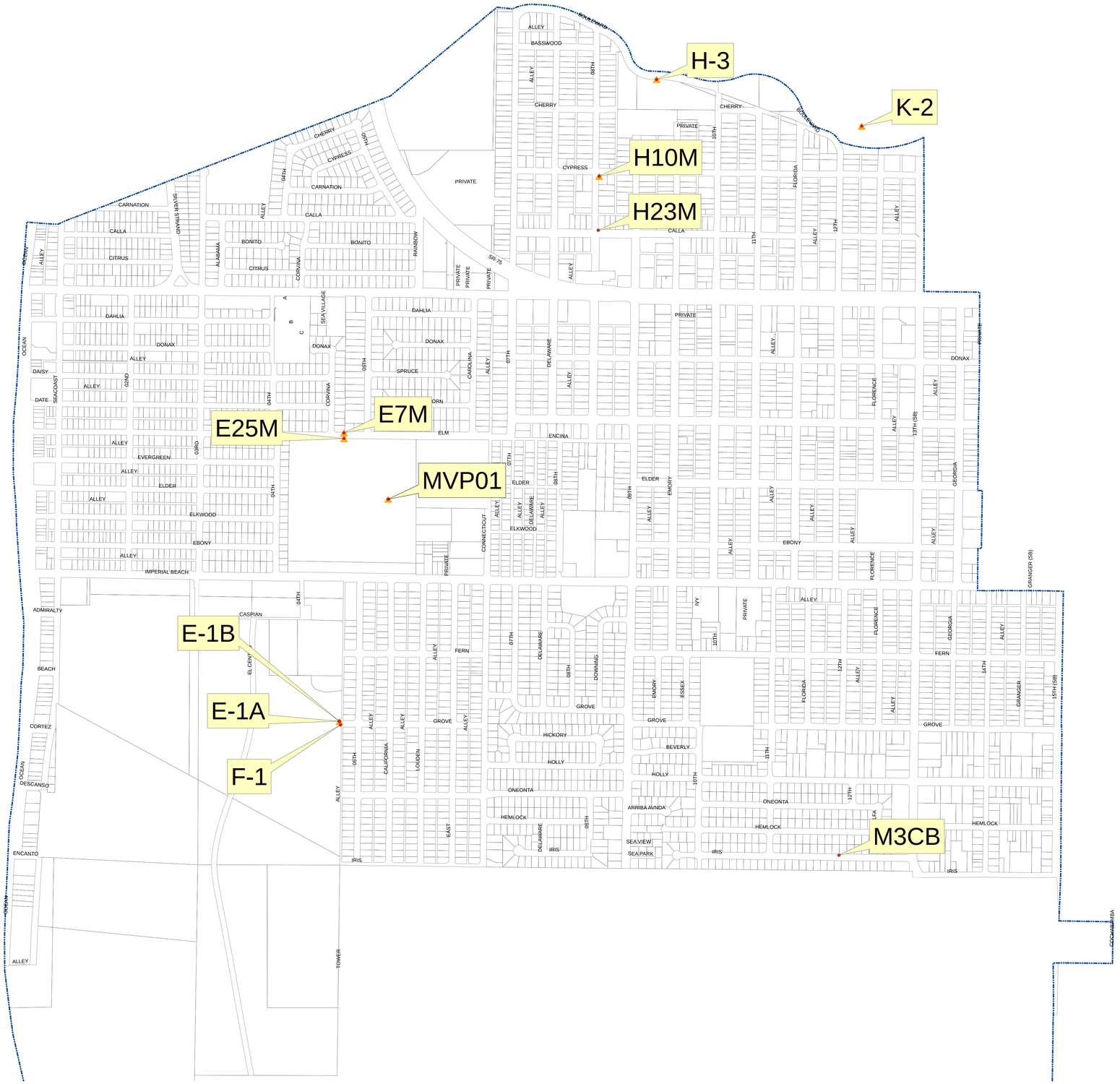
1 inch equals 1,000 feet

2006 Dry Weather Sampling Locations

Public Works Department

Date 1/3/2007

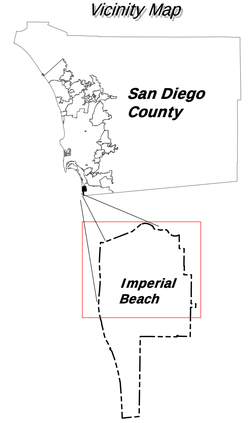
Scale 1:12,000



LEGEND

- PARCEL BOUNDARY
- Lab Sample Site
- CITY BOUNDARY
- Field Screening Site

Vicinity Map



0 125 250 500 750 1,000 Feet

1 inch equals 482.864115 feet

2007 Dry Weather Sampling Locations

Public Works Department

Date 12/18/2007

Scale 1:5,794

2006 Imperial Beach Dry Weather Monitoring Program

Field Screening Results

Site Name	Field Sample Taken	Lab Sample Taken	Loction Type	Sample Date	Sample Time	Observer	Weather	Tide	LastRain	Rainfall	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology	FlowObserved	ReachRecWater	EvidOvrIndFlow	WaterTemp(C)	pH	Ammonia(mg/l NH3-N)	Turbidity(NTU)	Nitrate(mg/l NO2-N)	Cond(ms/cm)	ReactPhosphorus(mg/l)	Upstream Investigation Conducted	Comments
AA-Grid	No	No	Grid	18-Jul-06		DC																						No	No urban runoff to sample.
A-Grid	No	No	Grid	12-Jul-06		DC																						No	No urban runoff to sample.
BB-Grid	No	No	Grid	18-Jul-06		DC																						No	No urban runoff to sample.
D-1A	No	No	Outfall	3-May-06	10:50 PM	DC/TS	Overcast	Low	> 72 Hours	None	None	None		None	None	Normal	None	Dry	N/A	No								No	No urban runoff to sample.
D-1B	No	No	Outfall	3-May-06	10:42 AM	DC/TS	Overcast	Low	> 72 Hours	None	None	None		None	None	None	None	Dry	N/A	No								No	No urban runoff to sample.
D-1B	No	No	Outfall	31-Jul-06	11:40 AM	DC																						No	No urban runoff to sample.
D-1B	No	No	Outfall	8-Sep-06	2:30 PM	DC	Sunny	Outgoing	> 72 Hours	None	None	None	Clear	None	None	None	None	Tidal	No	No								No	No urban runoff to sample.
E-1A	No	No	Outfall	19-May-06	8:45 AM	DC/TS	Sunny	Low	> 72 Hours	None																		No	Tidal influence, no sample taken.

2006 Imperial Beach Dry Weather Monitoring Program

Field Screening Results

Site Name	Field Sample Taken	Lab Sample Taken	Loction Type	Sample Date	Sample Time	Observer	Weather	Tide	LastRain	Rainfall	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology	FlowObserved	ReachRecWater	EvidOvrIndFlow	WaterTemp(C)	pH	Ammonia(mg/l NH3-N)	Turbidity(NTU)	Nitrate(mg/l NO2-N)	Cond(ms/cm)	ReactPhosphorus(mg/l)	Upstream Investigation Conducted	Comments
G-Grid	No	No	Grid	17-Jul-06		DC																						No	No urban runoff to sample.
H-3	Yes	No	Outfall	3-May-06	8:45 AM	DC/TS	Overcast	Low	> 72 Hours	None	None	Yellow	Clear	Trash	None	Normal	Insects/Algae	Ponded	No	No	19.4	7.80	0.8	2	0.0	0.265	0.0	No	Unclear whether ponded water is accumulated storm drain or tidal water.
H-3	Yes	Yes	Outfall	5-Jun-06	11:30 AM	DC/TS	Overcast	Low	> 72 Hours	None	None	None	Clear	Trash	None	Normal	Insects/Algae	Ponded	N/A	No	22.0	6.35	0.0	1	0.0	2.170	1.0	5-Jun-06	No illegal discharge was identified. Ponded water conductivity indicates fresh water. Corresponding river water (downstream)
H-3	Yes	Yes	Outfall	31-Jul-06	8:36 AM	DC/TS	Overcast	Low	< 72 Hours	< 0.1"	Musty	Gray	Slightly Cloudy	Trash	None	Normal	Algae	Ponded	Yes	No	23.1	7.31	0.0	136	0.0	35.530	4.0	31-Jul-06	No illegal discharge was identified. However, grayish cloudy water indicates possible discharge of paint or concrete.
H-3	No	No	Outfall	8-Sep-06	3:30 PM	DC	Sunny	Low	> 72 Hours	None	None	None	Clear	Trash	None	Normal	None	Tidal	N/A	No						46.880		No	Tidal influence, no sample taken.
H-Grid	No	No	Grid	12-Jul-06		DC																						No	No urban runoff to sample.
HH-06	Yes	No	Grid	28-Jun-06	2:15 PM	DC	Sunny	N/A	< 72 Hours	None	Other	None	Clear	None	None	Normal	None	Flowing	No	No	37.0	7.29	1.0	13	0.0	0.948	2.0	28-Jun-06	Residential car washing. Resident was informed about preferred practices.
J-Grid	No	No	Grid	17-Jul-06		DC																						No	No urban runoff to sample.

2006 Imperial Beach Dry Weather Monitoring Program

Field Screening Results

Site Name	Field Sample Taken	Lab Sample Taken	Loction Type	Sample Date	Sample Time	Observer	Weather	Tide	LastRain	Rainfall	Odor	Color	Clarity	Floatables	Deposits	Vegetation	Biology	FlowObserved	ReachRecWater	EvidOvrlndFlow	WaterTemp(C)	pH	Ammonia(mg/l NH3-N)	Turbidity(NTU)	Nitrate(mg/l NO2-N)	Cond(ms/cm)	ReactPhosphorus(mg/l)	Upstream Investigation Conducted	Comments
S-06	Yes	No	Grid	28-Jun-06	11:14 AM	DC	Sunny	N/A	> 72 Hours	None	"Detergent Like"	Brown	Clear	None	None	Normal	None	Ponded	No	No	32.7	8.69	6.0	46	0.0	2.230	1.0	28-Jun-06	No illegal discharge was identified.
S-1	Yes	Yes	Outfall	19-May-06	10:45 AM	DC/TS	Sunny	N/A	> 72 Hours	None	Musty	None	Clear	None	None	Normal	Insects/Algae	Ponded	No	No	18.6	7.05	10.0	9	0.0	2.310	2.0	19-May-06	No illegal discharge was identified.
S-1	Yes	Yes	Outfall	20-Jun-06	10:30 AM	DC/TS	Sunny	N/A	> 72 Hours	None	Musty	Yellow	Clear	None	None	Normal	None	Ponded	No	No	19.3	6.70	2.0	5	0.0	0.550	3.5	20-Jun-06	No illegal discharge was identified.
S-1	Yes	Yes	Outfall	22-Aug-06	2:30 PM	DC/TS	Sunny	N/A	> 72 Hours	None	None	Yellow	Clear	Trash	None	Normal	None	Ponded	No	No	23.8	7.02	0.0	5	0.0	1.220	2.7	22-Aug-06	No illegal discharge was identified.
S-1	Yes	No	Outfall	21-Sep-06	4:30 PM	DC/TS	Sunny	N/A	> 72 Hours	None	None	None	Clear	None	None	None	None	Ponded	No	No	20.6	6.84	1.5	10	0.0	1.350	3.0	21-Sep-06	No illegal discharge was identified. Water level was the lowest I have seen it.
T-06	Yes	Yes	Grid	12-Jul-06	9:15 AM	DC	Sunny	N/A	> 72 Hours	None	Musty	Brown	Clear	None	None	None	None	Ponded	No	No	26.9	7.18	8.0	114	1.0	1.280	10.0	12-Jul-06	There was a considerable amount of water and alley is dirt and not paved. No illegal discharge was identified.
U-Grid	No	No	Grid	18-Jul-06		DC																						No	No urban runoff to sample.
V-Grid	No	No	Grid	18-Jul-06		DC																						No	No urban runoff to sample.

FY 2006-07 Illicit Discharge Investigations
City of Imperial Beach

	COMPLAINT / INITIAL OBSERVATION			INVESTIGATION RESULTS								ENFORCEMENT ACTIONS					COST RECOVERY			CASE RESOLUTION	
CASE NUMBER	DATE RECEIVED	REFERRAL SOURCE *(Choose from List)*	COMPLAINT/OBSERVATION DESCRIPTION	DATE INVESTIGATED	INVESTIGATION RESULTS	CONSTITUENT *(Choose from List)*	those sections where BMP's do not exist.	WATERSHED *(Where observed or alleged violation is occurring)*	VIOLATION VERIFIED? (Y,N)	VIOLATOR IDENTIFIED (Y, N, N/A)	VIOLATOR TYPE *(Choose From List)*	VW Only *(Insert Date)*	NOA *(Insert Date)*	NOV *(Insert Date)*	FINE / CITATION *(Insert Date)*	INFORMATIONAL LETTER (Insert Date)	CITY CLEANUP? (Y, N, N/A)	COST RECOVERY? (Y, N, N/A)	COST RECOVERY/FINE AMOUNT	CASE RESOLUTION DATE	CORRECTIVE ACTIONS IMPLEMENTED
1	5-Jul-06	PW-ENV	City's Env. Prog. Specialist observed a lot of water coming off a sidewalk and into the gutter on Louden Lane. A Resident was rinsing off his camping chairs allowing the water to enter the street.	5-Jul-06	N/A	WASHWATER	1411 Louden Lane	TIJUANA ESTUARY	Y	Y	RESIDENT	5-Jul-06				5-Jul-06	N	N/A	N/A	5-Jul-06	Resident terminated activity and City made resident aware of City's obligation to prevent urban runoff pollution.
2	5-Jul-06	PW-ENV	City's Env. Prog. Specialist observed a green liquid in the gutter near Elder Avenue and 13th Street.	5-Jul-06	Investigations revealed that a minor accident occurred resulting in a discharge of engine coolant from one of the vehicles.	AUTO FLUIDS	N/A	OTAY RIVER	Y	Y	RESIDENT						Y	N	N/A	5-Jul-06	City cleaned up engine coolant spill .
3	5-Jul-06	PW-ENV	City's Env. Prog. Specialist observed 3 quarts of motor oil on edge of alley between East lane and Louden Lane.	5-Jul-06	N/A	AUTO FLUIDS	N/A	TIJUANA ESTUARY	Y	N	UNKNOWN						Y	N	N/A	5-Jul-06	Oil was recovered and taken back to City of Imperial Beach Public Works. Oil will be disposed of properly.
4	10-Jul-06	GENERAL PUBLIC	Resident reported that his neighbors at 1203 Louden Lane allowed oil to drip into the gutter and did not bother to clean it up.	10-Jul-06	City found some areas with dried oil spots, but nothing that would indicate a recent oil leak. The City found some cigarette debris in the gutter in front of 1203 Louden Lane and the resident did clean up the cigarette debris.	TRASH & DEBRIS	1203 Louden Lane	TIJUANA ESTUARY	Y	Y	RESIDENT	10-Jul-06				10-Jul-06	N	N/A	N/A	10-Jul-06	The City did not observe any recent oil spills that would warrant a cleanup effort.
5	10-Jul-06	GENERAL PUBLIC	Resident reported that neighbors across the street at 574 11th Street are not picking up after	10-Jul-06	The City did find some dog feces in the alley but could not determine who the			OTAY RIVER	Y	N	RESIDENT					10-Jul-06	N	N/A	N/A	10-Jul-06	The City did speak with two neighbors across the street from the complaintaints residence and informed them of the City's Pollution Prevention Policy and the

FY 2006-07 Illicit Discharge Investigations
City of Imperial Beach

Attachment 7-3

	COMPLAINT / INITIAL OBSERVATION			INVESTIGATION RESULTS								ENFORCEMENT ACTIONS					COST RECOVERY			CASE RESOLUTION	
CASE NUMBER	DATE RECEIVED	REFERRAL SOURCE *(Choose from List)*	COMPLAINT/OBSERVATION DESCRIPTION	DATE INVESTIGATED	INVESTIGATION RESULTS	CONSTITUENT *(Choose from List)*	those sections where BMP's do not exist.	WATERSHED *(Where observed or alleged violation is occurring)*	VIOLATION VERIFIED? (Y,N)	VIOLATOR IDENTIFIED (Y, N, N/A)	VIOLATOR TYPE *(Choose from List)*	VW Only *(Insert Date)*	NOA *(Insert Date)*	NOV *(Insert Date)*	FINE / CITATION *(Insert Date)*	INFORMATIONAL LETTER (Insert Date)	CITY CLEANUP? (Y, N, N/A)	COST RECOVERY? (Y, N, N/A)	COST RECOVERY/FINE AMOUNT	CASE RESOLUTION DATE	CORRECTIVE ACTIONS IMPLEMENTED
12	20-Jul-06	PW-ENV	City's Env Prog Specialist observed a lot of trash in alley, car port, and surrounding area at an apartment complex on 10th Street.	20-Jul-06	Property management informed City that area is routinely maintained and the wind can blow a lot of debris in vicinity of apartment complex.	TRASH & DEBRIS	805 10th Street	OTAY RIVER	Y	Y	PROPERTY MANAGEMENT		26-Jul-06			26-Jul-06	N	N/A	N/A	25-Jul-06	City reqested clean up of trash and debris. On 7/25/2006 City verified cleanup. Additionally, City submitted a letter, N.O.A and Business BMP brochure to property management in mail.
13	21-Jul-06	PW-ADMIN	San Diego Gas & Electric employees were discharging water into the gutter at a work site near 9th Street and Calla Avenue.	21-Jul-06	After investigating the City found that San Diego Gas & Electric workers were pumping clean water into the storm water conveyance system from various vaults located in the vicinity of 9th Street and Calla Avenue.	POTABLE WATER	9th Street/Calla Avenue	OTAY RIVER	N	N/A	UTILITY						N/A	N/A	N/A	21-Jul-06	San Diego Gas and Electric are permitted to discharge clean vault water,which is composed mainly of rain and irrigation water, into the storm water conveyance system. Water which shows any signs of contamination (ie. Oil sheen, odor, etc.) is not discharged into a storm water conveyance system, but rather is collected and transported off site for proper disposal.
14	24-Jul-06	PW-PARKS	City Parks employee reported a grease spill coming from KFC restaurant trash enclosure area and into the City's storm water conveyance system.	24-Jul-06	Investigations revealed that there was a grease discharge that originated in KFC's trash enclosure area and extended onto the alley and Imperial Beach Blvd. The City could not determine the cause of the spill.	COOKING OIL & GREASE	1056 13th Street	TIJUANA ESTUARY	Y	Y	FIXED COMMERCIAL BUSINESS		25-Jul-06				N	N/A	N/A	24-Jul-06	KFC contracted with a power washing company to conduct grease recovery efforts using heat, detergents and high pressure washing system. This was completed by Monday night.
15	24-Jul-06	CITY-OTHER	On Friday,, 7/21/06 thePublic Works Director observed paint and water coming out of a curb	25-Jul-06	Investigations revealed that the discharge was most likely the result of painting equipment being washed inside the	PAINT	1100 Seacoast Drive	TIJUANA ESTUARY	Y	Y	PROPERTY			26-Jul-06			Y	Y	$290.64	21-Jul-06	The City immediately gathered the necessary recovery equipment and recovered the paint debris in the gutter. The City will provide further outreach

FY 2006-07 Illicit Discharge Investigations
City of Imperial Beach

	COMPLAINT / INITIAL OBSERVATION			INVESTIGATION RESULTS								ENFORCEMENT ACTIONS					COST RECOVERY			CASE RESOLUTION	
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22	8-Aug-06	PW-ENV	City Env. Prog. Specialist observed a significant amount of paper blowing in the street near a construction site on 11th Street.	8-Aug-06	The City determined a construction site at 1065 11th Street had a significant pile of trash and debris that was uncovered and not contained resulting in a discharge into the street.	TRASH & DEBRIS	1065 11th Street	TIJUANA ESTUARY	Y	Y	CONSTRUCTION						N	N/A	N/A	8-Aug-06	Observation was communicated to Community Development Department. Trash and debris was subsequently picked up on the street and the construction site by the General Contractor.
23	10-Aug-06	PW-ENV	City's Env. Program Manager observed a white powdery material in the gutter near the intersection of Florence Street and Cypress Avenue.	11-Aug-06	After a City investigation, the City believes a concrete washout occurred since it appears a new approach and sidewalk was constructed at 573 Florence Street.	CONSTRUCTION DEBRIS	573 Florence Street	OTAY RIVER	Y	Y	RESIDENT			11-Aug-06		11-Aug-06	N	N/A	N/A	14-Aug-06	The City requested via a N.O.V form that the material be recovered using appropriate BMP's such as dry sweeping. The City verified the cleanup on Monday, August 14, 2006.
24	10-Aug-06	PW-PARKS	City employee observed individuals washing concrete equipment near the driveway resulting in an illegal discharge.	10-Aug-06	Investigations revealed that a contractor at 1200 Iris Avenue was rinsing his equipment which had dye material from driveway resurfacing work. This resulted in a discharge of pollutants into the gutter and some material did reach the nearby storm drain inlet.	CONSTRUCTION DEBRIS	1200 Iris Avenue	TIJUANA ESTUARY	Y	Y	MOBILE BUSINESS			10-Aug-06		10-Aug-06	N	N/A	N/A	10-Aug-06	Contractor abated all material that existed in the gutter and storm drain inlet. Both the contractor and owner were informed of the City's storm water management policies and BMP requirements.
25	15-Aug-06	PW-SEWER	Sewer supervisor reported that there was an illegal discharge of concrete in the gutter on the 900 block of 10th Street.	16-Aug-06	Investigations revealed that some type of hardscape resurfacing was conducted at 963 10th Street. The City found a dried purplish substance in the gutter starting in front of 963 10th Street down to Ebony Avenue.	CONSTRUCTION DEBRIS	963 10th Street	TIJUANA ESTUARY	Y	Y	RESIDENT			16-Aug-06		16-Aug-06	N	N/A	N/A	17-Aug-06	City wrote Notice of Violation requesting that the material be cleaned up using dry sweeping methods. City verified cleanup on 8/17/2006. Resident confirmed that she cleaned up the material using sweeping methods.
																					City wrote Notice of Violation requesting

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32	25-Aug-06	RESIDENTIAL INSPECTIONS	During a residential inspection of the LL Grid, the City's Env. Prog. Specialist observed some small amounts of a dried white powdery substance in the gutter in front of 1459 Fern Avenue.	25-Aug-06	Investigations revealed that a pool cleaning contractor at 1459 Fern washed out biodegradable pool filters into the gutter.	POOL WATER	1459 Fern Avenue	OTAY RIVER	Y	Y	MOBILE BUSINESS	25-Aug-06				25-Aug-06	N	N/A	N/A	25-Aug-06	Resident at 1459 Fern Avenue cleaned up the powdery substance in the gutter. City advised resident to have pool company find an alternative to cleaning the filter out into the street as this is a violation of the City's Municipal Code. City recommended washing pool filter in sewer drain or in a landscaped area.
33	25-Aug-06	GENERAL PUBLIC	Resident observed a hydraulic fluid leak from an EDCO trash truck which resulted in a discharge of pollutants onto the street.	25-Aug-06	Investigations revealed that a significant hydraulic fluid leak from an EDCO trash truck did occur on the 4th Street side of 394 Date Avenue.	AUTO FLUIDS	N/A	PACIFIC OCEAN	Y	Y	MOBILE BUSINESS						N	N/A	N/A	25-Aug-06	EDCO Disposal Company initially utilized absorbent material to contain and isolate the small spill and then a EDCO contracted power washing company completed the cleanup by power washing and recovering the oil.
34	28-Aug-06	RESIDENTIAL INSPECTIONS	During a inspection of the EE Grid the City's Env. Prog. Specialist observed a lot of water in the alley near florida Street and Imperial Beach Blvd.	28-Aug-06	Investigations revealed that overirrigation was occuring at 1131 Florida Street.	OVER IRRIGATION	1131 Florida Street	TIJUANA ESTUARY	N	Y	RESIDENT	28-Aug-06				28-Aug-06	N/A	N/A	N/A	28-Aug-06	City provided the resident with a Homeowner Pollution Prevention brochure. City mentioned that although minimal water runoff from irrigation is acceptable excess water runoff exacerbates runoff pollution problems associated with irrigation runoff.
35	28-Aug-06	RESIDENTIAL INSPECTIONS	During an inspection of the Y Grid, the City's Env. Prog. Specialist observed a white	28-Aug-06	Investigations revealed that the washing of concrete equipment at 1251 9th Street	CONSTRUCTION DEBRIS	1251 9th Street	TIJUANA ESTUARY	Y	Y	RESIDENT	28-Aug-06				28-Aug-06	N	N/A	N/A	28-Aug-06	Resident cleaned up material using dry sweeping methods.

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43	31-Aug-06	PW-PARKS	Parks Supervisor reported that the construction site at 1275 Grainger had some potential violations with respect to the City's BMP requirements.	5-Sep-06	The City's Env. Prog. Specialist did not observe any BMP violations at the construction site at 1275 Grainger Street.	CONSTRUCTION DEBRIS	1275 Granger Street	OTAY RIVER	N	N	CONSTRUCTION						N/A	N/A	N/A		None.
44	4-Sep-06	GENERAL PUBLIC	Resident reported that the storm drain channel behind his house contained a lot of weeds and trash and he was concerned with potential flooding problems.	5-Sep-06	Investigations revealed that the storm drain channel was in fact littered with some trash and there were overgrown weeds.	TRASH & DEBRIS	761 Corvina Street	PACIFIC OCEAN	N	N	UNKNOWN						Y	N	N/A	5-Sep-06	On 9/5/07 the City's Sewer Division removed the weeds and trash.
45	5-Sep-06	GENERAL PUBLIC	Resident reported that on 8/31/06 he and a fellow surfer smelled very strong gasonline fumes while they were surfing beyond Descanso Street and Seacoast Drive.	5-Sep-06	The resident believes the gasoline odors were a result of military activities in the vicinity.	AUTO FLUIDS	N/A	PACIFIC OCEAN	Y	N	OTHER						N/A	N/A	N/A		
46	5-Sep-06	BUSINESS	All American Car Wash Company reported that recurring non-profit car washing activities are taking place at Genes Auto Repair Shop resulting in illegal discharges of pollutants.	8-Sep-06	City discussed report with Gene's Auto Repair Shop and was told that all car washing activities are conducted using appropriate best management practices including recovering and disposing of wash water appropriately.	WASHWATER	1085 Palm Avenue	OTAY RIVER	N	N/A	FIXED COMMERCIAL BUSINESS						N/A	N/A	N/A		None.
					Investigations revealed that the owner at																City asked resident to cleanup the soap that was in the gutter and appraised the

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53	13-Sep-06	PW-PARKS	City's Park supervisor reported that there was soapy water in the gutter in the vicinity of Jack and the Box restaurant.	13-Sep-06	Investigations confirmed initial observation that there were soap suds in the gutter at Jack and the Box. The City, however, could not determine the source. The City did observe significant grease accumulations within and infront of Jack and the Box's grease storage area.	COOKING OIL & GREASE	890 Palm Avenue	OTAY RIVER	Y	Y	FIXED COMMERCIAL BUSINESS			13-Sep-06			N	N/A	N/A		City verified on 9/27/06 that all grease on the ground within the grease storage enclosure and infront was cleaned to the satisfaction of the City. Jack in the Box is currently proceeding in purchasing a new grease bin.
54	18-Sep-06	PW-ENV	City's Env. Prog. Specialist observed grass cuttings on the sidewalk on Ebony Avenue.	18-Sep-06	Investigations revealed that the grass was recently cut at 930 & 932 Ebony Avenue, but the cuttings were not cleaned up yet.	GREEN WASTE	930 Ebony Avenue	TIJUANA ESTUARY	Y	Y	PROPERTY MANAGEMENT	18-Sep-06					N	N/A	N/A		City reinspected on 9/19/2006 and found the grass piles were swept up.
55	21-Sep-06	PW-ADMIN	Contractor at a construction site was power washing the back parking lot to a newly converted condominium complex and allowing the runoff to enter the street.	21-Sep-06	Gulf Coast Contractor was conducting power washing operations in the back parking lot at 1340 Holly Avenue allowing the rinse water to enter the gutter on Holly Avenue.	WASHWATER	1340 Holly Avenue	TIJUANA ESTUARY	Y	Y	CONSTRUCTION			21-Sep-06			N	N/A	N/A	21-Sep-06	Gold Coast recovered water in gutter and terminated power washing activity. Supervisor told City that power washing will resume once the proper equipment is obtained.
56	21-Sep-06	CD-CODES	Code Enf. Inspector observed oil, litter, automotive fluids, and used oil containers on the paved rear parking beside the city alleyway.	21-Sep-06	Tenants son was storing and working on inoperable vehicles. The rear parking beside the alleyway was filled with pools of oil and automotive fluids, litter, and used oil containers.	AUTO FLUIDS	830 11th Street	OTAY RIVER	Y	Y	RESIDENT			22-Sep-07			N	N/A	N/A	10-Oct-06	Tenant removed all the oil, auto fluids, litter, and containers of discarded oil from the rear parking area beside the alleyway.
			Muddy water was running down		Subcontractor (Superior Concrete) was responsible for the discharge of concrete																

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66	27-Sep-06	RESIDENTIAL INSPECTIONS	City's Env. Prog. Specialist observed a pile of uncovered sediment on the sidewalk on Elm Avenue.	27-Sep-06	Further investigation revealed that some sediment had discharged onto street a few feet away. The City also observed that fiber rolls had been implemented at the nearby storm drain inlet.	SEDIMENT	777 Elm Avenue	OTAY RIVER	Y	Y	UTILITY	27-Sep-06					N	N/A	N/A	29-Sep-06	SDG&E cleaned up the dirt pile and power washed the remaining dirt on pavement utilizing a water recovery system.
67	27-Sep-06	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed a lot of oil spots that appeared to have been cleaned up using absorbents on Ebony Avenue.	27-Sep-06	Investigations revealed that a tow truck in the vicinity of the oil spots appears to be leaking automobile fluids as evidence from fresh oil spots underneath the truck.	AUTO FLUIDS	1187 Ebony Avenue	TIJUANA ESTUARY	Y	Y	RESIDENT			27-Sep-06		27-Sep-06	N	N/A	N/A	2-Oct-06	Resident utilized more absorbent materials to cleanup the remaining oil on the street and informed the City that he will be using a new, 2006 Tow Truck vehicle which does not possess the same automotive problems.
68	28-Sep-06	RESIDENTIAL INSPECTIONS	City's Env. Prog. Specialist observed oil spots on the ground and in the gutter in front of a residence on Thorn Street.	28-Sep-06	Investigations revealed that wet oil deposits existed in the gutter next to a truck at 572 Thorn Street. Other significant, but dried oil spots existed in the area as well.	AUTO FLUIDS	572 Thorn Street	TIJUANA ESTUARY	Y	Y	RESIDENT			28-Sep-06		27-Sep-06	N	N/A	N/A	16-Oct-06	After further inspection it appears the oil in the gutter was cleaned up. Additionally, the truck, that was leaking the oil has been moved to their driveway to avoid any leaks on the street. The owner is responsible for any discharges to the storm water conveyance system.
69	28-Sep-06	RESIDENTIAL INSPECTIONS	City's Env. Prog. Specialist observed concrete in the gutter on Dahlia Avenue.	28-Sep-06	Investigations revealed that a contractor at 176 Dahlia Avenue discharged concrete material in the gutter during a recent project.	CONSTRUCTION DEBRIS	176 Dahlia Avenue	PACIFIC OCEAN	Y	Y	MOBILE BUSINESS			28-Sep-06		28-Sep-06	N	N/A	N/A	2-Oct-06	Concrete material was abated from the gutter.
					City Contractor for Veterans Park																Contractor (RSM^2) and City placed fiber

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75	12-Oct-06	PW-SEWER	Complaint received from Public Works Sewar division about doge feces that was dumped in the stormwater conveyance system that runs through the rear of the property..	10/12/06	Tenants were throwning dog poop waste from the rear yard, over the fence, into a stormwater conveyance system easement that runs through the rear of the property. **(ANIMAL WASTE ----------)**	ANIMAL WASTE	1271 Essex Street	TIJUANA ESTUARY	Y	Y	RESIDENT			16-Oct-06			N/A	N/A	N/A	16-Oct-06	Tenants removed all of the dog feces from the easement / stormwater conveyance system, and they were to stop disposing of the dog poops in that fashion.
76	12-Oct-06	PW-PARKS	Employee of McDonald's (1135 Palm Ave.) washed gasoline into the street that had leaked from a car in the drive-through lane.	12-Oct-06	Spoke with manager who was not present at time of illegal discharge. Employee hosed down spilled material because he was getting complaints from customers about health and fire risk of gasoline on the ground. Informed him that all employees must be trained in BMPs, and required immediate cleanup of remaining materials in driveway, gutter, and storm drain.	AUTO FLUIDS	1135 Palm Ave.	OTAY RIVER	Y	Y	FIXED COMMERCIAL BUSINESS			12-Oct-06			N	N/A	N/A	12-Oct-06	McDonald's staff cleaned up the remaining gasoline in the driveway, gutter, and storm drain. They were instructed to block off the storm drain during cleaning, and did so.
77	19-Oct-06	RESIDENTIAL INSPECTIONS	City's Env. Prog. Specialist observed a recliner chair in the alley at 1253 Georgia Street.	19-Oct-06	City believes the chair was illegally dumped in alley.	TRASH & DEBRIS	1253 Georgia Street	OTAY RIVER	Y	N	UNKNOWN						N	N/A	N/A	19-Oct-06	This chair will be included on EDCO's alley pickup list for next week, 10/25/2006.
78	19-Oct-06	RESIDENTIAL INSPECTIONS	City observed gray water in above ground storm drain channel near Oneonta Elementary School which was the result of extinguishing a fire	19-Oct-06	City of Imperial Beach Fire department extinguished a small fire at 981 Grove Avenue resulting in the discharge of pollutants into the nearby above ground storm drain channel.	FIRE ASH	981 Grove Avenue	TIJUANA ESTUARY	Y	Y	RESIDENT						Y	N	N/A	19-Oct-06	City's Street's and Graffiti Division used a pressure washer and recovery system to recover the ash and water that entered the storm drain channel.

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85	25-Oct-06	RESIDENTIAL INSPECTIONS	City's Env. Prog. Specialist observed excess water runoff coming from the landscape at Carl's Junior Restaurant.	25-Oct-06	Investigations revealed that there was excess water runoff coming from the irrigation system in two different areas. It appeared that there was a broken water line which caused runoff to enter Palm Avenue.	OVER IRRIGATION	700 13th Street	OTAY RIVER	Y	Y	PROPERTY MANAGEMENT						N	N/A	N/A		No actions were taken.
86	25-Oct-06	RESIDENTIAL INSPECTIONS	City's Env. Prog. Specialist observed an employee hosing down soap from the outside walkway to Wienerschnitzel that caused runoff to flow towards Palm Avenue.		N/A	WASHWATER	1253 Palm Avenue	OTAY RIVER	Y	Y	FIXED COMMERCIAL BUSINESS	25-Oct-06		25-Oct-06		26-Oct-06	N	N/A	N/A	25-Oct-06	City asked employee to stop hosing down sidewalk and discussed this issue and appropriate best management practices with co-workers and owner.
87	26-Oct-06	RESIDENTIAL INSPECTIONS	City's Env. Prog. Specialist observed trash on the ground around the dumpster and some in the alley behind an apartment complex.	26-Oct-06	Potential runoff conditions exist at 750 11th Street.	TRASH & DEBRIS	750 11th Street	OTAY RIVER	Y	Y	PROPERTY MANAGEMENT			26-Oct-06		26-Oct-06	N	N/A	N/A	26-Oct-06	On 11/13/06 City confirmed cleanup of trash that existed around the dumpster.
88	26-Oct-06	RESIDENTIAL INSPECTIONS	City observed demolition work being conducted on Florida Street without the use of appropriate sediment control best management practices.	26-Oct-06	Fiber rolls did exist on site and the Contractor temporarily removed them to conduct work towards the perimeter (Florida Street side).	SEDIMENT	817 Florida Street	OTAY RIVER	N	N/A	CONSTRUCTION						N/A	N/A	N/A	26-Oct-06	Contractor will reposition fiber rolls on the perimeter once he is finished conducting his work there. City discussed City's storm water policies with the contractor.
89	26-Oct-06	GENERAL PUBLIC	Resident reported that she mistakenly directed the discharge of pool water into the alley	26-Oct-06	Resident's cleaning lady mistakenly drained the pool into the alley behind the house. Pool water did enter the storm drain at California Street and Grove	POOL WATER	1116 East Lane	TIJUANA ESTUARY	N	N	RESIDENT						N/A	N/A	N/A	26-Oct-06	As per the City's Municipal Code, the discharge was legal. Resident does utilize a state of the art filtering system which maintains purity of pool water.

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96	8-Nov-06	GENERAL PUBLIC	Resident reported a couch was illegally dumped in the alley at 565 Delaware Street.	8-Nov-06	City's Env. Program Specialist confirmed the resident's report.	TRASH & DEBRIS	565 Delaware Street	OTAY RIVER	Y	N	UNKNOWN						N	N/A	N/A	8-Nov-06	Illegally dumped item will be included on this weeks bulky item alley pickup which is conducted by EDCO Disposal Corporation.
97	13-Nov-06	PW-ENV	City's Env. Prog. Specialist observed a construction site on Imperial Beach Boulevard with inadequate sediment control best management practices.	13-Nov-06	General Contractor at 144 Imperial Beach Blvd was utilizing fiber rolls for partial perimeter sediment control. The City determined that perimeter control was also necessary on the southwestern section of the construction site.	SEDIMENT	144 Imperial Beach Blvd	PACIFIC OCEAN	Y	Y	CONSTRUCTION	13-Nov-06					N/A	N/A	N/A	20-Nov-06	Contractor installed additional fiber rolls.
98	13-Nov-06	PW-ENV	City's Env. Prog. Specialist observed water running down the gutter on 10th Street.	13-Nov-06	Investigations revealed that a resident on 10th Street had rinsed out his trash container in the street and was also in the process of rinsing his broom.	WASHWATER	577 10th Street	OTAY RIVER	Y	Y	RESIDENT	13-Nov-06					N	N/A	N/A	13-Nov-06	City informed resident of City's storm water runoff policies and applicable best management practices appropriate for cleaning household equipment. A homeowner pollution prevention brochure was provided to the resident.
99	14-Nov-06	PW-ADMIN	Public Works Superintendant found a white substance that had been discharged into the gutter in front of Hawaiian Garden apartment complex.	14-Nov-06	Investigations revealed that an Hawaiian Garden employee had washed paint into the street after an accidential paint spill in the tenant parking lot.	PAINT	1031 Imperial Beach Blvd	TIJUANA ESTUARY	Y	Y	PROPERTY MANAGEMENT		16-Nov-06			16-Nov-06	Y	N	N/A	14-Nov-06	City crews abated the paint which had entered the gutter and storm drain on Imperial Beach Blvd. City submitted a Notice of Abatement and discussed City's storm water policy with Hawaiian Garden's Operations Manager.
100	20-Nov-06	RESIDENTIAL INSPECTIONS	City's Env. Prog. Specialist observed trash on the ground in a parking lot on Granger Street.	20-Nov-06	Report was confirmed that trash did exist on the ground of the tenant parking lot at an apartment complex located on Grove Avenue.	TRASH & DEBRIS	1460 Grove Avenue	OTAY RIVER	Y	Y	PROPERTY MANAGEMENT			21-Nov-06		21-Nov-06	N	N/A	N/A		City verified trash cleanup on 11/30/2006. No further enforcement action is necessary.

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107	22-Nov-06	PW-PARKS	City's Park Supervisor reported a concrete discharge occurred at 1020 2nd Street as evidence of concrete material on the street and in the gutter.	22-Nov-06	Resident at 1020 2nd Street had an accidential spill of concrete from the back of his pickup truck. There were minor amounts of concrete on the street and gutter.	CONSTRUCTION DEBRIS	1020 2nd Street	PACIFIC OCEAN	Y	Y	RESIDENT	22-Nov-06					N	N/A	N/A	22-Nov-06	Resident cleaned up concrete residue on the street and in the gutter.
108	22-Nov-06	RESIDENTIAL INSPECTIONS	City's Env. Program Specialist observed a resident washing his trash container out in the street.		N/A	WASHWATER	1471 East Lane	TIJUANA ESTUARY	Y	Y	RESIDENT	22-Nov-06					N	N/A	N/A	22-Nov-06	City made resident aware of the City's Storm Water policies and appropriate best management practices such as washing trash containers on grass to prevent pollutant runoff onto the street.
109	22-Nov-06	RESIDENTIAL INSPECTIONS	City's Env. Prog. Specialist observed sediment in the gutter between 1410 and 1420 California Street.	22-Nov-06	Resident at 1420 California mentioned that his neighbor at 1410 California is currently planting a shrub and that sediment probably entered the street in the process.	SEDIMENT	1410 California Street	TIJUANA ESTUARY	Y	Y	RESIDENT	22-Nov-06					N	N/A	N/A	2-Dec-06	Sediment was cleaned up by the resident.
110	26-Nov-06	CITY-OTHER	Sheriff's dispatch referred complaint of spilled yellow paint in the gutter in front of 306 Dahlia Ave.	27-Nov-06	Investigation revealed a small quantity of paint (less than 2 gallons) in gutter. Residents in vicinity were not home, so no RP could be identified.	PAINT	306 Dahlia Avenue	PACIFIC OCEAN	Y	N	UNKNOWN						Y	N	N/A	27-Nov-06	Rain was imminent, so a Public Works crew was mobilized to clean up the paint spill immediately. Paint was recovered prior to start of rain.
111	25-Nov-06	GENERAL	Complaint submitted on-line: "Numberous times in the last year we have someone dumping car parts computor and electronic components and yard waste. This	27-Nov-06	Investigation revealed a large pile of green waste (palm fronds, shrub clippings, etc.) on the sidewalk and on	GREEN WASTE	1150-1180 Cypress	OTAY RIVER	Y	N	UNKNOWN						Y	N	N/A	27-Nov-06	A City crew was mobilized to clean up the green waste material in the public right-of-way. Complainant was informed that

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119	30-Nov-06	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed 3 uncovered piles of construction debris located in the alley behind a construction site on 9th Street.		N/A	CONSTRUCTION DEBRIS	615 9th Street	OTAY RIVER	Y	Y	CONSTRUCTION	30-Nov-06					N	N/A	N/A	30-Nov-06	City requested developer to cover piles of debris since current wind conditions may carry debris into the storm water conveyance system. City reinspected site on 11/30 and found all piles securely covered with plastic.
120	30-Nov-06	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed trash and debris on the ground surrounding the onsite trash dumpsters at a construction site on 11th Street.		N/A	CONSTRUCTION DEBRIS	589 11th Street	OTAY RIVER	Y	Y	CONSTRUCTION	30-Nov-06					N	N/A	N/A	30-Nov-06	City requested that all trash be cleaned up soon to prevent trash from entering the alley and storm water conveyance system. City verified cleanup of trash on 11/30/06.
121	1-Dec-06	PW-ENV	City Env. Prog. Specialist observed concrete residue in the gutter infront of 1610 Seacoast Drive and present down to 1640 Seacoast Drive.	1-Dec-06	After further investigation the City found that the condominium property manager discharged concrete residue after repairing a property sign.	CONSTRUCTION DEBRIS	1610 Seacoast Drive	TIJUANA ESTUARY	Y	Y	PROPERTY MANAGEMENT	1-Dec-06					N	N/A	N/A	2-Dec-06	Concrete residue was cleaned up in the gutter. Property management advised maintenance crew of City's storm water policies.
122	6-Dec-06	PW-ENV	City Env. Prog. Specialist observed some graded areas at Veterans Park that did not have a perimeter sediment control device installed.	6-Dec-06	The graded areas that were identified do slope towards Encina Avenue and therefore would warrant the implementation of at least a perimeter control best management practice.	SEDIMENT	847 Encina Avenue	TIJUANA ESTUARY	Y	Y	CONSTRUCTION	6-Dec-06					N	N/A	N/A	6-Dec-06	Contractor to Veterans Park renovation installed fiber rolls as a perimeter control device.
123	15-Dec-06	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed a couch on the sidewalk on Hemlock Avenue.	15-Dec-06	The City determined that the couch was illegally dumped at 1440 Hemlock Avenue.	TRASH & DEBRIS		TIJUANA RIVER	Y	N	UNKNOWN						N	N/A	N/A	15-Dec-06	EDCO Disposal Co. will be removing the couch next week as part of EDCO's weekly alley pickup service.
			City Env. Prog. Specialist																		EDCO Disposal Co. will be removing the

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133	21-Dec-06	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed dark streaks in the front gutter and tenant parking lot of an apartment complex on 3rd Street.	21-Dec-06	The City observed automotive fluids in the gutter and signs that the fluid discharges came from tenant vehicles on the parking lot.	AUTO FLUIDS	640 3rd Street	PACIFIC OCEAN	Y	Y	PROPERTY MANAGEMENT			2-Jan-07		2-Jan-07	N	N/A	N/A		1/11/07, City found that property management utilized absorbent material to contain and cleanup the oil.
134	21-Dec-06	RESIDENTIAL INSPECTIONS	City observed illegally dumped items in the alley behind a pet store on Palm Avenue.		N/A	TRASH & DEBRIS	775 Palm Avenue	OTAY RIVER	N	N	UNKNOWN						N	N/A	N/A	21-Dec-06	EDCO Disposal Co. will be removing the couch this week as part of EDCO's weekly alley pickup service.
135	10-Jan-07	GENERAL PUBLIC	Construction Company at 144 Imperial Beach Blvd construction site was allowing trash to be blown into the street eventually entering the estuary.	10-Jan-07	The City determined that the construction company did not have any onsite containment system to capture trash which may result in discharges into the conveyance system.	TRASH & DEBRIS	144 Imperial Beach Blvd	TIJUANA ESTUARY	Y	Y	CONSTRUCTION										Public Works refered case to City Building Department.
136	12-Jan-07	GENERAL PUBLIC	Resident reported a sewer spill on 5th Street.	12-Jan-07	Sewer spill was caused by a City sewer main line leak and resulted in a release of approx. 500 gallons of waste to the storm drain system and Tijuana Estuary.	SEWER SPILL	980 5th Street	TIJUANA ESTUARY	Y	Y	FIXED COMMERCIAL BUSINESS						Y	N	N/	12-Jan-07	City Sewer Dept responded immediately and was able to abate most of the waste contaminants from the storm drain system. Prior to responding to the site, it was estimated that approx. 500 gallons of waste was uncaptured and released into the estuary. County Health Department, US Fish and Wildlife, and RWQCB was

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171	28-Feb-07	RESIDENTIAL INSPECTIONS	City observed no perimeter sediment control at certain sections surrounding a construction site on 7th Street.	28-Feb-07	After further investigation the City observed stucco particles in the alley adjacent to those sections where a perimeter control BMP was not present.	CONSTRUCTION DEBRIS	575 7th Street	SAN DIEGO BAY	Y	Y	CONSTRUCTION	28-Feb-07					N	N/A	N/A	8-Mar-07	City reinspected on 3/8/2007 and found gravel material was cleaned up and fiber rolls installed on the perimeter of the construction site.
172	8-Mar-07	DRIVE BY	City's Env. Program Specialist observed what it was believed to have been concrete material in the gutter of the 1100 block of East Lane.	8-Mar-07	An SDG&E contractor discharged concrete material into the gutter at a project site located on 1106 East Lane.	CONSTRUCTION DEBRIS	1106 East Lane	TIJUANA ESTUARY	Y	Y	UTILITY	9-Mar-07					N	N/A	N/A	9-Mar-07	SDG&E crew abated material in gutter using a high pressure water and recovery system. Additionally, SDG&E educated the responsible contractor on storm water requirements.
173	14-Mar-07	PW-PARKS	City Parks Supervisor observed a construction employee washing concrete equipment in the parking lot which resulted in the runoff of pollutants towards the street.		N/A	CONSTRUCTION DEBRIS	285 Palm Avenue	PACIFIC OCEAN	Y	Y	CONSTRUCTION	14-Mar-07					N	N/A	N/A	14-Mar-07	Runoff did not enter the street. Parks Supervisor immediately instructed employee to stop operations and later, the City's Env. Prog. Specialist appraised property owner of BMP requirements to prevent illegal discharges to the conveyance system.
174	19-Mar-07	DRIVE BY	City Env. Prog. Specialist observed grass cuttings in the alley and street in the area surrounding 1257 East Lane.		N/A	GREEN WASTE	1257 East Lane	TIJUANA ESTUARY	Y	Y	RESIDENT		19-Mar-07			19-Mar-07	N	N/A	N/A		On 3/23/07 City verified cleanup of the grass.
					Apparantly, a vehicle leaked oil as it was																

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183	28-Mar-07	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed inadequate sediment control at a construction site at Elm Avenue and Florence Street.		N/A	SEDIMENT	908 Florence	OTAY RIVER	Y	Y	CONSTRUCTION	28-Mar-07					N	N/A	N/A	29-Mar-07	City reinspected site to verify implementation of additonal sediment control (fiber rolls).
184	28-Mar-07	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed excessive water entering the alley on Elder Avenue.	28-Mar-07	Investigations revealed that a resident at 1117 Elder was watering his plants which resulted in water runoff into the alley.	POTABLE WATER	1117 Elder Avenue.	OTAY RIVER	N	N/A	RESIDENT	28-Mar-07					N	N/A	N/A		City Env. Prog. Specialist discussed incident with owner and importance of limiting water runoff.
185	29-Mar-07	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed trash around the dumpster at a business on Florence Street.		N/A	TRASH & DEBRIS	535 Florence Street	OTAY RIVER	Y	Y	FIXED COMMERCIAL BUSINESS						N	N/A	N/A		
186	29-Mar-07	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed litter in the parking lot of an apartment complex on 12th Street.	29-Mar-07	Apartment manager stated that trash is being consistenly blown by wind onto his property from the another complex located at 1241 Calla Avenue.	TRASH & DEBRIS	631 12th Street	OTAY RIVER	Y	Y	PROPERTY MANAGEMENT	29-Mar-07					N	N/A	N/A	29-Mar-07	Property Manager cleaned up trash. City reinpsected both complexes on 4/4/2007 and found both trash enclosure areas free of litter. City will revisit area during April's City Wide Inspections.
187	29-Mar-07	RESIDENTIAL INSPECTIONS	City observed an uncovered dirt pile on the sidewalk on 12th Street.	29-Mar-07	Resident at 575 12th Street is conducting landscape work on his property. City observed that a temporary berm was installed to prevent runoff of sediment.	SEDIMENT	575 12th Street	OTAY RIVER	N	N/A	RESIDENT	29-Mar-07					N	N/A	N/A	29-Mar-07	City expressed concerns about potential runoff of sediment in the event of a storm. Resident stated he will have pile removed over the weekend.
			City Env. Prog Manager observed white material in the		Property owner at 1290 5th Street stated	CONSTRUCTION															Property owner instructed his contractor to

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195	17-Apr-07	PW-ENV	City Env. Prog. Specialist observed white material in the gutter in front of a residence on Florence Street. Material was present in the gutter from 831 Florence Street to the intersection of Florence and Donax Avenue.	17-Apr-07	Investigations revealed that former tenants washed a paint roller outside which resulted in a discharge of paint into the gutter.	PAINT	831 Florence Street	OTAY RIVER	Y	Y	RESIDENT	17-Apr-07				17-Apr-07	N	N/A	N/A	18-Apr-07	City discussed report and City's storm water policies with tenants who had recently moved out of the property. City also discussed this report with the property owner and provided a pollution prevention brochure. On 4/18 City verified cleanup of paint.
196	17-Apr-07	PW-PARKS	Parks supervisor reported that there is significant amounts of trash surrounding a dumpster behind a liquor store on 13th Street.	17-Apr-07	City Env. Prog. Specialist verified report. The dumpster is located behind the former business, Once Again, located at 1155 13th Street.	TRASH & DEBRIS	1155 13th Street	TIJUANA ESTUARY	Y	Y	FIXED COMMERCIAL BUSINESS	17-Apr-07					N	N/A	N/A	19-Apr-07	On April 19, 2007 the City verfied that the trash was picked up.
197	23-Apr-07	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed a brownish stain in the gutter and towards the nearby storm drain inlet near 1202 Downing.	23-Apr-07	After further investigation the City determined a small stain on the driveway at 1202 Downing Street which was different in color and assumably in nature than the stain in the gutter. The owner at 1202 Downing had a minor spill from his camper which was contained on his driveway and cleaned up appropriately. The City could not determine the cause or origin of the brown stain (illegal discharge) in the gutter.	UNKNOWN	N/A	TIJUANA ESTUARY	Y	N	UNKNOWN						N/A	N/A	N/A	23-Apr-07	None.
																					City discussed importance of pollution

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205	30-Apr-07	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed trash scattered around a trash dumpster behind a church located at 631 12th Street.		N/A	TRASH & DEBRIS	631 12th Street	OTAY RIVER	Y	Y	PROPERTY MANAGEMENT		1-May-07			1-May-07	N	N/A	N/A	8-May-07	City verified cleanup of trash on 5/8/07.
206	30-Apr-07	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed a lot of trash scattered the trash dumpster and parking lot of an apartment complex on Calla Avenue.		N/A	TRASH & DEBRIS	1170 Calla Avenue	OTAY RIVER	Y	Y	PROPERTY MANAGEMENT		1-May-07			1-May-07	N	N/A	N/A	8-May-07	City verified cleanup of trash on 5/8/07.
207	30-Apr-07	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed trash scattered throughout the tenant parking lot of an apartment complex located at 639 10th Street.		N/A	TRASH & DEBRIS	639 10th Street	OTAY RIVER	Y	Y	PROPERTY MANAGEMENT		1-May-07			1-May-07	N	N/A	N/A	8-May-07	City verified cleanup of trash on 5/8/2007
208	9-May-07	PW-PARKS	Parks and Facility's supervisor observed a contractor power washing a driveway allowing runoff to enter the street.		N/A	WASHWATER	1240 5th Street	TIJUANA ESTUARY	Y	Y	MOBILE BUSINESS	9-May-07				9-May-07	N	N/A	N/A	9-May-07	Contractor was educated on City's BMP requirements and instructed to keep washwater from entering the street. City Env. Prog. Specialist conducted a followup with Property Owner on 5/10/2007 and reiterated City's storm water policies.
209	16-May-07	GENERAL PUBLIC	Report of 5 gallon oil spill behind Kragen Auto Parts to the south.	16-May-07	Upon arrival, absorbent material had been placed on spilled oil.	AUTO FLUIDS	750 11th Street	OTAY RIVER	Y	N	UNKNOWN						N	N/A	N/A	16-May-07	Absorbents were used to contain oil leak.

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215	23-May-07	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed trash scattered on the ground behind Pours Liquor Store on 13th Street.		N/A	TRASH & DEBRIS	1141 13th Street	TIJUANA ESTUARY	Y	Y	FIXED COMMERCIAL BUSINESS	23-May-07					N	N/A	N/A	29-May-07	On May 29, 2007 City verified cleanup of trash.
216	23-May-07	RESIDENTIAL INSPECTIONS	City Env. Prog. Specialist observed significant cigarette debris on the edge of the alley behind the Office Lounge Bar.		N/A	TRASH & DEBRIS	1133 13th Street	TIJUANA ESTUARY	Y	Y	FIXED COMMERCIAL BUSINESS	23-May-07				23-May-07	N	N/A	N/A	29-May-07	On May 29th City verified cleanup of cigarette debris.
217	30-May-07	GENERAL PUBLIC	Resident reported that a drilling company was discharging water into the storm water conveyance system on 5th Street.	30-May-07	City Env. Prog. Specialist arrived to location where drilling rig was setup and observed water running down the gutter. Drilling company representative stated that water runoff is the result of excess water being drained from the refill line during the refilling of the rig's water tank.	POTABLE WATER	N/A	TIJUANA ESTUARY	N	N/A	UTILITY						N	N/A	N/A	30-May-07	City did not observe any violation but did speak with the drilling company's representative regarding the City's strict storm water poolution prevention program.
218	4-Jun-07	PW-ENV	Env. Prog. Specialist observed dried construction material in the gutter adjacent to the catch basin at 1167 8th Street.	4-Jun-07	Resident did not perform a complete site cleanup of grout after concrete operations were completed.	CONSTRUCTION DEBRIS	1167 8th Street	TIJUANA ESTUARY	Y	Y	RESIDENT					4-Jun-07	N	N/A	N/A	4-Jun-07	Resident had a helper clean up the grout during the investigation. City appraised resident of City's urban runoff management requirements.
219	4-Jun-07	PW-ENV	Env. Prog. Specialist observed grass cuttings in the gutter and around the property at 754 Iris Avenue.		N/A	GREEN WASTE	754 Iris Avenue	TIJUANA ESTUARY	N	N/A	RESIDENT						N	N/A	N/A	5-Jun-07	On the following day, the City observed that the grass cuttings were swept up.
																					M + R construction swept up sediment in

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228	27-Jun-07	RESIDENTIAL INSPECTIONS	City Env. Program Specialist observed illegally dumped items in the alley between 8th/9th Streets north of Donax Avenue.		N/A	TRASH & DEBRIS	N/A	OTAY RIVER	Y	N	UNKNOWN						N	N/A	N/A	27-Jun-07	Item will be picked up this week as part of EDCO's alley pickup program.
229	27-Jun-07	RESIDENTIAL INSPECTIONS	City Env. Program Specialist observed an overfull recycling dumpster behind the Wave Café Restaurant.		N/A	TRASH & DEBRIS	809 Seacoast Drive	PACIFIC OCEAN	Y	Y	PROPERTY MANAGEMENT			2-Jul-07			N	N/A	N/A	2-Jul-07	City spoke with property owner who is aware that the recycling bin is consistently overfull. She stated that she recently directed EDCO to increase the frequency of pickups from 1 to 2x/week. City will monitor this business in the future.
230	29-Jun-07	RESIDENTIAL INSPECTIONS	City Env. Program Specialist observed an illegally dumped item in the alley behind Pentecostal Church.		N/A	TRASH & DEBRIS	N/A	OTAY RIVER	Y	N	UNKNOWN						N	N/A	N/A	29-Jun-07	Item will be picked up next week as part of EDCO's alley pickup program.
231	29-Jun-07	RESIDENTIAL INSPECTIONS	City Env. Program Specialist observed significant oil spots on the street at the corner of Delaware Street and Cypress Avenue.	29-Jul-07	City spoke with owner at 538 Delaware who stated that he is experiencing vehicle problems, but will ensure oil gets cleaned up.	AUTO FLUIDS	538 Delaware Street	TIJUANA RIVER	Y	Y	RESIDENT			29-Jun-07			N	N/A	N/A		City discussed storm water policy with resident and emphasized the need to implement BMP's to prevent runoff pollutants. As of 7/2/2007 resident applied absorbent material to spot on Delaware Street.
			A resident reported that an oil		City Env. Prog. Specialist observed some																The City was unable to contact the complaintant since the resident didn't leave an accurate phone message. Regarding the oil spots, no immediate corrective

Sanitary Sewer Overflows (SSO) in Imperial Beach
FY 2006-07

Attachment 7-4

	Date & Time Reported	Reported By	Start Date & Time	End Date & Time	Estimated Overflow Flow Rate (gallons per minute)	Total Overflow Volume (Gallons)	Overflow Volume Recovered (Gallons)	Overflow Volume Released to Environment (Gallons)	SSO Location – Street Address	SSO Structure I.D.	No. of Overflows within 1000 ft. of this location in past 12 months	Dates of Overflows within 1000 ft. of this location in past 12 months	SSO Cause (Short Description)	SSO Correction and Prevention	72-hour period measurable precipitation? (Y or N)	Entered Storm Drain? (Y or N)	Warning Signs Posted (Y or N)	Location of Posting	No. of Days Signs Posted	Remarks
1	9/19/06 0630	Tim Taylor	9/19/06 0625	9/19/06 0635	1.00	2.00	2.00	0.00	814 Cypress Ave	P.S.#10	0	N/A	PUMP STATION FAILURE	Pump Station #10 is an above ground station. The air relief for pump #1 vibrated loose and sprayed in a downward direction into the station when the pump cycled. The station has a six inch lip inside to contain and drain to the wet well all effluent during maintenance. The angular spray from the air relief line directed effluent towards the floor and the lip causing a small amount of splash to escape between the upper lip and the door bottom.	N	Y	N	N/A	0	There is a storm drain catch basin directly adjacent to the pump station. The effluent had just made it to the storm drain, but the pipe was dry. Since the city is in the process of annual storm drain cleaning, the pipe will be cleaned as a precaution and reported as part of the annual storm drain cleaning
2	10/12/06 1000	Sonia Galaviz	10/12/06 1000	10/12/06 1145	1.00	5.00	5.00	0.00	945 13th Street	Private Lateral	0	N/A	PRIVATE PROPERTY	An unknown caller reported sewerage coming from the property at 945 13th Street. Anthony Serrano and the city Vactor crew were dispatched to asess the problem. The Vactor was stationed downstream to protect the storm drain system. A washdown was performed while the owner of the duplex was contacted. The property owner called for a plumber to fix the private property issue.	N	N	N	N/A	0	The spillage from the lateral was intermittant. The one gals per minute was measured at the peak flow. Total Gals reported was based on what was viewed in the gutter. The response by city personel was fantastic. The spill was cleaned up in very short order. This was clearly a private property issue.
3	11/09/06 0910	Sonia Galaviz	11/09/06 0905	11/9/2006 0910 AM	1.00	5.00	5.00	0.00	490 Emory Street	Manhole #211	0	N/A	BLOCKAGE	The public works secretary received a call from a maintenance person for the south bay school district stating there was an overflowing manhole in their parking lot. The Vactor truck was on the same block and responded immediately. The blockage had self relieved and the manhole was flowing free. There appaered to be a spill of apx that had run ten feet through the parking lot into an a storm drain. Tidal influence allowed 250 gallons of ocean water to be vacuumed from the storm drain, ensuring the entire spill volume had been recovered. The upstream and downstream lines were cleaned using the Vactor truck. The recovered effluent and ocean water was	N	Y	N	N/A	0	The spill had self relieved. All effluent was recovered. Quick response was due to the Vactor being on the same block. This sewer line is on the monthly jetting program to ensure it is maintained on a frequent basis. The jetting program is behind this year due to a fifty percent turnover of sewer division personnel.

Attachment 8-1
Program Assessment Form - Education and Public Participation Components
Effectiveness and Performance Measurements:

Activity	FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	Units	Explanation (if needed)
EDUCATION COMPONENT								
Number of storm water education/instructional materials/brochures distributed.	500	500	1,500	Unknown	Unknown	Unknown	#	Brochures outlining BMPs are disseminated during commercial inspections, citywide inspections, and investigations of illicit discharges
Number of municipal employee training events regarding storm water principles.	2	9	11	3	10	7	#	
Number of storm water-related instructional workshops / outreach events conducted.	0	2	7	5	8	8	#	
# of Municipal Department personnel educated on storm water quality, BMPs, and pollution prevention.	20	70	59	27	>70	36	Employees	
# of Construction Site Owners and Developers educated on storm water quality, BMPs, and pollution prevention.	280	289	382	285	171	157	#	
# of Industrial Owners and Operators educated on storm water quality, BMPs, and pollution prevention.	0	0	1	1	0	0	#	
# of Commercial Owners and Operators educated on storm water quality, BMPs, and pollution prevention.			127	375	52	47	#	Through complaint investigation and scheduled inspections
# of Residential community, General Public, and School children educated on storm water quality, BMPs, and pollution prevention.			All residents	All residents	All residents	All residents	#	City newsletter, school classroom presentations, etc.
PUBLIC PARTICIPATION COMPONENT								
Number of opportunities provided which enabled the public to participate.			3	4	4	4	#	3 large events and 1 JURMP Annual Report Public Hearing. Storm Water Hotline is always available.
# of public gatherings where storm water quality was discussed.			3	4	4	4	#	
# of public gatherings where solutions to pollution were discussed.			3	4	4	4	#	
# of public gatherings where pollution prevention was discussed.			3	4	4	4	#	









Jurisdictional Urban Runoff Management Program Annual Report FY2007-08 for the City of Imperial Beach

Submitted by the
City of Imperial Beach
Department of Public Works
495 10th Street
Imperial Beach, California 91932
September 30, 2008

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EXECUTIVE SUMMARY

This Annual Report summarizes the activities implemented by the City of Imperial Beach (City) in fulfillment of the Jurisdictional Urban Runoff Management Program (JURMP) requirements of Order R9-2007-0001 – the San Diego Municipal Storm Water Permit. With limited exception, the report covers activities conducted between July 1, 2007 and June 30, 2008 (FY2007-08).

The purpose of the JURMP Annual Report is threefold: 1) to document the City's compliance with Municipal Storm Water Permit requirements, 2) to assess the effectiveness of program implementation, and 3) to serve as a program planning tool for directing future activities. The report reflects the organization of the Municipal Storm Water Permit, and is divided into several components corresponding to major sources of pollutants or areas of activity. The following are highlights and major accomplishments for each major JURMP component during this fiscal year.

Development Planning Component

The Development Planning Component involves incorporating storm water and urban runoff management into the development project review process. Major accomplishments during this fiscal year included the following:

Conditioned 48 discretionary permit applications requiring developers to maximize infiltration, minimize impervious surfaces, install treatment devices, etc. This compares to 51 projects during FY2006-07.

Approved Storm Water Management Plans (SWMPs) for three (3) priority development projects subject to the Standard Urban Storm Water Mitigation Plan (SUSMP).

Discussed urban runoff management requirements with all permit applicants at project intake.

Construction Component

The Municipal Storm Water Permit requires the City to oversee compliance with construction-phase BMPs at all construction projects in the City. Major accomplishments during FY2007-08 included:

Inspected 48 active discretionary permit projects for proper deployment of construction-phase BMPs. Approximately 117 inspections were performed.

Performed oversight of construction BMP compliance at all eight (8) capital improvement projects (CIPs) that were in active construction phase.

No notices of violation or abatement to construction developers and contractors as part of the oversight and enforcement process. All projects were able to comply with verbal warnings.

Discussed urban runoff management requirements with all applicants at project intake, and emphasized requirements again during follow-up inspections.

Municipal Component

City employees, particularly field staff, continued to implement best management practices (BMPs) to prevent illegal discharge of water and pollutants to the storm drain system. Examples of BMPs implemented at municipal facilities included:

Vehicle washing in wash bays that drain to the sanitary sewer.

Preventive maintenance of City vehicles to prevent fluid leakage.

Use of high-power vacuums to capture runoff from power washing activities (i.e., during graffiti abatement and spill cleanup).

Hand weeding of street medians instead of herbicide application. Strict limitations on use of fertilizers and pesticides.

Monitoring of sprinkler systems to prevent over-topping onto roadways.

Completed the alarming of all sewage pump stations, thereby reducing the likelihood of a sewage spill to the storm drain system.

Purchase and use of spill barriers, gravel bags, and absorbent rags for spill containment and cleanup at work sites.

Other notable accomplishments during FY2007-08 were:

Removed an estimated 3 tons of material through storm drain cleaning.

Removed an additional 156.5 tons of material through frequent street sweeping.

Continued maintenance of below-ground storm water treatment devices, which trap debris before it reaches receiving waters (10th Street storm water interceptor; 12 storm drain inlet filters).

Continued operation of the Date Avenue urban runoff diversion system, which diverts nuisance runoff to the sanitary sewer during low-flow conditions. Began installation of the Palm Avenue

urban runoff diversion system at Seacoast Avenue. Completion is scheduled for December 2008.

Performed daily cleanup of trash, litter, and debris along the beach and tidelands area on Seacoast Drive.

Industrial and Commercial Component

The City is tasked with educating businesses about urban runoff management and overseeing their compliance with applicable Municipal Storm Water Permit requirements. Significant progress was made on this front during this fiscal year:

Conducted 27 inspections most of which were high priority businesses, including automotive repair shops, restaurants, bars, gas stations, car washes, etc. Performed an additional 136 investigations of commercial businesses as a result of complaint referrals or staff observations in the field. This was up from 46 during FY2006-07.

Issued 21 enforcement actions to businesses as part of the enforcement and case resolution process. Other deficiencies were resolved with verbal warnings.

Residential Component

The Residential Component involves 1) educating Imperial Beach residents about urban runoff management, 2) overseeing residential compliance with BMP requirements and discharge prohibitions, and 3) facilitating proper disposal and recycling of household hazardous waste and used motor oil. Major accomplishments during this reporting period included the following:

Identified and mitigated 46 residential violations. This compares to 18, 13, 42 and 50 in the previous four years, respectively. The most commonly observed violations involved construction debris, automotive fluids, washwater, detergents or chemicals, chlorinated swimming pool water and green waste.

Issued 14 notices of violation and 7 notices of abatement as part of the enforcement and case resolution process. Other deficiencies were resolved with verbal warnings and/or letters. No fines were issued to residents during this reporting period.

Distributed educational brochures to residents throughout the year. Brochures target the following high priority activities: 1) pollution prevention around the home, 2) disposal of pet waste, 3) car washing, 4) proper disposal of motor oil, and 5) lawn and garden care.

Educated residents on environmental issues including stormwater in the City's semi-annual newsletters and a quarterly newsletter distributed by EDCO. Organized and held an Earth Day at the Pier which was attended by approximately 300 school children from two school districts, and 20 other agencies and organizations, along with many members of the general public.

Approximately 3 tons of household hazardous waste was properly disposed of at the South Bay Household Hazardous Waste facility in Chula Vista.

Imperial Beach residents recycled approximately 2,110 gallons of used oil at Kragen Auto Parts and Jiffy Lube, and through EDCO's pick-up service. This is a slight decrease from the previous reporting period in which 2,440 gallons of used oil were recycled.

Illicit Discharge Detection and Elimination Component

The City endeavors to prevent municipal discharges from the Municipal Separate Storm Sewer System (MS4) from causing or contributing to a violation of water quality standards. The Illicit Discharge Detection and Elimination Component involves 1) water quality monitoring during the dry weather season (May through September) to detect illicit discharges to the storm drain system, and 2) year-round response to complaints and referrals of urban runoff discharge violations.

All components of the JURMP are represented in this report with the exception of this component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), extended the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

Notable accomplishments during FY2007-08 were:

City staff participated in the cleanup of 23 illicit discharges. Cost recovery was pursued in 3 of these cases, recouping approximately $1,000 in costs.

Responded to 6 sewage spills during this reporting period, all of which were from private laterals.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authorized Signatory(s)	Title	Phone No.	Date
H. A. Levien	Public Works Director	(619) 628-1369	9/25/08

1.0 INTRODUCTION

The City of Imperial Beach is required to submit its Jurisdictional Urban Runoff Management Program (JURMP) Annual Report each year by September 30th in compliance with the San Diego Regional Board Order Number R9-2007-0001 (Municipal Permit). The Annual Report contains a comprehensive description of all activities conducted by the City to meet all requirements of section D of the Municipal Permit. The reporting period for the Annual Report is the previous fiscal year July 1st to June 30th.

All components of the JURMP are represented in this report with the exception of Section 7.0, Illicit Discharge Detection and Elimination Component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), which extended the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 Introduction

The City endeavors to reduce the impacts of new development and redevelopment on water quality. This component is primarily applicable to the Community Development Department, the Capital Improvements Projects Division, the Environmental Program Division of the Department of Public Works, and the contracted engineering firm, BDS Engineering.

2.2 Level 1 Outcomes – Management Program Activities

2.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, amendments to the General Plan, the environmental review process, development project approval processes, and any development project requirements. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the Development Planning component is described in the *JURMP Section 4.0*. Figure 2.1 provides an overview of the major elements of this strategy as it was implemented during FY 2007-08.

During this reporting period, the City participated in the Copermittee Workgroup responsible for establishing interim Hydromodification Management Plan criteria to be submitted to the Regional Water Quality Control Board for approval. Upon Regional Board approval of the HMP, the City will have 180 days to incorporate the requirements into the program.

2.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses requirements, training, inspections, public awareness and response, and surveys and special investigations. Table 2.2 presents and describes targeted FY 2007-08 outcomes and results, as well as implementation targets for FY 2008-09. Additional documentation, analysis, and discussion are provided in Table 2.3.

2.3 Outcomes Targeted for Staff Implementing Control Measures

2.3.1 Outcome Level 2 – Knowledge and Awareness

Education is provided to the public through face-to-face interaction with City staff in meetings and at inspections, and through several local ordinances and brochures that outline the requirements for addressing urban runoff and water quality. These efforts by the City to educate the public on development planning are discussed in the *JURMP Section 4.0.* The education effort for City staff is discussed in the *JURMP Section 10.0.*

2.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The *JURMP Appendix C* defines minimum BMP requirements applicable to development and redevelopment in the City. BMPs applicable to the Development Planning Component were updated as part of the City's JURMP revision, submitted on March 24, 2008. FY 2007-08 changes included in that update are described in Table 2.2. BMP requirements were reviewed for necessary updates or modifications subsequent to the completion of FY 2007-08; additional modifications to the BMP requirements of this element were not determined to be necessary as a result of this review.

The City is required to enforce its storm water ordinances for all Development Projects and at all development sites as necessary to maintain compliance with the Municipal Storm Water Permit. The ordinances include appropriate sanctions to achieve compliance including non-monetary penalties, fines, bonding requirements, and/or permit or occupancy denials for non-compliance.

2.3.3 Outcome Level 4 – Source Load Reductions

The City imposed one or more conditions of approval on 48 discretionary project applications during FY 2007-08. This includes three new "priority development projects" that will be subject to the City's SUSMP ordinance.

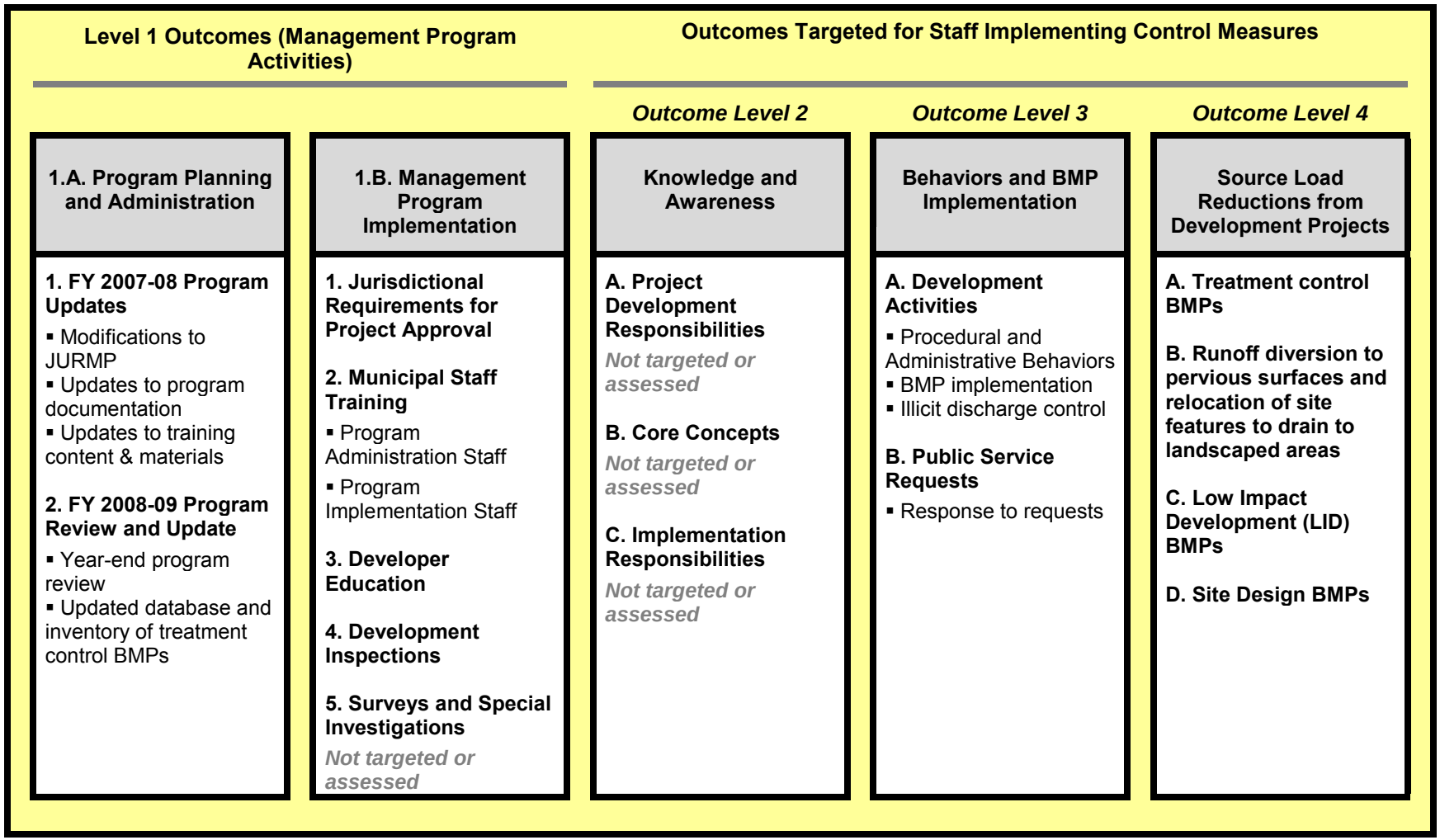

Figure 2.1 – FY 2007-08 Implementation and Assessment Strategy for the Development Planning Component

Table 2.1 – Overview of Development Planning Inventory by Development Type and Priority Classification

Category	Number	Description
A. Type of Development		
New development	12	All development projects are required to undergo the City's urban runoff approval process and meet applicable requirements.
Redevelopment	39	
B. Priority Classification		
Discretionary Projects	48	No projects received a SUSMP waiver.
Priority Development (SUSMP) Projects	3	
C. Totals		
Discretionary Projects	48	
Priority Development (SUSMP) Projects	3	
JURMP Sections	Description of FY 2007-08 Changes	
4.0 and Appendix C	BMP requirements of the JURMP applicable to development planning were modified in accordance with the requirements of the updated Permit in March 2008.	

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2007-08 PROGRAM UPDATES				
A) MODIFICATIONS TO JURMP				
Update applicable JURMP sections per new Permit requirements	Applicable JURMP sections updated 03-24-08	Completion	Applicable updates were included in **JURMP Section 4.0**, submitted to the RWQCB on 03-24-08.	Complete and identify FY 2008-09 JURMP modifications
B) UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
---	---	---	No program policies, plans, procedures, guidelines, or forms have yet been developed. The City previously modified its General Plan and updated forms associated with its environmental review process.	Update program documentation for consistency with program updates
C) UPDATES TO TRAINING PROGRAM				
---	---	---	**JURMP Section 10.0** establishes updated standards for training municipal staff. Since these standards will take effect during FY 2008-09, training content and materials will be updated accordingly.	Update staff training materials for consistency with updated standards of JURMP Section 10.0
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
A) YEAR-END PROGRAM REVIEW				
Complete annual	Review underway	In progress	An annual program review for this element is underway during the	Complete annual

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
year-end program review			development of this JURMP Annual Report. JURMP modifications recommended or planned as a result of this review are presented herein.	year-end program review
B) DEVELOP INVENTORY FOR DEVELOPMENT AND REDEVELOPMENT PROJECTS				
Develop inventory of development and redevelopment projects	Inventory developed	Completion	The City developed an inventory of development projects in progress in FY 2007-08.	Update development and redevelopment inventory
C) DEVELOP DATABASE AND INVENTORY FOR APPROVED TREATMENT CONTROL BMPS AND MAINTENANCE				
Develop watershed-based database and inventory of approved treatment control BMPs and maintenance activities	Database and inventory developed	Completion	The City was required to develop an inventory of development projects subsequent to the completion of FY 2007-08.	Update database and inventory
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. Jurisdictional Requirements for Project Approval				
Require projects to implement BMPs	Requirements implemented	Completion	All development and redevelopment projects are required to implement measures to reduce pollutants and runoff to the MEP.	Condition projects with appropriate BMPs prior to permit approval
2. Municipal Staff Training				
Provide training for FY 2007-08	Training provided	Completion	Continuing with FY 2008-09, training results for staff with responsibilities applicable to this element will be included as part of	Provide training to all staff with

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
			this annual report section.	identified responsibilities
3. Developer Education				
Conduct education through meetings, workshops, brochure dissemination	Counter hours held and meetings conducted throughout reporting period	Confirmation	The Community Development Department held counter hours and face-to-face meetings throughout FY 2007-08 to provide the developers education.	Operate counter hours, meetings, and workshops to provide developers education
4. Development Inspections				
Inspect development activities	117 inspections conducted	Completion	All development and redevelopment projects are formally inspected for applicable BMPs throughout the duration of each project.	Inspect development projects
5. Surveys and Special Investigations				
Not targeted or assessed	---	---	Special investigations were not conducted in FY 2007-08, and are not routinely conducted as part of the implementation strategy for this program element.	Survey developers to ascertain baseline levels of knowledge concerning development BMPs
Not targeted or assessed	---	---	Surveys of staff knowledge were not conducted during FY 2007-08. Beginning in FY 2008-09, surveys will routinely be incorporated before and after training as a means of evaluating training success and of monitoring staff knowledge from year to year.	Survey staff to ascertain baseline levels of knowledge concerning basic principles and specific job responsibilities.

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND CONTRACTORS)				
Not targeted or assessed	---	---	Starting in FY 2008-09, the City will begin incorporating testing before and after development planning staff training to evaluate the training success and to determine whether changes in knowledge are being retained over time. Anticipated content includes BMP knowledge, core concepts of development, and specific job responsibilities.	Establish a baseline of staff knowledge regarding applicable program content
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND DEVELOPERS)				
A. DEVELOPMENT ACTIVITIES				
1. Procedural and Administrative Behaviors				
July 1, 2007 through June 30, 2008				
Review projects and prescribe necessary conditions of approval	51 projects conditioned	Completion	The City reviews and conditions all proposed projects to ensure compliance with program.	Review projects prior to approval and issuance of permits
Inspect projects for compliance	51 projects inspected	Completion	The City inspects all projects for violations.	Inspect projects
Enforce compliance and track violations	0 with enforcement actions	Completion	The City enforces compliance at all project sites.	Enforce compliance and track violations
2. BMP Implementation, Operation and Maintenance				
July 1, 2007 through June 30, 2008				
Inspect projects	51 projects in	Completion	The City inspects and verifies BMPs at all proposed projects to	Review projects for

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
and verify BMPs	compliance		ensure compliance with program.	appropriate BMPs prior to approval and issuance of permits
Not targeted or assessed	---	---	The City annually verifies operation and maintenance of treatment control BMPs to ensure compliance with program.	Verify operation and maintenance of treatment control BMPs
3. Illicit Discharge Control				
July 1, 2007 through June 30, 2008				
Inspect development projects at least once during development	51 projects inspected	Completion	The City inspects projects and enforces stormwater ordinances at all development sites.	Inspect projects during development phase
B. PUBLIC SERVICE REQUESTS				
Respond to all development planning requests received	51 projects reviewed	Completion	The City tracks public service requests for development activities.	Respond to all development planning requests received
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM NEW DEVELOPMENT AND REDEVELOPMENT PROJECTS)				
A. TREATMENT CONTROL BMPS				
Not targeted	3 projects required installation of treatment control BMPs	---	The City requires and tracks the installation and maintenance of source control BMPs as necessary. Load reductions are not tracked.	Not targeted

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
B. RUNOFF DIVERSION AND RELOCATION OF SITE FEATURES TO DRAIN TO PERVIOUS SURFACES				
Not targeted	47 projects required to divert or relocate site features	---	The City requires diversion or relocation BMPs. Load reductions are not tracked.	Not targeted
C. LOW IMPACT DEVELOPMENT (LID) BMPS				
Not targeted	3 projects required to implement LID BMPs	---	The City requires LID BMPs. Load reductions are not tracked.	Not targeted
D. SITE DESIGN BMPS				
Not targeted	46 projects required to implement site design BMPs	---	The City requires site design BMPs. Load reductions are not tracked.	Not targeted

Table 2.3 – Treatment Control BMP Inventory

ID	Filter Type	Address / Location		Watershed	Date of Installation	Responsible Party for Maintenance	Date of Service	Service Conducted			Volume/Weight of Debris Removed (cu. ft. or lbs)	Materials Collected		
								Inspected	Cleaned	Boom(s) Replaced		Sediment	Trash	Organics
IBP1	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	Wally's IGA, 836 Palm Avenue	Wally's IGA parking lot	Otay	05/01/02	Drainage Protection Systems	09/29/07	X	X	X		X	X	X
							01/04/08	X	X	X		X	X	X
							05/05/08	X	X	X		X	X	X
							09/12/08	X	X	X		X	X	X
IBP2	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	Wally's IGA, 836 Palm Avenue	Northwest corner of Wally's IGA parking lot	Otay	05/01/02	Drainage Protection Systems	09/29/07	X	X	X		X	X	X
							01/04/08	X	X	X		X	X	X
							05/05/08	X	X	X		X	X	X
							09/12/08	X	X	X		X	X	X
IBP3	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	Wally's IGA, 836 Palm Avenue	Entrance to Wally's at 8th Street	Otay	05/01/02	Drainage Protection Systems	09/29/07	X	X	X		X	X	X
							01/04/08	X	X	X		X	X	X
							05/05/08	X	X	X		X	X	X
							09/12/08	X	X	X		X	X	X
IBP4	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	Wally's IGA, 836 Palm Avenue	Loading area at Wally's IGA	Otay	05/01/02	Drainage Protection Systems	09/29/07	X	X	X		X	X	X
							01/04/08	X	X	X		X	X	X
							05/05/08	X	X	X		X	X	X
							09/12/08	X	X	X		X	X	X

Table 2.3 – Treatment Control BMP Inventory

ID	Filter Type	Address / Location		Watershed	Date of Installation	Responsible Party for Maintenance	Date of Service	Service Conducted			Volume/Weight of Debris Removed (cu. ft. or lbs)	Materials Collected		
								Inspected	Cleaned	Boom(s) Replaced		Sediment	Trash	Organics
IBP 5	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	CVS Pharmacy, 888 Palm Avenue	Southeast corner of back lot	Otay	05/01/02	Drainage Protection Systems	09/29/07	X	X	X				
							01/04/08	X	X	X				
							05/05/08	X	X	X		X	X	X
							09/12/08	X	X	X		X	X	X
IBP 6	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	CVS Pharmacy, 888 Palm Avenue	Northeast corner of back lot	Otay	05/01/02	Drainage Protection Systems	09/29/07	X	X	X	Total (all)- 4cf	X	X	X
							01/04/08	X	X	X		X	X	X
							05/05/08	X	X	X		X	X	X
							09/12/08	X	X	X	Total (all)- 4cf	X	X	X
13SM1	Drop Inlet Catch Basin Insert w/ boom	13th Street Market, 1126 13th Street	Front entrance (north)	Tijuana	N/A	Bio Clean Environmental Services	02/08/08	X	X	X	15lbs	8	2	5
13SM2	Drop Inlet Catch Basin Insert w/ boom	13th Street Market, 1126 13th Street	Front entrance (south)	Tijuana	N/A	Bio Clean Environmental Services	02/08/08	X	X	X	15lbs	8	2	5

Table 2.3 – Treatment Control BMP Inventory

ID	Filter Type	Address / Location		Watershed	Date of Installation	Responsible Party for Maintenance	Date of Service	Service Conducted			Volume/Weight of Debris Removed (cu. ft. or lbs)	Materials Collected		
								Inspected	Cleaned	Boom(s) Replaced		Sediment	Trash	Organics
13S M3	Drop Inlet Catch Basin Insert w/ boom	13th Street Market, 1126 13th Street	Back parking lot (north)	Tijuana	N/A	Bio Clean Environmental Services	02/08/08		X	X	10lbs	4	1	5
13S M4	Drop Inlet Catch Basin Insert w/ boom	13th Street Market, 1126 13th Street	Back parking lot (south)	Tijuana	N/A	Bio Clean Environmental Services	02/08/08		X	X	10lbs	4	1	5
IRIS1	Sump Pump and Screen Mesh	1450 Iris Avenue	Back parking lot	Tijuana	2005	Tapestry Maintenance Association	Monthly							
11th ST1	KriStar, Flo Gard Plus Catch Basin Insert one or two	861 11th Street	Driveway approach to condominiums	Otay	N/A	Resident	09/01/07							
							09/12/08		X		4 cu ft.	2	0.8	1.2
TLE1	Grate Inlet Skimmer Box w/ boom	Tunes, Lubes, Etc 741 Palm Avenue	Back Vehicle Storage Area	Otay	1-Jun-05	Tunes, Lubes, Etc.	01/28/08		X		.5 lbs	X		

3.0 CONSTRUCTION COMPONENT

3.1 Introduction

The City endeavors to reduce the impacts of construction on water quality. This component is primarily applicable to the Community Development Department and requirements that apply to the Building and Planning Division activities related to construction and construction permits, and compliance actions proposed by the City. The Environmental Division of the Public Works Department assists in implementing stormwater requirements of the Municipal Permit.

3.2 Level 1 Outcomes – Management Program Activities

3.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, updates to program documentation and training content and materials. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the Construction component is described in the *JURMP Section 5.0*. Figure 3.1 provides an overview of the major elements of this strategy as it was implemented during FY 2007-08.

3.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses requirements, training, inspections, public awareness and response, and surveys and special investigations. Table 4.2 presents and describes targeted FY 2007-08 outcomes and results, as well as implementation targets for FY 2008-09. Additional documentation, analysis, and discussion are provided in Table 3.2.

3.3 Outcomes Targeted for Staff Implementing Control Measures

3.3.1 Outcome Level 2 – Knowledge and Awareness

Education is provided to the public through face-to-face interaction with City staff in meetings, workshops, community presentations, and at inspections, and through several local ordinances and brochures that outline the requirements for addressing urban runoff and water quality. These efforts by the City to educate the public on construction are discussed in the *JURMP Section 5.0.* The education effort for City staff is discussed in the *JURMP Section 10.0.*

3.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The City requires all construction projects to submit a project stormwater management plan for approval and to obtain coverage if necessary under the State Water Resources Control Board's

General Construction Permit during FY 2007-08. The *JURMP Appendix D* defines minimum BMP requirements applicable to construction in the City. BMPs applicable to the Construction Component were updated as part of the City's JURMP revision, submitted on March 24, 2008. FY 2007-08 changes included in that update are described in Table 3.2. BMP requirements were reviewed for necessary updates or modifications subsequent to the completion of FY 2007-08; additional modifications to the BMP requirements of this element were not determined to be necessary as a result of this review.

3.3.3 Outcome Level 4 – Source Load Reductions

A watershed-based inventory of all construction sites within the City is maintained and updated monthly.

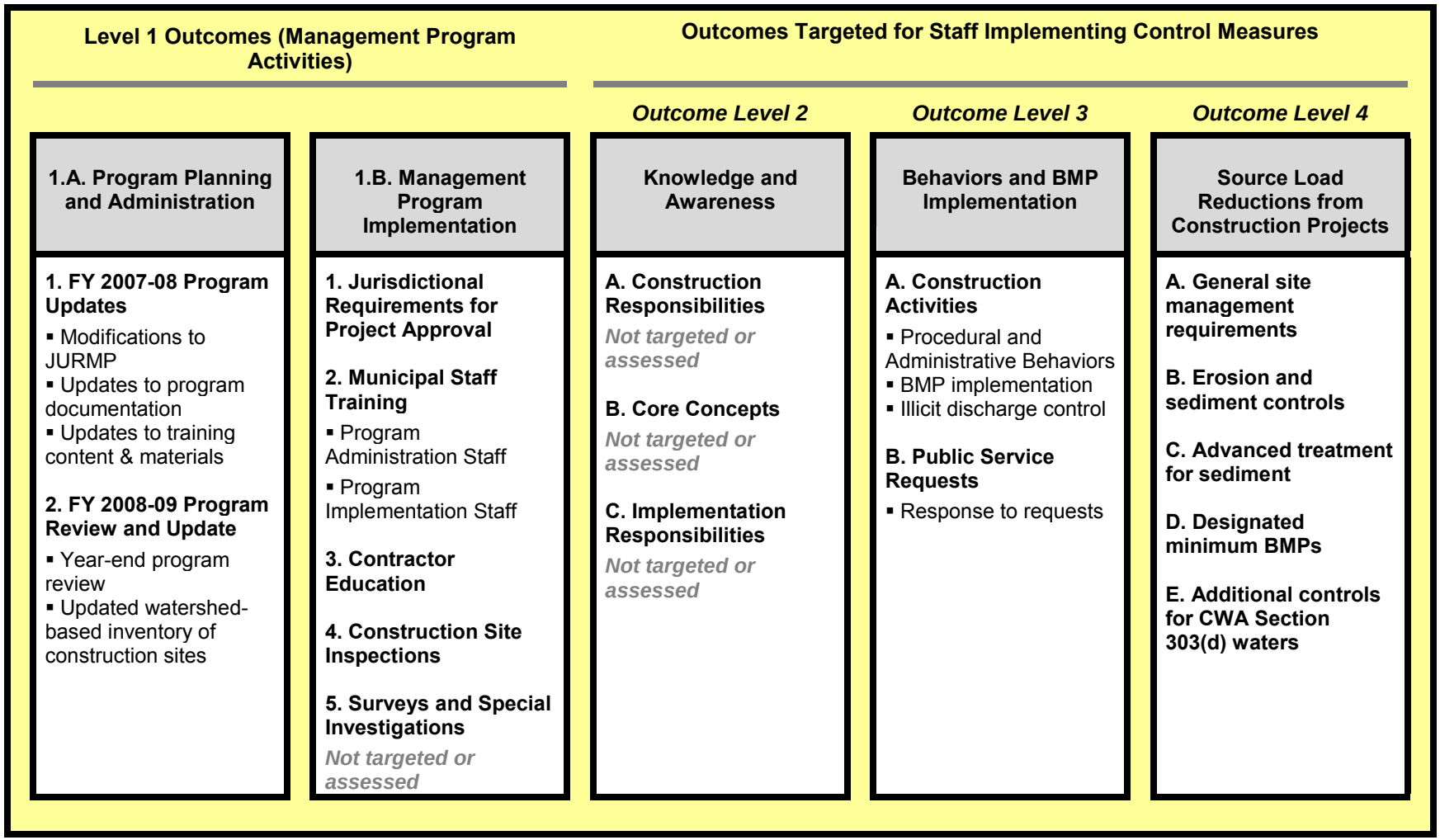

Figure 3.1 – FY 2007-08 Implementation and Assessment Strategy for the Construction Component

Table 3.1 – Overview of Construction Inventory by Priority Classification

Category	Number	Description
A. Type of Construction		
Construction Projects	48	
Priority Development (SUSMP) Projects	3	
B. Priority Classification		
High Priority Projects	12	High priority projects in the City are the new construction projects plus SUSMP projects.
Medium Priority Projects	--	
Low Priority Projects	39	
C. Totals		
Construction Projects	48	
Priority Development (SUSMP) Projects	3	

JURMP Sections	Description of FY 2007-08 Changes
5.0 and Appendix D	BMP requirements of the JURMP applicable to construction were modified in accordance with the requirements of the updated Permit in March 2008.

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2007-08 PROGRAM UPDATES				
A) MODIFICATIONS TO JURMP				
Update applicable JURMP sections per new Permit requirements	Applicable JURMP sections updated 03-24-08	Completion	Applicable updates were included in **JURMP Section 5.0**, submitted to the RWQCB on 03-24-08.	Complete and identify FY 2008-09 JURMP modifications
B) UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
---	---	---	No program policies, plans, procedures, guidelines, or forms have yet been developed. The City previously updated its grading ordinance and other applicable ordinances and forms associated with its environmental review process.	Update program documentation for consistency with program updates
C) UPDATES TO TRAINING PROGRAM				
---	---	---	**JURMP Section 10.0** establishes updated standards for training municipal staff. Since these standards will take effect during FY 2008-09, training content and materials will be updated accordingly.	Update staff training materials for consistency with updated standards of JURMP Section 10.0
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
A) YEAR-END PROGRAM REVIEW				
Complete annual	Review underway	In progress	An annual program review for this element is underway during the	Complete annual

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
year-end program review			development of this JURMP Annual Report. JURMP modifications recommended or planned as a result of this review are presented herein.	year-end program review
B) DEVELOP INVENTORY FOR CONSTRUCTION PROJECTS				
Develop an inventory of construction projects	Inventory developed	Completion	The City was required to develop an inventory of construction sites subsequent to the completion of FY 2007-08. Additional information for each construction site is provided in Table 3.3.	Update construction project inventory
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. Jurisdictional Requirements for Project Approval				
Require projects to implement BMPs	Requirements implemented	Completion	All development and redevelopment projects are required to implement measures to reduce pollutants and runoff to the MEP.	Condition projects with appropriate BMPs prior to permit approval
2. Municipal Staff Training				
Provide training for FY 2007-08	Training provided	Completion	Continuing with FY 2008-09, training results for staff with responsibilities applicable to this element will be included as part of this annual report section.	Provide training to all staff with identified responsibilities
3. Construction Contractor Education				
Conduct education through meetings, workshops, brochure dissemination	Counter hours held and meetings conducted throughout reporting period	Confirmation	The Community Development Department held counter hours and meetings throughout FY 2007-08 to provide the contractors education.	Operate counter hours, meetings, and workshops to provide contractors education.

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
4. Construction Inspections				
Inspect construction activities	66 Inspections done throughout project duration	Completion	All construction projects are formally inspected throughout the duration of the project. During the rainy season, all high priority sites will be inspected at least biweekly, medium priority sites will be inspected at least monthly, and low priority sites will be inspected as needed. During the dry season, all construction sites will be inspected as needed. Confirm maximum disturbed area for grading applied if applicable.	Inspect construction sites based on priority of site.
5. Surveys and Special Investigations				
Not targeted or assessed	---	---	Special investigations were not conducted in FY 2007-08, and are not routinely conducted as part of the implementation strategy for this program element.	Not targeted
Not targeted or assessed	---	---	Surveys of staff knowledge were not conducted during FY 2007-08. Beginning in FY 2008-09, surveys will routinely be incorporated before and after training as a means of evaluating training success and of monitoring staff knowledge from year to year.	Survey staff to ascertain baseline levels of knowledge concerning basic principles and specific job responsibilities.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND CONTRACTORS)				
Not targeted or assessed	---	---	Starting in FY 2008-09, the City will begin incorporating testing before and after development planning staff training to evaluate the training success and to determine whether changes in knowledge are being retained over time. Anticipated content includes BMP knowledge, core concepts of development, and specific job responsibilities.	Establish a baseline of staff knowledge regarding applicable program content

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND CONTRACTORS)				
A. CONSTRUCTION ACTIVITIES				
1. Procedural and Administrative Behaviors				
July 1, 2007 through June 30, 2008				
Review projects and prescribe necessary conditions of approval	51 projects conditioned	Completion	The City reviews and conditions all proposed projects to ensure compliance with program.	Review projects prior to approval and issuance of permits
2. BMP Implementation				
July 1, 2007 through June 30, 2008				
Review projects and require BMPs	51 projects approved	Completion	The City reviews and requires all proposed projects to comply with program.	Review projects for appropriate BMPs prior to approval and issuance of permits
Inspect projects and verify BMPs	51 projects inspected	Completion	The City inspects and verifies BMPs at all projects to ensure compliance with program.	Review projects for appropriate BMPs prior to approval and issuance of permits

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
3. Illicit Discharge Control				
July 1, 2007 through June 30, 2008				
Inspect development projects at least once during development	51 projects inspected	Completion	The City inspects projects and enforces stormwater ordinances at all construction sites.	Inspect projects during construction phase
B. PUBLIC SERVICE REQUESTS				
Respond to all construction requests received	51 projects reviewed	Completion	The City tracks public service requests for construction activities.	Respond to all construction requests received
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM CONSTRUCTION PROJECTS)				
A. GENERAL SITE MANAGEMENT REQUIREMENTS				
Not targeted	51 projects required to reduce discharges	---	The City requires construction sites to reduce construction site discharges of pollutants to the MEP, and to prevent discharges from causing or contributing to a violation of water quality standards.	Not targeted
B. EROSION AND SEDIMENT CONTROLS				
Not targeted	12 projects required installation of erosion and sediment control BMPs	---	The City requires installation of erosion and sediment control BMPs. Load reductions are not tracked.	Not targeted
C. ADVANCED TREATMENT FOR SEDIMENT				
Not targeted	12 projects required	---	The City requires advanced treatment controls for sediment. Load	Not targeted

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
	to apply advanced treatment controls for sediment		reductions are not tracked.	
D. DESIGNATED MINIMUM BMPS				
Not targeted	51 projects required to implement designated minimum BMPs	---	The City requires designated minimum BMPs. Load reductions are not tracked.	Not targeted
E. ADDITIONAL CONTROLS FOR CWA SECTION 303(D) WATERS				
Not targeted	0 projects required to implement additional controls for CWA Section 303(d) waters	---	The City requires additional controls to be implemented for Clean Water Act (CWA) Section 303(d) waters. Load reductions are not tracked.	Not targeted

Table 3.3 – Construction Site Inventory

Permit Number	Advanced Treatment Controls Required (Y/N)	Priority (High, Medium, Low)	Period of Time (# Weeks) Site Active During Rainy Season (October - April)	Total Number of Inspections - Rainy Season	Total Number of Inspections - Dry Season	Total Number of Inspections	General Results of Inspection	Street Number	Street Name	Inspection Status Date	Inspection Results Date	Number of Violations / Enforcement Action Type (VW, NOV, NOA)
4	N	Low	26	2	---	2	BMP SEDIMENT CONTROL	175	CARNATION	02/26/08	02/27/07	---
25	N	Low	26	---	1	1	BMP SEDIMENT CONTROL	762	GEORGIA	08/22/07	08/22/07	---
28	N	Low	0	2	---	2	BMP SEDIMENT CONTROL	1270	FLORENCE	12/17/07	02/22/07	---
39	N	High	0	---	2	2	BMP SEDIMENT CONTROL	1500	SEACOAST	06/16/08	06/12/08	---
53	N	Low	0	2	1	3	BMP SEDIMENT CONTROL	1360	EAST	04/14/08	04/08/08	---
										06/17/08	06/17/08	---
69	N	Low	0	---	2	2	BMP SEDIMENT CONTROL	419	CARNATION	05/19/08	05/13/08	---
101	N	Low	15	2	1	3	BMP SEDIMENT CONTROL	349	ELKWOOD	07/17/07	07/17/07	---
			0					1016	12TH	04/18/08	03/26/08	---
			0				BMP MATERIAL DLVRY / STORAGE	1265	11TH	04/18/08	04/03/08	---
104	N	Low	0	2	---	2	BMP SEDIMENT CONTROL	1265	11TH	04/18/08	04/03/08	---
105	N	Low	0			---	BMP MATERIAL DLVRY / STORAGE	912	EMORY	04/18/08	03/27/08	---
106	N	Low	0	2	---	2	BMP SEDIMENT CONTROL	383	PALM	04/18/08	04/18/08	---
										06/23/08	06/23/08	---
108	---		0			---	BMP MATERIAL DLVRY / STORAGE	304	DAHLIA	04/18/08	04/10/08	---
109	N	Low	0	2	---	2	BMP SEDIMENT CONTROL	1310	FERN	04/18/08	04/04/08	---
113	N	Low	0	---	1	1	BMP SEDIMENT CONTROL	933	EMORY	06/16/08	06/16/08	---
114	N	Low	26	---	2	2	BMP SEDIMENT CONTROL	963	FLORENCE	07/16/07	07/03/07	---
119	N	Low	0	---	2	2	BMP SEDIMENT CONTROL	222	ELM	05/19/08	05/14/08	---
	N	Low	20	2	---	2		254	ELM	10/17/07	10/03/07	---
122	N	Low		2	---	2	BMP SEDIMENT CONTROL	1187	DONAX	04/30/08	04/29/08	---
123	N	Low	26	---	2	2	BMP SEDIMENT CONTROL	830	GEORGIA	08/28/07	08/09/07	---

Table 3.3 – Construction Site Inventory

Permit Number	Advanced Treatment Controls Required (Y/N)	Priority (High, Medium, Low)	Period of Time (# Weeks) Site Active During Rainy Season (October - April)	Total Number of Inspections - Rainy Season	Total Number of Inspections - Dry Season	Total Number of Inspections	General Results of Inspection	Street Number	Street Name	Inspection Status Date	Inspection Results Date	Number of Violations / Enforcement Action Type (VW, NOV, NOA)
125	N	Low	0	---	1	1	BMP SEDIMENT CONTROL	742	3RD	05/28/08	05/28/08	---
129	N	Low	0	2	---	2	BMP SEDIMENT CONTROL	455	PALM	04/30/08	04/28/08	---
130	N	Low	0	2	---	2	BMP SEDIMENT CONTROL	455	PALM	04/30/08	04/29/08	---
	N	Low	0	---	3	3		549	DAHLIA	06/02/08	05/30/08	---
										06/16/08	06/16/08	---
136	N	Low	20	2	---	2	BMP SEDIMENT CONTROL	1242	13TH	10/17/07	10/02/07	---
140	N	Low	0	---	2	2	BMP SEDIMENT CONTROL	992	PALM	05/13/08	05/12/08	---
143	N	Low	0	---	1	1	BMP SEDIMENT CONTROL	383	PALM	05/05/08	05/05/08	---
148	N	Low	0	---	3	3	BMP SEDIMENT CONTROL	1026	IMPERIAL BEACH	05/19/08	05/19/08	---
										05/22/08	04/22/08	---
149	N	Low	0	---	2	2	BMP SEDIMENT CONTROL	764	5TH	05/13/08	05/08/08	---
156	N	Low	0	---	2	2	BMP SEDIMENT CONTROL	815	ENCINA	06/16/08	06/12/08	---
159	N	Low	16	1	---	1	BMP SEDIMENT CONTROL	1140	GEORGIA	11/26/07	11/26/07	---
173	N	Low	0	---	2	2	BMP SEDIMENT CONTROL	646	ALABAMA	06/02/08	05/14/08	---
174	N	Low	0	---	1	1	BMP SEDIMENT CONTROL	714	HICKORY	08/28/07	08/28/07	---
175	N	Low	14	---	1	1	BMP SEDIMENT CONTROL	1101	PALM	11/30/07	11/30/07	---
178	N	Low	19	---	1	1	BMP SEDIMENT CONTROL	737	HEMLOCK	08/16/07	08/16/07	---
187	N	Low	26	---	2	2	BMP SEDIMENT CONTROL	137	EBONY	07/23/07	07/18/07	---
	N	Low	0	---	2	2		1457	HOLLY	06/09/08	06/04/08	---
191	N	Low	0	---	2	2	BMP SEDIMENT CONTROL	1361	IMPERIAL BEACH	06/11/08	06/10/08	---
195	N	Low	0	---	1	1	BMP SEDIMENT CONTROL	455	PALM	06/16/08	06/16/08	---
196	N	High	0	---	2	2	BMP SEDIMENT CONTROL	1460	SEACOAST	06/02/08	05/28/08	---
198	N	High	0	---	2	2	BMP SEDIMENT CONTROL	725	SEACOAST	06/18/08	06/17/08	---
201	N	Low	0	---	1	1	BMP SEDIMENT CONTROL	1000	2ND	06/24/08	06/24/08	---
208	N	Low	0	---	1	1	BMP SEDIMENT CONTROL	363	PALM	06/25/08	06/25/08	---

Table 3.3 – Construction Site Inventory

Permit Number	Advanced Treatment Controls Required (Y/N)	Priority (High, Medium, Low)	Period of Time (# Weeks) Site Active During Rainy Season (October - April)	Total Number of Inspections - Rainy Season	Total Number of Inspections - Dry Season	Total Number of Inspections	General Results of Inspection	Street Number	Street Name	Inspection Status Date	Inspection Results Date	Number of Violations / Enforcement Action Type (VW, NOV, NOA)
213	N	Low	26	---	2	2	BMP SEDIMENT CONTROL	1167	5TH	07/16/07	07/13/07	---
220	N	Low	0	---	2	2	BMP SEDIMENT CONTROL	874	8TH	06/11/08	06/10/08	---
226	N	Low	0	---	1	1	BMP SEDIMENT CONTROL	1373	HEMLOCK	06/23/08	06/23/08	---
237	N	Low	10	2	---	2	BMP SEDIMENT CONTROL	1228	12TH	10/17/07	10/03/07	---
249	N	Low	18	2	---	2	BMP SEDIMENT CONTROL	1044	FERN	10/30/07	10/29/07	---
253	N	Low	20	2	---	2	BMP SEDIMENT CONTROL	1056	13TH	10/17/07	10/05/07	---
258	N	Low	2	1	---	1	BMP SEDIMENT CONTROL	1006	HEMLOCK	09/04/07	09/04/07	---
265	N	Low	18	2	---	2	BMP SEDIMENT CONTROL	140	CALLA	10/31/07	10/30/07	---
271	N	Low	25	1	---	1	BMP SEDIMENT CONTROL	961	FLORENCE	09/11/07	09/11/07	---
286	N	Low	20	2	---	2	BMP SEDIMENT CONTROL	1236	EMORY	10/17/07	10/03/07	---
341	N	Low	0	2	---	2	BMP SEDIMENT CONTROL	1277	14TH	04/09/08	04/04/08	---
350	N	Low	0	2	---	2	BMP SEDIMENT CONTROL	625	SILVER STRAND	03/12/08	03/10/08	---
357	N	Low	0	2	---	2	BMP SEDIMENT CONTROL	625	SILVER STRAND	02/13/08	02/12/08	---
358	N	Low	0	2	---	2	BMP SEDIMENT CONTROL	1016	12TH	04/30/08	04/28/08	---
391	N	Low	0	2	---	2	BMP SEDIMENT CONTROL	1234	LOUDEN	01/07/08	12/27/07	---

4.0 MUNICIPAL COMPONENT

4.1 Introduction

The City endeavors to prevent municipal discharges from the Municipal Separate Storm Sewer System (MS4) from causing or contributing to a violation of water quality standards. This component is primarily applicable to the Department of Public Works and its efforts to reduce municipal discharges of pollutants to the MS4 to the maximum extent practicable (MEP).

4.2 Level 1 Outcomes – Management Program Activities

4.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, updates to program documentation and training content and materials. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the municipal component is described in the *JURMP Section 6.0*. Figure 4.1 provides an overview of the major elements of this strategy as it was implemented during FY 2007-08.

4.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses requirements, training, inspections, public awareness and response, and surveys and special investigations. Table 4.2 presents and describes targeted FY 2007-08 outcomes and results, as well as implementation targets for FY 2008-09. Additional documentation, analysis, and discussion are provided in Table 4.2, and Figures 4.2 and 4.3.

4.3 Outcomes Targeted for Staff Implementing Control Measures

4.3.1 Outcome Level 2 – Knowledge and Awareness

A training program has been implemented within the City to inform employees of the components and goals of the JURMP. The training program focuses on the use of Best Management Practices in daily operations, and has been designed to create an overall sensitivity to pollution prevention concerns. Open discussions are encouraged to further the importance and enhance the program. This education effort is discussed in the *JURMP Section 10.0.*

4.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The *JURMP Appendix E* defines minimum BMP requirements applicable to streets, roads, highways, and municipal parking facilities in the City. BMPs applicable to these facilities were updated as part of the City's JURMP revision, submitted on March 24, 2008. FY 2007-08 changes included in that update are described in Table 4.2. BMP requirements were reviewed

for necessary updates or modifications subsequent to the completion of FY 2007-08; additional modifications to the BMP requirements of this element were not determined to be necessary as a result of this review.

4.3.3 Outcome Level 4 – Source Load Reductions

The City maintained approximately 125 miles of curbed streets and uncurbed roads located throughout the City during FY 2007-08. Approximately five miles of underground piping, 117 catch basins and inlets, seven open drainage facilities, over 30 acres of park facilities, athletic fields, beach accesses, and landscapes at various civic facilities, and five community parks located throughout the City were maintained during FY 2007-08. In addition, the City has a dedicated Tidelands crew that picks up trash and debris and conducts landscaping duties 7 days a week on the beach and one block inland of the beach. Table 4.2 provides a breakdown of the municipality by type and by priority category, and describes changes made to the inventory since its last update. A history of source load reductions for the Municipal Component is shown in Figures 4.2 and 4.3.

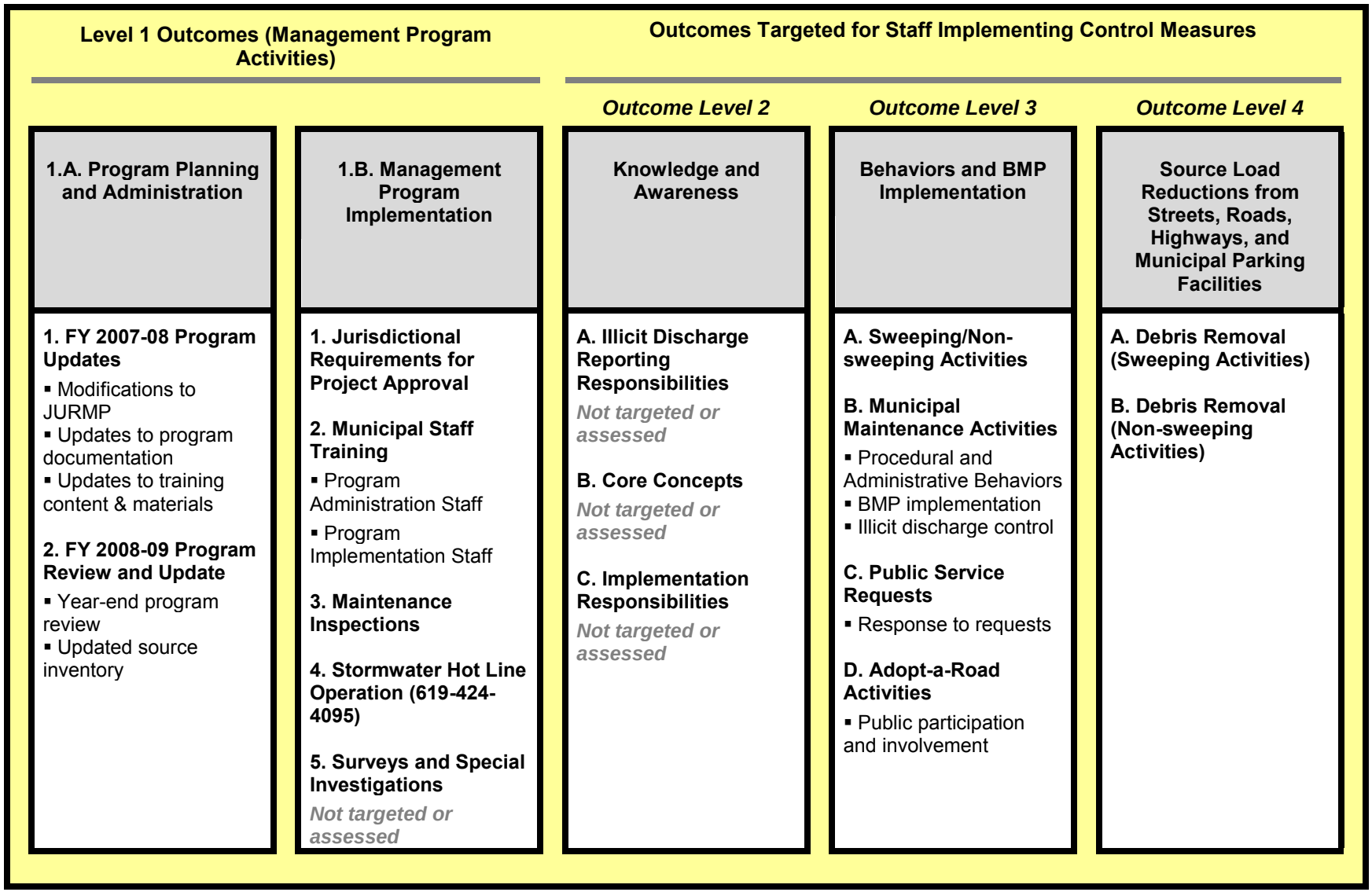

Figure 4.1 – FY 2007-08 Implementation and Assessment Strategy for the Municipal Component

Table 4.1 – Overview of Municipal Inventory by Facility Type and Priority Classification

Category	Miles	Number	Description of Changes
A. Type of Facility			
Paved Roads	127.9	---	
Unpaved Roads	---	---	
Municipal Parking Facilities	---	4	
Underground piping	5	---	
Catch basins/Inlets	---	117	
Open Drainage Facilities	---	7	
B. Priority Classification			
Streets, Roads, and Highways			This is the first year that municipal inventory statistics have been tracked by priority classification. Future JURMP Annual Reports will provide a description of significant year-to-year changes.
High (Commercial areas)	19.2	---	
Medium (Beachfront residential areas)	9.6	---	
Low (Other residential areas and paved alleys)	99.1	---	
Municipal Parking Facilities			
High (Commercial)		4	
Medium (N/A)	---	---	
Low (N/A)	---	---	
MS4 Facilities			
Underground piping	5	---	
Catch basins/Inlets	---	117	

Table 4.1 – Overview of Municipal Inventory by Facility Type and Priority Classification

Category	Miles	Number	Description of Changes
Open Drainage Facilities	---	7	
Sanitary Sewer System			
Pump stations		12	
Underground piping	39.5		
C. Totals			
Streets, Roads, and Highways	127.9	---	
Unpaved Roads	---	---	
Municipal Parking Facilities	---	4	
Underground Piping	5	---	
Catch Basins/Inlets	---	117	
Open Drainage Facilities	---	7	
Sanitary Sewer Pump Stations		12	
Underground Sewer Pipe	39.5		

JURMP Sections	Description of FY 2007-08 Changes
6.0 and Appendix E	BMP requirements of the JURMP applicable to streets, roads, highways, and municipal parking facilities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2007-08 PROGRAM UPDATES				
A) MODIFICATIONS TO JURMP				
Update applicable JURMP sections per new Permit requirements	Applicable JURMP sections updated 03-24-08	Completion	Applicable updates were included in **JURMP Section 6.0**, submitted to the RWQCB on 03-24-08.	Complete and identify FY 2008-09 JURMP modifications
B) UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
---	---	---	No program policies, plans, procedures, guidelines, or forms have yet been developed.	Update [develop] road maintenance procedures for consistency with program updates
C) UPDATES TO TRAINING PROGRAM				
---	---	---	**JURMP Section 10.0** establishes updated standards for training municipal staff. Since these standards will take effect during FY 2008-09, training content and materials will be updated accordingly.	Update staff training materials for consistency with updated standards of JURMP Section 10.0

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
A) YEAR-END PROGRAM REVIEW				
Complete annual year-end program review	Review underway	In progress	An annual program review for this element is underway during the development of this JURMP Annual Report. JURMP modifications recommended or planned as a result of this review are presented herein.	Complete annual year-end program review
B) UPDATED SOURCE INVENTORY				
Update roads inventory	Update not needed	N/A	The City was required to update its inventory of municipal facilities subsequent to the completion of FY 2007-08. This update was not necessary as the City has been developed, and no new roads or storm drains were added.	Update municipal inventory
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. Jurisdictional Requirements for Project Approval				
Require projects to implement BMPs	Requirements implemented	Completion	All development and redevelopment projects are required to implement measures to reduce pollutants and runoff to the MEP.	Condition projects with appropriate BMPs prior to permit approval
2. Municipal Staff Training				
Provide training for FY 2007-08	Training provided	Completion	Continuing with FY 2008-09, training results for staff with responsibilities applicable to this element will be included as part of this annual report section.	Provide training to all staff with identified responsibilities
3. Maintenance Inspections				
Inspect road, parking facilities,	Inspections done annually	Completion	All City-maintained roads, parking facilities, and storm drains are formally inspected annually. Other municipal areas and activities	Inspect municipal facilities

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
storm drains, and other municipal areas and activities			not identified as high priority are inspected as needed. During inspection, needed repairs are noted and scheduled, and maintenance is performed as appropriate. In addition to evaluating the road conditions, maintenance crews also evaluated potential stormwater impacts and identified sweeping, cleaning, and maintenance needs. Conveyance system and road right-of-way cleaning conducted as a result of these inspections is included in this section.	
Identify any MS4 facility found to require inspection less than annually	Review underway	In progress	Identify any MS4 facility found to require inspection less than annually following two years of inspection, and include justification for the finding.	Not targeted until FY 2009-10
4. Storm Water Hotline Operation				
Operate a hotline to provide the public opportunities to report trash and debris in roadways.	Hotline operated throughout reporting period	Confirmation	A Storm Water Hotline (619-424-4095) was operated throughout FY 2007-08 to provide the public a means of reporting accumulated trash or debris in City-maintained roadways and the MS4. 38 reports of trash and debris were received during the reporting period. See Level 4 Outcomes (below).	Operate a hotline to provide the public opportunities to report trash and debris in the City.
5. Surveys and Special Investigations				
Not targeted or assessed	---	---	Special investigations were not conducted in FY 2007-08, and are not routinely conducted as part of the implementation strategy for this program element. None are planned for FY 2008-09.	Not targeted
Not targeted or assessed	---	---	Surveys of staff knowledge were not conducted during FY 2007-08. Beginning in FY 2008-09, surveys will routinely be incorporated before and after training as a means of evaluating training success and of monitoring staff knowledge from year to year.	Survey staff to ascertain baseline levels of knowledge concerning basic principles and specific job responsibilities.

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND CONTRACTORS)				
Not targeted or assessed	---	---	Starting in FY 2008-09, the City will begin incorporating testing before and after municipal staff training to evaluate the training success and to determine whether changes in knowledge are being retained over time. Anticipated content includes illicit discharge reporting responsibilities, core concepts (e.g., What is a watershed?), and specific job responsibilities.	Establish a baseline of staff knowledge regarding applicable program content
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND CONTRACTORS)				
A. SWEEPING / NON-SWEEPING ACTIVITIES				
1. Improved Streets, Roads, and Highways				
July 1, 2007 through June 30, 2008				
Sweep all High TTWQ facilities at least twice per month	28.7 curb-miles swept at least twice per month	Completion	Commercial areas (19.2 miles of curbed roads and 4 parking lots) are swept weekly. Beachfront residential areas (9.5 miles of curbed roads) are swept bi-weekly (high TTWQ).	Sweep all High TTWQ facilities at least twice per month
Sweep all Moderate TTWQ facilities at least monthly	99.1 curb-miles swept at least monthly	Completion	All other areas (99.1 curb miles) are considered moderate priority and are swept on a monthly basis.	Sweep all Moderate TTWQ facilities at least monthly
Sweep all Low TTWQ facilities at least once (0)	N/A	N/A		Sweep all Low TTWQ facilities at least once
Sweep improved streets, roads, and highways	127.9 curb-miles swept (2,392 total miles)	Completion		Sweep at least the total minimum number of curb-miles required to

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
	swept)			meet Permit-prescribed frequencies for all improved streets
2. Improved Municipal Parking Facilities				
July 1, 2007 through June 30, 2008				
Sweep all High TTWQ parking facilities at least twice per month	4 facilities swept at least twice per month	Completion		Sweep all High TTWQ parking facilities at least twice per month
Sweep all Moderate TTWQ parking facilities at least monthly	0 facilities swept at least monthly	N/A		Sweep all Moderate TTWQ parking facilities at least monthly
Sweep all Low TTWQ parking facilities at least once	0 facilities swept at least once	N/A		Sweep all Low TTWQ parking facilities at least once
3. Municipal Separate Storm Sewer System (MS4)				
July 1, 2007 through June 30, 2008				
Clean accumulations of trash and debris greater than 33% of design capacity	24,481 feet of storm drain cleaned	Completion	There are approximately 117 catch basins and inlets that are inspected annually, and, if necessary, are cleaned if trash is observed.	Clean accumulations of trash and debris greater than 33% of design capacity
Inspect MS4 facilities at least once a year	24,481 feet of storm drain inspected	Completion		Clean accumulations of trash and debris

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
between May 1 and September 30 for all MS4 facilities that receive or collect high volumes of trash and debris. All other facilities shall be inspected at least annually.				greater than 33% of design capacity
Following two years of inspections, any MS4 facility that requires inspection and cleaning less than annually may be inspected as needed, but not less than every other year	Review underway	In progress		Inspect MS4 facilities not listed as high priority as needed, but not less than every other year.
4. Sewer System Maintenance and Spill Prevention				
July 1, 2007 through June 30, 2008				
Prevent and eliminate infiltration from the sanitary sewer to the MS4	39.5 miles of sanitary sewer system inspected	Completed	The City has conducted a sewer capacity study and identified areas needing improvement. These will be undertaken through the Capital Improvement Projects program. A Sewer System Management Plan was also completed in accordance with Waste Discharge Requirements.	Inspect sanitary sewer system for leaks to MS4
Conduct routine maintenance on sanitary sewer	39.5 miles of sanitary sewer system maintained	Completed	Most sanitary sewer pipelines are cleaned at least annually, and known problem areas are cleaned more frequently. Twelve alarmed sewage pump stations are monitored daily.	Conduct routine maintenance on and cleaning of

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
system				sanitary sewer system to prevent spills and discharges to MS4
5. Management of Pesticides, Herbicides, and Fertilizers				
July 1, 2007 through June 30, 2008				
Implement BMPs to reduce the contribution of pollutants to MS4	Requirements implemented	Completed	The City limits the application of pesticides and herbicides in accordance with Integrated Pest Management Program policy.	Implement IPM BMPs
B. MUNICIPAL MAINTENANCE ACTIVITIES				
Not targeted or assessed	---	---	The City enforces compliance at all municipal facilities, and does not currently consider Level 3 assessment of municipal maintenance activities to be applicable or feasible.	Not targeted
C. PUBLIC SERVICE REQUESTS				
Respond to all road service requests received	N/A	N/A	The City does not currently track public service requests for road maintenance activities.	Respond to all road service requests received
Respond to all sewer spills received and log in appropriate data bases	6 sewer spills reported	Completed	In the event of a sewer spill, City staff follows procedures laid out in its Sanitary Sewer Overflow Response Plan. All sewer spills during FY 07-08 were from private laterals.	Respond to and report all sewer spills received
D. ADOPT-A-ROAD ACTIVITIES				
Not targeted	0 volunteers participated in program	---	The City currently does not participate in Adopt-a-Road activities.	Not targeted

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
Not targeted	0 miles of road adopted and cleaned	---		Not targeted
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM THE MUNICIPALITY INCLUDING THE MS4)				
A. DEBRIS REMOVAL (SWEEPING ACTIVITIES)				
Not targeted	156.5 tons of debris removed through sweeping of streets, roads, highways, and municipal parking facilities		The amounts of debris collected are highly variable from year to year, as shown in Figure 4.2. Therefore, even though the overall yield of debris from sweeping this year was a little higher, this should not be interpreted as a trend. The City will continue to monitor results over a longer period, but believes its existing resources and schedules are properly allocated.	Not targeted
B. REMOVAL (NON-SWEEPING ACTIVITIES)				
Not targeted	---	---	The City does not currently track this element of trash and debris along City-maintained roads.	Not targeted
Clean accumulations of trash and debris in the MS4 greater than 33% of design capacity	3 tons of trash, debris and organic matter removed from MS4		There are approximately 117 catch basins and inlets that are inspected annually, and, if necessary, are cleaned if trash is observed. The amounts of debris collected are highly variable from year to year, as shown in Figure 4.3, and may be attributed to the estimation process used. Therefore, even though the overall yield of debris from cleaning this year was considerably reduced, this should not be interpreted as a trend. The City will continue to monitor results over a longer period, but believes its existing resources and schedules are properly allocated, and has made efforts to improve the estimation process.	Clean accumulations of trash and debris in the MS4 greater than 33% of design capacity

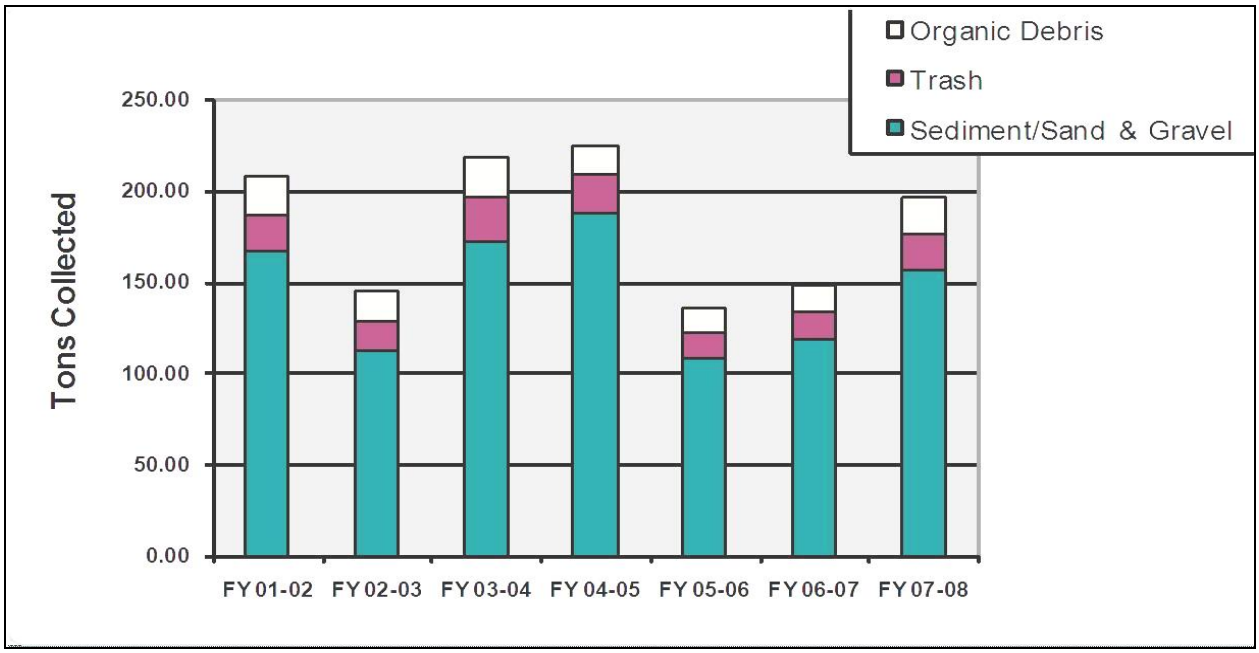

Figure 4.2 – Street Sweeping Removal Totals

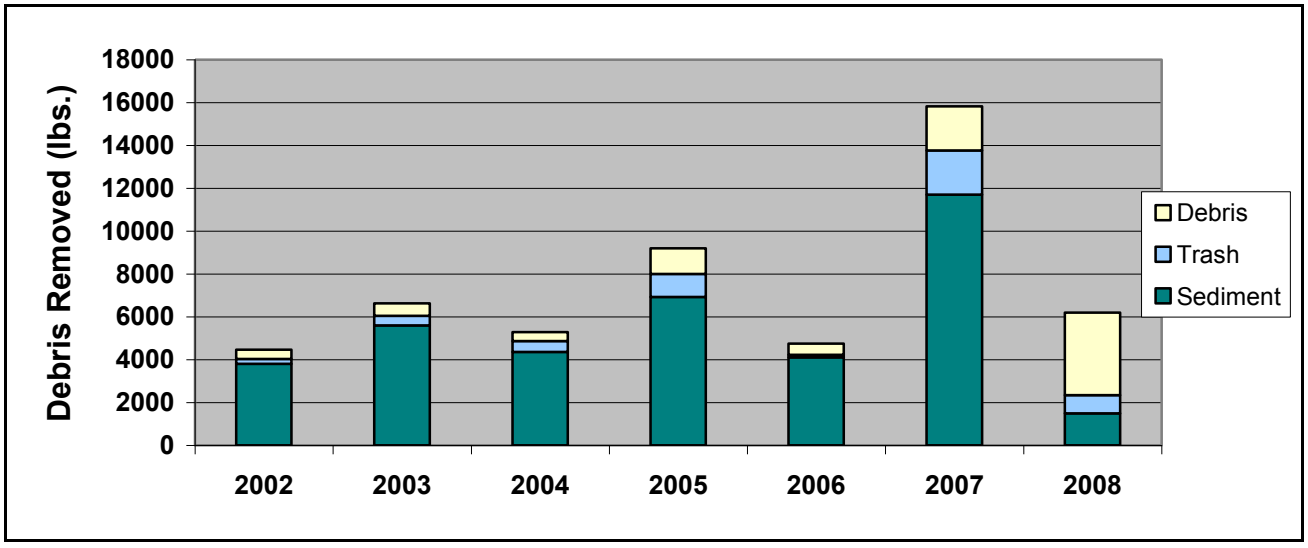

Figure 4.3 – Storm Drain Conveyance System Cleaning Totals

5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 Introduction

The City endeavors to reduce and prevent industrial and commercial discharges of pollutants to the MS4 and from those discharges causing or contributing to a violation of water quality standards. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and its efforts to oversee compliance with urban runoff regulations at businesses within the City and reduce municipal discharges of pollutants to the MS4 to the maximum extent practicable (MEP).

5.2 Level 1 Outcomes – Management Program Activities

5.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, updates to program documentation and training content and materials. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the industrial and commercial component is described in the *JURMP Section 7.0*. Figure 5.1 provides an overview of the major elements of this strategy as it was implemented during FY 2007-08.

5.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses requirements, training, inspections, public awareness and response, and surveys and special investigations. Table 5.2 presents and describes targeted FY 2007-08 outcomes and results, as well as implementation targets for FY 2008-09. Additional documentation, analysis, and discussion are provided in Table 5.2.

5.3 Outcomes Targeted for Staff Implementing Control Measures

5.3.1 Outcome Level 2 – Knowledge and Awareness

A training program has been implemented within the City to inform employees of the components and goals of the JURMP. The training program focuses on the use of Best Management Practices in daily operations, and has been designed to create an overall sensitivity to pollution prevention concerns. Open discussions are encouraged to further the importance and enhance the program. This education effort is discussed in the JURMP Section 10.0.

5.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The JURMP Appendix F defines minimum BMP requirements applicable to industrial and commercial projects in the City. BMPs applicable to these facilities were updated as part of the

City's JURMP revision, submitted on March 24, 2008. FY 2007-08 changes included in that update are described in Table 5.2. BMP requirements were reviewed for necessary updates or modifications subsequent to the completion of FY 2007-08; additional modifications to the BMP requirements of this element were not determined to be necessary as a result of this review.

5.3.3 Outcome Level 4 – Source Load Reductions

The City maintains a watershed-based inventory of all industrial and commercial facilities located within its jurisdiction that could contribute a significant pollutant load to the MS4. Table 5.2 provides a breakdown of the facilities, and describes changes made to the inventory since its last update.

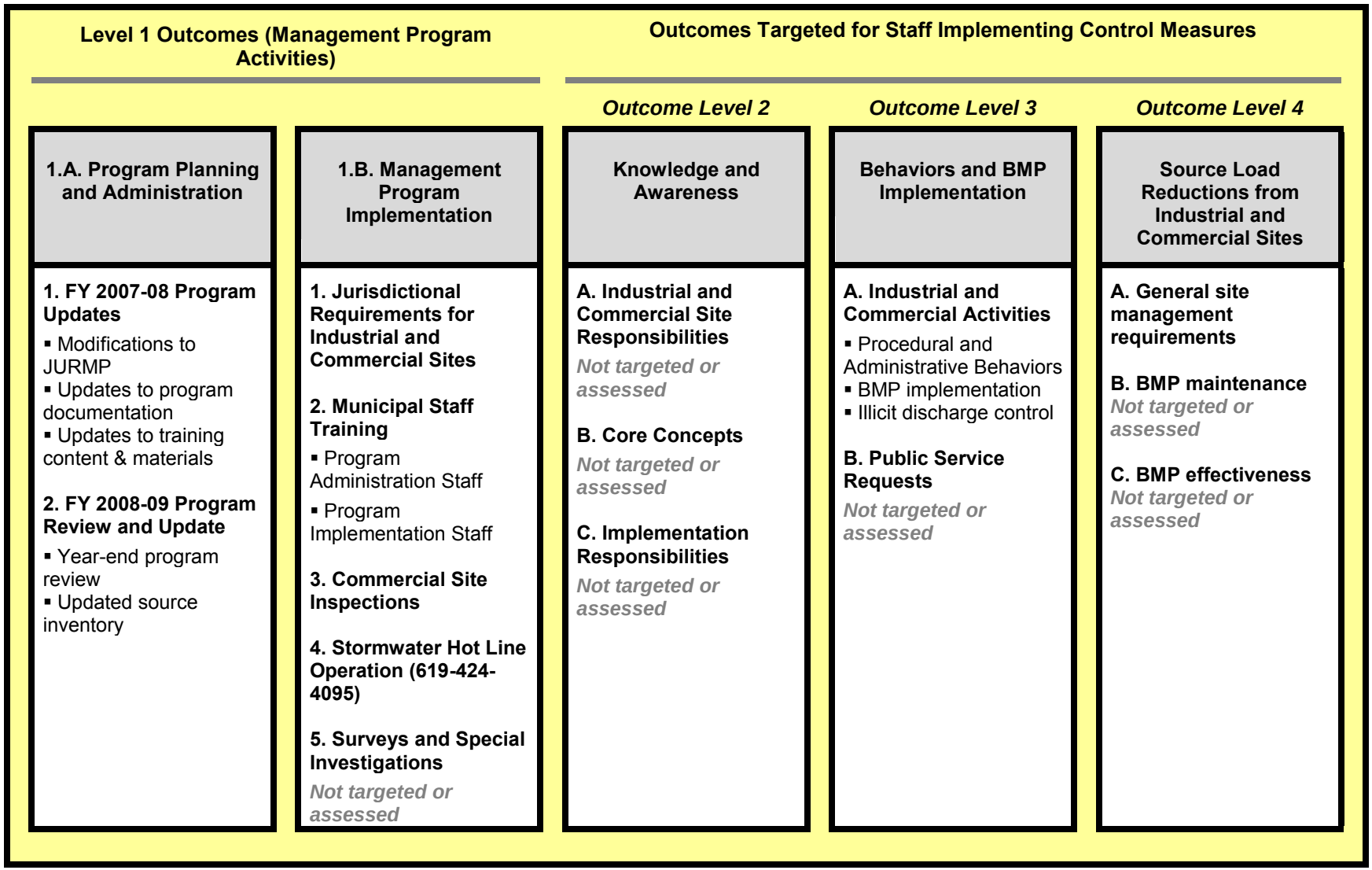

Figure 5.1 – FY 2007-08 Implementation and Assessment Strategy for the Industrial and Commercial Component

Table 5.1 – Overview of Industrial and Commercial Component by Facility Type and Priority Classification

Category	Number	Description
A. Type of Facility		
Industrial	0	Industrial activity is extremely limited. Only one business in operation that can reasonably be classified as "industrial" is a surfboard manufacturing company that performs all of its operations indoors, and is very similar to a commercial facility. The term "commercial" is therefore used for the activities within the City. As such, there is no need in this jurisdiction to identify non-filers under the General Industrial Permit.
Commercial	27	
B. Priority Classification		
High	24	
Medium	3	
Low	---	
C. Totals		
High	24	
Medium	3	
Low	---	

JURMP Sections	Description of FY 2007-08 Changes
7.0 and Appendix F	BMP requirements of the JURMP applicable to industrial and commercial facilities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2007-08 PROGRAM UPDATES				
A) MODIFICATIONS TO JURMP				
Update applicable JURMP sections per new Permit requirements	Applicable JURMP sections updated 03-24-08	Completion	Applicable updates were included in **JURMP Section 7.0**, submitted to the RWQCB on 03-24-08.	Complete and identify FY 2008-09 JURMP modifications
B) UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
---	---	---	No program policies, plans, procedures, guidelines, or forms have yet been developed.	Update [develop] road maintenance procedures for consistency with program updates
C) UPDATES TO TRAINING PROGRAM				
---	---	---	**JURMP Section 10.0** establishes updated standards for training municipal staff. Since these standards will take effect during FY 2008-09, training content and materials will be updated accordingly.	Update staff training materials for consistency with updated standards of JURMP Section 10.0
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
A) YEAR-END PROGRAM REVIEW				
Complete annual year-end program	Review underway	In progress	An annual program review for this element is underway during the development of this JURMP Annual Report. JURMP modifications	Complete annual year-end program

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
review			recommended or planned as a result of this review are presented herein.	review
B) UPDATED SOURCE INVENTORY				
Update commercial inventory	Update underway	In progress	The City is updating its commercial inventory.	Update commercial inventory
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. Jurisdictional Requirements for Industrial and Commercial Sites				
Require sites to implement BMPs	Requirements implemented	Completion	All industrial and commercial sites are required to implement measures to reduce pollutants and runoff to the MEP.	Require sites to use appropriate BMPs
2. Municipal Staff Training				
Provide training for FY 2007-08	Training provided	Completion	Continuing with FY 2008-09, training results for staff with responsibilities applicable to this element will be included as part of this annual report section.	Provide training to all staff with identified responsibilities
3. Commercial Site Inspections				
Inspect commercial sites and activities	Inspections done annually	Completion	Commercial businesses are inspected as per the Municipal Permit. The City does not contract out inspections; therefore, no third party inspections were conducted. Efforts to address mobile businesses are underway through the Copermittee workgroup, and the City will conduct inspections of mobile sources through the FY 2008-09 as necessary.	Inspect commercial facilities, including mobile sources as necessary
4. Storm Water Hotline Operation				
Operate a hotline to provide the public opportunities	Hotline operated throughout reporting period	Confirmation	A Storm Water Hotline (619-424-4095) was operated throughout FY 2007-08 to provide the public a means of reporting businesses not in compliance.	Operate a hotline

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
to report businesses not in compliance.				
5. Surveys and Special Investigations				
Not targeted or assessed	---	---	Special investigations were not conducted in FY 2007-08, and are not routinely conducted as part of the implementation strategy for this program element. None are planned for FY 2008-09.	Not targeted
Not targeted or assessed	---	---	Surveys of staff knowledge were not conducted during FY 2007-08. Beginning in FY 2008-09, surveys will routinely be incorporated before and after training as a means of evaluating training success and of monitoring staff knowledge from year to year.	Survey staff to ascertain baseline levels of knowledge concerning basic principles and specific job responsibilities.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND BUSINESSES)				
Not targeted or assessed	---	---	Starting in FY 2008-09, the City will begin incorporating testing before and after municipal staff training to evaluate the training success and to determine whether changes in knowledge are being retained over time. Anticipated content includes illicit discharge reporting responsibilities, core concepts (e.g., What is a watershed?), and specific job responsibilities.	Establish a baseline of staff knowledge regarding applicable program content

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND BUSINESSES)				
A. INDUSTRIAL AND COMMERCIAL ACTIVITIES				
1. Procedural and Administrative Behaviors				
July 1, 2007 through June 30, 2008				
Inspect businesses for compliance	27 sites inspected	Completion	The City inspects all inventoried businesses as per the requirements of the Municipal Permit Section D.3.b(3)(b). The City used these factors to develop the threat-to-water-quality (TTWQ) criteria for identifying high and non-high priority facilities. The first year of the Municipal Permit required the City to inspect a minimum of 20% of the sites inventoried, and this requirement increases each year. The City inspected 50% of all high priority businesses during the reporting period FY 2007-08. The City inspects those facilities identified as non-high priority only in the event a stormwater concern or violation is identified.	Inspect businesses
Notify business owners/operators of BMP requirements, including mobile businesses	45 sites notified	Completion	The City notifies business owners and operators, both fixed and mobile, of BMP requirements through a combination of methods including site inspections and follow-up inspection reports, direct mailings, inclusion of BMP information with business license and special event vendor packets, advertisements in newspapers, online resources such as the Project Clean Water website and the City's website, and targeted workshops focused on specific business sectors.	Notify business owners/operators of BMP requirements, including mobile businesses
Enforce compliance and track violations	21 sites with enforcement actions	Completion	The City enforces compliance at all businesses, including mobile sources, using Notices of Abatement and Notices of Violation.	Enforce compliance and track violations

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. BMP Implementation				
July 1, 2007 through June 30, 2008				
Not targeted or assessed	---	---	Starting in FY 2008-09, the City will begin incorporating evaluation of business owner and operator knowledge of applicable BMPs, and will determine whether knowledge is being retained over time. Anticipated content includes BMP knowledge and implementation, core concepts of good housekeeping practices, and specific responsibilities including employee training.	Establish a baseline of business operator knowledge regarding applicable BMP implementation
3. Illicit Discharge Control				
July 1, 2007 through June 30, 2008				
Investigate complaints	136 Complaints investigated	Completion	All complaints of illicit discharges from business sources including mobile businesses were conducted.	Investigate illicit discharges from businesses
B. PUBLIC SERVICE REQUESTS				
Not targeted or assessed	---	---	The City does not currently track public service requests for industrial and commercial activities.	Not targeted
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM INDUSTRIAL AND COMMERCIAL COMPONENT)				
A. GENERAL SITE MANAGEMENT REQUIREMENTS				
Not targeted or assessed	---	---	The City does not currently track this element for industrial and commercial activities.	Not targeted
B. BMP MAINTENANCE				
Not targeted	---	---	The City does not currently track BMP maintenance for industrial and commercial activities.	Not targeted

6.0 RESIDENTIAL COMPONENT

6.1 Introduction

The City endeavors to prevent residential discharges to and from the Municipal Separate Storm Sewer System (MS4) and from those discharges causing or contributing to a violation of water quality standards. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and its efforts to oversee compliance with urban runoff regulations.

6.2 Level 1 Outcomes – Management Program Activities

6.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, updates to program documentation and training content and materials. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the education component is described in the *JURMP Section 8.0*. Figure 8.1 provides an overview of the major elements of this strategy as it was implemented during FY 2007-08.

During this reporting period, the City participated in the Copermittee Workgroup responsible for developing and implementing the Regional Residential Education Program criteria to be submitted to the Regional Water Quality Control Board for approval.

6.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses requirements, training, inspections, public awareness and response, and surveys and special investigations. Table 6.2 presents and describes targeted FY 2007-08 outcomes and results, as well as implementation targets for FY 2008-09. Additional documentation, analysis, and discussion are provided in Table 6.2.

6.3 Outcomes Targeted for Staff Implementing Control Measures

6.3.1 Outcome Level 2 – Knowledge and Awareness

A training program has been implemented within the City to inform employees of the components and goals of the JURMP. The training program focuses on the use of Best Management Practices in daily operations, and has been designed to create an overall sensitivity to pollution prevention concerns. Open discussions are encouraged to further the importance and enhance the program. This education effort is discussed in the *JURMP Section 10.0.*

6.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The *JURMP Appendix G* defines minimum BMP requirements applicable to residential areas and activities in the City. BMPs applicable to these facilities were updated as part of the City's JURMP revision, submitted on March 24, 2008. FY 2007-08 changes included in that update are described in Table 8.2. BMP requirements were reviewed for necessary updates or modifications subsequent to the completion of FY 2007-08; additional modifications to the BMP requirements of this element were not determined to be necessary as a result of this review.

6.3.3 Outcome Level 4 – Source Load Reductions

The City maintained approximately 125 miles of curbed streets and uncurbed roads located throughout the City during FY 2007-08. Approximately five miles of underground piping, 117 catch basins and inlets, seven open drainage facilities, over 30 acres of park facilities, athletic fields, beach accesses, and landscapes at various civic facilities, and five community parks located throughout the City were maintained during FY 2007-08. Table 6.2 provides a breakdown of the municipality by type and by priority category, and describes changes made to the inventory since its last update.

Level 1 Outcomes (Management Program Activities)		Outcomes Targeted for Staff Implementing Control Measures		
		Outcome Level 2	*Outcome Level 3*	*Outcome Level 4*
1.A. Program Planning and Administration	**1.B. Management Program Implementation**	**Knowledge and Awareness**	**Behaviors and BMP Implementation**	**Source Load Reductions from Residential Areas and Activities**
1. FY 2007-08 Program Updates ▪ Modifications to JURMP ▪ Updates to program documentation ▪ Updates to training content & materials **2. FY 2008-09 Program Review and Update** ▪ Year-end program review ▪ Updated source inventory	**1. BMP Implementation** **2. Municipal Staff Training** ▪ Program Administration Staff ▪ Program Implementation Staff **3. Enforcement of Residential Areas and Activities** **4. Evaluation of Oversight of Residential Areas and Activities** **5. Surveys and Special Investigations** *Not targeted or assessed*	**A. Illicit Discharge Reporting** **B. Core Concepts** *Not targeted or assessed* **C. Implementation Responsibilities** *Not targeted or assessed*	**A. Motor Vehicle and Boat Repair and Maintenance Activities** *Not targeted or assessed* **B. Home and Garden Care and Maintenance Activities and Product Use** *Not targeted or assessed* **C. Pet Waste Management** *Not targeted or assessed* **D. Public Service Requests** ▪ Response to requests ▪ Facilitation of proper BMPs **E. Cleanup Activities** Public participation and involvement	**A. Household Hazardous Waste Collected** **B. Used Oil Collected** **C. Special Event Recycling and Waste Management**

Figure 6.1 – FY 2007-08 Implementation and Assessment Strategy for the Residential Component

Table 6.1 – Overview of Residential Component

Category	Number	Description
A. Threat to Water Quality Prioritization		
High	6	All residential areas of the City are considered high priority.
Medium	---	
Low	---	

JURMP Sections	Description of FY 2007-08 Changes
8.0 and Appendix G	BMP requirements of the JURMP applicable to residential areas and activities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2007-08 PROGRAM UPDATES				
A) MODIFICATIONS TO JURMP				
Update applicable JURMP sections per new Permit	Applicable JURMP sections updated 03-24-08	Completion	Applicable updates were included in **JURMP Section 8.0**, submitted to the RWQCB on 03-24-08.	Complete and identify FY 2008-09 JURMP

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
requirements				modifications
B) UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
---	---	---	No program policies, plans, procedures, guidelines, or forms have yet been developed.	Develop residential education for consistency with program updates
C) UPDATES TO TRAINING PROGRAM				
---	---	---	**JURMP Section 10.0** establishes updated standards for training municipal staff. Since these standards will take effect during FY 2008-09, training content and materials will be updated accordingly.	Update staff training materials for consistency with updated standards of JURMP Section 10.0
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
A) YEAR-END PROGRAM REVIEW				
Complete annual year-end program review	Review underway	In progress	An annual program review for this element is underway during the development of this JURMP Annual Report. JURMP modifications recommended or planned as a result of this review are presented herein.	Complete annual year-end program review
B) UPDATED SOURCE INVENTORY				
Identify high threat to water quality areas	Update not needed	N/A	The City has previously identified the high threat to water quality residential areas and activities that were focused on subsequent to the completion of FY 2007-08.	Update as needed

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. BMP Implementation				
Require residents to implement BMPs	Requirements implemented	Completion	All residents are required to implement measures to reduce pollutants and runoff to the MEP.	Provide BMP handouts and outreach
Facilitate proper management and disposal of household hazardous waste (HHW)	2,110 gallons of used oil collected; 3 tons of HHW collected	Completion	The City is required to facilitate the proper management and disposal of used oil, toxic materials, and other HHW through educational and public information activities, and establishment of collection sites operated by the City or a private entity.	Facilitate proper HHW management and disposal opportunities
Facilitate proper management and disposal of waste	114 tons of trash collected; 18 tons of green waste; 21 tons of metal; 25 tons of concrete	Completion	The City is required to facilitate the proper management and disposal of waste material through educational and public information activities, and establishment of collection sites operated by the City or a private entity. The City partners with EDCO Disposal in an annual Home Front Clean Up drop-off event to collect waste material at Mar Vista High School.	Facilitate proper management and disposal opportunities
2. Municipal Staff Training				
Provide training for FY 2007-08	Training provided	Completion	Continuing with FY 2008-09, training results for staff with responsibilities applicable to this element will be included as part of this annual report section.	Provide training to all staff with identified responsibilities
3. Enforcement of Residential Areas and Activities				
Enforce BMPs	25 Verbal Warnings, 14 Notices of Violation; 7 Notices of Abatement; 3 Cost	Compliance	The City enforces its stormwater ordinance and the Municipal Permit for all residential areas and activities through the use of verbal warnings with distribution of BMP literature, Notices of Violation, Notices of Abatement, and additional penalties or fines and civil and/or criminal court actions, including recovery of	Enforce BMPs

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
	Recovery Efforts		compensatory damages for losses to the City of approximately $1,000.	
4. Evaluation of Oversight of Residential Areas and Activities				
Operate a hotline to provide the public opportunities to report trash and debris in roadways.	Hotline operated throughout reporting period	Confirmation	A Storm Water Hotline (619-424-4095) was operated throughout FY 2007-08 to provide the public a means of reporting accumulated trash or debris in City-maintained roadways and the MS4. 38 reports of trash and debris were received during the reporting period. See Level 4 Outcomes (below).	Operate a hotline to provide the public opportunities to report trash and debris in the City.
5. Surveys and Special Investigations				
Not targeted or assessed	---	---	Special investigations were not conducted in FY 2007-08, and are not routinely conducted as part of the implementation strategy for this program element. None are planned for FY 2008-09.	Not targeted
Not targeted or assessed	---	---	Surveys of residential knowledge were not conducted during FY 2007-08. Surveys may be incorporated at educational events as a means of evaluating awareness. This effort is underway through the Copermittee workgroup.	Not targeted
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND RESIDENTS)				
Not targeted or assessed	---	---	Starting in FY 2008-09, the City will begin incorporating testing before and after municipal staff training to evaluate the training success and to determine whether changes in knowledge are being retained over time. Anticipated content includes illicit discharge reporting responsibilities, core concepts (e.g., What is a watershed?), and specific job responsibilities.	Establish a baseline of staff knowledge regarding applicable program content
Not targeted or assessed	---	---	Starting in FY 2008-09, the City will begin evaluating education success and to determine whether changes in knowledge are being retained over time.	Establish a baseline of resident knowledge regarding urban runoff

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY RESIDENTS)				
A. MOTOR VEHICLE AND BOAT REPAIR AND MAINTENANCE ACTIVITIES				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of residential maintenance activities to be applicable or feasible.	Not targeted
B. HOME AND GARDEN CARE AND MAINTENANCE ACTIVITIES AND PRODUCT USE				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of residential maintenance activities to be applicable or feasible.	Not targeted
C. PET WASTE MANAGEMENT ACTIVITIES				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of residential management activities to be applicable or feasible.	Not targeted
D. PUBLIC SERVICE REQUESTS				
Respond to all public service requests received	---	---	The City does not currently consider Level 3 assessment of public service requests to be applicable or feasible.	Not targeted
E. CLEANUP ACTIVITIES				
Not targeted	---	---	The City does not currently consider Level 3 assessment of cleanup activities to be applicable or feasible.	Not targeted
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM THE RESIDENTIAL COMPONENT)				
A. HOUSEHOLD HAZARDOUS WASTE (HHW) COLLECTED				
Not targeted	3 tons of HHW collected	---	The City's HHW disposal program is available to all residents, and the City partners with other jurisdictions in the South Bay to offer convenient, low-cost HHW disposal options.	Not targeted

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
B. USED OIL COLLECTED				
Not targeted	2,110 gallons of used oil disposed of by residents	---	The City is required to facilitate the proper management and disposal of used oil, toxic materials, and other HHW through educational and public information activities, and establishment of collection sites operated by the City or a private entity.	Not targeted
C. SPECIAL EVENT RECYCLING AND WASTE MANAGEMENT				
Not targeted	88 participants in annual Garage Sale; 742 participants in the annual Home Front Clean Up	---	The City is required to facilitate the proper management and disposal of waste materials, used oil, toxic materials, and other HHW through educational and public information activities, and establishment of collection sites operated by the City or a private entity.	Not targeted

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

7.1 Introduction

The City endeavors to prevent municipal discharges from the Municipal Separate Storm Sewer System (MS4) from causing or contributing to a violation of water quality standards. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and its efforts to reduce municipal discharges of pollutants to the MS4 to the maximum extent practicable (MEP).

All components of the JURMP are represented in this report with the exception of this component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), extended the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

The City's implementation and assessment strategy for the illicit discharge detection and elimination component is described in the *JURMP Section 9.0*.

8.0 EDUCATION COMPONENT

8.1 Introduction

The City endeavors to reduce the impacts of development on water quality. This component is applicable to all targeted communities. City departments, in particular the departments that have the most contact with the general public, including the Community Development Department, and the Capital Improvement Projects Division and the Environmental Program Division of the Department of Public Works, receive training and education on an annual basis.

8.2 Level 1 Outcomes – Management Program Activities

8.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, updates to program documentation and training content and materials. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the education component is described in the *JURMP Section 10.0*. Figure 8.1 provides an overview of the major elements of this strategy as it was implemented during FY 2007-08.

8.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses requirements, training, inspections, public awareness and response, and surveys and special investigations. Table 8.2 presents and describes targeted FY 2007-08 outcomes and results, as well as implementation targets for FY 2008-09.

8.3 Outcomes Targeted for Staff Implementing Control Measures

8.3.1 Outcome Level 2 – Knowledge and Awareness

A training program has been implemented within the City to inform employees of the components and goals of the JURMP. The training program focuses on the use of Best Management Practices in daily operations, and has been designed to create an overall sensitivity to pollution prevention concerns. Open discussions are encouraged to further the importance and enhance the program. This education effort is discussed in the JURMP Section 10.0.

The City is required to implement an education program for each target community using all media as appropriate to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment.

8.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The *JURMP Section 10.0* defines requirements to educate each target community on the laws, regulations, permits, requirements, BMPs, general urban runoff concepts, and other topics where appropriate. BMPs applicable to these audiences were updated as part of the City's JURMP revision, submitted on March 24, 2008. FY 2007-08 changes included in that update are described in Table 8.2. BMP requirements were reviewed for necessary updates or modifications subsequent to the completion of FY 2007-08; additional modifications to the BMP requirements of this element were not determined to be necessary as a result of this review.

8.3.3 Outcome Level 4 – Source Load Reductions

The City encourages the use of pollution prevention methods by the target audiences; however, source load reductions for education are not targeted or assessed.

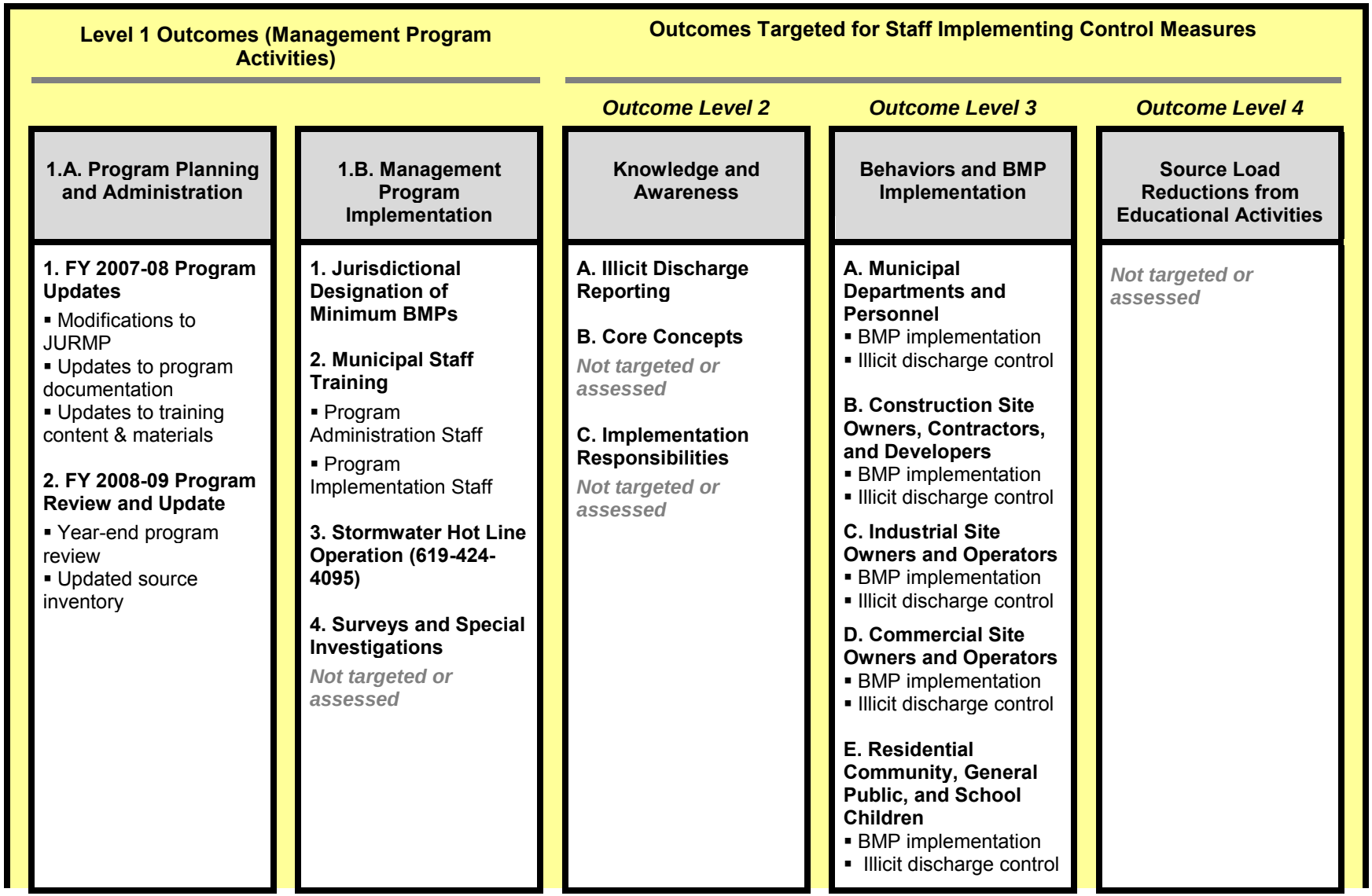

Figure 8.1 – FY 2007-08 Implementation and Assessment Strategy for the Education Component

Table 8.1 – Overview of Education

Category	Number	Description
A. Type of Education		
Municipal Departments and Personnel Training	---	
Construction Site Owners and Contractor Training	---	
Industrial Site Owners and Operators Workshops and Inspections	---	
Commercial Site Owners and Operators Workshops and Inspections	---	
Residential Community, General Public, and School Children Outreach	---	
B. Educational Efforts		
Municipal Employees Training Events	3	Employees are trained on the use of BMPs in their daily operations. Events were held in conjunction with the filing of the Annual Report of the JURMP and for the JURMP prepared for the new Municipal Permit, R9-2007-0001. Face-to-face meetings are held on a regular basis with employees to discuss the JURMP and its application in their operations. Construction Site Owners, Contractors and Developers are trained through face-to-face meetings with the Community Development Department and the Publics Works Department during the permitting process, in inspections, and in investigations of illegal discharges. Commercial Site Owners and Operators are trained through scheduled inspections by the Public Works Department Environmental Division, and through investigations of illegal discharges. All residents receive educational information in the City's newsletter, a newsletter sent out by the City's waste franchisee, website updates, materials provided at City Hall and the Public Works Department, through community presentations, etc. The City held an Earth Day Fair at the Pier, the first event of its kind, in which over 300 school children and many of the local population participated. School children in Imperial Beach also participate in the Habitat Heroes program offered to 5th and 6th graders. The City
Construction Site Owners, Contractors and Developer Training Events	114	
Industrial Site Owners and Operators Training Events	---	
Commercial Site Owners and Operators Training Events	55	
Residential Community Outreach Events	3	
General Public Outreach Events	2	
School Children Outreach Events	8	

Table 8.1 – Overview of Education

Category	Number	Description
		participated with other Co-Permittees in outreach at the San Diego County Fair, which spanned two fiscal years.

JURMP Sections	Description of FY 2007-08 Changes
10.0 and Appendix I	BMP requirements of the JURMP applicable to educational areas and activities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 8.2 – Targeted Outcomes and Results for the Education Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2007-08 PROGRAM UPDATES				
A. MODIFICATIONS TO JURMP				
Update applicable JURMP sections per new Permit requirements	Applicable JURMP sections updated 03-24-08	Completion	Applicable updates were included in **JURMP Section 10.0**, submitted to the RWQCB on 03-24-08.	Complete and identify FY 2008-09 JURMP modifications
B. UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
---	---	---	No program policies, plans, procedures, guidelines, or forms have yet been developed.	Update and/or develop educational efforts for consistency with program updates
C. UPDATES TO TRAINING PROGRAM				
---	---	---	**JURMP Section 10.0** establishes updated standards for training municipal staff. Since these standards will take effect during FY 2008-09, training content and materials will be updated accordingly.	Update staff training materials for consistency with updated standards of JURMP Section 10.0

Table 8.2 – Targeted Outcomes and Results for the Education Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
A. YEAR-END PROGRAM REVIEW				
Complete annual year-end program review	Review underway	In progress	An annual program review for this element is underway during the development of this JURMP Annual Report. JURMP modifications recommended or planned as a result of this review are presented herein.	Complete annual year-end program review
B. UPDATED OUTREACH MATERIALS				
Update outreach materials	Update and development of new underway	In progress	The City is updating and developing new outreach materials for each target community	Update outreach materials
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. Jurisdictional Designation of Minimum BMPs				
Require minimum BMPs	Requirements implemented	Completion	All components of the JURMP have the requirement to implement measures to reduce pollutants and runoff to the MEP.	Require minimum BMPs
2. Municipal Staff Training				
Provide training for FY 2007-08	Training provided	Completion	Continuing with FY 2008-09, training results for staff with responsibilities applicable to this element will be included as part of this annual report section.	Provide training to all staff with identified responsibilities
3. Storm Water Hotline Operation				
Operate a hotline to provide the public opportunities to report trash and debris in roadways.	Hotline operated throughout reporting period	Confirmation	A Storm Water Hotline (619-424-4095) was operated throughout FY 2007-08 to provide the public a means of reporting accumulated trash or debris in City-maintained roadways and the MS4. 38 reports of trash and debris were received during the reporting period.	Operate a hotline to provide the public opportunities to report trash and debris in the City.

Table 8.2 – Targeted Outcomes and Results for the Education Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
4. Surveys and Special Investigations				
Not targeted or assessed	---	---	Special investigations were not conducted in FY 2007-08, and are not routinely conducted as part of the implementation strategy for this program element. None are planned for FY 2008-09.	Not targeted
Not targeted or assessed	---	---	Surveys of staff knowledge were not conducted during FY 2007-08. Beginning in FY 2008-09, surveys will routinely be incorporated before and after training as a means of evaluating training success and of monitoring staff knowledge from year to year.	Survey staff to ascertain baseline levels of knowledge concerning basic principles and specific job responsibilities.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF)				
Not targeted or assessed	---	---	Starting in FY 2008-09, the City will begin incorporating testing before and after municipal staff training to evaluate the training success and to determine whether changes in knowledge are being retained over time. Anticipated content includes illicit discharge reporting responsibilities, core concepts (e.g., What is a watershed?), and specific job responsibilities.	Establish a baseline of staff knowledge regarding applicable program content
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND TARGETED AUDIENCES)				
A. MUNICIPAL DEPARTMENTS AND PERSONNEL				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of education activities to be applicable or feasible.	Not targeted
B. CONSTRUCTION SITE OWNERS AND DEVELOPERS				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of education activities to be applicable or feasible.	Not targeted

Table 8.2 – Targeted Outcomes and Results for the Education Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
C. INDUSTRIAL SITE OWNERS AND OEPRATORS				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of education activities to be applicable or feasible.	Not targeted
D. COMMERCIAL SITE OWNERS AND OPERATORS				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of education activities to be applicable or feasible.	Not targeted
E. RESIDENTIAL COMMUNITY, GENERAL PUBLIC, AND SCHOOL CHILDREN				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of education activities to be applicable or feasible.	Not targeted
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM EDUCATIONAL ACTIVITIES)				
Not targeted or assessed	---	---	The City does not currently consider Level 4 assessment of education activities to be applicable or feasible.	Not targeted

9.0 PUBLIC PARTICIPATION COMPONENT

9.1 Introduction

The City is required to incorporate a mechanism for Public Participation in the updating, development, and implementation of the JURMP.

9.2 Public Participation Efforts

The public was allowed to participate in the development of the JURMP under the new Municipal Permit, and the City conducted a public hearing on March 19, 2008 prior to its approval. The public was also noticed on this annual report in the September 4, 2008 edition of the Imperial Beach *Eagle & Times* newspaper. Public hearing notices were posted at City Hall and the Imperial Beach Public Library. A draft of both the revised JURMP and this Annual Report was made available for public viewing at the Imperial Beach City Hall and was posted on the City's website.

Other mechanisms the City uses include the operation of a stormwater hotline to report violations, an e-mail address to report stormwater issues through the City's website, coordination of cleanup activities with local organizations, encouraging environmental groups, civic organizations, and other interested local groups to conduct trash cleanups, and stenciling of storm drains with messages such as "No Dumping, Flows to Ocean".

10.0 PROGRAM EFFECTIVENESS ASSESSMENT

10.1 Introduction

The Environmental Program Division of the Department of Public Works is responsible for the assessment of the JURMP for effectiveness. Each jurisdictional activity/BMP implemented for each major component of the JURMP is assessed to indirectly gauge whether the processes and procedures put into place are working toward protecting the quality of receiving waters.

10.2 Level 1 Outcomes – Management Program Activities

10.2.1 Program Planning and Administration

Program Planning and Administration addresses modifications to the JURMP, updates to program documentation and training content and materials within each element of this Annual Report. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the program effectiveness is described in the *JURMP Section 13.0*.

10.2.2 Management Program Implementation

Management Program Implementation addresses requirements, training, inspections, public awareness and response, and surveys and special investigations for each component of the JURMP within each element of this Annual Report. The tables in each section of the Annual Report present and describe targeted FY 2007-08 outcomes and results, as well as implementation targets for FY 2008-09 that are funded by the program.

10.3 Outcomes Targeted for Staff Implementing Control Measures

10.3.1 Outcome Level 2 – Knowledge and Awareness

Knowledge and awareness are targeted and assessed as necessary within each element of this Annual Report independently.

10.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

Behaviors and BMP implementation are assessed within the tables located in each section of this Annual Report.

10.3.3 Outcome Level 4 – Source Load Reductions

Source load reductions are targeted and assessed as necessary within each element of this Annual Report independently.

11.0 FISCAL ANALYSIS COMPONENT

11.1 Introduction

The Environmental Program Division of the Department of Public Works is responsible for the fiscal analysis of the program. Findings indicate the stormwater program costs are approximately $1M. Revenue sources used by the City to fund the requirements of the Municipal Permit include City user fees on trash and sewer services, State appropriated funds, and Federal/State grant funds.

The City of Imperial Beach previously completed a financial review of its Jurisdictional Urban Runoff Management Program according to the requirements as specified under Regional Board Order No. 2001-001. This review found that the stormwater program costs were approximately $1M. Revenue sources used by the City to fund the requirements outlined in the Municipal Stormwater Permit include:

- City user fee on trash service
- City user fee on sewer usage
- State appropriated funds
- Federal/State grant funds

The City expects costs of the stormwater program implementation to increase incrementally each year with inflation.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authorized Signatory(s)	Title	Phone No.	Date
H. A. Levien	Public Works Director	(619) 628-1369	12-11-08

H. A. Levien

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

7.1 Introduction

Illicit discharges and illicit connections to the Municipal Separate Storm Sewer System (MS4) contribute to the violation of water quality standards of receiving waters. Order R9-2007-0001 (Municipal Stormwater Permit) requires Co-Permittees to detect, investigate, and eliminate illicit discharges and illicit connections in a timely manner. The City endeavors to reduce and prevent illicit discharges to the MS4 to the maximum extent practicable (MEP). The City uses targeted education and outreach programs and conducts routine inspections of construction and commercial facilities as preemptive efforts to prevent illegal discharges. In addition, the City conducts dry weather monitoring of major MS4 outfalls May 1st through September 30th with the intent of identifying illegal stormwater discharges. The City also responds to illicit discharges that are reported to the City's Stormwater Hotline or observed by City employees. The Department of Public Works Environmental Division follows through on all reported illegal discharges and ensures that the appropriate best management practices are used and maintained so no further discharges are detected.

The following figure and tables in this section provide an outline of the Illicit Discharge Detection and Elimination Component, an overview of City investigations, and supporting documentation that further explains the City's efforts relevant to this component. Figure 7.1 of this report presents an outline of the FY 2007-08 management program activities relating to the program planning, administration, and implementation of measures to control and reduce sources of pollution. Tables 7.1 and 7.2 present and describe targeted FY 2007-08 outcomes and results, as well as implementation targets for FY 2008-09. Dry weather field screening and laboratory analytical results are presented in Tables 7.3 and 7.4.

7.2 Level 1 Outcomes – Management Program Activities

7.2.1 Program Planning and Administration

The Environmental Division of the Department of Public Works oversees compliance of urban runoff regulations at construction and development sites, residential homes, commercial and industrial facilities[1], and mobile businesses operating within the City. The Program Planning and Administration element of the Annual Report reviews and addresses modifications to the JURMP, updates changes to Program documentation, and updates changes in the dry weather monitoring sites for the next fiscal year.

[1] *The City has no industrial businesses and therefore only conducts commercial inspections*

The City's implementation and assessment strategy for the Illicit Discharge Detection and Elimination component is described in the *JURMP Section 9.0*.

7.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses requirements for illicit discharge, detection and elimination, municipal staff training, public awareness and response, and surveys and special investigations. Table 7.2 presents and describes targeted FY 2007-08 outcomes and results, as well as implementation targets for FY 2008-09. Dry weather field screening and laboratory analytical results are presented in Tables 7.3 and 7.4.

7.3 Outcomes Targeted for Staff Implementing Control Measures

7.3.1 Outcome Level 2 – Knowledge and Awareness

Education is provided through face-to-face interaction with City staff in meetings, public workshops, community presentations, and inspections. In addition, the City disseminates brochures that outline the requirements for addressing urban runoff and water quality regulations. The efforts by the City to educate the public on detection of illegal discharges and elimination of future discharges are discussed in the *JURMP Section 9.0.* The education effort for City staff is discussed in the *JURMP Section 10.0.*

7.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The City is required by the Municipal Stormwater Permit to educate the public and enforce its stormwater ordinances. The City's stormwater ordinances include appropriate sanctions to achieve compliance and influence behavioral change. The City requires residents, commercial and industrial businesses, developers, construction companies, and municipal employees to implement stormwater management BMPs. These BMPs are specific to each particular JURMP component and are tracked and monitored by the City. BMP requirements were reviewed for necessary updates or modifications subsequent to the completion of FY 2007-08; additional modifications to the BMP requirements of this element were not determined to be necessary as a result of this review.

7.3.3 Outcome Level 4 – Source Load Reductions

Investigations of illegal discharges and illegal connections are logged and reported in the City's database. The City monitors and keeps track of treatment control BMPs, conducts stormwater inspections of commercial businesses, and inspects construction and development projects. In 2008 the City started conducting trash assessments in conjunctions with its dry weather monitoring at targeted MS4 outfalls. The trash assessment provides a qualitative rating of each sampling location on a scale of Optimal, Suboptimal, Marginal, Submarginal, or Poor. The trash

assessment program in the City is currently under review to better equip Co-Permittees in a regional effort to identify and eliminate trash. Lastly, the City provides means for residents to recycle used oil and household hazardous wastes (HHW) though the Used Oil Program and Household Hazardous Waste Program; however, both these programs had modification in FY 2007-08. The modifications to these programs are explained further below.

Used Oil Program

Residents can no longer drop off used oil at the Kragen Auto Parts at 1220 Palm Avenue, Imperial Beach. The City and the South Bay Regional Household Hazardous Waste Center are working to develop partnerships with other local businesses where residents can drop off used oil. In the meantime, residents can still get free curbside pickup from the City's waste hauler, EDCO, by calling (619) 287-7555. EDCO also provides containers for used oil. In addition, residents can still drop off used oil at the City's designated Household Hazardous Waste Facility at 1800 Maxwell Rd, Chula Vista.

Household Hazardous Waste Program

Residents can no longer get curbside pickup of HHW by the South Bay Regional Door-to-Door Household Hazardous Waste Collection Program. Residents can still drop off HHW at the City's designated collection facility at 1800 Maxwell Rd, Chula Vista. Residents may also recycle e-waste at Goodwill Industries at 849 Palm Avenue, Imperial Beach. The City is also meeting with agencies to establish a more convenient program that would operate on a regular basis within the City to support e-waste collection within the City.

Other Efforts

The City has also ensured the local grocery stores and CVS pharmacy are participating in the plastic bag recycling effort under Assembly Bill 2449 where they are required to establish an at-store take-back and recycling program for plastic bags.

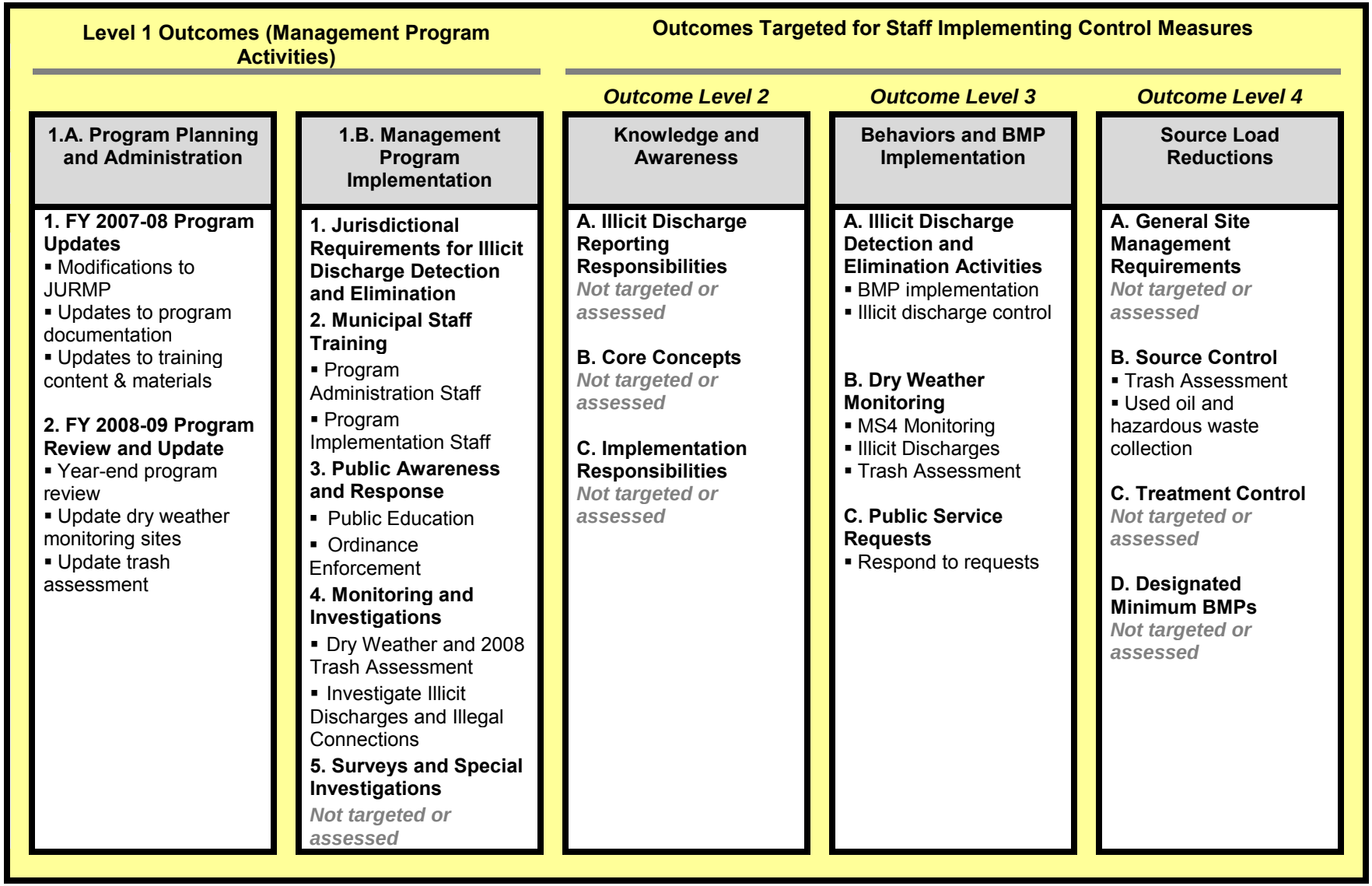

Figure 7.1 – FY 2007-08 Implementation and Assessment Strategy for the Illicit Discharge Detection and Elimination Component

Table 7.1 – Overview of Illicit Discharge Detection and Elimination Component

Category	Number	Description
A. Type of Investigations		
Dry Weather Monitoring and Trash Assessments	30	The City conducted 30 dry weather monitoring field investigations at 13 major monitoring outfalls. Starting in 2008 the City started conducting trash assessment along with its dry weather monitoring. The City performed one trash assessment at each monitoring location for a total of 13 assessments during the 2008 reporting period.
Illicit Discharge Detections	135	The Environmental Division responded to 135 illicit discharge reports within the City.
Commercial Inspections	27	The City conducted 27 commercial business inspections for stormwater compliance.
Construction Inspections	51	The City had 51 construction projects that required BMPs during the course of development. All construction projects were periodically inspected to ensure proper use of BMPs.
Treatment Control BMPs	13	The City keeps track and ensures maintenance on 13 treatment control BMPs.
B. Priority Classification of Illicit Discharges		
High Priority	10	Illicit discharges are prioritized on whether the discharge poses an immediate threat to receiving waters (high Priority) or potentially poses a threat to receiving waters (low Priority). High priority illicit discharges include sewage overflows, auto fluids and toxic spills, and sediment from construction sites. Low priority discharges include over irrigation, car washing, and power washing.
Low Priority	125	
C. Totals		
Total Investigations	256	
High Priority Illicit Discharges	10	
Low Priority Illicit Discharges	125	
JURMP Sections	**Description of FY 2007-08 Changes**	
9.0 and Appendix H	BMP requirements of the JURMP applicable to illegal discharges detection and elimination were modified in accordance with the requirements of the updated Permit in March 2008.	

Table 7.2 – Targeted Outcomes and Results for the Illicit Discharge Detection and Elimination Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
1.A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2007-08 PROGRAM UPDATES				
A) Modifications to JURMP				
Update applicable JURMP sections per new Permit requirements	Applicable JURMP sections updated 03-24-08	Completion	Applicable updates were included in **JURMP Section 9.0**, submitted to the RWQCB on 03-24-08.	Complete and identify FY 2008-09 JURMP modifications
B) Updates to Program Documentation (Policies, Plans, Procedures, Guidelines, and Forms)				
---	---	---	No program policies, plans, procedures, guidelines, or forms need to be updated.	Update program documentation for consistency with program updates
C) Updates to Training Program				
---	---	---	**JURMP Section 10.0** establishes updated standards for training municipal staff. Since these standards will take effect during FY 2008-09, training content and materials will be updated accordingly.	Update staff training materials for consistency with updated standards of JURMP Section 10.0

Table 7.2 – Targeted Outcomes and Results for the Illicit Discharge Detection and Elimination Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
A) Year-End Program Review				
Complete annual year-end program review	Review underway	In progress	An annual program review for this element is underway during the development of this JURMP Annual Report. JURMP modifications recommended or planned as a result of this review are presented herein.	Complete annual year-end program review
B) Dry Weather Monitoring				
Develop an inventory of dry weather monitoring sites	Inventory developed	Completion	The City was required to develop an inventory of dry weather monitoring sites subsequent to the completion of FY 2007-08.	Update dry weather monitoring sites as needed
C) Trash Assessment				
Develop trash assessment form and procedure	Methodology developed	Completion	In 2008, the City started conducting trash assessments at dry weather monitoring locations to identify high trash areas. Current efforts are underway to develop a regional trash assessment form and procedure so analysis can be made regionally and across jurisdictions.	Develop regional trash assessment form and inventory/database with Co-Permittees.
1.B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. JURISDICTIONAL REQUIREMENTS FOR ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT				
Require projects to implement BMPs	Requirements implemented	Completion	All municipal, commercial, and residential projects are required to implement measures to reduce pollutants and runoff to the MEP.	Require sites to have appropriate BMPs and to monitor and maintain BMPs

Table 7.2 – Targeted Outcomes and Results for the Illicit Discharge Detection and Elimination Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. MUNICIPAL STAFF TRAINING				
Provide training for FY 2007-08	Training provided	Completion	Continuing with FY 2008-09, training results for staff with responsibilities applicable to this element will be included as part of this annual report section.	Provide training to all staff with identified responsibilities
3. PUBLIC AWARENESS AND RESPONSE				
A) Public Education				
Conduct education through meetings, workshops, brochure dissemination, and routine inspections	Education is implemented through various means identified in each component of the JURMP	All education is recorded and tracked within its own JURMP component	Each individual component of the JURMP involves some level of education. All education activities are recorded and documented.	Provide training and education to commercial businesses and residential violators
B) Ordinance Enforcement				
Inspect commercial, residential, and construction sites for compliance with City's Stormwater ordinance (IBMC 8.30)	135 investigations were conducted 14 Notices of Violation 7 Notices of Abatement 1 Administration Citation	Completion	The Municipal Stormwater Permit requires the City to implement and enforce its ordinances, orders, or other legal agreements to prevent illicit discharges and illegal connections to its MS4s. The City of Imperial Beach Urban Runoff Management and Discharge Control Ordinance (I.B.M.C. 8.30) prohibits discharges and connections to the MS4 with only limited exceptions.	Enforce IBMC 8.30 through routine inspections and reports to the City's Stormwater Hotline or by Municipal staff
4. MONITORING AND INVESTIGATIONS				
A) Dry Weather Monitoring and Trash Assessments				
Conduct dry weather monitoring and trash	30 field investigations of 13 targeted MS4s	Completion	The City conducts dry weather monitoring of major MS4 outfalls May 1 through September 30th. In 2008 the City also started conducting trash assessments. The City performed a total of 13	Identify sources of illegal discharges and high trash

Table 7.2 – Targeted Outcomes and Results for the Illicit Discharge Detection and Elimination Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
assessment of targeted MS4s	locations		trash assessments, one at each monitoring location.	areas
B) Illicit Discharge and Illegal Connection Investigations				
Investigate illicit discharges and illegal connection reported to the Stormwater Hotline, residents, municipal staff, or identified from dry weather monitoring	135 illicit discharges investigated	Completion	The City endeavors to eliminate sources of pollution by responding to Stormwater Hotline calls, residential complaints, municipal staff reports, and dry weather monitoring water quality tests.	Investigate illicit discharges and illegal connections
5. SURVEYS AND SPECIAL INVESTIGATIONS				
Not targeted or assessed	---	---	Surveys and special investigations were not conducted in FY 2007-08, and are not routinely conducted as part of the implementation strategy for this program element.	Identify and take action on areas of high level of FOGs
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND THE COMMUNITY)				
Not targeted	---	---	Starting in FY 2008-09, the City will begin assessing knowledge and awareness of City staff and the community within each component of the JURMP.	Establish a baseline of staff knowledge
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND COMMUNITY)				
A. ILLICIT DISCHARGE DETECTION AND ELIMINATION ACTIVITES				
1. BMP Implementation				
Inspect projects with potential sources of pollutants and	121 site inspections	Completion	The City inspects commercial businesses, residential properties, construction and development sites, and treatment control BMPs to ensure compliance with the JURMP.	Inspect projects and verify compliance

Table 7.2 – Targeted Outcomes and Results for the Illicit Discharge Detection and Elimination Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
require BMPs				
2. Illicit Discharge Control				
Investigate discharges and potential sources of pollutants and require BMPs	256 investigations	Completion	The City actively seeks and eliminates illicit discharges and connections, and ensures appropriate BMPs are in place.	Remediate spills, eliminate discharges or install BMPs
B. DRY WEATHER MONITORING				
1. MS4 Monitoring				
Dry weather monitoring of targeted MS4s	30 field investigations of 13 targeted MS4s	Completion	The City conducted dry weather monitoring at major MS4 outfalls May 1 through September 30th.	Identify sources of illegal discharges
2. Illicit Discharges				
Identify illicit discharges	135 Illicit Discharges (10 High Priority discharges and 125 Low Priority discharges)	Completion	The City endeavors to identify illicit discharges by responding to Stormwater Hotline calls, residential complaints, and municipal staff reports, and by investigating dry weather monitoring water quality tests.	Identify sources of illegal discharges
3. Trash Assessment				
Develop trash assessment form and procedure	Qualitative trash assessment form	Completion	In 2008 the City started conducting trash assessments at dry weather monitoring locations to identify high trash areas. Current efforts are underway to develop a regional trash assessment form and procedure so analysis can be made regionally and across jurisdictions.	Identify high trash areas

Table 7.2 – Targeted Outcomes and Results for the Illicit Discharge Detection and Elimination Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
C. PUBLIC SERVICE REQUESTS				
Respond to stormwater hotline calls and illicit discharges reported by City employees	135 field investigations of illicit discharges	Completion	The City has a stormwater hotline that the public can report illegal stormwater discharges. City employees also report illegal stormwater discharges. The Environmental Division responds to all reports of illegal discharges.	Identify sources of illegal discharges
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS)				
A. GENERAL SITE MANAGEMENT REQUIREMENTS				
Not targeted	---	---	The City requires all illegal discharges to be eliminated to the MEP, and to prevent discharges from causing or contributing to a violation of water quality standards.	Not targeted
B. SOURCE CONTROL				
Not targeted	51 development projects required source control BMPs	---	The City requires source control BMPs for construction and development sites, commercial businesses, and residents. The City conducts routine site investigations and responds to residential discharges.	Not targeted
1. Used Oil and Hazardous Waste Collection				
Not targeted	3 tons HHW and 2,110 gallons of used oil collected	---	The City holds household hazardous waste collection days and provides collection points for used oil.	Not targeted
2. Trash Assessment				
Not targeted	Total trash was not quantified	---	The City conducts trash assessments at dry weather monitoring sites. Assessment is based on qualitative observations (Optimal, Suboptimal, Marginal, Submarginal, Poor).	Develop regional trash assessment that is more quantitative than qualitative.

Table 7.2 – Targeted Outcomes and Results for the Illicit Discharge Detection and Elimination Component

FY 2007-08 Results				FY 2008-09 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
C. TREATMENT CONTROL				
Not targeted	13 treatment control BMPs are monitored by the City	---	The City requires treatment controls on sites that discharge potentially contaminated runoff to storm drains.	Not targeted
D. DESIGNATED MINIMUM BMPS				
Not targeted	Minimum BMPs not quantified	---	The City requires designated minimum BMPs for commercial, residential, construction and development sites. Load reductions are not tracked.	Not targeted

Table 7.3 – 2008 Dry Weather Field Screening Results

Total Samples = 13 5 Outfall Samples 4 Manhole Samples	Water Temp (C) (best professional judgment)	pH (<6.5 – >9.0)	Ammonia (mg/L NH3-N) (1.0 mg/L)	Turbidity (NTU) (best professional judgment)	Nitrate (mg/L NO2-N) (10.0 mg/L)	Conductivity (ms/cm) (best professional judgment)	Reactive Phosphorus (mg/L) (2.0 mg/L)
# Exceedances / # Field Samples	N/A	2/13	3/13	N/A	0/13	N/A	1/13
Mean	20.2	5.78	2.10	33.3	ND	1.1	ND
Median	19.9	5.78	2.16	28.4	ND	1.1	ND
Max	21.6	5.99	2.20	67.1	ND	1.2	8.5
Min	19.1	5.58	1.93	4.5	ND	1.0	ND

During the 2008 dry weather season, field screening exceedances were most commonly observed for ammonia (23% of samples). Not all constituents were sampled during follow up investigations.

Table 7.4 – 2008 Dry Weather Laboratory Analytical Results

Total Samples = 9 5 Outfall Samples 4 Manhole Samples	Oil & Grease (mg/l)	MBAS (mg/l)	Total Hardness (mg/l)	Cadmium (ug/l)	Copper (ug/l)	Lead (ug/l)	Zinc (ug/l)	Diazinon (ug/l)	Chlorpyrifos (ug/l)	TotColiform (mpn/100ml)	FecColiform (mpn/100ml)	Enterococcus (mpn/100ml)
# Exceedances / # Lab Samples	0/9	0/5	N/A	0/5	6/7	0/5	4/5	0/4	0/4	7/7	6/7	7/7
Mean	ND	ND	237	ND	9	ND	28	ND	ND	900000	900	20
Median	ND	ND	247	ND	20	ND	36	ND	ND	545185	37333	97
Max	ND	ND	357	ND	51	ND	72	ND	ND	1100000	160000	200
Min	ND	ND	169	ND	ND	ND	ND	ND	ND	300	300	20

Laboratory analysis was performed for nine samples. Total coliform was the parameter that most commonly exceeded its dry weather action level (77% of samples).

The City continued its investigation of dissolved copper inputs in the E-1B drainage area (Grove and 5th Street – Tijuana River Watershed) during the FY 2007-08 reporting period, and determined levels had significantly decreased from previous years. The outfall drains primarily residential areas, portions of Imperial Beach Boulevard, and runoff from Mar Vista High School. City staff had conducted an in-depth investigation into this drainage area during FY 2006-07 upon observing over 1,000 gallons of water emptying from the outfall into the Tijuana River Estuary. Sample results indicated high

levels of chlorine and dissolved copper. Upstream investigation confirmed that Mar Vista High School maintenance staff had discharged chlorinated water as part of its weekly back flushing of the high school's swimming pool filters. Subsequent discussions with staff from the Sweetwater Union High School District revealed that the pool maintenance room was designed with a pipe connecting the back flush system to a storm drainpipe that leads to Outfall E-1B. At the City's request, this connection was closed off in early July 2006. In its place, the District constructed a 600-gallon holding tank that now discharges back flush water directly to the sanitary sewer. Staff hypothesized that this solution would remedy both the chlorine and dissolved copper issues (copper-based algaecides being a frequently used pool chemical). However, subsequent dry weather monitoring conducted indicates dissolved copper concentrations that continue to exceed the hardness-based dry weather action level. The City will continue its investigation of dissolved copper inputs in the E-1B drainage area during the FY 2008-09 reporting period.

The outfall S-1 (southeast corner of Ream Field – Tijuana River Watershed) has been sampled regularly since 2003. It drains several blocks of residential neighborhoods in Imperial Beach, a small portion of the City of San Diego, and the eastern edge of Ream Field, a U.S. Navy helicopter training facility. Elevated levels of ammonia and reactive phosphorous have been frequently detected at this site in the past. The City samples at the end of the outfall where runoff accumulates into a large pond of stagnant water. The outfall did not have flowing water and was not sampled in 2008. Upstream investigations have yet to be successful in pinpointing a specific source of the elevated pollutant levels; however, it would seem to be consistent with runoff from lawn irrigation (fertilizers). The City will continue to monitor and provide outreach in this area, and collaborate with the City of San Diego, which composes the majority of the drainage area.

The outfall H-3 (north of Bayside Elementary School – Otay River Watershed) has been visited on a regular basis since 2003. It is heavily influenced by tidal water and flushing is poor, both of which make isolating the outfall's urban runoff contribution a difficult task. A common observation over the last five years has been the presence of trash and debris around the outfall. It is unclear whether most trash is coming from tidal inputs after rain events, from upstream urban runoff, or from some other source. Potential upstream trash sources in this drainage area are the 9th and Palm shopping center (south of Palm Avenue), the Imperial Beach Promenade shopping center (north of Palm Avenue), and Palm Avenue itself from about 10th Street to Delaware Street. The Imperial Beach Promenade shopping complex installed six catch basin filters pursuant to redevelopment conditions imposed by the City several years ago. It continues to submit filter maintenance documentation to the City on a regular basis. Otherwise, investigation of this drainage area is ongoing. The City's capital improvement project (CIP) budget for FY 2008-09 has money set aside for installation of a structural treatment BMP, which is in the design phase for installation that would capture trash from upstream sources.



City of Imperial Beach Jurisdictional Urban Runoff Management Program

Annual Report Fiscal Year 2008-09

Submitted by the
City of Imperial Beach
Department of Public Works
495 10th Street
Imperial Beach, CA 91932





CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authorized Signatory(s)	Title	Phone No.	Date
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H. A. Levien			

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EXECUTIVE SUMMARY

This Annual Report summarizes the activities implemented by the City of Imperial Beach (City) in fulfillment of the Jurisdictional Urban Runoff Management Program (JURMP) requirements of Order R9-2007-0001 – the San Diego Municipal Storm Water Permit. With limited exception, the report covers activities conducted between July 1, 2008 and June 30, 2009 (FY2008-09).

The purpose of the JURMP Annual Report is threefold: 1) to document the City's compliance with Municipal Storm Water Permit requirements, 2) to assess the effectiveness of program implementation, and 3) to serve as a program planning tool for directing future activities. The report reflects the organization of the Municipal Storm Water Permit, and is divided into several components corresponding to major sources of pollutants or areas of activity. The following are highlights and major accomplishments for each major JURMP component during this fiscal year.

Development Planning

The Development Planning Component involves incorporating storm water and urban runoff management into the development project review process. Major accomplishments during this fiscal year included the following:

- Conditioned 24 discretionary projects requiring developers or contractors to implement minimum best management practices (BMPs) and low impact development (LID) requirements to reduce pollutants and runoff to the maximum extent practicable (MEP). This compares to 48 projects during FY 2007-08 and 51 projects during FY2006-07.

- No Water Pollution Control Plans subject to the Standard Urban Storm Water Mitigation Plan (SUSMP) requirements were approved during the reporting period. The City had 2 active SUSMP projects carry over from the previous reporting period, one of which was along the water front and managed by the Port of San Diego. The City also reviewed another 4 SUSMP projects that were not approved during FY 2008-09.

- Verified operation and maintenance of 16 permanent post construction treatment control BMPs including 1 new additional treatment control BMP location.

- Participated with San Diego Copermittees in the development of the Hydromodification Management Plan (HMP), which is currently under review.

- Provided storm water education to developers and contractors through face-to-face interactions with City staff in meetings, during counter hours held at the Community Development Department, and through informative brochures provided during the application process.

Construction Component

The Municipal Storm Water Permit requires the City to oversee compliance with construction-phase BMPs at all construction projects in the City. Major accomplishments during FY2008-09 included the following:

- Inspected a total of 51 active construction projects including 10 Capital Improvement Projects (CIP) and 1 Priority SUSMP project during the reporting period. Approximately 233 inspections were performed to verify the proper installation and maintenance of construction phase BMPs.
- Performed daily oversight of construction BMP compliance at all 10 CIP projects that were in active construction phase.
- Responded to 10 reports of illegal discharges from construction sites. No notices of violations were issued to construction developers or contractors at any discretionary project location. Verbal warnings were sufficient to bring violators into compliance.
- Discussed urban runoff management requirements with all applicants at project intake, and emphasized requirements again during follow-up inspections.

Municipal Component

City employees, particularly field staff, continued to implement best management practices (BMPs) to prevent illegal discharge of water and pollutants to the storm drain system. Examples of BMPs implemented at municipal facilities included:

- Vehicle washing in wash bays that drain to the sanitary sewer.
- Preventive maintenance of City vehicles to prevent fluid leakage.
- Use of high-power vacuum to capture runoff from graffiti abatement, sidewalk grinding, and spill cleanup.
- Strict limitations on the use of fertilizers and pesticides in parks and landscape areas.
- Monitoring of sprinkler systems to prevent over-topping onto roadways.
- Alarming of all sewage pump stations, thereby reducing the likelihood of a sewage spill to the storm drain system.
- Purchase and use of spill barriers, gravel bags, and absorbent rags for spill containment and cleanup.

- Annual storm water training for the Public Works Department on the use of BMPs in daily operations.

Other notable accomplishments during FY2008-09 were:

- Inspected and cleaned 100% of municipal storm drain system and removed 4,130 pounds of sediment, trash, and organic materials through storm drain cleaning.
- Removed an additional 206 tons of material through frequent street sweeping.
- Continued maintenance of the10th St. and Imperial Beach Blvd. vortech storm water interceptor to remove sediment, floating hydrocarbons, and debris from all levels of flow.
- Quarterly maintenance of 13 municipal storm drain filter inserts including one new additional filter installed this reporting period at the Imperial Beach Sports Park parking lot.
- Continued operation of the Date Avenue urban runoff diversion system, which diverts nuisance runoff to the sanitary sewer during low-flow conditions.
- Completed the Palm Avenue urban runoff diversion system at Seacoast Avenue. The City now operates 2 low-flow urban runoff diverters (Palm and Date Ave.) along the beach front. Both diverters have the capacity to divert up to 250 gallons per minute of urban runoff and first flush rain water.
- Completed phase 1 of the City Hall and Fire Station xeriscaping project.
- Performed daily cleanup of trash, litter, and debris along the beach and tidelands area on Seacoast Drive.

Industrial and Commercial Component

The City is tasked with educating businesses about urban runoff management and overseeing their compliance with applicable Municipal Storm Water Permit requirements. Significant progress continues to be made on increasing knowledge on urban runoff management among local businesses. The following are the major accomplishments achieved during this reporting period:

- Conducted 50 inspections most of which were high priority businesses, including automotive repair shops, restaurants, bars, gas stations, car washes, grocery stores, and mobile home parks. This is 23 more inspections than were conducted last reporting period. Inspections revealed some BMP deficiencies, but on the whole, most

businesses were knowledgeable of the urban runoff management requirements. Following each inspection the City mails the business owner a copy of the inspection form, an inspection report, and a BMP for your business brochure.

- Responded to 21 enforcement actions to businesses and issued 4 notices of violation as part of the enforcement and case resolution process. Other deficiencies were resolved with verbal warnings.

- The City participated with the Copermittees in the Regional development of an online mobile business database tracking system, which will be implemented during next reporting period. The database tracks active mobile businesses and violations issued by other jurisdictions.

Residential Component

The Residential Component involves 1) educating Imperial Beach residents about urban runoff management, 2) overseeing residential compliance with BMP requirements and discharge prohibitions, and 3) facilitating proper disposal and recycling of household hazardous waste and used motor oil. Major accomplishments during this reporting period included the following:

- Identified and mitigated 55 residential violations. This compares to 13, 42, 50, and 46 in the previous four years, respectively. The most commonly observed violations involved construction debris, automotive fluids, wash water, detergents or chemicals, chlorinated swimming pool water, and green waste.

- Issued 17 notices of violation and 1 notices of abatement as part of the enforcement and case resolution process. Other deficiencies were resolved with verbal warnings and/or letters. No fines were issued to residents during this reporting period.

- Distributed educational brochures to residents throughout the year. Brochures target the following high priority activities: 1) pollution prevention around the home, 2) disposal of pet waste, 3) car washing, 4) proper disposal of motor oil, and 5) lawn and garden care.

- Educated residents on environmental issues including storm water in the City's semi-annual newsletters and a quarterly newsletter distributed by EDCO.

- Participated in the Regional Education and Residential Sources workgroup as co-chair of the group and chair of the Underserved Target Audience sub-workgroup.

- Approximately 5,762 pounds of household hazardous waste, 2,433 pounds of universal and e-waste, and 2,172 pounds of used oil and other fluids were properly disposed of at the South Bay Household Hazardous Waste facility in Chula Vista.

- The City held its annual Citywide Garage Sale event followed next week by the annual Home Front Clean Up, which resulted in the proper disposal of 154 tons of trash, construction, metal, and green waste.

Illicit Discharge Detection and Elimination Component

The City endeavors to prevent discharges from the Municipal Separate Storm Sewer System (MS4) from causing or contributing to a violation of water quality standards. The Illicit Discharge Detection and Elimination Component involves 1) water quality monitoring during the dry weather season (May through September) to detect illicit discharges to the storm drain system, and 2) year-round response to complaints and referrals of urban runoff discharge violations.

All components of the JURMP are represented in this report with the exception of this component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), extended the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

Education Component

The City endeavors to implement a diverse education program that promulgates the storm water management requirements of the Municipal Permit. Education activities target the following groups: 1) municipal departments and personnel, 2) construction site owners and developers, 3) commercial business owners and operators, 4) industrial business owners and operators (none exist in Imperial Beach) 5) residents, general public, and school children, and 6) underserved community. Education plays an important role in facilitating the necessary behavioral change required to successfully reduce and eliminate pollutants from urban runoff.

1.0 Introduction

1.1 Introduction

The City of Imperial Beach is required to submit its Jurisdictional Urban Runoff Management Program (JURMP) Annual Report each year by September 30th in compliance with the San Diego Regional Board Order Number R9-2007-0001 (Municipal Permit). The Annual Report contains a comprehensive description of all activities conducted by the City to meet all requirements of section D of the Municipal Permit. The reporting period for the Annual Report is the previous fiscal year July 1st to June 30th.

All components of the JURMP are represented in this report with the exception of Section 7.0, Illicit Discharge Detection and Elimination Component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), which extended the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

1.2 Purpose and Objectives

The purpose of the FY 2008-09 JURMP Annual Report is to provide a comprehensive account of programmatic and management activities conducted by the City of Imperial Beach to meet the requirements of the Water Quality Order No. R9-2007-0001. Additionally, the annual reporting process is used to evaluate the overall effectiveness and efficiency of program elements. The following chapters in this Annual Report discuss the measures taken by the City to meet the regulatory requirements of the Municipal Permit and demonstrates that the City has achieved substantial compliance towards reducing sources of pollutants and urban runoff to the maximum extent practicable (MEP).

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 Introduction

The City endeavors to reduce pollutants and runoff from development and redevelopment projects to the maximum extent practicable (MEP). This component is primarily applicable to the Community Development Department, the Capital Improvements Projects Division, the Environmental Program Division of the Department of Public Works, and the contracted engineering firm, BDS Engineering. This section of the Annual Report discusses program implementation and changes made during FY 2008-09 to the Development Planning Component as it relates to management program activities and outcomes targeted for staff implementing control measures.

2.2 Level 1 Outcomes – Management Program Activities

2.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, amendments to the General Plan, changes to development project approval and verification processes, and modification to any development project requirements. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the Development Planning component is described in the *2008 JURMP Section 4.0*. During the reporting period no new changes were made to the JURMP or the program planning, administration, or assessment strategy. The updates to the General Plan made with the 2008 JURMP are still hung up and pending approval with the California Coastal Commission. All development projects under went the appropriate environmental review and verification processes. Development and BMP inventories were maintained on record and site inspections were tracked using the City's database system HTE.

During the reporting period, a draft of the Final Hydromodification Management Plan (HMP) was submitted to the Regional Board and comments were received. Currently, Brown and Caldwell is working to address the Regional Board's comments and submit the Final HMP within the schedule defined in the Municipal Permit. The City participated in the Copermittee Workgroup responsible for establishing interim HMP criteria. Once the Final HMP is approved, the City will have 180 days to incorporate the requirements into the program.

2.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses Jurisdictional requirements for project development, municipal staff training, developer education, public awareness and response, and surveys and special investigations.

The City requires all development and redevelopment projects to implement measures to reduce pollutants and runoff to the MEP. Minimum BMPs and LID requirements were established in the *2008 JURMP Section 4.0* and are required as conditions during the development review process. Priority development projects are given special consideration under the Standard Urban Stormwater Mitigation Plan (SUSMP) and have more stringent requirements. All municipal staff is knowledgeable in the storm water program and receives annual training as described in the 2008 *JURMP Section 10.0*. The Community Development Department also held counter hours and face-to-face meetings throughout FY 2008-09 to provide education and answer questions for developers. In addition, every development or redevelopment project regardless of its prioritization is formally inspected for applicable BMPs throughout the duration of the project. Post construction treatment control BMPs are also inspected annually for operation and maintenance verification. An inventory of treatment control BMPs and inspection records are provided in Table 2.3.

Additional documentation, analysis, and discussion on the implementation of Management Program Activities are provided in the following tables and figures:

- Figure 2.1 presents the implementation and assessment strategy for the Development Planning Component.
- Table 2.1 provides an overview of the development and planning projects as it was implemented during FY 2008-09.
- Table 2.2 presents and describes targeted FY 2008-09 outcomes and results, as well as implementation targets for FY 2009-10.
- Table 2.3 provides the updated treatment control BMP inventory.
- Table 2.4 provides an inventory of FY 2008-09 Development Review and SUSMP projects.

2.3 Outcomes Targeted for Staff Implementing Control Measures

2.3.1 Outcome Level 2 – Knowledge and Awareness of Program Implementation by Staff and Contractors

Education is provided to the public through face-to-face interaction with City staff in meetings, through inspections, and through several local ordinances and brochures that outline the requirements for addressing urban runoff and water quality. These efforts by the City to educate the public on development planning are discussed in the *2008 JURMP Section 4.0.* The

education effort for City staff is discussed in the *2008 JURMP Section 10.0.* Additional information on targeted FY 2008-09 outcomes and results is presented in Table 2.2.

2.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation by Staff and Developers

City staff works with developers to ensure that all development projects and redevelopment project reduce pollutants and runoff to the MEP. The 2008 JURMP Section 4.0 defines minimum BMP and LID requirements applicable to development and redevelopment in the City.

During FY 2008-09 the City continued to facilitate changes in behavior for development and redevelopment projects by reviewing and requiring conditions on projects to ensure program compliance. The City inspects active projects for violations and enforces compliance on all required conditions. All BMPs are verified for proper implementation, operation, and maintenance throughout the duration of construction. Post construction maintenance and operation of treatment control BMPs are also verified and inspected annual by the Environmental Division. Updates to treatment control BMP inventory is provided in Table 2.3.

The City is required to enforce its storm water ordinances for all Development Projects and at all development sites as necessary to maintain compliance with the Municipal Storm Water Permit. City ordinances include appropriate sanctions to achieve compliance including non-monetary penalties, fines, bonding requirements, and/or permit or occupancy denials for non-compliance.

Additional information on Behaviors and BMP Implementation by Staff and Developers is presented below in Table 2.2.

2.3.3 Outcome Level 4 – Source Load Reductions

Source load reductions from development and redevelopment projects are achieved through the implementation of BMPs and LID strategies. The City requires specific project conditions for treatment control BMPs, LIDs, and site design BMPs to reduce pollutants and runoff to the MEP. The City imposed one or more conditions of approval on 30 discretionary project applications during FY 2008-09. This includes four new “priority development projects” that will be subject to the City’s SUSMP ordinance.

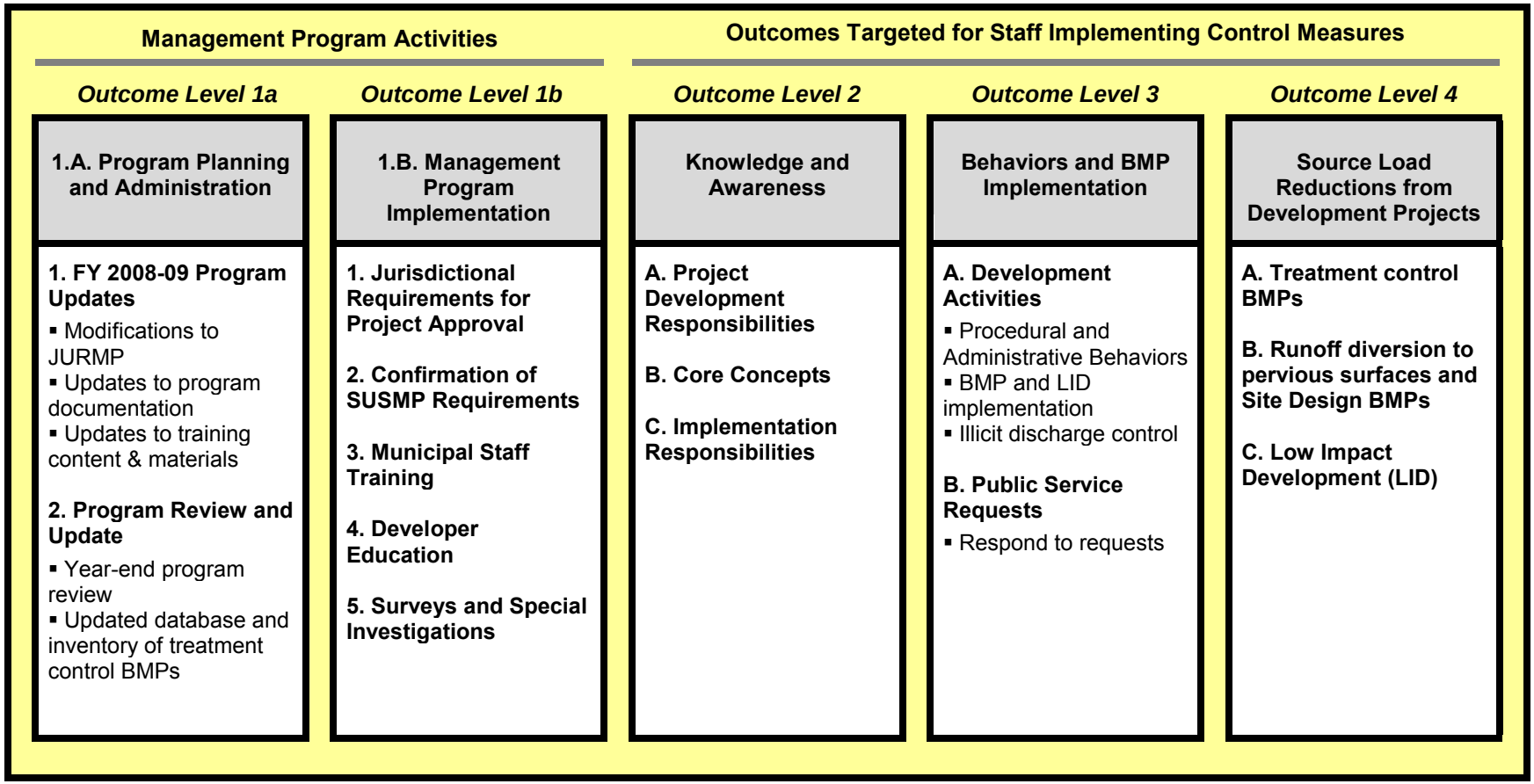


Figure 2.1 – FY 2008-09 Implementation and Assessment Strategy for the Development Planning Component

Table 2.1 – Overview of Development Planning Inventory by Development Type and Priority Classification

Category	Number	Description
A. Type of Development		
New development	1	All development projects are required to undergo the City's urban runoff approval process and meet applicable requirements. Administrative procedures for development project review is discussed in *2008 JURMP Section 4.0.*
Redevelopment	29	
B. Priority Classification		
Discretionary Projects	24	No projects received a SUSMP waiver. *All SUSMP-eligible projects were subject to applicable requirements; however, no SUSMP projects were approved during this reporting period. Two SUSMP projects were previously approved for construction, with one of the projects (Palm Ave Street End Improvements and Storm Drain Diverter) managed by the Port of San Diego. The only active SUSMP project managed by the City during the reporting period was the North Island Credit Union Building and the project was completed at the beginning of the reporting period. Permits to begin construction on the other four priority development projects will not be issued until acceptable SUSMP and Water Pollution Control Plans have been submitted and approved.
Priority Development (SUSMP) Projects	6*	
C. Totals		
Discretionary Projects	24	Complete list of development projects that received an environmental review during the reporting period or projects requiring a SUSMP is provided in Table 2.4.
Priority Development (SUSMP) Projects	6	

JURMP Sections	Description of FY 2008-09 Changes
4.0 and Appendix C	No changes were made to the Development Planning Component. Updates were made to the Treatment Control BMP inventory and Development Project inventory.

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2008-09 PROGRAM UPDATES				
a) MODIFICATIONS TO JURMP				
Update applicable JURMP sections per Permit requirements	No updates made during FY 2008-09	Complete	Applicable updates were included in the *2008 JURMP Section 4.0*. The City is still in the process of updating Model SUSMP and Hydro Modification Plan (HMP).	Make changes in accordance to Model SUSMP and HMP
b) UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
Update program documentation for consistency with program updates	No updates made during FY 2008-09	Under review	No program policies, plans, procedures, guidelines, or forms were updated this reporting period. The City is currently looking into updating its Environmental Review forms (7-A and 7-B) and updating guidance documents for developers.	Incorporate changes from Model SUSMP and HMP
c) UPDATES TO TRAINING PROGRAM				
Update training materials for consistency with *2008 JURMP Section 10.0*	Made updates to Community Development survey	Under review	The City makes annual updates to the municipal training content and materials so that each education activity provides appropriate information for the target audience. The City endeavors to keep education activities exciting, fun, and informative.	Update training materials for consistency with *2008 JURMP Section 10.0*

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
a) YEAR-END PROGRAM REVIEW				
Complete annual year-end program review	Review underway	In progress	An annual program review for the Development Planning Component is underway during the development of this JURMP Annual Report. The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.	Complete annual year-end program review
b) INVENTORY FOR DEVELOPMENT AND REDEVELOPMENT PROJECTS				
Update development and redevelopment inventory	Updates made throughout the reporting period	Complete	The City maintains a database of active development projects and development review status on the City's database software HTE. Annual inventories are also maintained in excel with the Environmental Division of the Department of Public Works.	Update development and redevelopment inventory
c) INVENTORY FOR APPROVED TREATMENT CONTROL BMPS AND MAINTENANCE				
Update inventory for treatment control BMPs	Updates made and maintenance verified through inspections	Made updates to property owners and contact information for O&M of BMPs	The Environmental Division maintains an inventory of treatment control BMPs. During this reporting period there were changes made to property owners and operation and maintenance of the BMPs. Annual verification is necessary to ensure the O&M of the BMPs.	Update inventory and maintenance for treatment control BMPs

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. Jurisdictional Requirements for Project Approval				
Require projects to implement BMPs	BMPs are required as conditions for development projects	Complete	All development and redevelopment projects are required to implement measures to reduce pollutants and runoff to the MEP. The City's project review process further requires that any new construction or modification with a valuation more than $50,000 be subject to public improvements. Projects that meet the $50,000 criterion are routed from the Community Development Department to the Public Works Department for a review in regard to storm water and runoff.	Condition projects with appropriate BMPs prior to permit approval
2. Confirmation of Priority Development (SUSMP) Requirements				
Verify that SUSMP-eligible projects are subject to applicable requirements and that BMPs are implemented and verified through inspections	All SUSMP-eligible projects were held to full SUSMP requirements	Verification confirmed	Six SUSMP high priority projects were subject to applicable requirements, with only two in active construction phase during this reporting period. One project was the Palm Ave Street End Improvement and Storm Drain Diverter Project, which fell under the Port of San Diego's jurisdiction for project management. The City of Imperial Beach still provided daily oversight on the project and enforced SUSMP requirements. The second project was the construction of the new North Island Credit Union building. Construction on the project finished at the beginning of this reporting period and the Environmental Division confirmed the installation of the pre-conditioned treatment control BMPs for the storm drains on the property.	Verify that SUSMP-eligible projects are subject to applicable requirements and that BMPs are implemented and verified through inspections

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
3. Municipal Staff Training				
Provide municipal staff training for FY 2008-09	Training provided to Community Development Department 9/23/08 and Public Works Department 9/17/08	Complete	Training was conducted on 9/23/08 for the Community Development Department (Planning Division, Building Division, Code Compliance Division, and Redevelopment Division) and Public Works Department 9/17/08 on the necessary elements of the storm water program. A survey was also provided to establish a baseline of knowledge. Daily interaction with City staff ensures that storm water pollution prevention remains a high priory throughout the City.	Provide municipal staff training for FY 2009-10
4. Developer Education				
Provide education for developers	Counters hours held and meetings conducted throughout the reporting period	Confirmation of developer education from Community Development	The Community Development Department held counter hours, face-to-face meetings, project review meetings, and performed inspections throughout the reporting period.	Provide developer education for FY 2009-10
5. Surveys and Special Investigations				
Not targeted or assessed	---	---	Special investigations were not conducted in FY 2008-09, and are not routinely conducted as part of the implementation strategy for this program element.	Not targeted
Provide a survey to municipal staff	Administered a survey to municipal staff as part of annual training program	Complete	Training was conducted on 9/23/08 for the Community Development Department and 9/17/08 for the Public Works Department on the necessary elements of this component. A survey was provided to establish a baseline of knowledge. The City incorporates surveys or pre and post tests into training programs and administers them when appropriate.	Survey municipal staff to ascertain baseline knowledge of storm water program

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND CONTRACTORS)				
Establish a baseline of staff knowledge regarding applicable program content	Performed a survey on 9/23/08 of Community Development and 9/17/08 of Public Works Department as part of annual training.	Survey consisted of a 16 question test. The results are as follows: Community Development Department (12 surveys completed) and average score 89%. Public Works Department (23 surveys completed) and average score 81%.	Training was conducted on 9/23/08 for the Community Development Department and 9/17/08 for the Public Works Department on the necessary elements of this component. The survey administered during the training session provides a baseline of knowledge of core concepts and helps in refining the municipal training program for the next reporting period. The City incorporates surveys or pre and post tests into training programs and administers them when appropriate. Results from this reporting period indicate that the Community Development Department has a greater level of knowledge on core concepts of the storm water program than the Department of Public Works. The overall results still show a high level of knowledge on core storm water management concepts in the City.	Survey municipal staff to assess knowledge of storm water program
Not Targeted	Community Development Department provided education opportunities for developers	---	The Community Development Department held counter hours and face-to-face meetings throughout FY 2008-09 to provide education and answer questions for developers. Inspects of BMPs at project sites by Code Enforcement, Building Division, and Public Works also provides additional education. Surveys were not conducted in FY 2008-09, and are not routinely conducted as part of the implementation strategy for this program element. Changes in knowledge of contractors are evident by the increased level of compliance observed during inspections.	Not Targeted

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND DEVELOPERS)				
A. DEVELOPMENT ACTIVITIES				
1. Procedural and Administrative Behaviors				
July 1, 2008 through June 30, 2009				
Review projects and prescribe necessary conditions of approval	30 projects reviewed for conditions of approval	Complete	The City reviews all proposed projects and ensures that all necessary conditions and BMPs are met.	Review projects prior to approval and issuance of permits
Inspect projects for BMP compliance	12 Projects, including the two active SUSMP Projects, were inspected daily by the Public Works Inspector	Complete	The Building Division, Code Enforcement, Environmental Division, and Public Works Inspector conduct inspections at all active development projects for compliance of minimum BMPs. The Public Works Inspector conducts inspections at all CIP and active SUSMP projects daily. The Building Inspector conducts inspections of all Discretionary permit projects and ensures the implementation of BMPs. Code Enforcement and Environmental Division respond to all reports of storm water violations from development projects. Construction inspections of Discretionary Projects are covered in the next Section of this Annual Report.	Inspect projects
2. BMP Implementation, Operation and Maintenance				
July 1, 2008 through June 30, 2009				
Inspect projects and verify BMP implementation	30 projects reviewed and received conditions All active projects inspected for BMPs	Complete	The Department of Public Works reviews and requires conditions on all Discretionary Projects greater than $50,000 in costs. Once a project becomes active the City inspects and verifies that all BMPs are implemented. The Public Works Inspector also provides continual oversight during project management of CIP projects.	Review projects for appropriate BMPs and verify implementation through inspections

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
Verify operation and maintenance of treatment control BMPs	15 out of 16 treatment control BMPs inspected	Complete	The City annually verifies operation and maintenance of treatment control BMPs to ensure compliance with program. All high priority treatment control BMPs are inspected for operation and maintenance annually.	Verify operation and maintenance of treatment control BMPs
3. Illicit Discharge Control				
July 1, 2008 through June 30, 2009				
Inspect development projects and respond to illicit discharges	All active projects inspected 10 verbal warnings	Complete	The City inspects and enforces storm water ordinances at all development projects. The City responds to all illicit discharge reports.	Inspect projects during development phase
B. PUBLIC SERVICE REQUESTS				
Respond to all development planning requests and illegal discharge reports	30 projects reviewed 10 illegal discharge reports from construction sites	Complete	The City tracks public service requests for construction activities. Requests include project reviews and illegal discharge reports. The Environmental Division investigates all illicit discharges that are reported by the storm water hotline, City staff, or from the online reporting form.	Respond to all development planning requests

Table 2.2 – Targeted Outcomes and Results for the Development Planning Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM NEW DEVELOPMENT AND REDEVELOPMENT PROJECTS)				
A. TREATMENT CONTROL BMPS				
Not targeted	1 new treatment control BMPs installed as a project condition 16 treatment control BMPs are monitored for operation and maintenance by the City	Complete	The City requires the installation of treatment control BMP devices for projects which are deemed necessary. Load reductions are tracked when available. Table 2.3 provides the inventory, inspection records, and source loads of treatment control BMPs.	Track operation and maintenance of treatment control BMPs
B. RUNOFF DIVERSION AND SITE DESIGN BMPS				
Not Targeted	30 projects required to divert or relocate site features	Complete	The City requires the diversion of runoff from development projects to pervious areas. When runoff diversion is not feasible then a treatment control BMP is necessary. Load reductions are not typically tracked.	Not targeted
C. LOW IMPACT DEVELOPMENT (LID) BMPS				
Not targeted	30 projects required LID BMPs	Complete	During the project review the City requires LID BMPs for high priority projects. Load reductions are not tracked for LID BMPs.	Not targeted

Table 2.3 – Post Construction Treatment Control BMP Inventory and Inspection Record

ID	Address/Location		Priority	HU	Date of Installation	Responsible for Maintenance	Date of City Inspection	Service Conducted			Volume/ Weight of Debris Removed (cf or lbs)
								Date of Service	Cleaned	Booms Replaced	
IRIS1	1450 Iris	Back parking lot	Low	911.11	6/27/05	Imperial Beach Property Management		Monthly 4/21/09	X	X	4 lbs
11thST1	861 11th St	Driveway approach	Med	910.20	6/1/07	HOA	4/9/09				
TLE1	741 Palm	Back vehicle storage area	High	910.20	6/1/05	Property Owner	10/27/08 4/8/09	3/1/09	X	X	
13ST1	1372 13th St	Back Parking lot drain	Med	910.20	10/1/08	Property Manager	10/1/08 4/8/09	3/1/09	X		60cf
PALM1	481 Palm	Front parking and back sediment filter	Med	910.20	11/1/08	Property Manager	11/1/08 4/9/09	11/1/08	X	X	
IBP1	836 Palm	Parking lot	High	910.20	5/1/02	Property Manager	10/29/08	11/1/08 3/1/09	X X	X X	
IBP2	836 Palm	North corner parking lot	High	910.20	5/1/02	Property Manager	10/29/08	11/1/08 3/1/09	X X	X X	
IBP3	836 Palm	Entrance at 8th St	High	910.20	5/1/02	Property Manager	10/29/08	11/1/08 3/1/09	X X	X X	
IBP4	836 Palm	Loading area	High	910.20	5/1/02	Property Manager	10/29/08	11/1/08 3/1/09	X X	X X	
IBP5	836 Palm	Southeast Corner of lot	High	910.20	5/1/02	Property Manager	10/29/08	11/1/08 3/1/09	X X	X X	
IBP6	836 Palm	Northeast corner of lot	High	910.20	5/1/02	Property Manager	10/29/08	11/1/08 3/1/09	X X	X X	

Table 2.3 – Post Construction Treatment Control BMP Inventory and Inspection Record

ID	Address/Location		Priority	HU	Date of Installation	Responsible for Maintenance	Date of City Inspection	Service Conducted			Volume/ Weight of Debris Removed (cf or lbs)
								Date of Service	Cleaned	Booms Replaced	
13SM1	1126 13th St	North front entrance	Med	911.11	5/1/05	Property Owner	10/27/08 4/9/09	4/20/09	X	X	
13SM2	1126 13th St	South front entrance	Med	911.11	5/1/05	Property Owner	10/27/08 4/9/09	4/20/09	X	X	
13SM3	1126 13th St	North back parking lot	Med	911.11	5/1/05	Property Owner	10/27/08 4/9/09	4/20/09	X	X	
13SM4	1126 13th St	South back parking lot	Med	911.11	5/1/05	Property Owner	10/27/08 4/9/09	4/20/09	X	X	
NICU1	1101 Palm	Back parking lot and planter box	Med	910.20	9/1/08	Property Owner	4/9/09	9/1/08		X	

Table 2.4 – Development Review and SUSMP Project Inventory FY 2008-09

ID	File No.	SUSMP	Address 1	Project Type	Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff into Landscaped Area	Permanent Post-Construction BMP Needed	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Construction / Post-construction BMP Notification	Loamy soil to minimize runoff	Water Pollution Control Plan
1	MF 881	Yes (Active)	1101 Palm Ave	New Building	North Island Credit Union building				X				X	X		X
2	D03-102	Yes (Active)	Palm Ave street end	Other	Palm Ave improvements and storm drain diverter											X
3	CIP MF 950	Yes (Not Active)	495 10th St	CIP	Public Works yard expansion											X
4	MF 962	Yes (Not Active)	400 7th Street	SFR	New SFR behind existing SFR	X	X	X		X			X	X	X	X
5	MF 779	Yes (Not Active)	221-225 Palm Ave	Building add.	8 unit residential and commercial	X	X			X			X	X	X	X
6	MF 1003	Yes (Not Active)	853 Emory St	Demolition/ new construction	demolition and const of new church	X		X	X	X			X	X		X
7	CIP S08-101	No	Seacoast Drive	CIP	South Seacoast Drive Overlay											X
8	CIP W05-104	No	501 Elm	CIP	Pump Station 3 Upgrade											X
9	MF 984	No	137 Ebony	2- unit condo Conversion	conversion of existing condo	X				X			X	X	X	
10	No MF	No	624 12th street	Low Mod complex	Conv app to low mod complex	X				X			X	X	X	
11	CIP F05-204	No	825 Imperial Beach Blvd	CIP	Fire Station Door Replacement											X
12	MF 987	No	1534-1548 Seacoast Drive	Revetment Maintenance	Repair maintenance of seawall and revetment								X	X		
13	No MF	No	624 12th St	Conversion	App to low-mod complex	X	X			X						
14	MF 986	No	535 7th St	SFR	Teo new SFR	X				X			X	X	X	
15	CIP F05-201	No	825 Imperial Beach Blvd	CIP	City Hall Council Chambers Renovations											X
16	CIP F05-203	No	825 Imperial Beach Blvd	CIP	City Emergency Power Replacement and Upgrade											X
17	CIP P05-601	No	Reama Park	CIP	Reama Park Master Plan											X
18	CIP P06-101	No	Teeple Park	CIP	Teeple Park Master Plan											X
19	CIP P08-701	No	Sports Park	CIP	Sports Park Rec Center Master Plan											X
20	MF 990	No	602 7th Street	SFR	single family residentail	X	X			X			X	X	X	
21	MF 989	No	1233 California St	Building add.	single family residentail	X		X	X	X			X	X	X	
22	MF 992	No	1497 13th St	Wireless communication facility	New wireless communication facility	X				X			X	X	X	
23	MF 994	No	762 Georgia St	2 unit condo conversion	Convert two houses to condominiums	X				X			X	X	X	
24	CIP S07-102	No	City Streets	CIP	CIP Slurry Seal on road											X
25	MF 1000	No	710 Seacost Dr	New roof	new roof over 2nd floor patio	X	X				X					
26	No MF	No	347 Evergreen Ave	New addition and remodel	1-story addition and kitchen remodel	X				X			X	X	X	
27	MF 1006	No	181-183 Ebony	Condo Conversion	Conversion of two residential to condo units	X				X			X	X	X	
28	No MF (City SD)	No	1344 Palm	New Car Wash (City of SD)	Convert empty lot to a new car wash on City of SD property								X	X		
29	MF 1010	No	1245 East Lane	SFR	SFR remodel	X	X			X			X	X		
30	R04-201	No	100-300 Palm Ave	CIP	Old Palm Ave Steet Scape Improvements											X

3.0 CONSTRUCTION COMPONENT

3.1 Introduction

The City endeavors to reduce pollutants and runoff from construction sites to the MEP. This component is primarily applicable to the Community Development Department and the requirements that apply to the Building and Planning Division activities related to construction and construction permits, and compliance actions proposed by the City. The Environmental Division of the Public Works Department facilitates the implementation of the construction requirements of the Municipal Permit. This section of the Annual Report discusses program implementation and changes made during FY 2008-09 to the Construction Component as it relates to management program activities and outcomes targeted for staff implementing control measures.

3.2 Level 1 Outcomes – Management Program Activities

3.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, updates to local ordinances, program documentation, training content, and materials. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the Construction Component is described in the *JURMP Section 5.0*. During FY 2008-09 no new updates were made to the municipal code or the program planning and administration processes. The last updates to the municipal code were made in February 2008 and included amendments to Chapter 8.30 "Urban Runoff Management and Discharge Control", Chapter 8.32 "Standard Urban Stormwater Mitigation Plan (SUSMP)", and Chapter 15.54 "Grading Permits and Plans". Amendments were submitted to the Regional Board as part of the *2008 JURMP Appendix B and C*.

The City maintains an ongoing database of active construction projects and tracks inspections though the City's database software HTE. A more detailed description of the City's inspection frequency, tracking, and verification process is provided in the *2008 JURMP Section 5.0.*

Figure 3.1 presents the implementation and assessment strategy for the Construction Component as it was implemented during FY 2008-09. Table 3.2 provides a complete overview of targeted FY 2008-09 outcomes and results, as well as implementation targets for FY 2009-2010.

3.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses Jurisdictional requirements for construction sites, training of municipal staff and contractors, inspections, public awareness and response, and surveys and special investigations.

The City requires all development and redevelopment projects, including Capital Improvement Projects (CIP), to reduce pollutants and runoff to the MEP through the implementation of BMPs. The designated minimum BMPs for construction projects are listed in the *2008 JURMP Section 5.0* and are required as project conditions prior to the approval and issuance of local construction and grading permits. Construction projects receive a prioritization ranking of high, medium, or low based on the criteria of City form 7-A. Construction projects receive the necessary frequency of BMP inspections once building permits are assigned and construction begins. During the rainy season high priority projects are inspected at least biweekly, medium priority sites are inspected at least monthly, and low priority projects are inspected as needed. During the dry season, all construction sites receive inspections as needed. The following tables and figures below provide additional information on the implementation and assessment of the Management Program Activities for the Construction Component:

- Table 3.1 provides an overview of the construction projects as it was implemented during FY 2008-09.
- Figure 3.1 presents the implementation and assessment strategy for the Construction Component.
- Table 3.2 presents and describes targeted FY 2008-09 outcomes and results, as well as implementation targets for FY 2009-10.
- Table 3.3 Construction permit inventory and inspection frequency

3.3 Outcomes Targeted for Staff Implementing Control Measures

3.3.1 Outcome Level 2 – Knowledge and Awareness

Education is provided to the public through face-to-face interaction with City staff in meetings, workshops, community presentations, inspections, and through several local ordinances and brochures that outlines the requirements for addressing urban runoff and water quality. These efforts by the City to educate the public on construction are discussed in the *JURMP Section 5.0.* The education effort for City staff is discussed in the *JURMP Section 10.0.*

3.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The City facilitates changes in behavior and implementation of BMPs at construction sites by working with developers to ensure that all projects meet the requirements of the Regional Permit. Prior to the issuance of construction and grading permits the City requires developers to submit design plans that reduce pollutants and runoff to the MEP, develop a Project Storm Water Management Plan, and obtain coverage if necessary under the State Water Resources Control Board's General Construction Permit. The City also inspects projects and enforces storm water ordinances at all construction sites. The *2008 JURMP Section 5.0* provides more information on the procedural and administrative mechanisms in the City that promote behavioral changes. The *2008 JURMP Appendix D* defines minimum BMP requirements applicable to construction in the City. Additional information is presented below in Table 3.2 on the targeted outcomes and results for changes in behavior and BMP implementation as they were implemented in FY 2008-09.

3.3.3 Outcome Level 4 – Source Load Reductions

The primary goal of BMP implementation is to reduce the loading of pollutants and runoff to storm water discharges. During FY 2008-09 the City successfully implemented all program requirements that relate to the Construction Component of the Regional Permit. Source load reductions were achieved at construction sites by implementing erosion and sediment control, requiring minimum BMPs, and enforcing general site management requirements. The City required 41 active construction projects and 10 Capital Improvement Projects to reduce pollutants and runoff to the MEP. Compliance with required minimum BMPs were then verified through 233 site inspections.

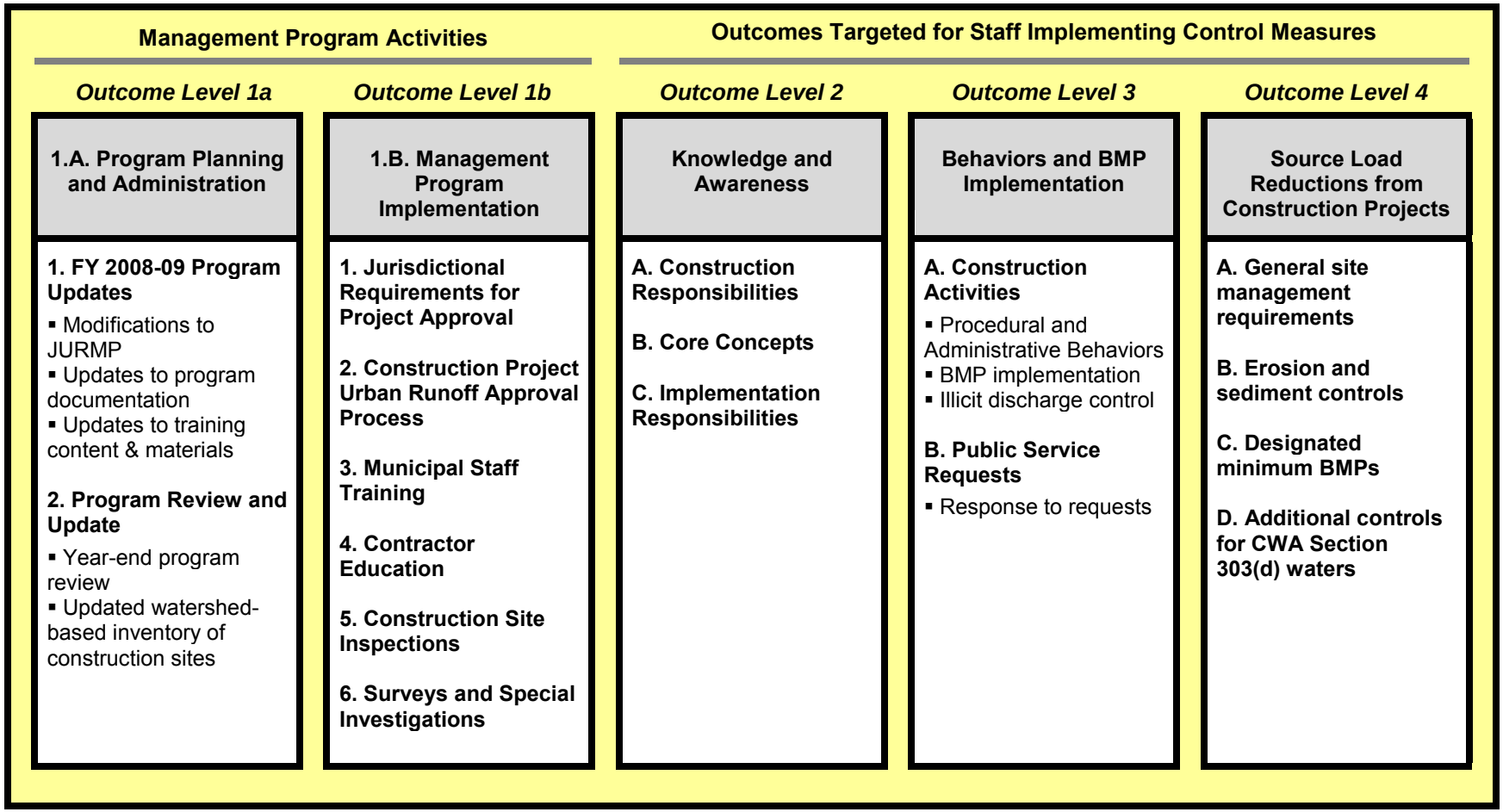


Figure 3.1 – FY 2008-09 Implementation and Assessment Strategy for the Construction Component

Table 3.1 – Overview of Construction Inventory by Priority Classification

Category	Number	Description
A. Type of Construction		
Construction Projects	40	
Capital Improvement Projects (CIP)	10	
Priority Development (SUSMP) Projects	1	
B. Priority Classification		
High Priority Projects	1	High priority projects are determined by City 7-A form and generally consist of new building construction projects or SUSMP projects. Most development projects in the City are categorized as low priority.
Medium Priority Projects	1	
Low Priority Projects	49	
C. Totals		
Construction Projects	50	*The City had two active SUSMP projects during the reporting period. However, one of the projects, Palm Ave Street End Improvements and Storm Drain Diverter, was along the waterfront and managed by the Port of San Diego. The only active SUSMP project was the North Island Credit Union Building and it finished completion at the beginning of the reporting period.
Priority Development (SUSMP) Projects	2*	

JURMP Sections	Description of FY 2008-09 Changes
5.0 and Appendix D	BMP requirements of the JURMP applicable to construction were modified in accordance with the requirements of the updated Permit in March 2008. No additional changes were made during this reporting period.

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2008-09 PROGRAM UPDATES				
a) MODIFICATIONS TO JURMP				
Update applicable JURMP sections per new Permit requirements	No updates made during FY 2008-09	Complete	Applicable updates were included in *JURMP Section 5.0*, submitted to the RWQCB on 03-24-08.	Make an necessary updates to the JURMP
b) UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
---	---	---	No program policies, plans, procedures, guidelines, or forms were updated during the reporting period. The City previously updated its ordinance and associated environmental review forms last reporting period.	Update program documentation for consistency with program updates
c) UPDATES TO TRAINING PROGRAM				
---	---	---	*JURMP Section 10.0* establishes updated standards for training municipal staff. The City makes annual updates to the municipal training content and materials so that each education activity provides appropriate information for the target audience.	Update staff training materials for consistency with JURMP

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
a) YEAR-END PROGRAM REVIEW				
Complete annual year-end program review	Review underway	In progress	An annual program review for the Construction Component is underway during the development of this JURMP Annual Report. The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.	Complete annual year-end program review
b) DEVELOP INVENTORY FOR CONSTRUCTION PROJECTS AND SITE INSPECTIONS				
Develop an inventory of construction projects	Inventory developed	Complete	An inventory of construction projects and inspections is maintained on the City's database software HTE. Constructions site inspection records are also maintained on HTE. The Environmental Division also maintains an inventory of construction projects that require conditions from Public Works. An inventory of Capital Improvement Projects (CIP) is also maintained by the Environmental Division.	Update construction project inventory
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. Jurisdictional Requirements for Project Approval				
Require projects to implement BMPs	Construction BMPs are required as conditions for development projects	Complete	All development and redevelopment projects are required to implement measures to reduce pollutants and runoff to the MEP. Designated minimum BMPs for construction projects are listed in the *2008 JURMP Section 5.0*.	Condition projects with appropriate BMPs prior to permit approval

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. Construction Project Urban Runoff Approval Process				
Require construction projects to have adequate project review for storm water and pollution control	All construction projects received the necessary project review before being issued City permits	Complete	Prior to the issuance of construction and grading permits the City requires developers to submit design plans that reduce pollutants and runoff to the MEP, develop a Project Storm Water Management Plan, and obtain coverage if necessary under the State Water Resources Control Board's General Construction Permit. Construction projects with costs greater than $50,000 are channeled through Public Works Department and required to implement public improvements before project completion. Information on the City's project review and approval process is provided in the *2008 JURMP Section 4.0* and in the previous chapter of this report.	Require construction projects to have adequate project review for storm water and pollution control
3. Municipal Staff Training				
Provide training for FY 2008-09	Training provided to Community Development Department 9/23/08 and Public Works Department 9/17/08	Complete	Training was conducted on 9/23/08 for the Community Development Department (Planning Division, Building Division, Code Compliance Division, and Redevelopment Division) and Public Works Department 9/17/08 on the necessary elements of this component. A survey was also provided to establish a baseline of knowledge. Three staff members from Community Development and two staff members from Public Works also attended a half day workshop on the new Model SUSMP on 6/1/09.	Provide training to all staff with identified responsibilities
4. Construction Contractor Education				
Provide education for contractors	Counter hours held and meetings conducted throughout reporting period	Complete	The Community Development Department held counter hours, face-to-face meetings, project review meetings, and performed inspections throughout the reporting period. Public Works Department oversaw storm water compliance for the Capital Improvement Projects and provided education to contractors during meetings and inspections.	Provide contractor education for FY 2009-10

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
5. Construction Inspections				
Inspect construction activities	The Building Inspector made 58 inspections for BMP compliance at construction sites; and the Public Works Inspector made 175 inspections for BMP compliance at CIP projects.	Complete	All construction projects get formally inspected throughout the duration of the project. During the rainy season, all high priority sites are inspected at least biweekly, medium priority sites are inspected at least monthly, and low priority sites are inspected as needed. During the dry season, all construction sites are inspected as needed. The Public Works Department inspects all active CIP projects sites daily, and Discretionary Projects, which are not CIP, receive inspections by the Community Development Department Building Inspector as required by the Permit.	Inspect construction sites based on priority of site
6. Surveys and Special Investigations				
Not targeted or assessed	---	---	Special investigations were not conducted in FY 2008-09, and are not routinely conducted as part of the implementation strategy for this program element.	Not targeted
Establish a baseline of staff knowledge regarding applicable program content	Performed a survey on 9/23/08 of Community Development and 9/17/08 of Public Works Department as part of annual training.	Complete	Training was conducted on 9/23/08 for the Community Development Department and 9/17/08 for the Public Works Department on the necessary elements of this component. A survey was also provided to establish a baseline of knowledge. The City incorporates surveys or pre and post tests into training programs and administers them when appropriate.	Survey staff to ascertain baseline levels of storm water program

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND CONTRACTORS)				
Establish a baseline of staff knowledge regarding applicable program content	Performed a survey on 9/23/08 of Community Development and 9/17/08 of Public Works Department as part of annual training.	Survey consisted of a 16 question test. The results are as follows: Community Development Department (12 surveys completed) and average score 89%. Public Works Department (23 surveys completed) and average score 81%.	Training was conducted on 9/23/08 for the Community Development Department and 9/17/08 for the Public Works Department on the necessary elements of this component. The survey administered during the training session provides a baseline of knowledge of core concepts and helps in refining the municipal training program for the next reporting period. The City incorporates surveys or pre and post tests into training programs and administers them when appropriate. Results from this reporting period indicate that the Community Development Department has a greater level of knowledge on core concepts of the storm water program than the Department of Public Works. The overall results still show a high level of knowledge on core storm water management concepts in the City.	Survey staff and assess results to refine training program
Not targeted	Community Development and Public Works Departments provide education opportunities for contractors	---	The Community Development Department held counter hours and face-to-face meetings throughout FY 2008-09 to provide education and answer questions for contractors. The Public Works Department also held pre construction meetings and provided construction management throughout the duration of all CIP projects. Inspects of BMPs at project sites by Code Enforcement, Building Division, and Public Works Inspector also provided additional opportunities for education. Surveys were not conducted in FY 2008-09, and are not routinely conducted as part of the implementation strategy for this program element.	Not targeted

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND CONTRACTORS)				
A. CONSTRUCTION ACTIVITIES				
1. Procedural and Administrative Behaviors				
July 1, 2008 through June 30, 2009				
Review projects and prescribe necessary conditions of approval	All constructions projects (51 projects) reviewed for conditions of approval before getting notice to proceed with construction activities	Complete	The City reviews and conditions all proposed projects to ensure all necessary conditions and BMPs are met before any construction permits are issued. Once a City permit is issued then the project is in active construction phase and receives applicable inspections for BMP compliance.	Review projects prior to approval and issuance of permits
2. BMP Implementation				
July 1, 2008 through June 30, 2009				
Inspect projects and verify BMPs	The Building Division conducted 58 BMP site inspections. The Public Works Inspector provided daily oversight at all CIP construction sites and performed 175 BMP inspections.	Complete	The City inspects and verifies BMPs at all projects to ensure compliance with program. The Building Inspector, Public Works Inspector, Code Enforcement Officer, and Environmental Division share the responsibility of inspecting development projects and verifying BMP compliance.	Inspect projects and verify BMPs

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
3. Illicit Discharge Control				
July 1, 2008 through June 30, 2009				
Inspect active construction projects and respond to illicit discharges	Total of 233 construction site inspections were made during the reporting period. Responded to 10 reports of illegal discharges from construction activities	Complete	The City inspects projects and enforces storm water ordinances at all construction sites. The City responds to all illicit discharges.	Inspect projects during construction phase and respond to illicit discharges
B. PUBLIC SERVICE REQUESTS				
Respond to all construction requests and illegal discharge reports	All active construction projects (51 projects) were reviewed for Permit requirements. The City responded to 10 reports of illegal discharges from construction activities.	Complete	The City tracks public service requests for construction activities. Requests include project reviews and illegal discharge reports. The Environmental Division investigates all illicit discharges that are reported by the storm water hotline, City staff, or from the online reporting form. Most construction related discharges are from private residences and not active construction sites. (i.e. washing paint brushes, landscaping, or power washing). Only One illicit discharge was from an active construction site requiring a City permit.	Respond to all construction requests

Table 3.2 – Targeted Outcomes and Results for the Construction Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM CONSTRUCTION PROJECTS)				
A. GENERAL SITE MANAGEMENT REQUIREMENTS				
Not targeted	51 projects required to implement BMPs	---	The City requires construction sites to reduce discharges of pollutants to the MEP, and to prevent discharges from causing or contributing to a violation of water quality standards. Source load reductions from BMPs are not tracked.	Not targeted
B. EROSION AND SEDIMENT CONTROLS				
Not targeted	12 projects required installation of erosion and sediment control BMPs	---	The City requires installation of erosion and sediment control BMPs. Load reductions are not tracked.	Not targeted
C. DESIGNATED MINIMUM BMPS				
Not targeted	51 projects required to implement designated minimum BMPs	---	The City requires designated minimum BMPs for all construction projects. Load reductions are not tracked.	Not targeted
D. ADDITIONAL CONTROLS FOR CWA SECTION 303(D) WATERS				
Not targeted	No projects required additional controls for CWA 303(d) waters	---	The City requires additional controls to be implemented for Clean Water Act (CWA) Section 303(d) waters. Load reductions are not tracked.	Not targeted

Table 3.3 – FY 2008-09 Active Construction Inventory and Inspection Frequency

Permit or File No.	Priority (High, Medium, Low)	Period of Time (# Weeks) Site Active During Rainy Season (October - April)	Total Number of Inspections Rainy Season	Total Number of Inspections Dry Season	Total Number of Inspections	Address	General Results of Inspections / CIP Project Discription	Number of Violations / Enforcement Action Type (VW, NOV, NOA)
382	Low	27	1	1	2	132 IMPERIAL BEACH	BMP SEDIMENT CONTROL	VW
329	Low	19	1	-	1	163 ELDER	BMP SEDIMENT CONTROL	-
447	Low	27	2	-	2	177 CARNATION	BMP SEDIMENT CONTROL	-
303	Low	2	-	1	1	220 EVERGREEN	BMP SEDIMENT CONTROL	-
261	Low	10	1	-	1	235 DAHLIA	BMP SEDIMENT CONTROL	-
380	Low	25	2	-	2	319 IMPERIAL BEACH	BMP SEDIMENT CONTROL	VW
68	Low	0	-	1	1	347 EVERGREEN	BMP SEDIMENT CONTROL	-
230	Low	0	-	1	1	414 ELM	BMP SEDIMENT CONTROL	-
69	Low	27	2	1	3	419 CARNATION	BMP SEDIMENT CONTROL	-
169	Low	27	-	1	1	458 CHERRY	BMP SEDIMENT CONTROL	VW
277	Low	0	-	1	1	545 11TH	BMP SEDIMENT CONTROL	-
277	Low	1	-	1	1	548 CALLA	BMP SEDIMENT CONTROL	-
130	Low	27	-	1	1	549 DAHLIA	BMP SEDIMENT CONTROL	-
245	Low	7	1	-	1	605 FLORENCE	BMP SEDIMENT CONTROL	-
293	Low	27	-	1	1	624 12TH	BMP SEDIMENT CONTROL	-
323	Low	0	-	1	1	634 OCEAN	BMP SEDIMENT CONTROL	-
173	Low	0	-	2	2	646 ALABAMA	BMP SEDIMENT CONTROL	-
233	Low	27	-	1	1	705 3RD	BMP SEDIMENT CONTROL	-
460	Low	16	1	-	1	729 5TH	BMP SEDIMENT CONTROL	-
339	Low	5	-	1	1	742 5TH	BMP SEDIMENT CONTROL	-
394	Low	27	-	2	2	754 HICKORY	BMP SEDIMENT CONTROL	VW
346	Low	27	-	1	1	811 CORVINA	BMP SEDIMENT CONTROL	-
156	Low	27	-	2	2	815 ENCINA	BMP SEDIMENT CONTROL	-
348	Low	3	-	1	1	821 12TH	BMP SEDIMENT CONTROL	VW
371	Low	27	-	1	1	861 10TH	BMP SEDIMENT CONTROL	-
113	Low	1	-	2	2	933 EMORY	BMP SEDIMENT CONTROL	-
222	Low	0	-	2	2	970 ARRIBA AVENIDA	BMP SEDIMENT CONTROL	-
216	Low	27	1	1	2	975 IRIS	BMP SEDIMENT CONTROL	-
179	Low	22	1	-	1	995 8TH	BMP SEDIMENT CONTROL	-
101	Low	25	-	2	2	1016 12TH	BMP SEDIMENT CONTROL	-
391	Low	20	2	-	2	1121 LOUDEN	BMP SEDIMENT CONTROL	-
355	Low	8	1	-	1	1130 FLORIDA	BMP SEDIMENT CONTROL	-
339	Low	4	1	-	1	1173 GROVE	BMP SEDIMENT CONTROL	-
3	Low	0	-	1	1	1174 EMORY	BMP SEDIMENT CONTROL	-
142	Low	27	-	1	1	1231 PALM	BMP SEDIMENT CONTROL	-
443	Low	6	2	-	1	1233 CALIFORNIA	BMP MATERIAL DLVRY / STORAGE	VW
278	Low	4	-	2	2	1244 GRANGER	BMP SEDIMENT CONTROL	VW
341	Low	25	-	1	1	1277 14TH	BMP SEDIMENT CONTROL	-
228	Low	0	-	2	2	1420 10TH	BMP SEDIMENT CONTROL	-
270	Low	3	-	1	1	1610 SEACOAST	BMP SEDIMENT CONTROL	-
MF-881	High	0	-	3	3	1101 PALM	SUSMP BMP	-
Public Works Capital Improvement Projects								
CIP	Med	4	18	45	63	100-300 PALM	BMP Old Palm Ave Steet Scape Improvements	-
CIP	Low	0	-	13	13	825 Imperial Beach Blvd	BMP City Hall Council Chambers Renovations	-
CIP	Low	0	-	13	13	825 Imperial Beach Blvd	BMP City Emergency Power Upgrade	-
CIP	Low	0	-	14	14	825 Imperial Beach Blvd	BMP Fire Station Door Replacement	-
CIP	Low	0	-	12	12	Reama Park	BMP Reama Park Master Plan	-
CIP	Low	0	-	12	12	Teeple Park	BMP Teeple Park Master Plan	-
CIP	Low	0	-	12	12	Sports Park	BMP Sports Park Rec Center Master Plan	-
CIP	Low	0	-	10	10	City Streets	BMP CIP Slurry Seal on road	-
CIP	Low	0	-	13	13	Seacoast Drive	BMP South Seacoast Drive Overlay	-
CIP	Low	0	-	13	13	501 Elm	BMP Pump Station 3 Upgrade	-

Table 3.3 The Public Works Department and Community Development Department share responsibility for inspecting active construction projects for applicable BMPs. Capital Improvement Projects receive inspection from the Public Works Inspector and discretionary permit projects receive inspections form the Building Inspector. Both Public Works and Community Development Departments share responsibility for SUSMP projects. Enforcement action is taken through verbal warnings (VW), notice of violations (NOV), and notice of abatements (NOA).

4.0 MUNICIPAL COMPONENT

4.1 Introduction

The City endeavors to reduce or eliminate pollutants and runoff from municipal discharges to the MEP. This component is primarily applicable to the Department of Public Works and its efforts to prevent municipal discharges from causing or contributing to a violation of water quality standards. This section of the Annual Report discusses program implementation and changes made during FY 2008-09 to the Municipal Component as it relates to management program activities and outcomes targeted for staff implementing control measures.

4.2 Level 1 Outcomes – Management Program Activities

4.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, updates to program documentation, training content, and materials. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the municipal component is described in the *2008 JURMP Section 6.0*. The *JURMP Appendix E* defines minimum BMP requirements applicable to streets, roads, highways, municipal areas, and parking facilities in the City. BMPs applicable to these facilities were updated as part of the City's *2008 JURMP*, submitted on March 24, 2008. During FY 2008-09 no updates were determined necessary to the minimum BMP requirements.

During FY 2008-09 the City expanded the municipal training program to include pre and post tests as part of the effectiveness assessment. The City also updated its municipal facility and activity list, adding Serenity Gardens to the inventory. Table 4.4 provides the updated municipal facility and activity list and Figure 4.1 presents the implementation and assessment strategy for the major elements of the Municipal Component as it was implemented during FY 2008-09.

4.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses Jurisdictional requirements, municipal staff training, municipal facility inspections, public awareness and response, and surveys and special investigations.

The City makes storm water pollution prevention and response a high priority for all Public Works employees. Each Public Works vehicle contains a binder of municipal storm water BMPs and contains a map of the entire MS4 system. The Environmental Division conducts annual training for all Public Works employees and daily interactions with staff ensures that storm water pollution prevention remains a high priory throughout the City. The Public Works Department is

the eyes and ears on the streets and therefore the first line of defense for pollution prevention, response, and cleanup. The *2008 JURMP Section 6.0* provides a complete description of the management programs for the Municipal Component.

Routine maintenance and cleaning of municipal facilities keeps accumulated debris and other potential pollutants from entering the MS4. The City conducts formal inspections of all high priority municipal facilities and actives. All other municipal facilities get inspected as need. Inspection records for FY 2008-09 are provided in Table 4-4. The City also maintains a number of storm drain inlet filters that are cleaned and maintained quarterly by Downstream Services, Inc. Cleaning records are maintained on file and logged in a database on the Environmental Division server. The municipal storm drain filter inventory and maintenance record is provided in Table 4-3. During FY 2008-09 the one additional municipal storm drain inlet filter for a total of 13 now currently maintained by the City.

During FY 2008-09 the City completed work on the Palm Avenue street end improvement and low-flow storm drain diverter. The storm drain diverter project, which was funded by a Clean Beach Initiative grant, has the capacity to divert up to 250 gallons per minute of urban runoff into the sanitary sewer. The City now has two major storm drain diverters along the water front (Date Ave street end and Palm Ave street end).

The City continued operation of its storm water hotline and online citizen requests form. All public correspondence either online, phone or personal communication is tracked on the Environmental Division server.

Table 4.1 presents and overview of the municipal inventory by facility type. Table 4-2 presents and describes details on targeted FY 2008-09 outcomes and results, as well as implementation targets for FY 2009-10. Additional documentation, analysis, and discussion are provided in Figure 4.2, and Tables 4.3 and 4.4.

4.3 Outcomes Targeted for Staff Implementing Control Measures

4.3.1 Outcome Level 2 – Knowledge and Awareness

The City conducts annual training for all municipal employees. Training for the Municipal Component is specifically targeted at the Public Works Department because City Streets, Maintenance Workers, and Sewer crews are typically the first line of defense for storm water pollution. The training program focuses on the use of Best Management Practices in daily operations, and is designed to create an overall sensitivity to pollution prevention concerns. Open discussions are encouraged to further the importance and enhance the program. This education effort is discussed in the *JURMP Section 10.0.*

4.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The City implements minimum BMPs for all municipal activities as described in the *JURMP Appendix E*. Major targeted outcomes for FY 2008-09 included streets and parking lot sweeping, MS4 cleaning, sewer system preventative maintenance, integrated pest management at parks, and implementation of municipal facility BMPs. Additional information on how BMPs were implemented is presented below in Table 4.2.

4.3.3 Outcome Level 4 – Source Load Reductions

The City continues to make impressive source load reductions from municipal facilities and activities. The City maintained approximately 125 miles of curbed streets and uncurbed roads located throughout the City. Approximately 206 tons of trash and debris were collected through street sweeping operations. The City also collected 174 loads of large bulky items illegally dumped in City alleys through its franchise waste hauler EDCO. The annual City-wide Home Front Clean Up event also collected another 154 tons of waste debris.

The Sewer Division also did an outstanding job of cleaning and inspecting the MS4 system and is on track to clean 100 percent of the City's storm drain lines and catch basins for 2009. Approximately five miles of underground piping, 117 catch basins and inlets, and seven open drainage facilities get cleaned between the months of May through October. During this reporting period a total of 4,130 pounds of trash, sediment, and organic matter was collected out of the MS4 system. Figure 4.3 provides the amount of debris collected out of the MS4 broken down by fiscal year.

Lastly, over 30 acres of park facilities, athletic fields, beach accesses, landscapes at various facilities, and five community parks located throughout the City were maintained during FY 2008-09. The City has a dedicated Tidelands crew that picks up trash and debris and conducts landscaping duties 7 days a week on the beach and one block inland of the beach. In addition, the City contracts with Donovan Prison for a weekly crew to pick up trash and conducts landscape duties at City parks, streets, and alleys.

Table 4.2 provides a breakdown of the source load reductions for FY 2008-09 from municipal facilities and activities.

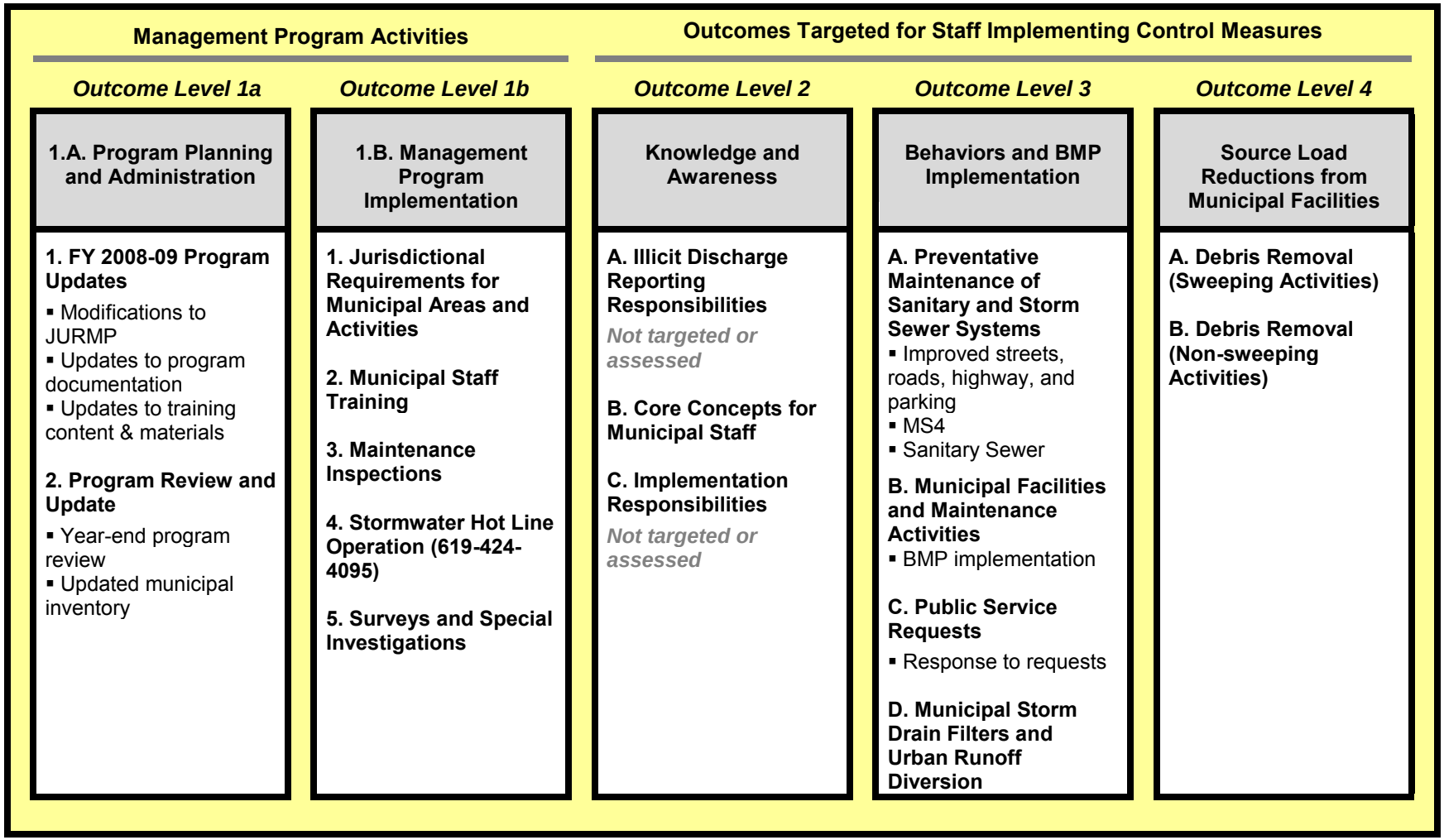


Figure 4.1 – FY 2008-09 Implementation and Assessment Strategy for the Municipal Component

Table 4.1 – Overview of Municipal Inventory by Facility Type and Priority Classification

Category	Miles	Number	Description of Changes
A. Type of Facility			
Paved Roads	127.9	---	
Unpaved Roads	---	---	
Municipal Parking Facilities	---	4	
Underground storm drain piping	5	---	
Catch basins/Inlets	---	117	
Open Drainage Facilities	---	7	
B. Priority Classification			
Streets, Roads, and Highways			The City also contains 13.3 miles of paves alleys and 2.5 miles of unimproved alleys that are not on the municipal inventory. The alleys are not owned by the City and are maintained by the property owners. The City conducts monthly street sweeping on the paved alleys and provides pick up of large bulky items illegally dumped in the alleys.
High (Commercial areas)	19.2	---	
Medium (Beachfront residential areas)	9.6	---	
Low (Other residential areas and paved alleys)	99.1	---	
Municipal Parking Facilities			
High (Commercial)		4	
Medium (N/A)	---	---	
Low (N/A)	---	---	
MS4 Facilities			
Underground piping	5	---	

Table 4.1 – Overview of Municipal Inventory by Facility Type and Priority Classification

Category	Miles	Number	Description of Changes
Catch basins/Inlets	---	117	
Open Drainage Facilities	---	7	
Sanitary Sewer System			
Pump stations		12	
Underground piping	39.5		
C. Totals			
Streets, Roads, and Highways	127.9	---	
Unpaved Roads	---	---	
Municipal Parking Facilities	---	4	
Underground Piping	5	---	
Catch Basins/Inlets	---	117	
Open Drainage Facilities	---	7	
Sanitary Sewer Pump Stations		12	
Underground Sewer Pipe	39.5		

JURMP Sections	Description of FY 2008-09 Changes
6.0 and Appendix E	BMP requirements of the JURMP applicable to streets, roads, highways, and municipal parking facilities were modified in accordance with the requirements of the updated Permit in March 2008. The City made updates to its municipal inventory list adding Serenity Gardens. City made updates to the municipal inspection form.

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2008-09 PROGRAM UPDATES				
a) MODIFICATIONS TO JURMP				
Update applicable JURMP sections per Permit requirements	No updates were made during FY 2008-09	Complete	Applicable updates were included in *JURMP Section 6.0*. No significant updates are expected to be necessary during this permit cycle.	Not targeted
b) UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
Update program documentation for consistency with program updates	Updates made to the Municipal Inspection Forms	Complete	The City updated its Municipal Inspection Forms. The City created three new municipal inspection forms: 1.General Municipal Inspection Form, 2. Municipal Parks Inspection Form, 3. Public Works Yard Inspection Form. This reporting period was the first year inspection forms were used.	Make updates to program documentation as needed
c) UPDATES TO TRAINING PROGRAM				
Update training materials for consistency with *2008 JURMP Section 10.0*	Made updates to municipal survey	Under review	The City makes annual updates to the municipal training content and materials so that each education activity provides appropriate information for the target audience.	Update training materials for consistency with *2008 JURMP Section 10.0*

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
a) YEAR-END PROGRAM REVIEW				
Complete annual year-end program review	Review underway	In progress	An annual program review for the Municipal Component is underway during the development of this JURMP Annual Report. The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.	Complete annual year-end program review
b) UPDATES MUNICIPAL INVENTORIES				
Update municipal inventory	Made updates to municipal facilities and activities inventory by adding Serenity Gardens to the inventory.	Complete	The City made updates to the municipal facilities and activities inventory by adding Serenity Gardens to the inventory list. Serenity Gardens was accidentally omitted from the inventory list last reporting period because of its small size.	Update municipal inventory
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. Jurisdictional Requirements for Municipal Areas and Activities				
Require municipal areas and activities to implement minimum BMPs	Requirements implemented	Complete	Specific minimum BMP requirements for municipal facilities and activities, including pollution prevention methods, are described in the *2008 JURMP Appendix E*. Municipal BMPs are reviewed regularly and updated as necessary. In addition, each City vehicle contains a binder of Best Management Practices for Public Works activities. The binder is a reference tool for employees to properly implement BMPs for specific job tasks and a reference for responding to illegal discharges.	Implement minimum BMPs for municipal areas and activities

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. Municipal Staff Training				
Provide training for FY 2008-09	Training provided to Community Development Department 9/23/08 and Public Works Department 9/17/08 and during municipal inspections	Complete	Training was conducted on 9/23/08 for the Community Development Department (Planning Division, Building Division, Code Compliance Division, and Redevelopment Division) and Public Works Department 9/17/08 on the necessary elements of the storm water program. A survey was also provided to establish a baseline of knowledge. Training is also provided to Division supervisors during municipal inspections. Daily interaction with City staff ensures that storm water pollution prevention remains a high priory throughout the City.	Provide municipal staff training for FY 2009-10
3. Maintenance Inspections				
Inspect road, parking facilities, storm drains, and other municipal areas and activities	Inspections done annually	Complete	All City-maintained roads, parking facilities, and storm drains are formally inspected annually. Other municipal areas and activities not identified as high priority are inspected as needed. Inspections include a review of activities and practices, review and inspection of site BMPs, and a review of the overall effectiveness of the BMPs. Inspection records are provided in Table 4.3.	Inspect municipal facilities
Identify any MS4 facility found to require inspection less than annually	Review underway	In progress	The City endeavors to inspect and clean 100% of the accessible portions of the underground storm drain system. The City recognizes that in some years this goal may not be possible. For this reason the City is currently reviewing and identifying portions of the MS4 that collect high volumes of trash and debris in order to prioritize the maintenance and cleaning of the storm drain system.	Inspect and clean MS4

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
4. Storm Water Hotline Operation				
Operate a hotline to provide the public opportunities to report illegal storm water discharges	Hotline operated throughout reporting period	In progress	A Storm Water Hotline (619-424-4095) was operated throughout FY 2008-09 to provide the public a means of reporting illegal storm water discharges or report accumulated trash and debris in City-maintained roadways. 174 reports of trash and debris and 95 illegal storm water complaints were received during the reporting period by residents and municipal staff. See Level 4 Outcomes (below).	Operate a hotline to provide the public opportunities to report illegal storm water discharges
5. Surveys and Special Projects				
Provide a survey to municipal staff	Administered a survey to municipal staff as part of annual training program	Complete	Training was conducted on 9/23/08 for the Community Development Department and 9/17/08 for the Public Works Department on the necessary elements of this component. A survey was provided to establish a baseline of knowledge. The City incorporates surveys or pre and post tests into training programs and administers them when appropriate.	Survey municipal staff to ascertain baseline knowledge of storm water program
Implement special projects that go beyond minimum JURMP requirements	Finished completion of Palm Ave low-flow urban runoff diverter project. Installed one new storm drain treatment control filter at Sports Park.	Projects complete	The City finished completion of the Palm Ave low-flow urban runoff diverter, which diverts up to 250 gallons per minute of urban runoff into the sanitary sewer. The City also added another storm drain inlet filter at the IB Sports Park for a total of 13 municipal storm drain filters maintained by the City. Storm drain filter inventory and maintenance records are provided in Table 4.3.	Not targeted

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
Implement special projects that go beyond minimum JURMP requirements	Completed first phase of the City Hall and Fire Department xeriscaping project	In progress	The City is xeriscaping 6,500 square feet of landscape area in front of City Hall and Fire Department. The first phase of the project in front of the Fire Station was completed during this reporting period. The second phase of the project will be completed during the beginning of next FY. This project involved public participation with two Boy Scout Eagle Projects contributing to the project.	Not targeted
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND CONTRACTORS)				
Establish a baseline of staff knowledge regarding applicable program content	Performed a survey on 9/23/08 of Community Development and 9/17/08 of Public Works Department as part of annual training.	Survey consisted of a 16 question test. The results are as follows: Community Development Department (12 surveys completed) and average score 89%. Public Works Department (23 surveys completed) and average score 81%.	Training was conducted on 9/23/08 for the Community Development Department and 9/17/08 for the Public Works Department on the necessary elements of this component. The survey administered during the training session provides a baseline of knowledge of core concepts and helps in refining the municipal training program for the next reporting period. The City incorporates surveys or pre and post tests into training programs and administers them when appropriate. Results from this reporting period indicate that the Community Development Department has a greater level of knowledge on core concepts of the storm water program than the Department of Public Works. The overall results still show a high level of knowledge on core storm water management concepts in the City.	Survey municipal staff to assess knowledge of storm water program

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND CONTRACTORS)				
A. PREVENTATIVE MAINTENANCE OF SANITARY AND STORM SEWER SYSTEMS				
1. Improved Streets, Roads, Highways, and Parking Facilities				
July 1, 2008 through June 30, 2009				
Sweep all High trash areas at least twice per month	28.7 curb-miles swept at least twice per month and 4 municipal parking facilities are swept weekly	Complete	Commercial areas (19.2 miles of curbed roads and 4 parking lots) are swept weekly. Beachfront residential areas (9.5 miles of curbed roads) are swept bi-weekly (high trash and debris).	Sweep all High trash areas at least twice per month
Sweep all Moderate trash areas at least monthly	99.1 curb-miles swept at least monthly	Complete	All other areas (99.1 curb miles) are considered moderate priority and are swept on a monthly basis.	Sweep all Moderate trash at least monthly
Sweep all Low trash areas at least once (0)	N/A	N/A		Sweep all Low trash areas at least once
Sweep improved streets, roads, and highways	127.9 curb-miles swept (2,392 total miles) swept)	Complete		Sweep at least the total minimum number of curb-miles required to meet Permit-prescribed frequencies for all improved streets

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. Municipal Separate Storm Sewer System (MS4)				
July 1, 2008 through June 30, 2009				
Clean accumulations of trash and debris greater than 33% of design capacity	117 catch basins inspected	Complete	Storm drain cleaning generally occurs between the months of May and August. In this annual report we provide analysis for the specified reporting period (July 1st – June 30th), which includes records of both the 2008 and 2009 cleaning events for this annual report. It is important to note that the City inspects all of its 117 catch basins and cleans them if necessary on an annual basis. The City also endeavors to clean 100% of the 5 miles of storm drain lines annually.	Clean accumulations of trash and debris greater than 33% of design capacity
Inspect and clean MS4 line	Approximately 5 miles of storm drain lines cleaned and inspected	Complete	City endeavors to clean 100% of the 5 miles of storm drain lines annually. During 2008 the Sewer Division cleaned 100% of the MS4. The Sewer Division is on track to do the same for 2009. The Sever Division uses its vactor truck to jet and clean accumulated debris out of the storm drain.	Clean accumulations of trash and debris greater than 33% of design capacity
Following two years of inspections, any MS4 facility that requires inspection and cleaning less than annually may be inspected as needed, but not less than every other year	Review underway	In progress	The Environmental Division is performing a review of past storm drain line cleaning records to identify areas of high trash and debris accumulation. Sections of the MS4 that are identified as low trash and debris accumulation areas may be cleaned and inspected less than annually.	Inspect MS4 facilities not listed as high priority as needed, but not less than every other year.

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
3. Sewer System Maintenance and Spill Prevention				
July 1, 2008 through June 30, 2009				
Prevent and eliminate infiltration from the sanitary sewer to the MS4	36 miles of sanitary sewer system inspected	Complete	The City has conducted a sewer capacity study and identified areas needing improvement. These will be undertaken through the Capital Improvement Projects program. A Sewer System Management Plan was also completed in accordance with Waste Discharge Requirements.	Inspect sanitary sewer system for leaks to MS4
Conduct routine maintenance on sanitary sewer system	36 miles of sanitary sewer system maintained	Complete	Most sanitary sewer pipelines are cleaned at least annually, and known problem areas are cleaned more frequently. Twelve alarmed sewage pump stations are monitored daily.	Conduct routine maintenance on and cleaning of sanitary sewer system to prevent spills and discharges to MS4
4. Management of Pesticides, Herbicides, and Fertilizers				
July 1, 2008 through June 30, 2009				
Implement BMPs to reduce the contribution of pollutants to MS4	Requirements implemented	Complete	The City limits the application of pesticides and herbicides in accordance with Integrated Pest Management Program policy.	Implement IPM BMPs
B. MUNICIPAL FACILITIES AND MAINTENANCE ACTIVITIES				
Implement minimum BMPs at municipal facilities and activities	Minimum BMPs implemented	Complete	The City enforces compliance of minimum BMPs at all municipal facilities and maintenance activities. All City vehicles contain a binder on BMPs for Public Works activities. Implementation of BMPs are verified during annual inspections and get reinforced though daily interactions.	Implement minimum BMPs

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
C. PUBLIC SERVICE REQUESTS				
Respond to all road service requests received	N/A	N/A	The City does not currently track public service requests for road maintenance activities.	Respond to all road service requests received
Respond to all sewer spills received and log in appropriate data bases	6 sewer spills reported	Completed	In the event of a sewer spill, City staff follows procedures laid out in its Sanitary Sewer Overflow Response Plan. All but one sewer spill during FY 08-09 were from private laterals. The exception is from a spill occurring from Imperial Beach Pier.	Respond to and report all sewer spills received
D. MUNICIPAL STORM DRAIN INSERTS AND STORM WATER DIVERSIONS				
Maintain municipal treatment control devices	Maintenance implemented for the 10th St interceptor	Complete	The City maintains a vortech storm water interceptor at the intersection of 10th St and Imperial Beach Blvd. The system was installed in December 2002 and is designed to remove sediment, floating hydrocarbons, and debris from storm water during all levels of flow. The City inspects the 10th St interceptor at least quarterly.	Maintain municipal treatment control devices
Maintain municipal storm drain filters	Maintenance implemented for 13 municipal storm drain filters	Complete	The City voluntarily installed storm drain inlet filters at 13 municipal locations. During this reporting period the City added one additional storm drain filter insert at the Imperial Beach Sports Park. Each filter is designed to capture sediment, hydrocarbons, trash, and debris. The filters are inspected and maintained quarterly by contract service. Table 4.3 provides the inventory and cleaning records for the municipal storm drain inserts.	Maintain municipal storm drain filters

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
Maintain urban runoff diverters	Palm Ave street end low-flow urban runoff diverter became operational January 5, 2009; City continued operation of the Date Ave street end diverter	Complete	The City finished completion of the Palm Ave street end low-flow urban runoff diverter on January 5, 2009. The City now operates two low-flow urban runoff diverters along the beach front. Both diverters have the capacity to divert up to 250 GPM into the sanitary sewer.	Maintain urban runoff diverters
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM THE MUNICIPALITY INCLUDING THE MS4)				
A. DEBRIS REMOVAL (SWEEPING ACTIVITIES)				
Not targeted	206 tons of trash and debris removed through sweeping of streets, roads, highways, and municipal parking facilities	---	The amounts of debris collected are highly variable from year to year, as shown in Figure 4.2. Therefore, even though the overall yield of debris from sweeping this year was a little higher, this should not be interpreted as a trend. The City will continue to monitor results over a longer period, but believes its existing resources and schedules are properly allocated.	Not targeted

Table 4.2 – Targeted Outcomes and Results for the Municipal Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
B. REMOVAL (NON-SWEEPING ACTIVITIES)				
Not targeted	Collect trash and debris along City-maintained roads; EDCO collected 174 loads of bulky items illegally dumped in alleys	---	The City has a dedicated Tidelands Maintenance Division, funded by the Port of San Diego, whose mission is to keep the beach and one block inland from the beach free of trash, sand, and other debris. The City also maintains a contract with Donavan Correctional Facility to provide supervised labor for various needs including landscaping and trash pickup. In addition the City has a contract with EDCO to collect items illegally discarded in City alleys. Finally, the Streets and Parks Divisions play a crucial role in keeping the City free of trash. At this time it is not particle for the City to track this element of trash and debris along City-maintained roads.	Not targeted
Clean accumulations of trash and debris in the MS4 greater than 33% of design capacity	4,130 pounds of trash, debris and organic matter removed from MS4		There are approximately 117 catch basins and inlets that are inspected annually, and, if necessary, are cleaned if trash is observed. The amounts of debris collected are highly variable from year to year, as shown in Figure 4.3, and may be attributed to the estimation process used. Therefore, even though the overall yield of debris from cleaning this year was considerably reduced, this should not be interpreted as a trend. The City will continue to monitor results over a longer period, but believes its existing resources and schedules are properly allocated, and has made efforts to improve the estimation process.	Clean accumulations of trash and debris in the MS4 greater than 33% of design capacity
Divert urban low-flow runoff	192,000 gallons of urban runoff was diverted to the sanitary sewer during the first 6 months of operation of the Palm Ave diverter	In progress	The City conducted weekly post construction monitoring for bacteria and tracked diverted flow at the Palm Ave diverter. During the first 6 months 192,000 gallons of urban runoff was diverted to the sanitary sewer and prevented from flowing to the Pacific. Weekly bacterial analysis also revealed elevated levels of bacteria in the diverted flows. Using AB411 monitoring action levels, 85% of the samples were in exceedance of enterococcus and 100% of the samples were in exceedance of total coliform bacteria.	Continue operation of the Palm Ave and Date Ave storm drain diverters

Figure 4.2 – Street Sweeping Totals

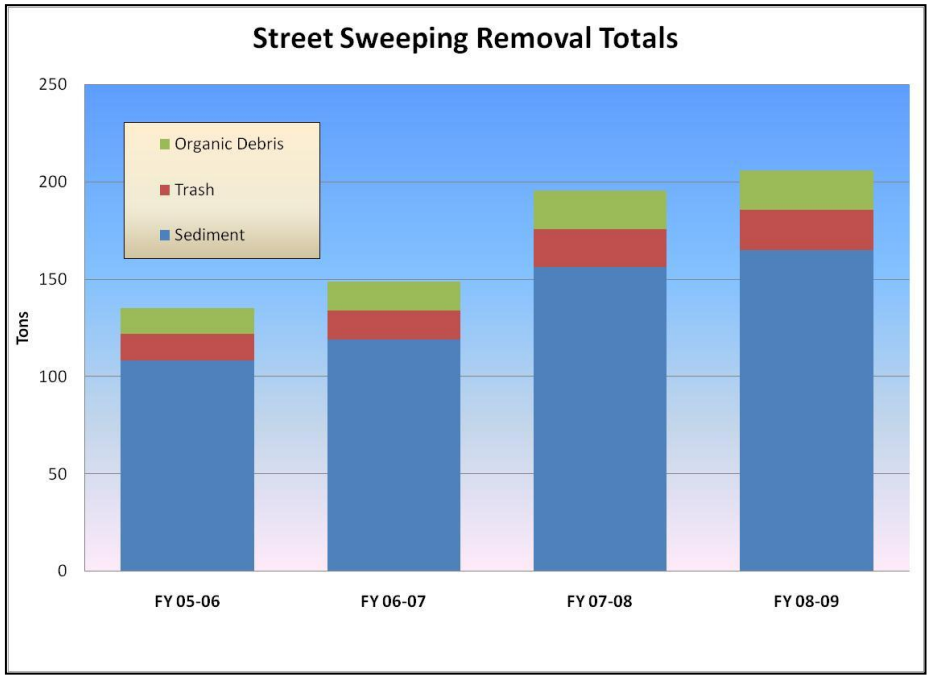


Figure 4.3 – MS4 Cleaning Totals

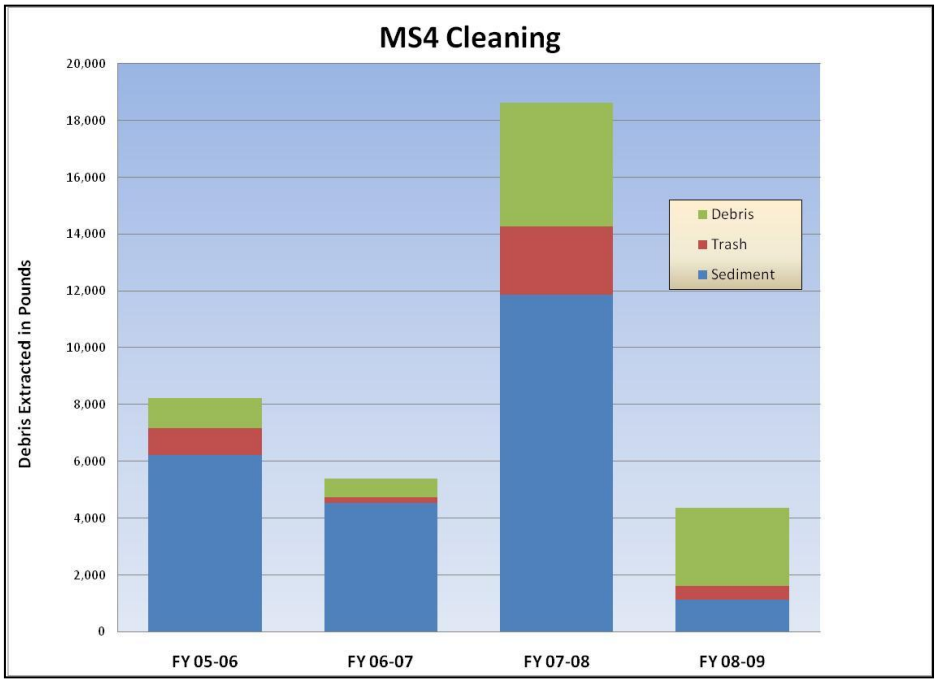


Figure 4.3- The MS4 cleaning totals presented above provide totals by fiscal year. It is important to note that the City endeavors to clean 100% of the MS4 between the months of May-October; therefore, this figure is not a true represetation of the amount removed during an annual cleaning cycle. FY 07-08 also inclues a channel cleaning event, which explains the unusually high totals.

Table 4-3 – Municipal Storm Drain Filter Inventory and Maintenance Records

ID	Filter Type	Address / Location	Watershed	Date of Installation	Date of Service	Service Conducted			Weight of Debris	Materials Collected (lbs.)			Volume Used
						Inspected	Cleaned	Boom(s) Replaced	Removed (lbs.)	Sed	Trash	Org	%
SDF1	Grate Inlet Skimmer Box 18" X 18" Bio-sorb oil absorbing polymers for hydrocarbon removal	495 Tenth St. Public Works Yard (Back of yard)	910.20	13-Oct-03	24-Sep-08	X	X	X	2	X	-	X	5%
					8-Dec-08	X	X	X	5	X	-	X	15%
					16-Mar-09	X	X	X	20	X	-	X	20%
					9-Jun-09	X	X	-	2	X	-	X	10%
SDF2	Grate Inlet Skimmer Box - Round 24" X 24" Bio-sorb oil absorbing polymers for hydrocarbon removal	495 Tenth St. Public Works Yard (Front Parking Area)	910.20	13-Oct-03	24-Sep-08	X	X	-	0.5	X	-	X	3%
					8-Dec-08	X	X	-	2	X	-	X	5%
					16-Mar-09	X	X	X	10	X	-	X	15%
					9-Jun-09	X	X	X	4	X	-	X	10%
SDF3	Grate Inlet Skimmer Box 24" X 36" Bio-sorb oil absorbing polymers for hydrocarbon removal	825 Imperial Beach Blvd. City Hall	911.11	13-Oct-03	24-Sep-08	X	na	na	2	X	-	X	29%
					8-Dec-08	X	na	na	25	X	-	X	25%
					16-Mar-09	X	X	X	40	X	-	X	20%
					9-Jun-09	X	X	-	6	X	-	X	10%
SDF4	Grate Inlet Skimmer Box 12" X 12" Bio-sorb oil absorbing polymers for hydrocarbon removal	865 Imperial Beach Blvd. Fire Station	911.11	13-Oct-03	24-Sep-08	X	X	X	2	X	-	-	15%
					8-Dec-08	X	X	-	0	-	-	-	0%
					16-Mar-09	X	X	X	0.2	X	X	X	1%
					9-Jun-09	X	X	-	0.4	X	X	X	2%
SDF5	Grate Inlet Skimmer Box 24" X 30" Bio-sorb oil absorbing polymers for hydrocarbon removal	8th St. / Marina Vista Marina Vista Center	911.11	13-Jan-03	24-Sep-08	X	X	X	9	-	-	X	5%
					8-Dec-08	X	X	X	25	-	-	X	50%
					16-Mar-09	X	X	X	4	X	-	X	10%
					8-Jun-09	X	X		5	X	-	X	30%

ID	Filter Type	Address / Location	Watershed	Date of Installation	Date of Service	Service Conducted			Weight of Debris	Materials Collected (lbs.)			Volume Used
						Inspected	Cleaned	Boom(s) Replaced	Removed (lbs.)	Sed	Trash	Org	%
SDF6	Grate Inlet Skimmer Box 24" X 36" Bio-sorb oil absorbing polymers for hydrocarbon removal	Seacoast Dr. / Palm Ave. City Parking Lot	910.10	13-Jan-03	3-Jul-08	X	na	na	0	na	na	na	0%
					24-Sep-08	X	na	na	0	na	na	na	0%
					8-Dec-08	X	na	na	0	na	na	na	0%
					16-Mar-09	X	na	na	0	na	na	na	0%
					8-Jun-09	X	X	X	30	X	X	X	25%
SDF7	Pipe Skimmer 24" X 24" Bio-sorb oil absorbing polymers for hydrocarbon removal	Hemlock Ave. / 15th St. City Easement	911.11	12-Jan-05	3-Jul-08	X	na	na	0	na	na	na	0%
					24-Sep-08	X	X		0.8	X	X	-	1%
					8-Dec-08	X	-	-	0	-	-	-	0%
					16-Mar-09	X	X	-	0.125	X	X	X	0%
					9-Jun-09	X	-	-	0.1	X	X	X	0%
SDF8	KriStar, Flo Gard Plus Catch Basin Insert 18" X 36" Hydrocarbon absorption boom	839 10 St. City Alley East of 10 St. between Elm and Donax	910.20	3-Nov-05	3-Jul-08	X	X	-	1	X		X	5%
					24-Sep-08	X	X	X	0.5	X	X	X	3%
					8-Dec-08	X	X	-	0.5	X		X	3%
					16-Mar-09	X	X	X	6	X	X	X	10%
					9-Jun-09	X	X	-	2	X	X	X	10%
SDF9	2 Grate Inlet Skimmer Boxes 24" X 36" Hydrocarbon absorption boom	Alley abutting 8th St City Alley 100 yd South of Palm	910.20	22-Feb-07	3-Jul-08	X	X	-	0.5	X	-	-	0%
					24-Sep-08	X	X	X	1	X	X	X	6%
					8-Dec-09	X	X	-	5	X	-	X	3%
					16-Mar-09	X	X	X	12	X	X	X	15%
					8-Jun-09	X	X	-	5	X	X	X	10%

ID	Filter Type	Address / Location	Watershed	Date of Installation	Date of Service	Service Conducted			Weight of Debris	Materials Collected (lbs.)			Volume Used
						Inspected	Cleaned	Boom(s) Replaced	Removed (lbs.)	Sed	Trash	Org	%
SDF10	Grate Inlet Skimmer Box 32" X 40" Hydrocarbon absorption boom	Alley b/w 8th St. & Delaware St just South of Palm Commercial Ctr.	910.20	5-Feb-07	3-Jul-08	X	X	-	8	X	-	X	5%
					24-Sep-08	X	X	X	0.25	X	-	X	1%
					8-Dec-08	X	X	-	8	X	-	X	5%
					16-Mar-09	X	X	X	45	X	-	X	15%
					8-Jun-09	X	X	-	5	X	-	X	5%
SDF11	Grate-Inlet Box 24" X 36" Hydrocarbon absorption boom	Curb inlet at SW Corner 9th St. and Palm Ave	910.20	22-Feb-07	3-Jul-08	X	X	-	2	X	X	X	16%
					24-Sep-08	X	X	X	2	X	X	X	90%
					8-Dec-08	X	X	-	1	X	X	X	25%
					16-Mar-09	X	X	X	3	X	X	X	80%
					8-Jun-09	X	X	-	5	X	X	X	90%
SDF12	KriStar, Flo Gard Plus Catch Basin Insert	740-798 Florida Street City Alley behind appartment complex	910.20	17-May-07	3-Jul-08	X	X	-	2	X	X	X	10%
					24-Sep-08	X	X	X	3	X	X	X	15%
					8-Dec-08	X	X	-	35	X	X	X	25%
					16-Mar-09	X	X	X	60	X	X	X	40%
					8-Jun-09	X	X	-	5	X	X	X	15%
SDF13	Round Hyrdo Flow Guard Plus and hydrocarbon booms 24" Diameter Grate and 22" Diamerter Inlet	4th Street South end of parking lot at Sports Park	911.11	29-Jun-09	29-Jun-09	X	-	X	-	-	-	-	-

Table 4.4 – Municipal Facility and Activity Inventory and Inspection Record

ID	Name	Inspection Date	Address	Type1	Type2	Type3	Watershed	Receiving Water	303(d) Tributary Status	ESA Status	Inspection Priority
M-1	Public Works Yard	5/14/09	495 10th Street	Office Building	Corporate Yard	Parking Lot	910.20	Otay River	No	Yes	High
M-2	Dempsey Holder Safety Center	Tidelands and Lifeguards Daily, Director yearly	950 Ocean Lane	Office Building	Corporate Yard		911.11	Pacific Ocean	Yes	Yes	High
M-3	Fire Station	5/14/2009 Env	865 Imperial Beach Boulevard	Office Building	Fire Station	Parking Lot	911.11	Tijuana Estuary	Yes	No	High
M-4	City Hall	5/14/2009 Env	825 Imperial Beach Boulevard	Office Building	Parking Lot		911.11	Tijuana Estuary	Yes	No	High
M-5	Marina Vista Center	5/20/2009 Env 3/3/2009 Dir	1075 8th Street	Office Building	Parking Lot		911.11	Tijuana Estuary	Yes	No	Low
M-6	I.B. Boys & Girls Club	5/20/2009 Env	847 Encina Avenue	Office Building	Parking Lot		911.11	Tijuana Estuary	Yes	No	Med
M-7	Veteran's Park	5/20/2009 Env	9th Street / Imperial Beach Boulevard	Park	Parking Lot		911.11	Tijuana Estuary	Yes	No	High
M-8	Reama Park	5/20/2009 Env	Elder Avenue / Elkwood Avenue	Park	Parking Lot		911.11	Pacific Ocean	Yes	No	Med
M-9	Sports Park & Recreation Center	6/4/2009 Env 3/3/2009 Dir	425 Imperial Beach Avenue	Park	Office Building	Parking Lot	911.11	Tijuana Estuary	Yes	No	High
M-10	Teeple Park	5/20/2009 Env	Calla Avenue / Florida Street	Park	Parking Lot		910.20	Otay River	No	No	Med
M-11	Triangle Park	5/20/2009 Env	7th Street / Palm Avenue	Park			910.20	Otay River	No	No	Med
M-12	Dunes Park	5/20/2009 Env	700 Seacoast Drive	Park	Parking Lot		910.10	Pacific Ocean	Yes	Yes	High
M-13	Pier Plaza	Tidelands Daily	Evergreen Street / Seacoast Drive	Park			911.11	Pacific Ocean	Yes	Yes	High
M-14	Imperial Beach Pier	Tidelands Daily	Evergreen Street / Seacoast Drive	Miscellaneous			N/A	Pacific Ocean	Yes	Yes	High
M-15	Beachfront	Tidelands and Lifeguards Daily	Mexican Border to YMCA Camp Surf	Miscellaneous			N/A	Pacific Ocean	Yes	Yes	Med

ID	Name	Inspection Date	Address	Type1	Type2	Type3	Watershed	Receiving Water	303(d) Tributary Status	ESA Status	Inspection Priority
M-16	Seacoast & Palm Parking Lot	6/10/2009 Env Director also inspects yearly	Seacoast Drive & Palm Avenue	Parking Lot			910.10	Pacific Ocean	Yes	Yes	High
M-17	Elkwood Parking Lot	6/10/2009 Env Director also inspects yearly	Seacoast Drive & Elkwood Avenue	Parking Lot			911.11	Pacific Ocean	Yes	Yes	High
M-18	Underground MS4	Sewer and Enviro Div inspect and clean	Citywide	MS4			All	All	Yes	Yes	High
M-19	Pump Station #11 (Storm Drain)	Sewer Daily and Weekly Env Mang	Palm Avenue street end	MS4			910.10	Pacific Ocean	Yes	Yes	High
M-20	Underground Sewer	Sewer vactor once per year	Citywide	Sewer			All	All	Yes	Yes	High
M-21	Pump Station #1A (Underground)	Sewer Weekly Director (June)	862 Seacoast Drive	Sewer			910.10	Pacific Ocean	Yes	Yes	High
M-22	Pump Station #1B (Underground)	Sewer Weekly Director (March)	1098 Seacoast Drive	Sewer			911.11	Pacific Ocean	Yes	Yes	High
M-23	Pump Station #2 (Above ground)	Sewer Weekly Director (July)	1306 South Seacoast Drive	Sewer			911.11	Tijuana Estuary	Yes	Yes	High
M-24	Pump Station #3 (Underground)	Sewer Weekly Director (April)	501 Elm Avenue	Sewer			911.11	Tijuana Estuary	Yes	No	High
M-25	Pump Station #4 (Underground)	Sewer Weekly Director (Dec)	755 Delaware Avenue	Sewer			911.11	Tijuana Estuary	Yes	No	High
M-26	Pump Station #5 (Underground)	Sewer Weekly Director (May)	133 Dahlia Avenue	Sewer			910.10	Pacific Ocean	Yes	No	High
M-27	Pump Station #6 (Underground)	Sewer Weekly Director (Nov)	498 Rainbow Street	Sewer			910.10	San Diego Bay	Yes	No	High
M-28	Pump Station #7 (Underground)	Sewer Weekly Director (Oct)	504 Oneonta Avenue	Sewer			911.11	Tijuana Estuary	Yes	No	High

ID	Name	Inspection Date	Address	Type1	Type2	Type3	Watershed	Receiving Water	303(d) Tributary Status	ESA Status	Inspection Priority
M-29	Pump Station #8 (Underground)	Sewer Weekly Director (Jan)	895 Imperial Beach Boulevard	Sewer			911.11	Tijuana Estuary	Yes	No	High
M-30	Pump Station #9 (Underground)	Sewer Weekly Director (August)	1025 9th Street	Sewer			911.11	Tijuana Estuary	Yes	No	High
M-31	Pump Station #10 (Above ground)	Sewer Weekly Director (Feb)	814 Cypress Avenue	Sewer			910.20	Otay River	No	No	High
M-32	Streets	Citywide inspections monthly Director (Annually)	Citywide	Streets			All	All	Yes	Yes	High
M-33	Alleys	Citywide inspections monthly	Citywide	Streets			All	All	Yes	Yes	High
M-34	Traffic Islands	Inspected by Streets and Parks	Citywide	Streets			All	All	Yes	No	Med
M-35	Special Event Venues	Env and Tidelands for each event	Citywide	Miscellaneous			All	All	Yes	Yes	High
M-36	Graffiti Removal	Annual Training	Citywide	Miscellaneous			All	All	Yes	Yes	High
M-37	Serenity Garden	6/30/2009 Env	Silver Strand Blvd and Citrus Ave	Park			910.10	Otay River	No	No	Med

5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 Introduction

The City endeavors to prevent or eliminate the discharge of pollutants and runoff from industrial and commercial sources. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and its efforts to oversee compliance with urban runoff regulations at businesses within the City and reduce the discharge of pollutants to the MS4 to the maximum extent practicable (MEP). The City is tasked with educating businesses about urban runoff management and overseeing their compliance with applicable Municipal Storm Water Permit requirements. This section of the Annual Report discusses program implementation and changes made during FY 2008-09 to the Industrial and Commercial Component as it relates to management program activities and outcomes targeted for staff implementing control measures.

5.2 Level 1 Outcomes – Management Program Activities

5.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, updates to program documentation, training content, and materials. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the Industrial and Commercial Component is described in the *2008 JURMP Section 7.0*. During the reporting period the City made routine updates to the Commercial and Industrial business inventory. The inventory is maintained on the Environmental Division Server and identifies all industrial and commercial facilities that could contribute pollutant loads to the MS4. The City currently does not have any industrial facilities on that inventory. As of the most recent update in February 2009, the City had a total of 170 commercial and zero industrial businesses on the inventory. Records are also maintained for each specific business on inspections, corrective actions, and illegal discharges.

The City is also currently in the process of updating the stationary business inventory to match the San Diego Copermittees Standardized Regional Industrial and Commercial Inventory template. The City is collaborating with the San Diego Copermittees in the development of an online Regional Mobile Business database. Both the Standardized Regional Commercial and Industrial Inventory template and online Regional Mobile Business database will be in operation for FY 2009-10.

An overview of the City's industrial and commercial inventory and facility classification is provided in Table 5.1.

During FY 2008-09 additional updates were made to the commercial business inspection program and to the inspection education materials. The City updated its commercial inspection form and started inspecting food service businesses for fats, oils, and grease (FOG) compliance. Updates were also made to the "Best Management Practices for your Business" brochure, which is distributed during every commercial inspection.

Figure 5.1 presents the implementation and assessment strategy for the major elements of the Commercial and Industrial Component as it was implemented during FY 2008-09. Figure 5.2 provides the updated "Best Management Practices for your Business" brochure and Figure 5.3 provides the updated Commercial Inspection Form.

5.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses Jurisdictional requirements, municipal training, commercial site inspections, public awareness and response, and surveys and special investigations.

The Environmental Division performs inspections at all high priority commercial businesses in the City. The City also inspects non-high priority business and mobile businesses during the year as necessary. Commercial inspection records conducted during this reporting period is provided in Table 5.3. Inspections are conducted and documented as outlined in the *2008 JURMP Section 7.0*. Annual training for City staff also addresses BMP requirements for commercial businesses. City staff is encouraged to report to the Environmental Division any illicit discharges or activities observed from businesses. The combination of inspections and observant City staff has contributed to the high success of the commercial inspection program.

In addition to City staff reporting illegal discharges, the Environmental Division also responds to calls to the storm water hotline and from online complaints. However, the vast majority of storm water violation reports are made from City staff. The low number of commercial businesses and relatively contained commercial zoning allows City staff to be the predominant eyes on the street for identifying storm water violations.

Table 5.2 presents and describes targeted FY 2008-09 outcomes and results, as well as implementation targets for FY 2009-10.

5.3 Outcomes Targeted for Staff Implementing Control Measures

5.3.1 Outcome Level 2 – Knowledge and Awareness

The City conducts annual training for all municipal employees. The training program for the Industrial and Commercial Component is specifically targeted at the Public Works Department because the Streets, Maintenance, and Sewer Crews are typically the first line of defense for storm water pollution. A training program has been implemented within the City to inform all

employees of the components and goals of the *2008 JURMP*. Training focuses on the use of Best Management Practices in daily operations, and is designed to create an overall sensitivity to pollution prevention concerns. Open discussions are encouraged to reinforce the importance of pollution prevention and enhance the program. The education effort relating to the Commercial and Industrial Component is discussed in the *2008 JURMP Section 10.0.*

5.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The City facilitates changes in behavior and implementation of BMPs at commercial businesses by providing continuous education efforts through face-to-face interactions, routine inspections, dissemination of brochures, mailing of post inspection letters, and responding to illegal storm water discharges. The *2008 JURMP Appendix F* defines minimum BMP requirements applicable to industrial and commercial projects in the City. The *2008 JURMP Section 7.0* provides more information on the procedural and administrative mechanisms in the City that promote behavioral changes for commercial, industrial, and mobile businesses. Addition information is presented below in Table 5.2 on the targeted outcomes and results for changes in behavior and BMP implementation as they were implemented in FY 2008-09.

5.3.3 Outcome Level 4 – Source Load Reductions

The two step approach of education on storm water pollution and enforcement of BMPs have unquestionably resulted in the source load reductions from commercial businesses. Although the City does not currently track source load reductions from commercial sites, the increased level of knowledge on storm water BMPs and cooperation among the local business community have successfully prevented the release of pollutants from commercial businesses. Table 5.2 provides a breakdown of program implementation and targeted outcomes and results for FY 2008-09.

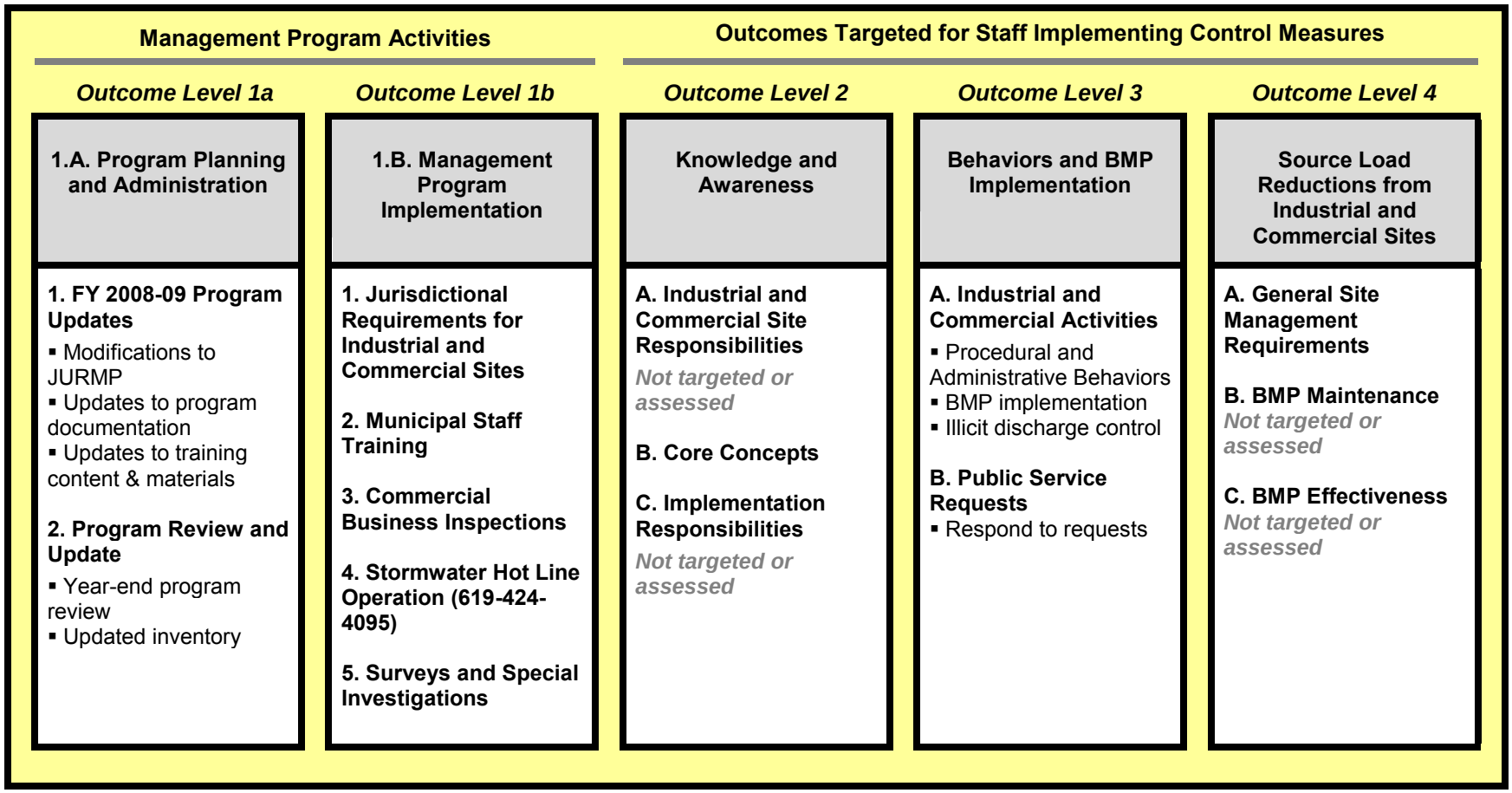


Figure 5.1 – FY 2008-09 Implementation and Assessment Strategy for the Industrial and Commercial Component

Table 5.1 – Overview of Industrial and Commercial Component by Facility Type and Priority Classification

Category	Number	Description
A. Type of Facility		
Industrial	0	Industrial activity is extremely limited. Only one business in operation that can reasonably be classified as "industrial" is a surfboard manufacturing company that performs all of its operations indoors, and is very similar to a commercial facility. The term "commercial" is therefore used for the activities within the City. As such, there is no need in this jurisdiction to identify non-filers under the General Industrial Permit.
Commercial	170	
B. Priority Classification Totals		
High	38	High Priority include all businesses conducting outdoor or high threat to water quality activities, businesses known to have one or more treatment control BMP, and any business that had a previous storm water violation in the last reporting cycle. Medium Priority includes similar business but do not have high threat to water quality activities or conduct work outdoors. Low Priority includes all other businesses listed on the Commercial inventory.
Medium	102	
Low	---	
Mobile	30	Mobile business database is tracked and maintained on the new copermittee online Regional Mobile Business Inventory.
C. Inspection Totals		
High	38	The Environmental Division conducts all commercial inspections. Starting this reporting period 100% of high priority commercial businesses receive an annual inspection. The City endeavors to inspect as many businesses as possible during the reporting period.
Medium	12	
Mobile	---	Mobile businesses do not currently receive annual inspections. The Environmental Division informally inspects mobile businesses while responding to illegal discharge reports and public service requests.

JURMP Sections	Description of FY 2008-09 Changes
7.0 and Appendix F	BMP requirements of the JURMP applicable to industrial and commercial facilities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2008-09 PROGRAM UPDATES				
a) MODIFICATIONS TO JURMP				
Update applicable JURMP sections per new Permit requirements	No updates made during FY 2008-09	Complete	Applicable updates were included in *JURMP Section 7.0*, submitted to the RWQCB on 03-24-08.	Not targeted
b) UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
Update program documentation for consistency with program updates	Updates made to Commercial Inspection Form and Mobile Business database. Fats, oils, and grease (FOG) program included with restaurant inspections.	Complete	The City made updates to its commercial inspection form. In addition, the City participated with the Copermittees Industrial and Commercial Workgroup in developing an online Mobile Business database and worked towards developing a standardized commercial business inventory list and standardized inspection form. The City also started incorporating fats, oils, and grease (FOG) management as part of the commercial business inspection for restaurants.	Make updates to program documentation as needed
c) UPDATES TO TRAINING PROGRAM				
Update training materials for consistency with *2008 JURMP Section 10.0*	Made updates to municipal survey	Under review	The City makes annual updates to the municipal training content and materials so that each education activity provides appropriate information for the target audience.	Update training materials for consistency with *2008 JURMP Section 10.0*

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
a) YEAR-END PROGRAM REVIEW				
Complete annual year-end program review	Review underway	In progress	An annual program review for the Industrial and Commercial Component is underway during the development of this JURMP Annual Report. The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.	Complete annual year-end program review
b) UPDATED SOURCE INVENTORY				
Update commercial inventory	Routine updates made to the commercial inventory. Last updates were made February 2009.	Complete	Routine updates are made to the commercial and industrial business inventory. A regional online mobile business database is also maintained as needed.	Update commercial inventory
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. Jurisdictional Requirements for Industrial and Commercial Sites				
Require commercial and industrial businesses to implement BMPs	Requirements implemented	Complete	The City requires all commercial and industrial sites/sources to implement designated minimum BMPs and other measures to prevent the discharge of pollutants to the MEP. The City's Urban Runoff Management and Discharge Control Ordinance (Chapters: 8.30.070, 8.30.090, and 8.30.100) mandate the implementation of designated BMPs and control measures.	Require commercial and industrial sites to implement appropriate BMPs

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. Municipal Staff Training				
Provide training for FY 2008-09	Training provided to Community Development Department 9/23/08 and Public Works Department 9/17/08	Complete	Training was conducted on 9/23/08 for the Community Development Department (Planning Division, Building Division, Code Compliance Division, and Redevelopment Division) and Public Works Department 9/17/08 on the necessary elements of the storm water program. A survey was also provided to establish a baseline of knowledge. Daily interaction with City staff ensures that storm water pollution prevention remains a high priory throughout the City.	Provide municipal staff training for FY 2009-10
3. Commercial Business Inspections				
Inspect commercial sites and activities	Conducted inspections at 100% of high priority commercial businesses, at non-high priority businesses, and as needed with mobile businesses	Complete	Commercial businesses are inspected as per the Municipal Permit. The City does not contract out inspections; therefore, no third party inspections were conducted. Efforts to address mobile businesses are underway through the Copermittee workgroup.	Inspect commercial facilities, including mobile sources as necessary
4. Storm Water Hotline Operation				
Operate a hotline to provide the public opportunities to report illegal storm water discharges	Hotline operated throughout reporting period	Complete	A Storm Water Hotline (619-424-4095) was operated throughout FY 2008-09 to provide the public a means of reporting illegal storm water discharges from commercial businesses.	Operate a hotline to provide the public opportunities to report illegal storm water discharges

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
5. Surveys and Special Investigations				
Provide a survey to municipal staff	Administered a survey to municipal staff as part of annual training program	Complete	Training was conducted on 9/23/08 for the Community Development Department and 9/17/08 for the Public Works Department on the necessary elements of this component. A survey was provided to establish a baseline of knowledge. The City incorporates surveys or pre and post tests into training programs and administers them when appropriate.	Survey municipal staff to ascertain baseline knowledge of storm water program
Enhance commercial inspection program	Incorporate fats, oils, and grease (FOG) management into commercial inspection program	Under review	The inspection of FOG management practices at eating and drinking establishments is a new program being implemented into the commercial inspection program to target the prevention of sanitary sewer overflows. The Environmental Division is working closely with the Sewer Division to identify FOG hotspots. The City continues to refine outreach and education efforts with businesses and local community.	Include a FOG management practices as part of the commercial inspection of eating and drinking establishments

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND BUSINESSES)				
Establish a baseline of staff knowledge regarding applicable program content	Performed a survey on 9/23/08 of Community Development and 9/17/08 of Public Works Department as part of annual training.	Survey consisted of a 16 question test. The results are as follows: Community Development Department (12 surveys completed) and average score 89%. Public Works Department (23 surveys completed) and average score 81%.	Training was conducted on 9/23/08 for the Community Development Department and 9/17/08 for the Public Works Department on the necessary elements of this component. The survey administered during the training session provides a baseline of knowledge of core concepts and helps in refining the municipal training program for the next reporting period. The City incorporates surveys or pre and post tests into training programs and administers them when appropriate. Results from this reporting period indicate that the Community Development Department has a greater level of knowledge on core concepts of the storm water program than the Department of Public Works. The overall results still show a high level of knowledge on core storm water management concepts in the City.	Survey municipal staff to assess knowledge of storm water program
Not targeted or assessed	---	---	No attempts have been made to establish a baseline level of knowledge and awareness of core storm water program concepts at local businesses. Anecdotal evidence such as high level of compliance noted during commercial inspections and continual interaction with local business owners suggest a high level of knowledge of basic storm water concepts.	Survey local businesses to assess baseline knowledge of storm water program

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND BUSINESSES)				
A. INDUSTRIAL AND COMMERCIAL ACTIVITIES				
1. Procedural and Administrative Behaviors				
July 1, 2008 through June 30, 2009				
Inspect businesses for compliance	50 sites inspected (38 High Priority and 12 Medium Priority)	Complete	The City inspections 100% of high priority commercial businesses, non-high priority businesses, and mobile businesses as needed. Inspections consist of observing business operations, reviewing minimum BMPs, and enforcing pollution prevention practices.	Inspect businesses
Notify business owners/operators of BMP requirements, including mobile businesses	71 sites notified (54 Fixed Commercial and 17 Mobile Businesses)	Complete	The City notifies business owners and operators, both fixed and mobile, of BMP requirements through a combination of methods including site inspections, follow-up inspection reports, direct mailings, inclusion of BMP information with business license and special event vendor packets, advertisements in newspapers, online resources such as the Project Clean Water website and City's website, and targeted workshops focused on specific business sectors. The City only accounts for direct site visits in the implementation results when notifying business owners of BMP requirements. More businesses receive BMP information than are tracked on the City's database.	Notify business owners/operators of BMP requirements, including mobile businesses
Enforce compliance and track violations	71 Verbal contacts 52 Informative letters sent 4 Notice of Violations	Complete	The City enforces compliance at all businesses, including mobile sources, using an escalating series of enforcement actions. Verbal or written warnings are used when violation in question is minor. Notices of Violations (NOVs) may be issued for any observed violation. And escalating administrative penalties, fines, and civil penalties may be enforced for non compliance. Violations are tracked and maintained on the Environmental server database.	Enforce compliance and track violations

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. BMP Implementation				
July 1, 2008 through June 30, 2009				
Not targeted or assessed	---	---	Starting in FY 2009-10, the City will begin incorporating evaluation of business owner and operator knowledge of applicable BMPs, and will determine whether knowledge is being retained over time. Anticipated content includes BMP knowledge and implementation, core concepts of good housekeeping practices, and specific responsibilities including employee training.	Establish a baseline of business operator knowledge regarding applicable BMP implementation
3. Illicit Discharge Control				
July 1, 2008 through June 30, 2009				
Investigate complaints	21 Complaints investigated	Complete	The Environmental Division responds to complaints received from Storm Water Hotline, online complaint form, and City staff. All investigations are documented and	Investigate illicit discharges from businesses
B. PUBLIC SERVICE REQUESTS				
Not targeted or assessed	21 Complaints received and investigated	---	The City does not currently track public service requests for industrial and commercial activities. The City does track reports of illegal discharges from the Storm Water Hotline, online complaint form, and City staff. During this reporting period 21 reports were received and investigated.	Not targeted

Table 5.2 – Targeted Outcomes and Results for the Industrial and Commercial Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM INDUSTRIAL AND COMMERCIAL COMPONENT)				
A. GENERAL SITE MANAGEMENT REQUIREMENTS				
Not targeted or assessed	---	---	Commercial and industrial facilities are required to implement minimum BMPs which are verified during the commercial inspection process. Source load reductions from minimum BMPs are not tracked.	Not targeted
B. BMP MAINTENANCE				
Not targeted	12 Treatment control BMPs installed at commercial businesses	---	The City does not currently track BMP maintenance for industrial and commercial activities. Maintenance and operation compliance for treatment control BMPs for commercial and industrial locations are managed under the Development Planning Component of this Annual Report.	Not targeted

Figure 5.2 – Best Management Practices for your Business Brochures



Storm Water Compliance Inspections

The City of Imperial Beach has developed an inventory of all existing commercial businesses and has prioritized them according to the type of business, proximity to a receiving water and potential threat to water quality.

Based on this prioritization, the City will be conducting storm water compliance inspections of commercial and industrial facilities within the City. Mobile businesses operating within the City may also be inspected.

These inspections will include a meeting with the business owner or operator, a walk through of the facility, a review and evaluation of current best management practices, and recommendations for additional measures that may be required to comply with the City's storm water permit and ordinance.

Report all spills immediately to the Storm Water Hotline: (619) 424-4095 or the Sheriff Dispatch at (619) 585-7232

REMEMBER
ONLY RAIN IN THE STORM DRAIN!

City of Imperial Beach
Storm Water Protection Program
825 Imperial Beach Boulevard
Imperial Beach, CA 91932

Storm Water Hotline: (619) 424-4095

Printed on Recycled Paper

Best Management Practices for your Business

ONLY RAIN IN THE STORM DRAIN!

City of Imperial Beach Storm Water Protection Program

Storm Water Hotline: (619) 424-4095

Did you know that urban storm water is the biggest contributor to coastal water pollution?

Whether your business is 2 blocks or 2 miles from the coast, you can unknowingly contribute to storm water pollution through improper housekeeping and maintenance practices.

One of the most common types of pollution from businesses is contaminated water runoff, usually from cleaning and maintenance activities. Simple best management practices (BMPs) can prevent storm water pollution, and prevention is good business. It means clean water, clean beaches and shows your customers you care about the community.

What is storm water pollution?

Storm water pollution is urban runoff water that has picked up pollutants as it flows through the storm drain system–a network of channels, gutters and pipes that collect runoff from city streets, neighborhoods, construction sites, parking lots, etc. –and empties directly into receiving waters.

In the City of Imperial Beach, these receiving waters are the Pacific Ocean, Tijuana Estuary, Tijuana River, Otay River and San Diego Bay.

What can your business do to help?

The following are steps you can take in and around your business to prevent water pollutants from entering the storm drain.

Good Housekeeping

- Use brooms or mops to clean dumpsters, loading docks, pavements, and sidewalks, instead of using a hose or pressure washing.
- Never disposed of any wash water down the storm drain, streets, sidewalks, parking lots or driveways. Use the sanitary sewer.
- Use non-toxic products for cleaning and gardening maintenance.
- Make sure landscape irrigation is properly set to prevent over irrigation. Landscape should be watered in the early morning or evening and for no longer than 10 minutes.

Materials Storage and Handling

- When possible store materials indoors or under cover areas not exposed to rain and water.
- Store liquids, oil, hazardous waste, and other chemicals in a designated area with secondary containment.
- Keep liquid waste segregated. Many fluids can be recycled through hazardous waste disposal companies, as long as they are not mixed.

Spill Response

- Use absorbents such as cat litter to clean up small spills and disposed properly.
- Keep rags and absorbents readily accessible.
- Keep a spill response plan current and ensure that employees are trained properly.

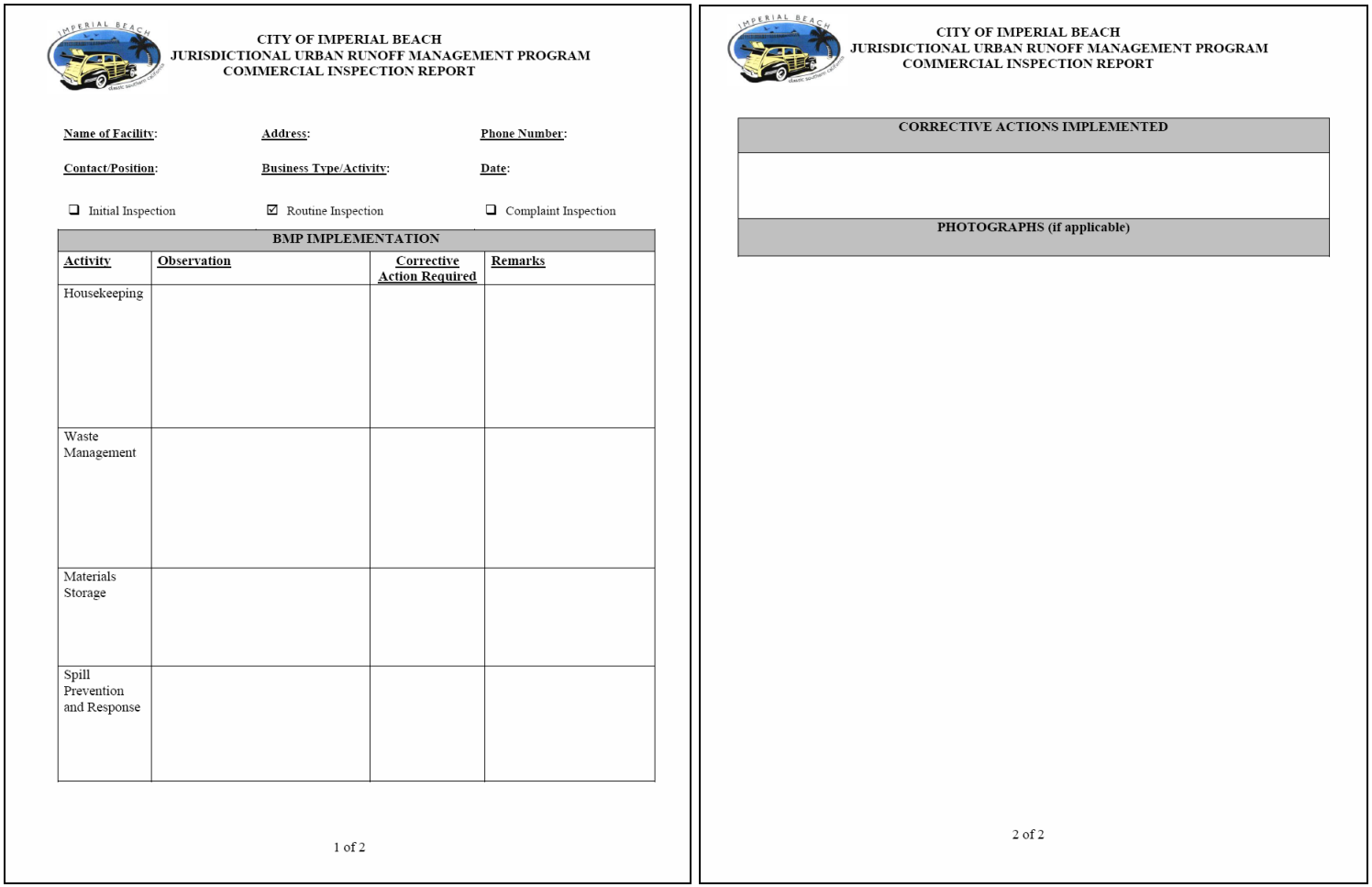
Waste Management

- Keep property free of trash and debris. Keep all trash inside dumpsters or containers until it can be hauled away.
- Dumpster lids should always be kept closed to prevent rainwater from entering.
- Never place hazardous waste in dumpster or trash bin.
- Recycle cans, bottles, paper, cardboards, and newspaper.
- Recycle cooking oil, motor oil and filters, anti-freeze, batteries, solvents, lubricants, tires, etc. These items are not trash, and are illegal to dump. Contact a hazardous waste hauler for proper disposal.

Employee Training

- Conduct regular training with all employees. Train employees on good housekeeping practices and the importance of pollution prevention.
- Inform employees of materials that can be recycled and those that have special disposal requirement. Identify and label containers.
- Post good housekeeping tips and best management practices on visible places such as the kitchen, or employee bulletin boards.
- Inform subcontractors, property managers, gardeners, and maintenance or cleaning crews about the storm water requirements and pollution prevention measures.

Figure 5.3 – Commercial Business Inspection Form



CITY OF IMPERIAL BEACH
JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM
COMMERCIAL INSPECTION REPORT

Name of Facility: **Address**: **Phone Number**:

Contact/Position: **Business Type/Activity**: **Date**:

❑ Initial Inspection ☑ Routine Inspection ❑ Complaint Inspection

BMP IMPLEMENTATION			
Activity	**Observation**	**Corrective Action Required**	**Remarks**
Housekeeping			
Waste Management			
Materials Storage			
Spill Prevention and Response			

1 of 2

CITY OF IMPERIAL BEACH
JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM
COMMERCIAL INSPECTION REPORT

CORRECTIVE ACTIONS IMPLEMENTED
PHOTOGRAPHS (if applicable)

2 of 2

Table 5.3 – Commercial Business Inspections FY 2008-09

BUSINESS NAME	SITE ADDRESS	CLASSIFICATION	SIC Code	METALS	ORGANICS	OIL & GREASE	SEDIMENT	PESTICIDES	NUTRIENTS	GROSS POL	BACTERIA	TRASH	HU AREA	PRIORITY	INSPECTIONS FY 08-09
HAWKINS AUTO BODY	519 FLORIDA ST	AUTO BODY & PAINT	7539	x	x	x	x			x		x	910.20	High	3/10/09
GENES' AUTOMOTIVE	1085 PALM AVE	AUTO REPAIR & MAINTENANCE	7538	x	x	x	x			x		x	910.20	High	3/10/09
TITO AUTO SERVICE	1335 PALM AVE	AUTO REPAIR & MAINTENANCE	7538	x	x	x	x			x		x	910.20	High	3/10/09
MASON'S ALIGNMENT-BRAKE-MUFFLE	975 PALM AVE	AUTO REPAIR & MAINTENANCE	7538	x	x	x	x			x		x	910.20	High	3/10/09
PRECISION FOREIGN	1240 PALM AVE	AUTO REPAIR & MAINTENANCE	7538	x	x	x	x			x		x	910.20	High	3/10/09
SOPHISTICATED AUTO	987 PALM AVE	AUTO REPAIR & MAINTENANCE	7538	x	x	x	x			x		x	910.20	High	3/10/09
TUNES LUBES ETC.	741 PALM AVE	AUTO REPAIR & MAINTENANCE	7538	x	x	x	x			x		x	910.20	High	10/27/08
WALLY'S IGA	836 PALM AVE	FOOD MARKET	5411	x	x	x	x			x	x	x	910.20	High	10/29/08
DEPENDABLE CARBURETOR EXCHANGE	660 EMORY ST	AUTO REPAIR & MAINTENANCE	7538	x	x	x	x			x		x	910.20	High	4/1/09
ALIBERTO'S MEXICAN FOOD	1183 13TH ST	EATING / DRINKING	5812		x	x				x	x	x	910.20	High	4/1/09
BEACH CLUB GRILLE	710 SEACOAST DR, SUITE F	EATING / DRINKING	5812		x	x				x	x	x	910.10	High	4/1/09
El CILANTRO	764 13TH ST	EATING / DRINKING	5812		x	x				x	x	x	910.20	High	4/2/09
EL TAPATIO RESTAURANT INC	260 PALM AVE	EATING / DRINKING	5812		x	x				x	x	x	910.10	High	4/1/09
JACK IN THE BOX #12	890 PALM AVE	EATING / DRINKING	5812		x	x				x	x	x	910.20	High	4/1/09
DON PANCHOS TACO SHOP	690 SR-75	EATING / DRINKING	5812		x	x				x	x	x	910.20	High	4/2/09
ROLANDO'S TACO SHOP	805 SEACOAST DR	EATING / DRINKING	5812		x	x				x	x	x	910.10	High	4/15/09
MICKIES BAR AND GRILL	220 PALM AVE	EATING / DRINKING	5812		x	x				x	x	x	910.10	High	5/6/09
SOMBRERO MEXICAN FOOD	189 PALM AVE	EATING / DRINKING	5812		x	x				x	x	x	910.10	High	5/18/09

BUSINESS NAME	SITE ADDRESS	CLASSIFICATION	SIC Code	METALS	ORGANICS	OIL & GREASE	SEDIMENT	PESTICIDES	NUTRIENTS	GROSS POL	BACTERIA	TRASH	HU AREA	PRIORITY	INSPECTIONS FY 08-09
WOODIES	710 SEACOAST DR, SUITE E	EATING / DRINKING	5812		x	x				x	x	x	910.10	High	4/1/09
YE OLDE PLANK INN	24 PALM AVE	EATING / DRINKING	5813		x	x				x	x	x	910.10	High	5/18/09
SUBWAY	876 SEACOAST DR	EATING / DRINKING	5812		x	x				x	x	x	910.10	High	4/15/09
THE WAVE CAFE	809 SEACOAST DR	EATING / DRINKING	5812		x	x				x	x	x	910.10	High	4/15/09
7-ELEVEN	1311 PALM AVE	RETAIL FUELING	5541	x	x	x	x			x	x	x	910.20	High	5/6/09
7-ELEVEN	1303 IMPERIAL BEACH BLVD	RETAIL FUELING	5541	x	x	x	x			x	x	x	910.20	High	2/6/09
BEACH SIDE STATION	681 SR-75	RETAIL FUELING	5541	x	x	x	x			x		x	910.10	High	4/2/09
ARCO	1185 PALM AVE	RETAIL FUELING	5541	x	x	x	x			x		x	910.20	High	4/2/09
Valero	1300 IMPERIAL BEACH BLVD	RETAIL FUELING	5541	x	x	x	x			x		x	910.20	High	2/6/09
G & M Oil, 76 STATION	907 PALM AVE	RETAIL FUELING	5541	x	x	x	x			x		x	910.20	High	2/6/09
MARRERO'S CAR WASH	1257 IMPERIAL BEACH BLVD	CARWASH	7542	x	x	x	x			x		x	911.11	High	4/15/09
MIKE'S CAR WASH	1117 PALM AVE	CARWASH	7542	x	x	x	x			x		x	910.20	High	4/15/09
RJ's CAR WASH	730 10TH ST	CARWASH	7542	x	x	x	x			x		x	910.20	High	4/15/09
COW-A-BUNGA CA GLACIER FNAM	10 EVERGREEN	EATING / DRINKING	5812		x	x				x	x	x	910.10	High	4/15/09
I.B. MEXICAN GRILL, LLC	1337 PALM	EATING / DRINKING	5812		x	x				x	x	x	910.20	High	5/6/09
KATY'S CAFE	704 SEACOAST	EATING / DRINKING	5812		x	x				x	x	x	910.10	High	4/15/09
KFC CORPORATION	1056 13TH ST	EATING / DRINKING	5812		x	x				x	x	x	911.11	High	10/21/08
LA POSTA MARKET	1268 IMPERIAL BEACH BLVD	FOOD MARKET	5411		x	x				x	x	x	911.11	High	10/20/08
13TH STREET MARKET	1126 13TH ST	FOOD MARKET	5411		x	x				x	x	x	911.11	Non-High	10/27/08
ALL AMERICAN CAR WASH	1158 PALM AVE	CARWASH	7542	x	x	x	x			x		x	910.20	High	10/27/08
BURGER KING #806	1180 PALM AVE	EATING / DRINKING	5812		x	x				x	x	x	910.20	Non-High	10/27/08

BUSINESS NAME	SITE ADDRESS	CLASSIFICATION	SIC Code	METALS	ORGANICS	OIL & GREASE	SEDIMENT	PESTICIDES	NUTRIENTS	GROSS POL	BACTERIA	TRASH	HU AREA	PRIORITY	INSPECTIONS FY 08-09
C.H. DONUTS	1070 13TH ST, SUITE A	EATING / DRINKING	5812		x	x				x	x	x	911.11	Non-High	10/20/08
GIANT PIZZA KING #5	600 PALM AVE, SUITE 100	EATING / DRINKING	5812		x	x				x	x	x	910.2	Non-High	10/20/08
GIANT PIZZA KING #4	1070 13TH ST, SUITE B	EATING / DRINKING	5812		x	x				x	x	x	911.11	Non-High	10/20/08
K-C'S CHINESE FOOD	1299 IMPERIAL BEACH BLVD	EATING / DRINKING	5812		x	x				x	x	x	911.11	Non-High	11/3/08
SIESTA RV PARK	409 PALM AVE	TRAILER PARK	6515		x	x			x	x	x	x	910.20	Non-High	11/3/08
PALM AVENUE LIQUOR & MARKET	1200 PALM	OTHER - FIXED	5411							x		x	910.20	Non-High	10/28/08
MCDONALDS/SCAROB INC.	1135 PALM AVE	EATING / DRINKING	5812		x	x				x	x	x	910.20	Non-High	10/27/08
AROMA THAI	757 SEACOAST DR	EATING / DRINKING	5812		x	x				x	x	x	910.2	Non-High	4/1/09
SEACOAST PIZZA	807 SEACOAST DR	EATING / DRINKING	5812		x	x				x	x	x	910.2	Non-High	4/15/09
PRETZELES AND MORE	10 EVERGREEN #D	EATING / DRINKING	5812		x	x				x	x	x	910.1	High	4/15/09
TIN FISH	910 SEACOAST DR	EATING / DRINKING	5812		x	x			x	x	x	x	910.2	Non-High	5/6/09

6.0 RESIDENTIAL COMPONENT

6.1 Introduction

The City endeavors to prevent or eliminate the discharge of pollutants and runoff from residential sources. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and the City's Code Enforcement Division. Efforts are made to educate the public and oversee compliance with local urban runoff regulations to reduce the release of pollutants to the MEP. This section of the Annual Report discusses program implementation and changes made to the Residential Component as it relates to management program activities and outcomes targeted for staff implementing control measures.

6.2 Level 1 Outcomes – Management Program Activities

6.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, updates to program documentation, training content, materials, and year-end program review. It also addresses participation in a Regional Education Program.

The City's implementation and assessment strategy for the Residential Component is described in the *2008 JURMP Section 8.0*. During FY 2008-09 no updates were made to the high threat to water quality residential areas or activities. Figure 6.2 provides a map of the City and the high threat to water quality residential areas. Table 6.1 also provides an overview of the residential areas and activities. The only update the City made in regards to program documentation was update the Notice of Violation (NOV) form, which is provided in Figure 6.3. All other program planning and administration elements remain unchanged from the *2008 JURMP Section 8.0*.

Figure 6.1 presents the implementation and assessment strategy for the major elements of the Residential Component. Additional documentation on the targeted outcomes and results for the Residential Component is presented in Table 6.2.

During this reporting period, the City participated in the Education and Residential Sources Workgroup with the San Diego Copermittees and held the responsibility of co-chair for the group. Significant progress continues to be made in the areas of media and public relations, materials development, outreach to underserved target audiences, partnership development, regional website development, regional brand, regional events, and program assessment through a county-wide telephone survey.

6.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses Jurisdictional requirements, training activities, residential inspections, public awareness and response, and surveys and special investigations.

The City enforces its storm water ordinances for all residential areas and activities to maintain compliance with the Municipal Storm Water Permit. Public outreach and education as outlined in the *2008 JURMP Section 10.0* encourages residents to comply with the minimum set of BMPs listed in Imperial Beach Municipal Code 8.30.080. The City encourages the use of pollution prevention methods for all residents and provides convenient and cheap house hold hazardous waste disposal. City staff also receives annual training on minimum BMP requirements.

Table 6.2 presents and describes targeted FY 2008-09 outcomes and results, as well as implementation targets for FY 2009-10.

6.3 Outcomes Targeted for Staff Implementing Control Measures

6.3.1 Outcome Level 2 – Knowledge and Awareness

The City conducts annual training for all municipal employees. The training program focuses on the use of Best Management Practices in daily operations, and has been designed to create an overall sensitivity to pollution prevention concerns. Open discussions and active involvement in the monitoring and enforcement of minimum BMPs is encouraged for all staff. Filed staff are trained to recognize illegal discharges and BMP deficiencies and to report them to the Environmental Division. The education effort for the Residential Component is discussed in the *JURMP Section 10.0.*

6.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The City facilitates changes in behavior and implementation of BMPs for high threat to water quality activities and residential areas by providing education through face-to-face interactions, disseminating education materials through various media, and responding to illegal discharges. The *2008 JURMP Appendix G* defines minimum BMP requirements applicable to residential areas and activities in the City. These minimum BMPs were adopted as part of the *Imperial Beach Municipal Code 8.30.080* and became effective March 24, 2008. BMP requirements were reviewed for necessary updates or modifications during the reporting period and no additional changes were determined to be necessary at this time. The *2008 JURMP Section 8.0* provides additional information on the procedural and administrative mechanisms in the City that promote changes in behavior for residential areas.

6.3.3 Outcome Level 4 – Source Load Reductions

The City does not track individual source load reductions to receiving waters from residential areas or activities. However, increased public awareness about urban runoff and implementation of storm water BMPs among residents has undoubtedly prevented the release of some pollutants.

The City continues to quantify load reductions whenever feasible for disposal of household hazardous waste, used oil, and special clean up events. The City provides residents a variety of options for the collection and disposal of house hold hazardous waste. During FY 2008-09 roughly 4.5 tons of hazardous materials were properly disposed or recycled by City residents at the South Bay HHW location. The City also one again held the annual Home Front Clean-up and Citywide Garage Sale events. Participation was up for both the Citywide Garage Sale with 732 participants and Home Front Clean-up with 93 participants. The final total of waste collected during the Home Front Clean Up event was 154.3 tons of trash, metals, green, and construction waste. Table 6.2 provides an overview of FY 2008-09 source load reductions and results for the Residential Component.

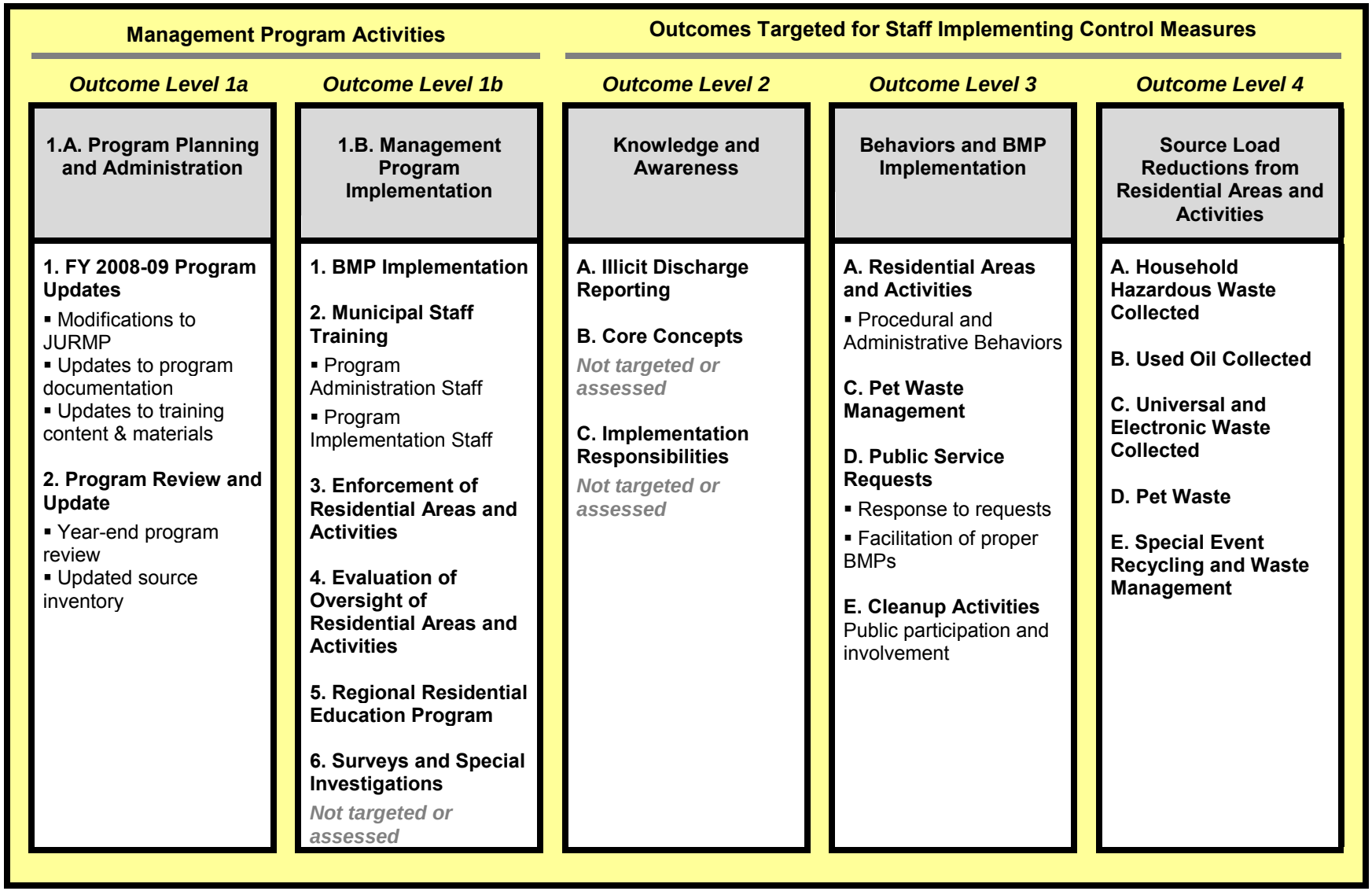


Figure 6.1 – FY 2008-09 Implementation and Assessment Strategy for the Residential Component

Table 6.1 – Overview of Residential Component

Category	Pounds	Number	Description of Changes
A. Residential Threat to Water Quality Prioritization			
High	---	6	All residential areas in the City are considered high priority.
Medium	---	---	
Low	---	---	
B. House Hold Hazardous, Electronic, and Universal Waste Disposal			
Flammable and Poison	2,557	---	Imperial Beach residents have a variety of options for the collection and disposal of house hold hazardous waste. Most residents utilize the South Bay HHW Collection center at the City of Chula Vista. The amount of waste dropped off by Imperial Beach residents is provided in the table to the left. The City also offers curbside pickup of HHW, used oil, and a number of regional collection events for electronic and universal waste. The disposal totals for these additional activities are not provided in this report.
Acid, Base, Oxidizer, and PCB-containing	135	---	
Reclaimable (Antifreeze, Car batteries, Latex Paint, Used Oil and filters)	2,172	---	
Other HHW	3,070		
Universal and Electronic Waste	2,433		
Total Waste Disposed	10,367		

JURMP Sections	Description of FY 2008-09 Changes
8.0 and Appendix G	BMP requirements of the JURMP applicable to residential areas and activities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2008-09 PROGRAM UPDATES				
a) MODIFICATIONS TO JURMP				
Update applicable JURMP sections per new Permit requirements	No updates made during FY 2008-09	Complete	Applicable updates were included in the *2008 JURMP Section 8.0*, submitted to the RWQCB on 03-24-08.	Not targeted
b) UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
Update program documentation for consistency with program updates	Updates were made to the storm water notice of violation (NOV) form	Complete	The City developed a storm water specific Notice of Violation form that is used for code enforcement for both Public Works Department and Community Development Department. The form is provided in Figure 6.3.	Update program documentation for consistency with program updates
c) UPDATES TO TRAINING PROGRAM				
Update training materials for consistency with *2008 JURMP Section 10.0*	Made updates to municipal survey	Under review	The City makes annual updates to the municipal training content and materials so that each education activity provides appropriate information for the targeted audience.	Update training materials for consistency with *2008 JURMP Section 10.0*

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
a) YEAR-END PROGRAM REVIEW				
Complete annual year-end program review	Review underway	In progress	An annual program review for Residential Component is underway during the development of this JURMP Annual Report. The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.	Complete annual year-end program review
b) UPDATED SOURCE INVENTORY				
Identify high threat to water quality areas	Update not needed	---	The City has previously identified the high threat to water quality residential areas and activities. All residential areas in the City are considered high threat to water quality areas. Figure 6.2 provides a map of the high priority residential areas. The *2008 JURMP Section 8.0* provides a list of high threat to water quality activities.	Update as needed
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. BMP Implementation				
Require residents to implement BMPs	Requirements implemented	Complete	The City requires all residential areas to implement designated minimum BMPs and other measures to prevent the discharge of pollutants to the MEP. The City enforces its *Urban Runoff Management and Discharge Control Ordinance* and provides education and outreach to local residents.	Provide BMP handouts and outreach
Facilitate proper management and disposal of household hazardous waste (HHW)	Provided a variety of disposal options for used oil, toxic materials, and other hazardous waste	Complete	The City provides a variety of options for the proper management and disposal of used oil, toxic materials, and other HHW. Residents are generally directed to drop off hazardous materials at the South Bay HHW center at the City of Chula Vista. The City also provides curb side pickups and a number of regional collection events for HHW, used oil, electronic waste, and universal waste.	Facilitate proper HHW management and disposal opportunities

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
Facilitate proper management and disposal of waste	Provided proper waste management at special events and held annual Home Front Clean Up drop-off event	Complete	The City partners with EDCO Disposal to proved proper waste management and disposal for residents. The City also ensures proper waste management and storm water compliance at special events. Additionally, the City once again held its annual Home Front Clean Up drop-off event to collect waste material.	Facilitate proper management and disposal opportunities
2. Municipal Staff Training				
Provide training for FY 2008-09	Training provided to Community Development Department 9/23/08 and Public Works Department 9/17/08	Complete	Training was conducted on 9/23/08 for the Community Development Department (Planning Division, Building Division, Code Compliance Division, and Redevelopment Division) and Public Works Department 9/17/08 on the necessary elements of the storm water program. A survey was also provided to establish a baseline of knowledge. Daily interaction with City staff ensures that storm water pollution prevention remains a high priory throughout the City.	Provide municipal staff training for FY 2009-10
3. Enforcement of Residential Areas and Activities				
Enforce minimum BMPs in residential areas	Responded to storm water violations reported by staff and public	Complete	The City enforces its storm water ordinance and the Municipal Permit for all residential areas and activities through the use of verbal warnings with distribution of BMP literature, Notices of Violation, Notices of Abatement, and additional penalties or fines and civil and/or criminal court actions. The Environmental Division responds to storm water violations, which are reported by City staff and public.	Enforce BMPs

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
4. Evaluation of Oversight of Residential Areas and Activities				
Evaluate methods of oversight and enforcement for residential areas and activities	Operate storm water hotline and utilizes monthly sewer and street inspections to identify BMP deficiencies or storm water violations	Complete	A Storm Water Hotline (619-424-4095) was operated throughout FY 2008-09. The City received 15 reports on the Storm Water Hotline (619-424-4095) for storm water violations in residential areas. The Environmental Division responded to another 40 residential violations reported by City staff. The City also operates an online complaint form that does not get utilized very often. No reports for storm water violations were received during this reporting period from the online complaint form.	Evaluate methods of oversight for residential areas and activities
5. Regional Residential Education Program				
Participate in Regional Residential Education Program	Held co-chair position of the Education and Residential Sources Workgroup and chair position of the Underserved Target Audience Sub-workgroup	On going	During this reporting period, the City participated in the Education and Residential Sources Workgroup with the San Diego Copermittees and held the responsibility of co-chair for the group. Significant progress continues to be made in the areas of media and public relations, materials development, outreach to underserved target audiences, partnership development, regional website development, regional brand, regional events, and program assessment through a county-wide telephone survey.	Participate in Regional Residential Education Program
6. Surveys and Special Investigations				
Not targeted or assessed	---	---	Special investigations were not conducted in FY 2008-09, and are not routinely conducted as part of the implementation strategy for this program element.	Not targeted
Not targeted or assessed	Surveys incorporated into regional educational events	---	Surveys were not included during this reporting period for City based special events. However, surveys were included as part of municipal training and regional education efforts by the Education and Residential Sources Workgroup.	Incorporate surveys into local special events and education activities

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND RESIDENTS)				
Establish a baseline of staff knowledge regarding applicable program content	Performed a survey on 9/23/08 of Community Development and 9/17/08 of Public Works Department as part of annual training.	Survey consisted of a 16 question test. The results are as follows: Community Development Department (12 surveys completed) and average score 89%. Public Works Department (23 surveys completed) and average score 81%.	Training was conducted on 9/23/08 for the Community Development Department and 9/17/08 for the Public Works Department on the necessary elements of this component. The survey administered during the training session provides a baseline of knowledge of core concepts and helps in refining the municipal training program for the next reporting period. The City incorporates surveys or pre and post tests into training programs and administers them when appropriate. Results from this reporting period indicate that the Community Development Department has a greater level of knowledge on core concepts of the storm water program than the Department of Public Works. The overall results still show a high level of knowledge on core storm water management concepts in the City.	Survey municipal staff to assess knowledge of storm water program
Not targeted or assessed	---	---	Starting in FY 2009-10, the City will begin evaluating education success and to determine whether changes in knowledge are being retained over time.	Establish a baseline of resident knowledge regarding urban runoff

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND RESIDENTS)				
A. RESIDENTIAL AREAS AND ACTIVITIES				
1. Procedural and Administrative Behaviors				
July 1, 2008 through June 30, 2009				
Enforce minimum BMPs and track violations	32 Verbal Warnings, 1 Notice of Abatement, 17 Notice of Violations, 11 informative letters, and 3 cleanup cost recoveries	Complete	The City enforces its storm water ordinance and the Municipal Permit for all residential areas and activities through the use of verbal warnings with distribution of BMP literature, Notices of Violation, Notices of Abatement, and additional penalties or fines, including recovery of costs for compensatory damages. The Environmental Division investigates and tracks all storm water violations which are then tracked on the Environmental Division server. The most common violations were over watering, wash water, excessive trash or sediment, and leaking auto fluids. The City's *Urban Runoff Management and Discharge Control Ordinance* establishes minimum BMP requirements for the following residential activities: 1) motor vehicle and boat repair and maintenance; 2) motor vehicle washing; 3) motor vehicle parking; 4) home and garden care activities and product use; 5) home care and maintenance; 6) manure and pet waste management; and 7) private sewer laterals and on-site waste water systems.	Enforce minimum BMPs and track violations
B. PET WASTE MANAGEMENT ACTIVITIES				
Not targeted or assessed	10 pet waste bag dispensers are maintained by the Ocean Blue Foundation	---	The pet waste bag dispenser program is maintained and operated by the Ocean Blue Foundation, a local not for profit group. The City works with the Ocean Blue Foundation to ensure that the pet waste bag dispensers are maintained and the program has adequate funding.	Not targeted

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
C. PUBLIC SERVICE REQUESTS				
Respond to public service requests and reports of storm water violations	Responded to 15 storm water Hotline calls and 40 storm water violations reports from municipal staff	Complete	The City does not currently track public service requests for residential areas and activities. The City does track reports for storm water violations. The City received 15 reports on the Storm Water Hotline (619-424-4095) for storm water violations in residential areas. The Environmental Division responded to another 40 residential violations reported by City staff. The City also operates an online complaint form that does not get utilized very often.	Respond to public serve requests and storm water violations
D. CLEANUP ACTIVITIES				
Not targeted	---	---	The City does not currently consider Level 3 assessment of cleanup activities to be applicable or feasible.	Not targeted
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM THE RESIDENTIAL COMPONENT)				
A. HOUSEHOLD HAZARDOUS WASTE (HHW) COLLECTED				
Not targeted	5,762 pounds of HHW collected	---	The City's HHW disposal program is available to all residents, and the City partners with other jurisdictions in the South Bay to offer convenient, low-cost HHW disposal options.	Not targeted
B. USED OIL COLLECTED				
Not targeted	2,172 pounds of Reclaimable (Antifreeze, Car batteries, Latex Paint, Used Oil and filters) collected	---	The City is required to facilitate the proper management and disposal of used oil, toxic materials, and other HHW through educational and public information activities, and establishment of collection sites operated by the City or a private entity.	Not targeted

Table 6.2 – Targeted Outcomes and Results for the Residential Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
C. UNIVERSAL AND ELECTRONIC WASTE COLLECTED				
Not targeted	2,433 pounds of electronic and universal waste collected	---	The City facilitates the proper management and disposal of universal and electronic wastes.	Not targeted
D. PET WASTE COLLECTED				
Not targeted	10 pet waste bag dispensers; 72,800 bags replaced, and an estimate of 18,200 lbs of pet waste collected	---	The pet waste bag dispenser program is maintained and operated by the Ocean Blue Foundation, a local not for profit group. The City works with the Ocean Blue Foundation to ensure that the pet waste bag dispensers are maintained and the program has adequate funding. If the average pet waste weighs 4 ounces then an estimate of 18,200 lbs of waste was collected.	Not targeted
E. SPECIAL EVENT RECYCLING AND WASTE MANAGEMENT				
Not targeted	93 participants in annual Garage Sale; 732 participants in the annual Home Front Clean Up	---	The City holds an annual Citywide Garage Sale followed the next weekend by the annual Home Front Cleanup event for the purpose of facilitating reuse and the proper disposal of waste materials. The Home Front Clean Up had 732 participants and disposed of 154.3 tons of trash, construction, metals, and green waste.	Not targeted

Figure 6.2 High Priority Residential Neighborhoods

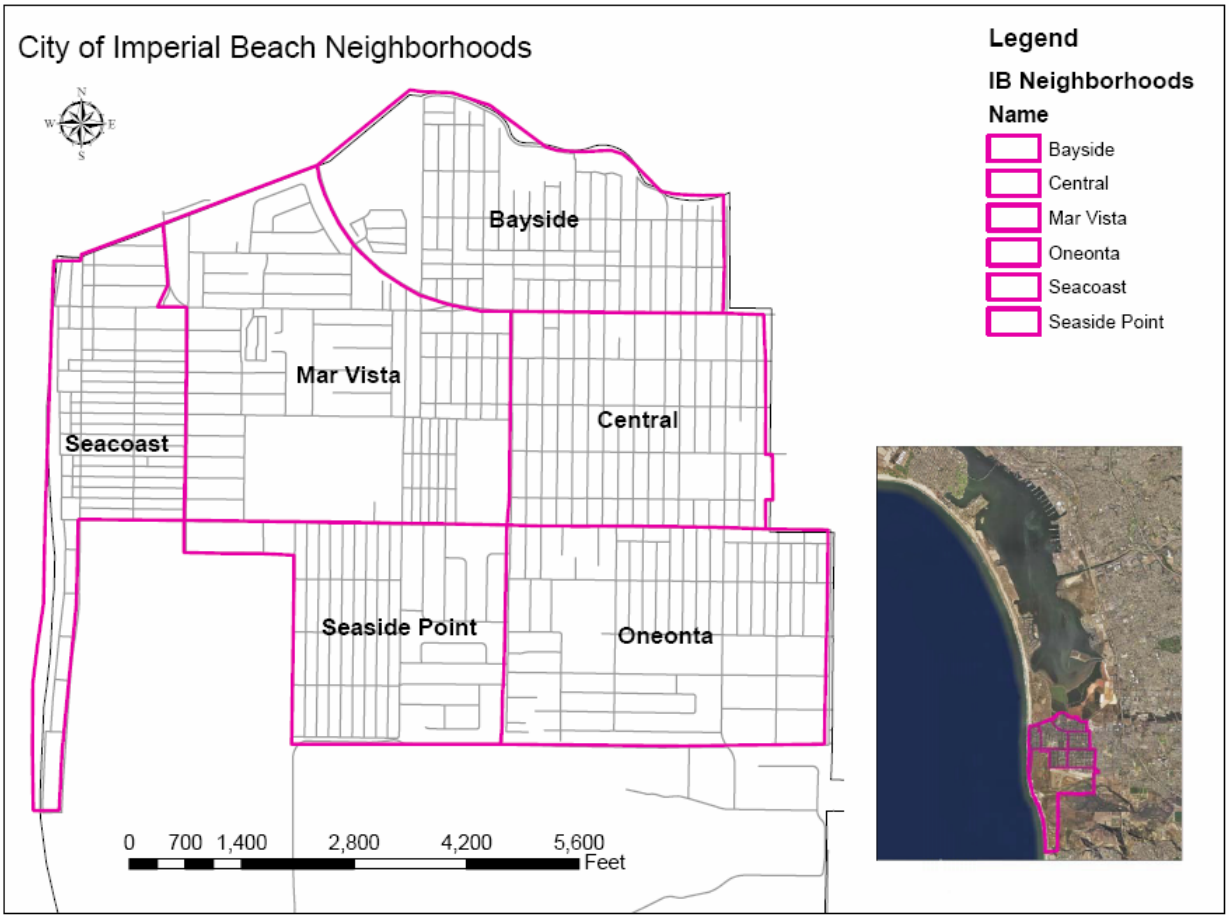
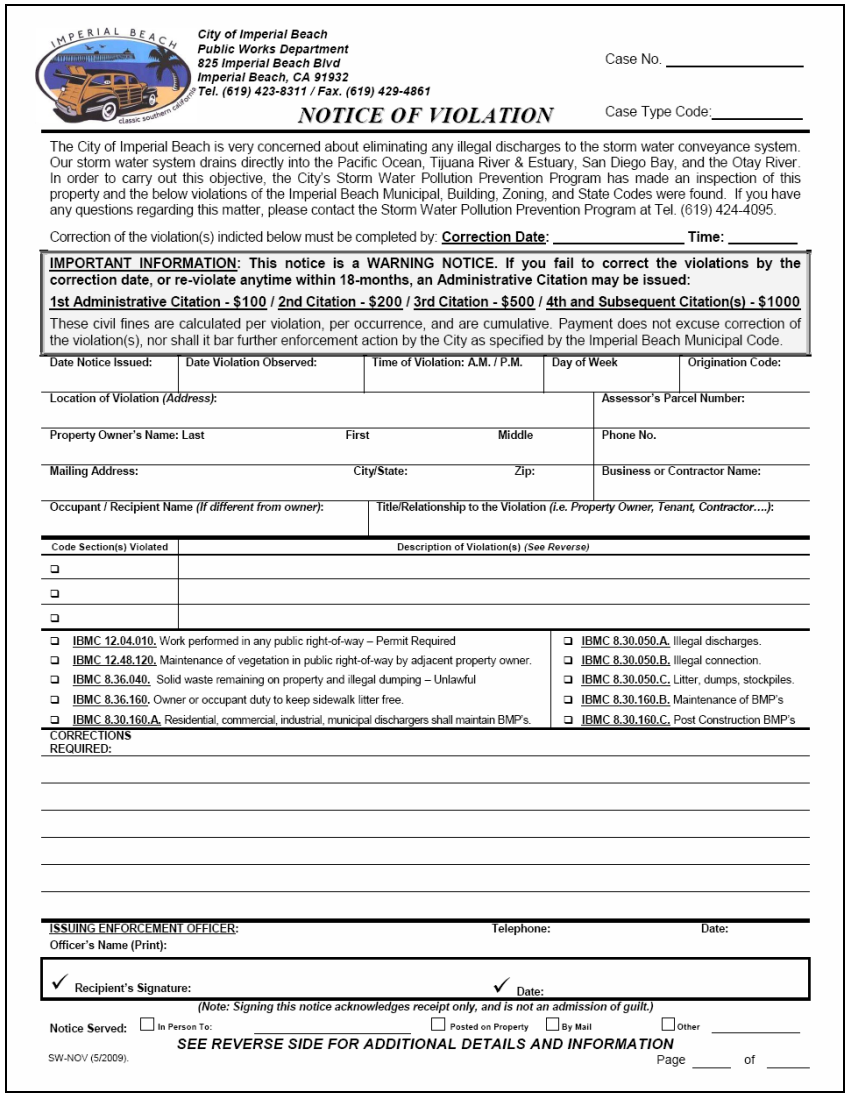


Figure 6.2 – The entire urbanized area of the City is designated as high priority residential neighborhoods. The map above identifies the six high priority residential neighborhoods in the City.

Figure 6.3 Notice of Violation for Storm Water



City of Imperial Beach
Public Works Department
825 Imperial Beach Blvd
Imperial Beach, CA 91932
Tel. (619) 423-8311 / Fax. (619) 429-4861

Case No. _____

NOTICE OF VIOLATION

Case Type Code:_____

The City of Imperial Beach is very concerned about eliminating any illegal discharges to the storm water conveyance system. Our storm water system drains directly into the Pacific Ocean, Tijuana River & Estuary, San Diego Bay, and the Otay River. In order to carry out this objective, the City's Storm Water Pollution Prevention Program has made an inspection of this property and the below violations of the Imperial Beach Municipal, Building, Zoning, and State Codes were found. If you have any questions regarding this matter, please contact the Storm Water Pollution Prevention Program at Tel. (619) 424-4095.

Correction of the violation(s) indicted below must be completed by: **Correction Date**: _____ **Time:** _____

IMPORTANT INFORMATION: This notice is a WARNING NOTICE. If you fail to correct the violations by the correction date, or re-violate anytime within 18-months, an Administrative Citation may be issued:

1st Administrative Citation - $100 / 2nd Citation - $200 / 3rd Citation - $500 / 4th and Subsequent Citation(s) - $1000

These civil fines are calculated per violation, per occurrence, and are cumulative. Payment does not excuse correction of the violation(s), nor shall it bar further enforcement action by the City as specified by the Imperial Beach Municipal Code.

Date Notice Issued:	Date Violation Observed:	Time of Violation: A.M. / P.M.	Day of Week	Origination Code:

Location of Violation *(Address)*:			Assessor's Parcel Number:
Property Owner's Name: Last	First	Middle	Phone No.
Mailing Address:	City/State:	Zip:	Business or Contractor Name:
Occupant / Recipient Name *(If different from owner)*:		Title/Relationship to the Violation *(i.e. Property Owner, Tenant, Contractor….)*:	

Code Section(s) Violated	Description of Violation(s) *(See Reverse)*
❑	
❑	
❑	

❑ IBMC 12.04.010. Work performed in any public right-of-way – Permit Required	❑ IBMC 8.30.050.A. Illegal discharges.
❑ IBMC 12.48.120. Maintenance of vegetation in public right-of-way by adjacent property owner.	❑ IBMC 8.30.050.B. Illegal connection.
❑ IBMC 8.36.040. Solid waste remaining on property and illegal dumping – Unlawful	❑ IBMC 8.30.050.C. Litter, dumps, stockpiles.
❑ IBMC 8.36.160. Owner or occupant duty to keep sidewalk litter free.	❑ IBMC 8.30.160.B. Maintenance of BMP's
❑ IBMC 8.30.160.A. Residential, commercial, industrial, municipal dischargers shall maintain BMP's.	❑ IBMC 8.30.160.C. Post Construction BMP's

CORRECTIONS REQUIRED:

ISSUING ENFORCEMENT OFFICER: **Telephone:** **Date:**

Officer's Name (Print):

✓ **Recipient's Signature:** ✓ **Date:**

(Note: Signing this notice acknowledges receipt only, and is not an admission of guilt.)

Notice Served: ☐ In Person To: _____ ☐ Posted on Property ☐ By Mail ☐ Other _____

SEE REVERSE SIDE FOR ADDITIONAL DETAILS AND INFORMATION

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Storm Water Pollution Prevention Program
The illegal discharge of pollutants into the City's street/storm water conveyance system constitutes a violation of the City's Municipal Code and is declared a nuisance subject to abatement. The City is bound through a permit issued by the California Regional Water Quality Control Board, San Diego Region, to eliminate any illegal discharges to the storm water conveyance system. Our storm water system drains directly into the Pacific Ocean, Tijuana River & Estuary, San Diego Bay, and the Otay River. It is imperative that only storm water enters the storm water conveyance system. Except as provided in section 8.30.060 of the City's Municipal Code discharges into the street/storm water conveyance system is a violation of the Federal Clean Water Act, State Porter-Cologne Act, and the City of Imperial Beach Municipal Code.

It is the City's policy to hold the responsible party(ies), including property owners, business owners, tenants, or contractors, liable for any illegal discharges to the storm water conveyance system. This responsibility may include satisfying requirements for any citation issued to the property owner or responsible person (violator) and payment for costs incurred by the City as a result of the violations. It is also the City's policy to issue a lien, in the event that the responsible party fails to reimburse the City for costs incurred.

IBMC 8.30.050. Urban Runoff Mgmt. & Discharge Prohibitions.
A. Illegal Discharges. The discharge of pollutants directly or indirectly into the stormwater conveyance system or receiving waters in non-stormwater is prohibited, except as exempted in Section 8.30.060 of this chapter. The discharge of pollutants directly or indirectly into the stormwater conveyance system or receiving waters in stormwater is prohibited, unless the applicable requirements of this chapter have been met.
B. Illegal Connection. The establishment of illegal connections is prohibited. The use of illegal connections is prohibited, even if the connection was established pursuant to a valid city permit and was legal at the time it was constructed.
C. Litter, Dumps, and Stockpiles. Throwing, depositing, leaving, abandoning, maintaining or keeping materials or wastes on public or private lands in a manner and place where they may result in an illegal discharge is prohibited unless written authorization is provided by the city.
D. Emergency Flares. The non-emergency use of flares is prohibited unless written authorization is provided by the city. (Ord. 2002-978 § 1 (part), 2002)

IBMC 8.30.060. Discharges exempted from discharge prohibitions.
A. Categorically Allowed Discharges. The following categories of non-stormwater discharges are exempt from discharge prohibitions established by this chapter and are not subject to Section 8.30.070. Dischargers must, however, comply with any order issued pursuant to Section 8.30.040(I) of this chapter; and must install, implement and maintain the specifically applicable minimum BMPS, if any, set out in the city urban runoff standards manuals:
1. Discharges from potable water sources other than water main breaks;
2. Air conditioning condensation;
3. Flows from emergency fire fighting activities;
4. Springs;
5. Water line flushing;
6. Diverted stream flows (provided required permits are obtained);
7. Flows from riparian habitats and wetlands;
8. Foundation drains (not including active groundwater dewatering systems);
9. Individual residential washing of vehicles;
10. Irrigation water including recycled water used for irrigation;
11. Landscape irrigation;
12. Lawn watering;
13. Rising groundwater;
14. Swimming pool and spa discharges (if dechlorinated to less than one PPM chlorine);
15. Uncontaminated groundwater infiltration to storm drains;
16. Uncontaminated pumped groundwater;
17. Water from crawl space pumps; and
18. Water from footing drains (not including active groundwater dewatering systems).
B. Exemptions to Protect Public Health and Safety. Discharges determined by any authorized enforcement official or by authorized enforcement staff to be necessary to protect public health and safety are exempt from discharge prohibitions established by this chapter, provided any conditions on such discharges imposed by the authorized enforcement official authorized enforcement staff are satisfied. In emergency circumstances, the determination of an authorized enforcement official or authorized enforcement staff that a discharge is necessary may initially be oral but must be promptly confirmed in writing by an authorized enforcement official or by authorized enforcement staff. In non-emergency situations, a prior written determination is required to exempt a discharge.
C. On-site wastewater systems. Discharges to the subsurface from permitted properly functioning on-site wastewater systems are not prohibited by this chapter.
D. Exemptions Not Absolute. Any discharge category described in Section 8.30.060(A) above that is a significant source of pollutant to waters of the United States shall be prohibited from entering the stormwater conveyance system, or shall be subjected to a requirement to implement additional BMPS to reduce pollutants in that discharge to the MEP. Such prohibitions shall be effective on a schedule specified by an authorized enforcement official in a written notice to the discharger. That schedule may take into account the nature and severity of any effects caused by the discharge; and the time required to design, engineer, fund, procure, construct and make appropriate BMPS operational. (Ord. 2002-978 § 1 (part), 2002)

IBMC 8.30.070. Best management practice requirements and general requirements of all dis-chargers.
A. Applicable Requirements. All dischargers in the city must comply with the generally applicable prohibitions and requirements in Sections 8.30.010 through 8.30.070 of this chapter, and must also comply with any other parts of this chapter that are applicable to the type of facility or activity owned or operated by that discharger.
B. Minimum Best Management Practices for All Dischargers. All dischargers in the city must install, implement and maintain at least the following minimum BMPS:
1. Eroded soils. Prior to the rainy season, dischargers must remove or secure any significant accumulations of eroded soils from slopes previously disturbed by clearing or grading, if those eroded soils could otherwise enter the stormwater conveyance system or receiving waters during the rainy season.
2. Pollution Prevention. Dischargers employing ten or more persons on a full-time basis shall implement those stormwater pollution prevention practices that are generally recognized in that discharger's industry or business as being effective and economically advantageous.
3. Prevention of Illegal Discharges. Illicit connections must be eliminated (even if the connection was established pursuant to a valid permit and was legal at the time it was constructed), and illegal discharge practices eliminated.
4. Slopes. Completed slopes that are more than five feet in height, more than two hundred fifty square feet in total area, and steeper than three to one (run-to-rise) that have been disturbed at any time by clearing, grading, or landscaping, shall be protected from erosion prior to the first rainy season following completion of the slope, and continuously thereafter.
5. Storage of Materials and Wastes. All materials and wastes with the potential to pollute urban runoff shall be stored in a manner that either prevents contact with rainfall and stormwater, or contains contaminated runoff for treatment and disposal.
6. Use of Materials. All materials with the potential to pollute urban runoff (including but not limited to cleaning and maintenance products used outdoors, fertilizers, pesticides and herbicides, etc.) shall be used in accordance with label directions. No such product may be disposed of or rinsed into receiving waters or the stormwater conveyance system.
C. Inspection, Maintenance, Repair and Upgrading of BMPS. The discharger before and following predicted rain events must inspect BMPS at manned facilities. The discharger must inspect BMPS at unmanned facilities at least once during the rainy season and at least once between each rainy season. These BMPS must be maintained so that they continue to function as designed. BMPS that fail must be repaired as soon as it is safe to do so. If the failure of a BMP indicates that the BMPS in use are inappropriate or inadequate to the circumstances, the BMPS must be modified or upgraded to prevent any further failure in the same or similar circumstances.
D. Stormwater Pollution Prevention Plan. An authorized enforcement official may require a commercial, industrial or land disturbance activities discharger to prepare and submit a SWPPP for approval by that official if (1) the discharger does not come into compliance with this chapter after one or more warnings or other enforcement action, because BMPS are inadequate or are not being adequately maintained; or (2) the facility or activity at issue is a significant source of contaminants to receiving waters despite compliance with this chapter. Any discharger required to submit and to obtain approval of a SWPPP shall install, implement and maintain the BMPS specified in the approved SWPPP.
The SWPPP shall identify the BMPS that will be used by the discharger to prevent or control pollution of stormwater to the MEP. If the facility is an industrial facility, the SWPPP submitted to the city shall at a minimum meet the requirements of the state NPDES general industrial stormwater permit. If the activity at issue is a construction or land disturbance activity, the SWPPP submitted to the city shall at a minimum meet the requirements of the state NPDES general construction stormwater permit. If a facility required to submit a SWPPP to the city discharges non-stormwater to groundwater, the facility shall obtain an RWQCB permit as required by the state Water Code, and shall describe the requirements of that permit in the SWPPP.
Whenever submission of a SWPPP is required pursuant to this chapter, an authorized enforcement official or authorized enforcement staff may take existing city guidance documents into account when determining whether the practices proposed in the SWPPP are BMPS that will prevent or control pollution to the required level of MEP.
E. Notification of Spills, Releases and Illegal Discharges. Spills, releases, and illegal discharges of pollutants to receiving waters or to the stormwater conveyance system shall be reported by the discharger as required by all applicable state and federal laws. In addition, any such spills, releases and illegal discharges with the potential to endanger health, safety or the environment shall be reported to the city within twenty-four hours after discovery of the spill, release or discharge. If safe to do so, necessary actions shall be taken to contain and minimize the spill, release or illegal discharge.
F. Sampling, Testing, Monitoring, and Reporting. Commercial, industrial or land disturbance activities dischargers shall perform the sampling, testing, monitoring and reporting required by this chapter. In addition, an authorized enforcement official or authorized enforcement staff may order a discharger to conduct testing or monitoring and to report the results to the city if (1) the authorized enforcement official determines that testing or monitoring is needed to determine whether BMPS are effectively preventing or reducing pollution in stormwater to the MEP, or to determine whether the facility is a significant source of contaminants to receiving waters; or (2) the authorized enforcement official or authorized enforcement staff determines that testing or monitoring is needed to assess the impacts of an illegal discharge on health, safety or the environment; or (3) an illegal discharge has not been eliminated after written notice by an authorized enforcement official or authorized enforcement staff; or (4) repeated violations have been documented by written notices from authorized enforcement officials or authorized enforcement staff; or (5) the RWQCB requires the city to provide any information related to the discharger's activities.
Testing and monitoring ordered pursuant to this subsection may include the following:
1. Visual monitoring of dry weather flows, wet weather erosion, and/or BMPS;
2. Visual monitoring of premises for spills or discharges;
3. Laboratory analyses of stormwater or non-stormwater discharges for pollutants;
4. Background or baseline monitoring or analysis; and
5. Monitoring of receiving waters or sediments that may be affected by pollutant discharges by the discharger (or by a group of dischargers including the discharger).
The authorized enforcement official or authorized enforcement staff may direct the manner in which the results of required testing and monitoring are reported, and may determine when required sampling, testing or monitoring may be discontinued.
G. Mitigation. All illegal discharges must be mitigated within a reasonable period of time to correct or compensate for all damage to the environment caused by the illegal discharge. The authorized enforcement official or authorized enforcement staff, who issued notice to the discharger that a discharge was illegal, or authorized enforcement staff designated by that official, shall determine whether mitigation measures proposed or completed by the discharger meet this standards of this chapter, applicable permit conditions on other applicable laws. In cases of ongoing activity that would potentially lead to repeated illegal discharges, the authorized enforcement official or authorized enforcement staff shall require the discharger to submit a mitigation plan and schedule by a specified date prior to taking action, and to submit a summary of completed mitigation by a specified date. (Ord. 2002-978 § 1 (part), 2002)

IBMC 8.30.160. Maintenance of BMPS.
A. Existing Development. Residential, commercial, industrial, agricultural and municipal dischargers shall maintain the BMPS they rely upon to achieve and maintain compliance with this chapter.
B. New Development. The owners and occupants of lands on which structural post-construction BMPS have been installed to meet the requirements of this chapter shall ensure the maintenance of those BMPS, and shall themselves maintain those BMPS if other persons or entities who are also obliged to maintain those BMPS (by contract or covenant, or pursuant to this chapter) fail to do so.
C. Maintenance Obligations Assumed by Contract or Other Agreement. Primary responsibility to maintain a BMP may be transferred through a contract or other agreement. If that contract provides that it will be submitted to the city pursuant to this chapter as part of a development permit application, and if that contract is so submitted, the person or entity accepting a maintenance obligation in such a contract or agreement will also be legally obliged to maintain that BMP pursuant to this chapter.
D. Obligation to Maintain BMPS Not Avoided by Contracts or Other Agreements. For purposes of city enforcement, no contract or other agreement imposing an obligation to maintain a BMP can relieve a person or entity of any obligation to maintain a BMP imposed by this chapter.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

7.1 Introduction

The City endeavors to prevent municipal discharges from the Municipal Separate Storm Sewer System (MS4) from causing or contributing to a violation of water quality standards. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and its efforts to reduce municipal discharges of pollutants to the MS4 to the maximum extent practicable (MEP).

All components of the JURMP are represented in this report with the exception of this component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), extending the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

The City's implementation and assessment strategy for the illicit discharge detection and elimination component is described in the *JURMP Section 9.0*.

8.0 EDUCATION COMPONENT

8.1 Introduction

The City endeavors to implement a diverse education program in the community to reduce the impacts of urbanization on water quality. Education activities are targeted at the following groups: 1) municipal departments and personnel, 2) construction site owners and developers, 3) commercial business owners and operators, 4) industrial business owners and operators (none exist in the City of Imperial Beach), 5) residents, general public, and school children, and 6) underserved community. This component is applicable to all City departments, in particular the Environmental Program Division of the Department of Public Works, which spearheads the City's education efforts and is responsible for the annual training for municipal employees on the components and goals of the JURMP. This section of the Annual Report discusses program implementation and changes made to the Education Component as it relates to management program activities and outcomes targeted for staff implementing control measures. Note that each section of this JURMP Annual Report already includes a description of education activities for each element. The City recognizes the importance education plays in facilitating the necessary behavioral changes to successfully reduce and eliminate pollutants from urban runoff.

8.2 Level 1 Outcomes – Management Program Activities

8.2.1 Program Planning and Administration

The Program Planning and Administration element of the Annual Report addresses modifications to the JURMP, updates to program documentation and training content and materials. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the Education Component is described in the *2008 JURMP Section 10.0*. During FY 2008-09 the City made no significant updates to the education program. The City continues to focus education efforts at the five targeted community groups. The City tailors each individual education activity to best suit the message and content for the target community; however, the overall message is consistent with the *2008 JURMP Section 10.0*. Minor changes to the program include changes to materials such as handouts, surveys, and promotional items, which are continuously updated throughout the year. The City also actively seeks for ways to expand and improve the effectiveness of the education program. For example the City started a new education campaign for resident to adopt the use of reusable bags. The City is also looking for ways to expand the education program by developing education partnerships with existing groups in the community. New education partnerships are being explored with the YMCA Surf Camp, Fish and Wildlife Service, and

Tijuana Estuary. Figure 8.1 provides an overview of the major elements of this strategy as it was implemented during FY 2008-09.

8.2.2 Management Program Implementation

The Management Program Implementation element of the Annual Report addresses JURMP requirements, training and education activities, public awareness and response, and surveys and special investigations.

The Environmental Division oversaw the implementation of the Education Component during FY 2008-09. The City successfully achieved the JURMP requirement and provided education for the six targeted communities. Table 8.1 provides an overview of the education efforts during this reporting period. Table 8.2 also presents and describes targeted FY 2008-09 outcomes and results, as well as implementation targets for FY 2009-10. Additional documentation, analysis, and discussion are provided in Table 8.3.

8.3 Outcomes Targeted for Staff Implementing Control Measures

8.3.1 Outcome Level 2 – Knowledge and Awareness

A training program has been implemented within the City to inform employees of the components and goals of the 2008 JURMP. The training program focuses on the use of Best Management Practices in daily operations, and designed to create an overall sensitivity to pollution prevention concerns. Open discussions are encouraged to further the importance and enhance the program. This education effort is discussed in the *2008 JURMP Section 10.0*.

The City is required to implement an education program for each target community using all media as appropriate to 1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and 2) to measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment. During FY 2008-09 the City started implementing pre and post tests and surveys in attempts to capture changes in knowledge and awareness. A description of these efforts is captured in Table 8.2 with additional documentation, analysis, and discussion provided in Table 8.3.

8.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

The *2008 JURMP Section 10.0* defines requirements to educate each target community on the laws, regulations, permits, requirements, BMPs, general urban runoff concepts, and other topics where appropriate. Education is the largest mechanism the City uses to facilitate changes in behavior and implementation of BMPs. Each chapter presented in this Annual Report touches on how changes in behaviors and implementation of BMPs were achieved.

8.3.3 Outcome Level 4 – Source Load Reductions

The City encourages the use of pollution prevention methods by the target audiences; however, source load reductions for education are not targeted or assessed.

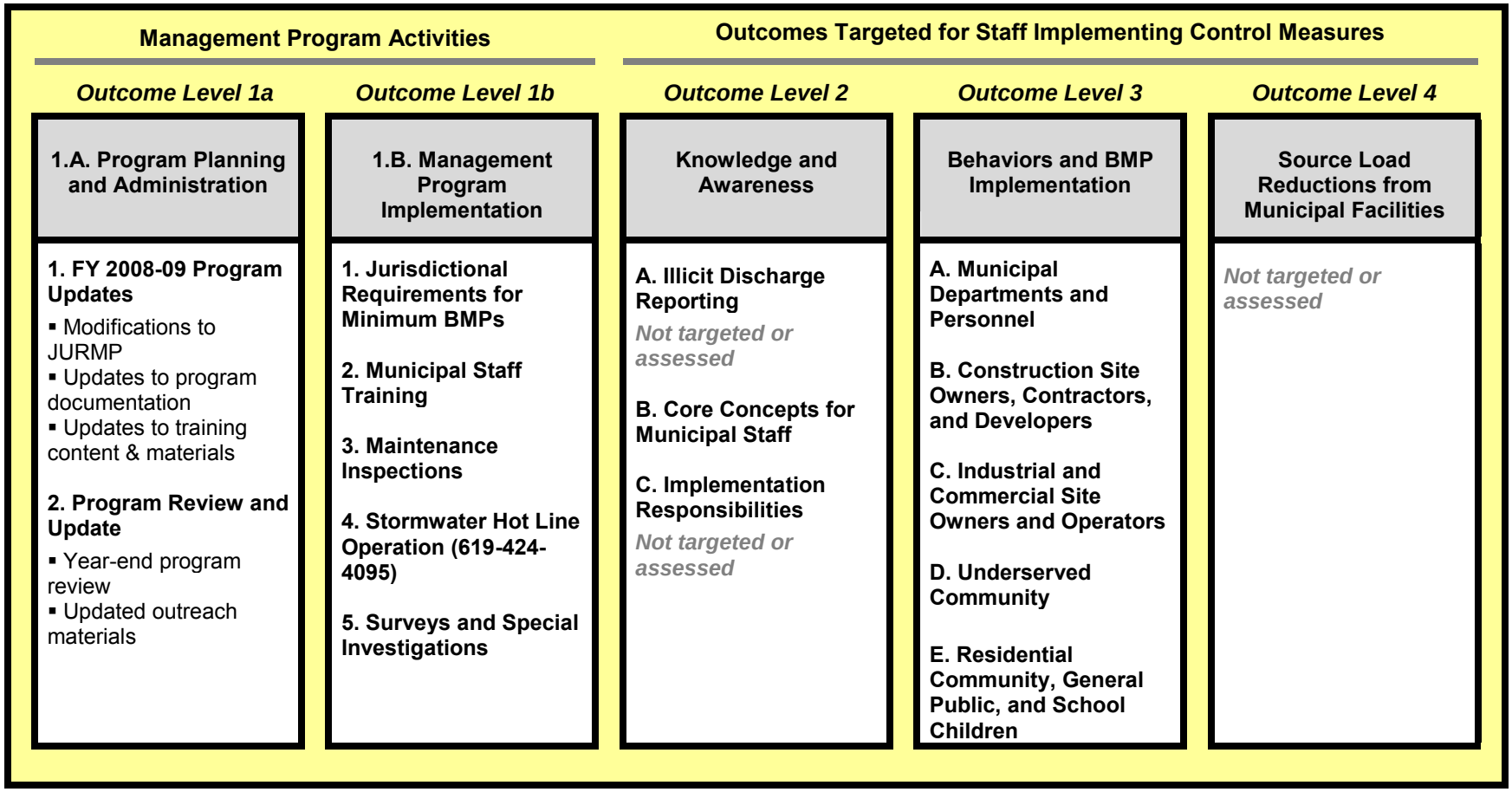


Figure 8.1 – FY 2008-09 Implementation and Assessment Strategy for the Education Component

Table 8.1 – Overview of Education

Category	Number	Description
A. Educational Efforts		
Municipal Departments and Personnel Events	5	Employees are trained annually on the use of BMPs in their daily operations. Face-to-face meetings are held on a regular basis with employees to discuss the JURMP and its application in their operations. Construction Site Owners, Contractors and Developers are trained through face-to-face meetings with the Community Development Department and the Publics Works Department during the permitting process, in inspections, and in investigations of illegal discharges. Commercial Site Owners and Operators are trained through scheduled inspections by the Public Works Department Environmental Division, and through investigations of illegal discharges. All residents receive educational information in the City's newsletter, a newsletter sent out by the City's waste franchisee, website updates, materials provided at City Hall and the Public Works Department, through community presentations, etc. The City held an information booth at the U.S. Open Sand Castle competition and Auto Show. The City also participated with other Co-Permittees in regional outreach events that target the underserved community.
Construction Site Owners, Contractors and Developer Training Events	2	
Industrial Site Owners and Operators Training Events	---	
Commercial Site Owners and Operators Training Events	4	
Residential Community and General Public Outreach Events	10	
Underserved Community	1	
School Children Outreach Events	6	

JURMP Sections	Description of FY 2008-09 Changes
10.0 and Appendix I	BMP requirements of the JURMP applicable to educational areas and activities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 8.2 – Targeted Outcomes and Results for the Education Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 1 OUTCOMES (MANAGEMENT PROGRAM ACTIVITIES)				
A. PROGRAM PLANNING AND ADMINISTRATION				
1. FY 2008-09 PROGRAM UPDATES				
a. MODIFICATIONS TO JURMP				
Update applicable JURMP sections per new Permit requirements	No updates made during FY 2008-09	Complete	Applicable updates were included in *2008 JURMP Section 10.0*, submitted to the RWQCB on 03-24-08.	Not targeted
b. UPDATES TO PROGRAM DOCUMENTATION (POLICIES, PLANS, PROCEDURES, GUIDELINES, AND FORMS)				
Update educational efforts for consistency with program updates	Minor updates made to program	---	The City started implementing surveys when feasible at education events to establish a baseline level of knowledge. Minor program updates are also made throughout the year to program content to most effectively present education materials.	Update and/or develop educational efforts for consistency with program updates
c. UPDATES TO TRAINING PROGRAM				
Update staff training materials for consistency with *2008 JURMP Section 10.0*	Made updates to presentation and survey	Under review	The City makes annual updates to training content and materials so that each education activity provides appropriate information for the target audience.	Update staff training materials for consistency with *2008 JURMP Section 10.0*

Table 8.2 – Targeted Outcomes and Results for the Education Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
2. FY 2008-09 PROGRAM REVIEW AND UPDATE				
a. YEAR-END PROGRAM REVIEW				
Complete annual year-end program review	Review underway	In progress	An annual program review for the Education Component is underway during the development of this JURMP Annual Report. The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.	Complete annual year-end program review
b. UPDATED OUTREACH MATERIALS				
Update outreach materials	Updates made to BMP practices for your Business brochure	In progress	The City is updating and developing new outreach materials for each target community.	Update outreach materials
B. MANAGEMENT PROGRAM IMPLEMENTATION				
1. Jurisdictional Designation of Minimum BMPs				
Require minimum BMPs	Requirements implemented	Complete	All components of the JURMP have the requirement to implement measures to reduce pollutants and runoff to the MEP.	Require minimum BMPs
2. Municipal Staff Training				
Provide training for FY 2008-09	Training provided to Community Development Department 9/23/08 and Public Works Department 9/17/08 and during indoctrination of new employees	Complete	The Environmental Division provides annual training to all City Departments as well as during the indoctrination of new employees. Daily interactions with City staff ensure that storm water pollution prevention remains a high priority throughout the City.	Provide training to all staff with identified responsibilities

Table 8.2 – Targeted Outcomes and Results for the Education Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
3. Storm Water Hotline Operation				
Operate a hotline to provide the public opportunities to report illegal storm water discharges	Hotline operated throughout reporting period	Complete	A Storm Water Hotline (619-424-4095) was operated throughout FY 2008-09 to provide the public a means of reporting storm water violations in City-maintained roadways and the MS4.	Operate a storm water hotline
4. Surveys and Special Investigations				
Provide a survey to municipal staff	Administered a survey to municipal staff as part of annual training program	Complete	Training was conducted on 9/23/08 for the Community Development Department and 9/17/08 for the Public Works Department on the necessary elements of this component. A survey was provided to establish a baseline of knowledge. The City incorporates surveys or pre and post tests into training programs and administers them when appropriate.	Survey municipal staff to ascertain baseline knowledge of storm water program

Table 8.2 – Targeted Outcomes and Results for the Education Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF)				
Establish a baseline of staff knowledge regarding applicable program content	Performed a survey on 9/23/08 of Community Development and 9/17/08 of Public Works Department as part of annual training.	Survey consisted of a 16 question test. The results are as follows: Community Development Department (12 surveys completed) and average score 89%. Public Works Department (23 surveys completed) and average score 81%.	Training was conducted on 9/23/08 for the Community Development Department and 9/17/08 for the Public Works Department on the necessary elements of this component. The survey administered during the training session provides a baseline of knowledge of core concepts and helps refine training programs for the next reporting period. The City incorporates surveys or pre and post tests into training programs and administers them when appropriate. Results from this reporting period indicate that the Community Development Department has a greater level of knowledge on core concepts of the storm water program than the Department of Public Works. The overall results still show a high level of knowledge on core storm water management concepts in the City.	Survey municipal staff to assess knowledge of storm water program
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND TARGETED AUDIENCES)				
A. MUNICIPAL DEPARTMENTS AND PERSONNEL				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of education activities to be applicable or feasible. Please refer to Table 8.1 and Table 8.3 for a description of municipal education activities.	Not targeted
B. CONSTRUCTION SITE OWNERS AND DEVELOPERS				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of education activities to be applicable or feasible. Please refer to Table 8.1 and Table 8.3 for education activities that target construction site owners and developers.	Not targeted

Table 8.2 – Targeted Outcomes and Results for the Education Component

FY 2008-09 Results				FY 2009-10 Targeted Measurable Outcomes
Targeted Measurable Outcomes	Implementation Results	Assessment Results	Explanation	
C. COMMERCIAL AND INDUSTRIAL SITE OWNERS AND OEPRATORS				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of education activities to be applicable or feasible. Please refer to Table 8.1 and Table 8.3 for a description of commercial business education activities.	Not targeted
D. UNDERSERVED COMMUNITY				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of education activities to be applicable or feasible. Please refer to Table 8.1 and Table 8.3 for a description of education activities targeting the underserved community.	Not targeted
E. RESIDENTIAL COMMUNITY, GENERAL PUBLIC, AND SCHOOL CHILDREN				
Not targeted or assessed	---	---	The City does not currently consider Level 3 assessment of education activities to be applicable or feasible. Please refer to Table 8.1 and Table 8.3 for a description of education activities that target residential community, general public, and school children.	Not targeted
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM EDUCATIONAL ACTIVITIES)				
Not targeted or assessed	---	---	The City does not currently consider Level 4 assessment of education activities to be applicable or feasible.	Not targeted

Table 8.3 FY 2008-09 Jurisdictional Education Activities

Education Activity	Date	Activity or Event Description	Topics	Participants
Municipal Departments and Personnel				
Public Works Department Training	9/17/2008	Annual municipal training	JURMP Components	23
Community Development Training	9/23/2008	Annual municipal training	JURMP Components	12
SUSMP Workshop	6/1/2009	Model SUSMP Workshop	Implementation of Model SUSMP	5
New Employee Training	On going	Indoctrination of new employees on storm water program	Storm water program	4
City FYI articles	On going	10 different FYI articles	Storm water pollution prevention on various topics	200+ each article
Construction Site Owners and Developers				
Copy of storm water/grading/erosion control requirements attached to Imperial Beach issued permits	On going	Community Development Department disseminates BMP and storm water information with permits	BMP, pollution prevention, City storm water requirements	---
Community Development counter hours	On going	Counter hour for education relating to construction and development in the City	BMPs, pollution prevention, City storm water regulations	---
Commercial Owners and Operators				
Sand Castle vender packet and inspections	7/16th-20th/2008	Provided education materials for street venders and conducted commercial inspections during event	Mobile business, pollution prevention recycling	54
Commercial Inspection	On going	Commercial business inspections	Pollution prevention, BMPs, storm water regulations	50
Follow up inspection report and letter	On going	Each commercial inspection is followed up with summary report and BMP brochures by mail	Commercial BMPs, recycling and pollution prevention	50
Residents and General Public				
Annual Home Front Clean up	5/2/2009	Large bulky item collection at Mar Vista HS	Recycling, reuse, pollution prevention	689
Citywide Garage Sale	4/25/2009	City promotes reuse of materials through a one day Citywide garage sale event	Reuse and public participation	93
Day Without a Bag	12/15/2008	City partnered with local businesses to promote "Day without a plastic bag".	Reuse and pollution prevention	---
City of Imperial Beach storm water booth at U.S. Open Sand Castle competition	7/19th-20th/2008	City booth for storm water and pollution prevention	Pollution prevention, HHW, recycling, and storm water regulations	300,000

Education Activity	Date	Activity or Event Description	Topics	Participants
City of Imperial Beach storm water booth at Auto Show	7/26/2008	City booth for storm water and pollution prevention	Pollution prevention, HHW, recycling	1,000
City Semi-Annual news letter	Bi-annually	Summer and Winter City news letter sent to all residents	Pollution prevention, storm water BMPs, Recycling	27,000
EDCO Environmental Times	Quarterly	Summer , Fall, Winter, and Spring news letters sent to all residents	Pollution prevention, HHW, recycling, and storm water regulations	27,000
Eagle and Times newspaper	7/9/08; 11/1/08; 12/15/08; 4/1/09; 5/10/09	Articles on variety of topics advising the community on storm water related issues	Storm water pollution, reusable bag day, pollution prevention, City pollution prevention efforts	Citywide newspaper
Coastal Clean Up Day	4/25/2009	7th Annual Creek to Bay Clean Up sponsored by ILACSD	Pollution prevention	4,000
Website	On going	Information about storm water program, recycling, and online reporting	Pollution prevention, storm water BMPs, Recycling	---
Underserved Community				
Underserved Target Audience Sub-workgroup	On going	Co-chair of Education Residential Sources Workgroup, Chair of Underserved Target Audience sub-workgroup.	Regional education materials and regional activities for the underserved community	---
School Children				
Central Elementary 5th and 6th Grade presentations	6/16/2009	Three individual presentations for 5th and 6th graders at Central Elementary School by ILACSD	Presentation on storm water pollution, pollution prevention, BMPs, watersheds	100
Imperial Beach Elementary 5th Grade presentations	5/20/2009	Three individual presentations for 5th Graders at Imperial Beach Elementary School by ILACSD	Presentation on storm water pollution, pollution prevention, BMPs, watersheds	54

9.0 PUBLIC PARTICIPATION COMPONENT

9.1 Introduction

The City is required to incorporate a mechanism for Public Participation in the updating, development, and implementation of the JURMP. In working with the public, the City gains a better understanding of public perception and attitudes towards the problem of storm water pollution. The implementation of the 2008 JURMP naturally includes an element of public participation. The Environmental Division of the Department of Public Works regularly interacts with residents, commercial businesses, municipal staff, and developers while conducting inspections, education activities, BMP enforcement, and other JURMP implementation components. The City also makes additional efforts to include public participation in the implementation and development of the JURMP. These efforts are discussed below.

9.2 Public Participation Efforts

The City holds a public hearing and solicits public comments prior to the adoption and submittal of the JURMP and its Annual Reports. The public was notified on this Annual Report in the Imperial Beach *Eagle & Times and Union Tribune* newspapers and through public hearing notices that were posted at City Hall and the Imperial Beach Public Library. A draft of this JURMP Annual Report was made available for public viewing at the Imperial Beach City Hall, posted on the City's website, and presented at a public hearing to City Council on September 2, 2009.

Other public participation mechanisms the City uses include the operation of a storm water hotline and online reporting tool to report violations, coordination of cleanup activities such as the pet waste bag program and trash clean ups with local organizations, involvement with local environmental groups to spread awareness of urban runoff pollution, participation with civic organizations, City special events; and the City Hall xeriscaping Eagle Scout projects.

10.0 FISCAL ANALYSIS COMPONENT

10.1 Introduction

The Environmental Program Division of the Department of Public Works is responsible for the fiscal analysis of the storm water program. Implementation costs for the JURMP are approximately $1,000,000. Revenue sources used by the City to fund the storm water program include a solid waste fee for storm water management services, sewer enterprise funds, building permit fees, State grants, and City Redevelopment Agency funds.

10.2 General Budget Information

The costs of implementing the JURMP are spread across the whole City. Each Department and associated Division has an established role in implementing the components of the JURMP. However, the primary responsibility of implementing the storm water program is split between the Department of Public Works and Community Development Department.

10.3 Fiscal Analysis Methods

The Standardized Fiscal Analysis Methods and Format (Fiscal Analysis Methods) were collaboratively developed and adopted by the Copermittees in January 2009 in accordance with sections G, J.1.a(3)(k), and J.1.c(1)(d) of NPDES Order No. R9-2007-0001. The Fiscal Analysis Methods document was submitted to the San Diego RWQCB by January 31, 2009, as Attachment 1 of the Regional Urban Runoff Management Plan (RURMP) Annual Report for 2008-2009. The Standardized Fiscal Analysis Methods will be worked into FY 2009-10 Annual Report for next reporting period.

10.4 Fiscal Analysis Results

10.4.1 Expenditures

Detailed analysis of expenditures is currently underway and will be provided in the next Annual Report for FY 2009-10.

10.4.2 Funding Source

Revenue sources used by the City to fund the requirements of the Municipal Permit include a solid waste fee for storm water management services, sewer enterprise funds, and building permit fees. Other storm water pollution prevention projects were funded from State Clean Beaches Initiative funds and the City Redevelopment Agency funds.

11.0 PROGRAM EFFECTIVENESS ASSESSMENT

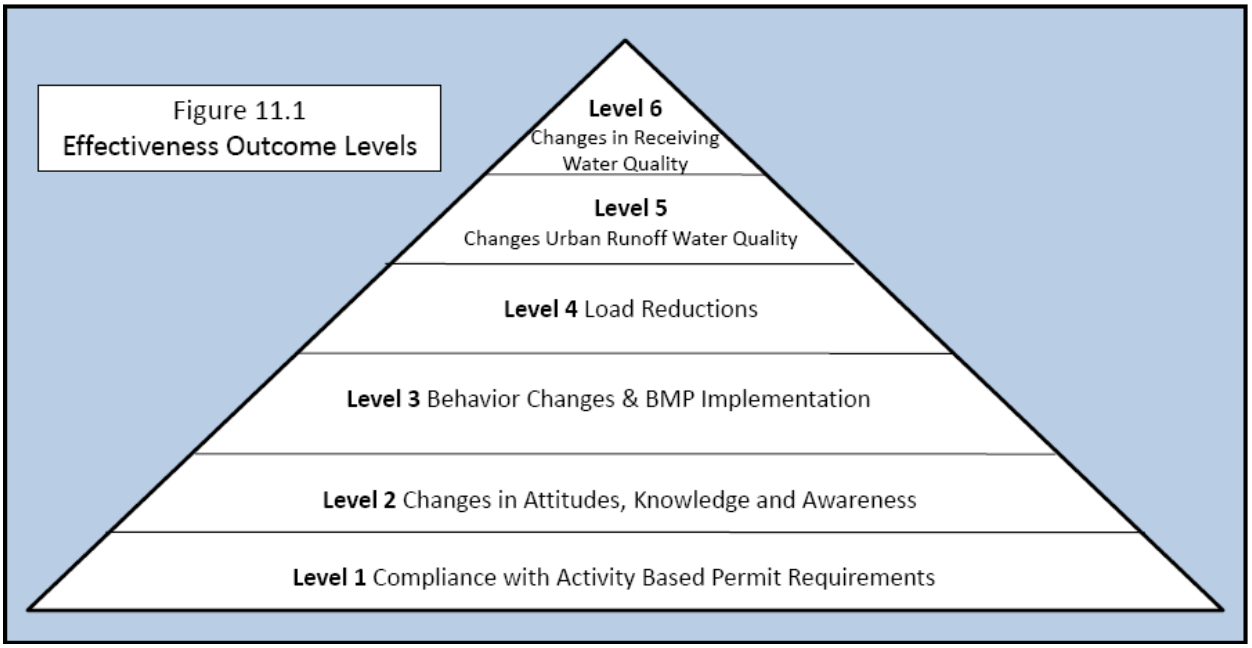
11.1 Introduction

The Environmental Program Division of the Department of Public Works is responsible for the assessment of the JURMP for effectiveness. Each jurisdictional activity/BMP implemented for each major component of the *2008 JURMP* is assessed to indirectly gauge whether the processes and procedures put into place are working toward protecting the quality of receiving waters.

The structure of this Annual Report evaluates the level of effectiveness for each JURMP component in the context of program planning, management, and implementation. The City uses the structural hierarchy of levels that were established in the *2003 Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*. Within each section of this Annual Report the City assesses program effectiveness on Outcome Level 1- Outcome Level 4. The hierarchy of outcomes is shown graphically in Figure 11.1.

In general, Outcome Levels 1, 2, and 3 can be addressed on a Jurisdictional scale. Some Outcome Level 4 measurements of load reductions can be addressed at this scale, but for the most part, assessment of changes to water quality (Levels 4, 5, and 6) are best addressed at the watershed or regional scale. The City therefore only assesses program effectiveness on Outcome Level 1through Outcome Level 4.

Figure 11.1 – Effectiveness Outcome Levels



11.2.1 Program Planning and Administration

Program Planning and Administration addresses modifications to the *2008 JURMP*, updates to program documentation and training content and materials within each element of this Annual Report. It also addresses a review and update of the program including inventories for the next fiscal year.

The City's implementation and assessment strategy for the program effectiveness is described in the *JURMP Section 13.0*.

11.2.2 Management Program Implementation

Management Program Implementation addresses requirements, training, inspections, public awareness and response, and surveys and special investigations for each component of the *2008 JURMP* within each element of this Annual Report. The tables in each section of the Annual Report present and describe targeted FY 2008-09 outcomes and results, as well as implementation targets for FY 2009-10 that are funded by the program.

11.3 Outcomes Targeted for Staff Implementing Control Measures

11.3.1 Outcome Level 2 – Knowledge and Awareness

Knowledge and awareness are targeted and assessed as necessary within each element of this Annual Report independently.

11.3.2 Outcome Level 3 – Behaviors and Best Management Practice (BMP) Implementation

Behaviors and BMP implementation are assessed within the tables located in each section of this Annual Report.

11.3.3 Outcome Level 4 – Source Load Reductions

Source load reductions are targeted and assessed as necessary within each element of this Annual Report independently.

12.0 Special Investigations

12.1 Introduction

This section describes special investigations that were conducted above and beyond Permit requirements, but with the ultimate goal of better understanding and controlling urban runoff and storm water pollution. Surveys and special investigations relevant to each JURMP component are assessed in the tables of each section of this Annual Report. The discussion presented in this section provides additional details on the special investigation for the Palm Avenue Low Flow Urban Runoff Diverter and the Tijuana River Bacterial Source Identification Study, both of which were funded under Clean Beach Initiative (CBI) grants.

12.2 Palm Avenue Low Flow Urban Runoff Diverter

In January 2009 the Palm Avenue Low Flow Urban Runoff Diverter became operational. The diverter project, which was mostly funded under a Prop 50 CBI Grant, diverts nuisance flow urban runoff and first-flush rain water into the sanitary sewer. The Palm Avenue diverter is fed by four curb inlets and 15 grated drains. The inlets drain approximately 72.1 acres of residential and light commercial land uses. Prior to the construction of the Palm Ave Diverter, all flows from these inlets discharged directly onto the beach. Operating at maximum capacity, the Palm Ave diverter can divert flows up to 250 gallons per minute into the sanitary sewer.

As part of the condition on the Grant, the City is conducting weekly post construction water quality monitoring for a one year period from January 2009 through December 2009. Samples are analyzed for bacteria, temperature, pH, conductivity, and filed observations. The volume of diverted runoff is also being tracked. During the first 6 months of monitoring, 192,000 gallons of urban runoff wad diverted into the sanitary sewer and prevented from flowing to the Pacific. Results from the weekly bacterial analysis also revealed elevated levels of bacteria in the diverted flows. Compared to AB411 monitoring action levels, 85% of the samples were in exceedance of enterococcus and 100% of the samples were in exceedance of total coliform bacteria.

The initial data from the post construction monitoring of the Palm Ave Diverter project confirms the same results from the previously completed monitoring from the Date Ave Diverter in 2004. The results show that the coastal drainage areas have persistently high levels of bacteria in the urban runoff, which could have contributed to the high levels of bacteria observed off the coast. With the completion of the Palm Avenue Diverter project and the continued operation of the Date Avenue Diverter, the vast majority (137.2 acres) of the low flow urban runoff is diverted before reaching the beach. The only coastal outfall in Imperial Beach not on a diverter system is at the Ebony Street end, which consists of a 12 inch outfall and drains a residential area of 2.2 acres.

12.3 Tijuana River Bacterial Source Identification Study

During this reporting period, the City with funding from a Proposition 50 Clean Beach Initiative (CBI) Grant, initiated a source identification survey to identify sources of bacterial contamination in the U.S. portion of the Tijuana River Watershed. The purpose of the study is to contribute to the regional efforts to identify domestic sources of bacterial contamination and recommend appropriate actions and activities to reduce the input of those sources to the Tijuana River and adjacent Pacific Ocean.

In October 2008 the first sanitary survey was complete and the project was on track to perform the dry and wet weather components of the study. Unfortunately, on December 22, 2008 the City was notified that the State Water Board would not be processing invoices for the period of December 15th onward. After discussions with the State Water Board and the contractors, further work on the project was limited to administration and maintenance until the matter could be resolved. During the first quarter of 2009 the State budget situation did not improve and starting April 1, 2009, the Tijuana River Source Identification Study was put permanently on hold until funding for the CBI Grant is restored. As of this Annual Report, CBI Grant funds and project work are still on hold.

13.0 Non-Emergency Fire Fighting

13.1 Introduction

The City requires pollution prevention measures and BMPs to reduce or eliminate non-emergency fire fighting flows. The Environmental Division assists the Fire Department in implementing control measures to prevent or control pollutants from both emergency and non-emergency fire fighting activities. The *2008 JURMP Section 2.2* identifies the BMPs that are implemented as part of fire fighting activities.

Non-emergency fire fighting activities, such as training activities that simulate emergency responses, are performed in a manner that eliminates discharges to the storm water system whenever practicable, and minimizes discharges to the storm water conveyance system when elimination of discharges is practicably unavoidable. The following best management practices are implemented as part of these activities:

- Water flows are directed to landscaped areas whenever possible
- When flowing water to an area where landscaping does not prevent runoff, the area selected shall be surveyed by the Officer in charge prior to training activities to ensure that debris will not enter into the storm water system as a result of the drill
- Areas that have debris, which could potentially enter the storm water system as a result of the drill activities, will not be used for training until debris has been removed. Referrals to the Department responsible for the debris removal will be made as needed
- Live fire training activities will be pre-planned to allow integration of barriers to off-site runoff, which could contribute to storm water discharges
- Discharges from maintenance of equipment and restoration of hoses, vehicles, tools, ladders and other emergency response equipment are directed to the sewage, and dry methods are used whenever practical
- Staff is trained on good housekeeping practices to be used during standard facility maintenance procedures
- The fire fighting personnel and inspectors receive annual pollution prevention training
- Vehicle washing or equipment cleaning is conducted over a wash bay that drains to the sewer

14.0 JURMP Revisions

14.1 Introduction

The Environmental Program Division of the Department of Public Works is responsible to maximize program effectiveness by identifying and describing any JURMP modifications that are made during the reporting period, or that are proposed or planed for the next reporting period. Under the reporting format of this Annual Report, any modification or proposed changes made to the *2008 JURMP* are identified in the Program Planning and Administration subsection within each preceding Section of this report.

15.0 Conclusions and Recommendations

15.1 Introduction

The City made great progress in further developing and refining its urban runoff and management program during FY 2008-09. The management programs and activities implemented by municipal staff demonstrate a high level of compliance with the regulatory mandates of the Municipal Storm Water Permit, and underscore the City's commitment to reducing and eliminating pollutants related to urban runoff. The Components of the JURMP require the City to reduce to the maximum extent practicable sources of pollutants from three distinct phases of urban development: 1) planning and design phase, 2) construction and development phase, and 3) existing development phase. The City's urban runoff management program outlined in this Annual Report successfully meets these regulatory requirements and in some cases exceeds the minimum Permit requirements.

Looking forward to FY 2009-10 and beyond, the City is committed to continuing with many of the programs and management activities implemented in this report. Recommendations for future Reports is to enhance the program's end-of-year review and effectiveness assessment in order to further refine and improve each JURMP Component and to most effectively target sources of pollutants. The JURMP and all the Annual Reports are a living document that evolve over time and build upon the success and sometimes failure of management program activities. The City endeavors to implement the most effective storm water program possible, building upon the existing program, and given the resources that are available to the City.

7.0 Illicit Discharge Detection and Elimination Component

Illicit discharges and connections to the MS4 can be a significant source of pollutants. The Municipal Stormwater Permit (R9-2007-0001) requires the City of Imperial Beach to establish an illegal discharge and illicit connection (ID/IC) program to actively seek and eliminate illicit discharges. The primary goal of the ID/IC component is the development and implementation of a program, which will enable the City to find and eliminate illegal discharges and connections. The City's ID/IC program includes dry weather monitoring of the MS4, investigation of illicit discharges and connections, and spill response and prevention. This section describes implementation of the City's Illicit Discharge Detection and Elimination Program during FY 2008-09. Attachment 7-2 provides the City of Imperial Beach Field Screening and Water Sample Collection Standard Operating Procedure and Section 7.6 of this report describes effectiveness assessment measures related to this program component.

7.1 Dry Weather Monitoring Program

Dry weather urban runoff monitoring is one of several tools utilized by the City to identify ID/ICs to its MS4. Each year between May 1 and September 30 – the dry weather season – City staff collects samples from storm drain outfalls, manholes, catch basins, and other areas where urban runoff is commonly found. Where water volume is sufficient for collection, samples are analyzed in the field for several water quality parameters. This is referred to as "field screening". A sub-set of collected samples is also sent to a certified laboratory for additional analysis. Whenever field screening or lab analysis results exceed the dry weather monitoring Action Levels, then a timely follow up investigation is undertaken to identify and eliminate the pollutant source. Additionally, a trash assessment is conducted for each sampling location using the San Diego Copermittees Trash Assessment form. The complete overview of the dry weather monitoring program is provided in Attachment 7-3, City of Imperial Beach Dry Weather Monitoring Program 2009.

Summary of Dry Weather Monitoring Activity

	2009
Monitoring Site Locations Sampled	9
Field Screening Samples Collected	14
Samples Submitted for Lab Analysis	8

The tables below present the field screening and laboratory data for 2009. Monitoring was conducted at nine sample locations with a total of fourteen field screening samples and eight laboratory samples collected and analyzed. Nine field screening samples were collected from ponded catch basins and five field screening samples were collected from flowing water in the MS4. From these samples, four of the five flowing water events and four of the nine ponded water events were submitted for laboratory analysis.

Table 7-1. 2009 Field Screening Results

Station ID	Water Flow	Flow Rate L/sec	Date	Time	pH	Ortho P (PO4-P) mg/L	Nitrate (NO3-N) mg/L	Ammonia (NH3-N) mg/L	Detergents (MBAS)	Turbidity NTU	Temp (◦C)	Electrical Cond. mS/cm
K	Dry		5/11/09	9:15								
H	Tidal		5/11/09	9:15								
E1A	Tidal		5/11/09	9:30								
E1B	Dry		5/11/09	9:30								
F	Tidal		5/11/09	9:30								
M3	Dry		5/11/09	10:00								
E25	Ponded		5/11/09	10:30	7.72	**4.38***	0.138	ND	0.5	4.62	23.1	1.49
H2	Ponded		5/12/09	7:00							18.3	50.56
K	Dry		5/12/09	7:00								
E1B	Dry		5/12/09	7:15								
E25	Ponded		5/12/09	8:00	7.58	**3.36***	ND	ND		12.1	18.8	1.49
E1B	Dry		5/13/09	8:10								
E1B	Dry		5/13/09	12:00								
K	Flowing	0.029	5/13/09	11:40	8.03	0.961	ND	ND	0.75	4.68	22.1	1.26
K	Dry		5/26/09	8:30								
E1B	Dry		5/26/09	8:50								
E25	Ponded		5/26/09	1:15	7.84	1.61	ND	ND	0.75		22.5	1.53
F10	Ponded		5/26/09	9:00	7.83					8.57	21.3	41.3
E1B	Dry		5/27/09	7:45								
K	Dry		5/27/09	8:15								
H12	Flowing	0.010	5/27/09	8:45	8.15	0.81	ND		0.75	4.76	20.2	1.06
K	Dry		6/2/09	8:30								
E1B	Dry		6/2/09	8:45								
K	Dry		6/3/09	9:00								
E1B	Dry		6/3/09	9:30								
E1B	Dry		6/10/09	8:30								
E1B	Dry		6/15/09	7:45								
K	Dry		6/29/09	8:50								
E1B	Dry		6/29/09	9:15								
H6	Ponded		7/6/09	2:00	7.55	1.354	0.275	**3.72***	**2***	4.79	23.4	33.58
K	Dry		7/8/09	9:30								
E1B	Dry		7/8/09	10:30								
E1B	Dry		7/13/09	9:30								
E25	Ponded		7/13/09	10:20		1.09		**1.341***	0.75			
D2	Ponded		7/13/09	11:15	7.35	0.724	0.192	**1.164***	0.25	13.5		0.12
K	Flowing	0.0067	7/13/09	11:30	8.32	1.632	0.19	0.435	0.25	1.42		0.11
F7	Ponded		7/13/09	12:00	8.13	1.437	0.132	**2.85***	**1***	11.3		18.93
E1B	Flowing	0.016	9/4/09	8:30	7.8	0.648	0.342	0.082	0	0.69		0.39
E1B	Flowing	0.050	9/16/09	1:50	8.2	1.82	0.188	**1.013***	0.5	1.93		0.928

*** - Exceeded Action Levels**
ND- Non Detect

During the 2009 dry weather season, field screening exceedances were observed for ammonia, orthophosphates, and detergents. The necessary follow up investigations were conducted to identify and abate the sources of pollutants. When conditions are appropriate, follow up investigations are conducted in the field by identifying the sources of water and assessing the conditions that may have contributed to the observed exceedances. Follow up investigations were conducted in the field for the exceedances observed at site locations F7, D2, and H6. When necessary, additional water quality samples are collected to identify the sources of pollutants. Additional samples were collected to identify the exceedances at site locations E1B and E25. The next section presents information on the results of the follow up investigations.

Table 7-2. 2009 Lab Analysis Results

Station ID	Water Flow	Date	Time	Phos Mg/L	Oil & Gr. mg/L	Diaz. ug/L	Mala-Thion ug/L	Chlor-pyrif. ug/L	Tot. Hard (mgCA CO3/L)	Cad. Diss mg/L	Copper Diss mg/L	Lead Diss mg/L	Zinc Diss mg/L	Total MPN/100 ml	Fecal MPN/100 ml	Entero MPN/100 ml
K	Flowing	5/13/09	11:40	-	ND	ND	ND	ND	322	ND	ND	ND	0.094	**90000***	1300	9000
H12	Flowing	5/27/09	8:45	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	**170000***	**30000***	**50000***
K	Flowing	7/13/09	12:00	-	ND	ND	ND	ND	323	ND	0.003	ND	ND	**80000***	**30000***	**50000***
E1B	Flowing	9/16/09	13:50	-	ND	ND	ND	ND	307	ND	**0.165***	ND	0.07	**80000***	3500	300
F7	Ponded	7/13/09	12:00	-	ND	ND	ND	ND	2160	ND	ND	ND	ND	**240000***	3000	1700
D2	Ponded	7/13/09	11:15	-	ND	ND	ND	ND	363	ND	0.003	ND	ND	**1600000***	**90000***	**50000***
E25	Ponded	7/13/09	10:20	-	ND	ND	ND	ND	319	ND	0.003	ND	ND	3500	90	34
E25	Ponded	5/12/09	8:00	**2.82**	ND	ND	ND	ND	412	ND	ND	ND	0.056	**170000***	1300	3000

*** - Exceeded Action Levels**
ND- Non Detect

Laboratory analysis was performed for eight samples and resulted in exceedances of bacteria, dissolved copper, and phosphorus. As in previous years, bacteria were elevated in the samples taken in the MS4 and metals testing exceeded action levels in copper at Station E1B. The high phosphorus level is also related to the follow up investigation that identified elevated phosphorus levels from a catch basin during the field screening analysis. The next section presents information on the results of the follow up investigations.

Trash Assessment

In 2008 the City started conducting trash assessments in conjunctions with its dry weather monitoring at targeted MS4 sites. The San Diego Copermittees developed a standardized Trash Assessment Form that provides a qualitative rating of each sampling location on a scale of Optimal, Suboptimal, Marginal, Submarginal, or Poor. Figure 7-1 below provides the results for the 2009 Dry Weather monitoring season.

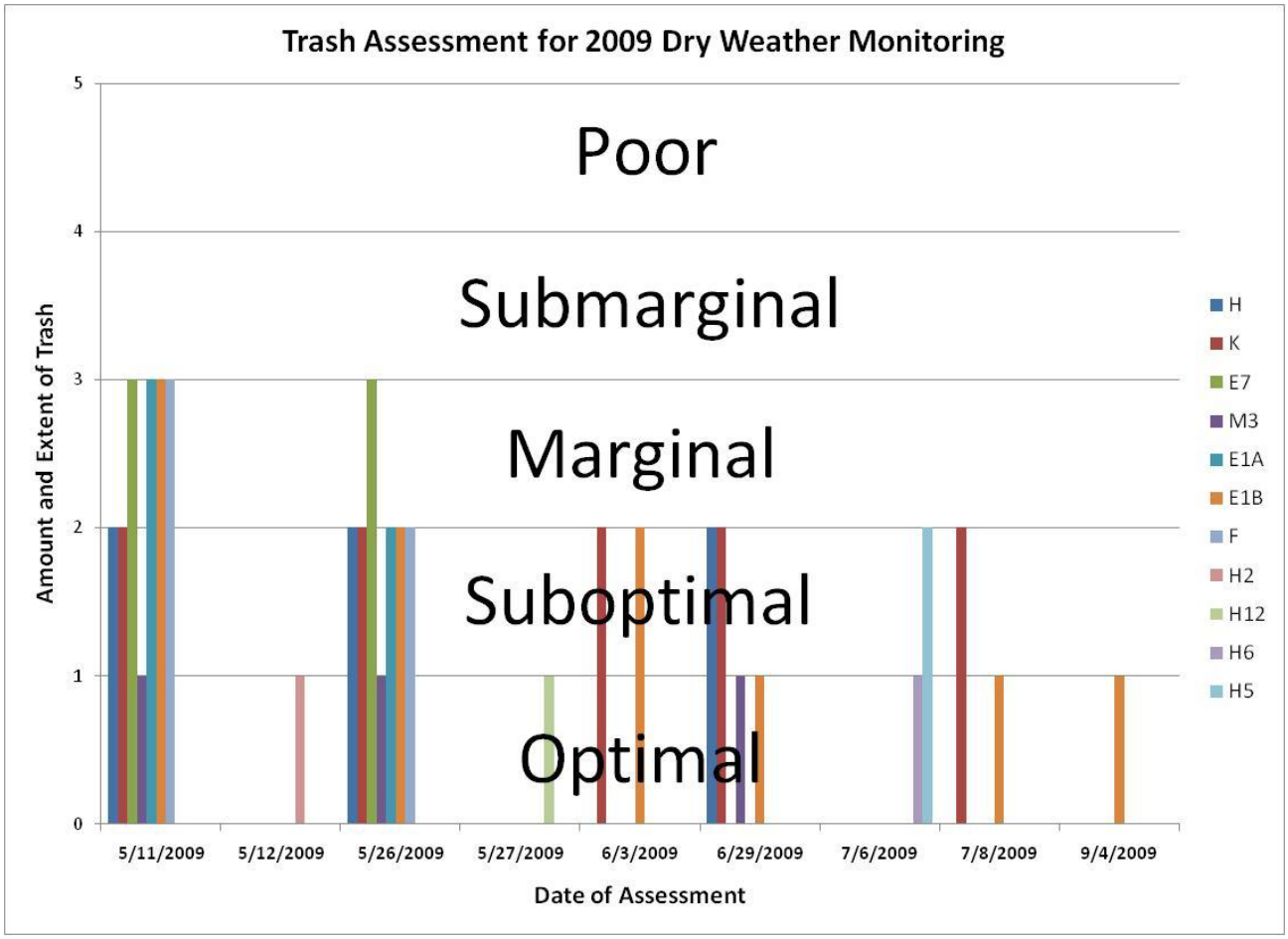


Figure 7-1. The graph above shows trash assessment results for 2009. According to the data, trash is not a serious problem for human or aquatic health at dry weather monitoring stations in Imperial Beach. Twenty-Seven trash assessments were conducted. Of those, most were in the optimal or suboptimal category, meaning that at first glance, little or no trash was visible. Only five locations reached the marginal category, meaning trash was evident at low to medium levels and the appropriate actions were taken to clean up those areas.

Follow Up Investigations and Analysis

Follow up investigations to identify and abate the sources of pollutants were conducted when water quality samples exceeded the Copermittees Action Levels. The City follows the guidelines for eliminating illegal discharges or connections set forth in Chapter 9 of the JURMP and outlined in Attachment 7-3, City of Imperial Beach Dry Weather Monitoring Program 2009. This section provides the results of the 2009 dry weather monitoring follow up investigations and also presents analysis of data to reveal possible pollutant trends. Significant findings are presented by major outfall or pollutant source below:

- **Outfall E-1B (Grove & 5th Street) – Tijuana River Estuary Watershed**



This outfall drains runoff primarily from Mar Vista High School, some residential areas, and portions of Imperial Beach Boulevard and discharges into the Tijuana Estuary. This outfall was completely dry for most of the 2009 dry weather monitoring period, and then in September began to start having a low volume, intermittent flow. Initial investigations by City staff were unable to locate any easily observable source for the discharge other than originating somewhere on Mar Vista High School. Field screening results indicated slightly elevated ammonia and detergents and lab analysis indicated slightly elevated dissolved copper and total coliform bacteria.

City staff took a number of steps to locate the source of the water discharging from Mar Vista High School that continued past the end of the dry weather monitoring season. The City cleaned the E1B storm drain line for the second time during the year to ensure that the pipe was completely free of any debris. City staff also met with Mar Vista High School management to discuss the problem and conducted site investigations with the custodian on numerous occasions. On November 10, 2009, during the third site investigation with the custodian, City staff identified the source of water originating from an outdoor shower at the School's swimming pool. At the City's request, Mar Vista High School turned off the water to the outdoor showers until the drainage problem is fixed.

The E1B outfall has been sampled on a regular basis since 2003 and has consistently shown an elevated level of dissolved copper as seen in Figure 7.2 below. During the dry weather monitoring season of 2006, staff observed over 1,000 gallons of water emptying from the outfall into the Tijuana River Estuary. Sample results indicated elevated levels of dissolved copper. Upstream investigation confirmed that Mar Vista High School maintenance staff had discharged pool water as part of its weekly back flushing of the high school's swimming pool filters. Subsequent discussions with staff from the Sweetwater Union High School District revealed that the pool maintenance room was designed with a pipe connecting the back flush system to a storm drain pipe that leads to the E1B outfall. At the City's

request, this connection was closed off in early July 2006. In its place, the District constructed a 600-gallon holding tank that now discharges back flush water directly to the sanitary sewer. It was hypothesized that this solution would remedy the dissolved copper issues (copper-based algaecides being a frequently used pool chemical). However, despite these previous solutions, Environmental Staff continues to observe a fairly steady flow of water coming from this outfall. The most recent identification of the illegal connection from the outdoor pool shower at Mar Vista High School may finally resolve the problem of dry weather flows and elevated copper loads.

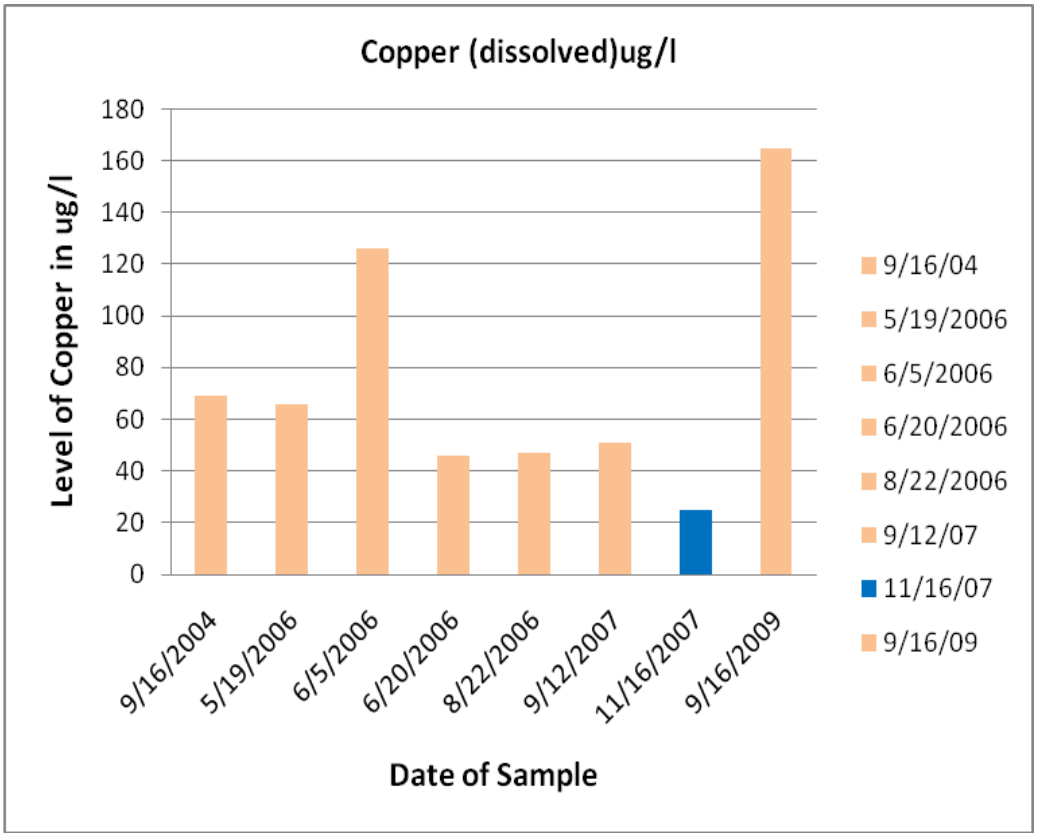


Figure 7-2. The graph above shows the elevated dissolved copper from outfall E1B over time. Since 2004 the outfall has only had one test for copper that was below action levels. The identification of the illegal shower connection at Mar Vista pool may finally resolve this problem.

- **Station E25 (South side of Elm in front of Mar Vista High) – Tijuana River Watershed**





The E25 catch basin captures runoff from primarily residential areas and runoff from Mar Vista High School. This location is one of the few in the City that consistently has ponded water due to the design of the drop box inlet. The ponded water is most likely the result of runoff from irrigation from either Mar Vista High School or local residents. The elevated phosphorus, ammonia, and total coliform during the 2009 dry weather monitoring season was most likely from residential fertilizers and over irrigation; however, no cause was identified in follow up investigations. Follow up monitoring showed a rapid drop in phosphorus indicating that the source was only a onetime input. Total coliform is also most likely from natural sources due to non elevated fecal and enterococcus. The elevated ammonia levels would also be consistent with the observed ponded water from irrigation runoff. The E25 outfall has been sampled regularly over the last three dry weather season and has shown elevated phosphorus and ammonia levels as seen in Figure 7.3.

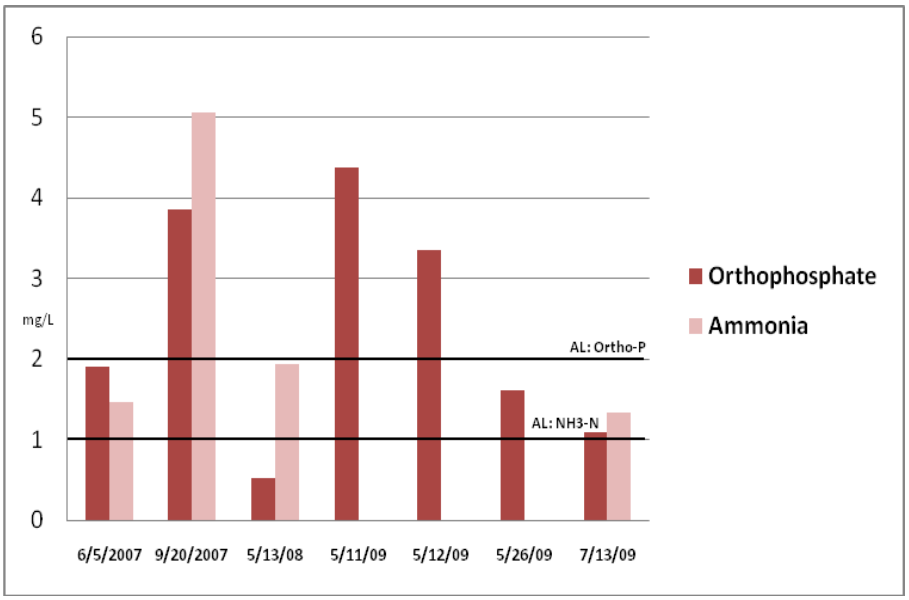


Figure 7-3. The graph above shows elevated levels of ammonia and phosphorus at the E25 station. The possible sources include Mar Vista High School, residential homes in the immediate vicinity, and the ponding of water in the drop box. The City has a close working relationship with Mar Vista High School in regards to urban runoff management and pollution prevention. The specific source for the elevated ammonia and phosphorus is still unknown and the city continues to investigate the problem.

- **Outfall K (Florence and 12th) – Otay River (San Diego Bay) Watershed**





The K outfall drains runoff from 120 acres and has a mix of residential and commercial land uses. The site is located between Florence and 12th Street along the San Diego Bay Shore bike path. This outfall is usually dry during the monitoring season. During 2009 the outfall had flowing water only 2/10 visits and only had exceedances in bacteria as seen in Figure 7-4 below.

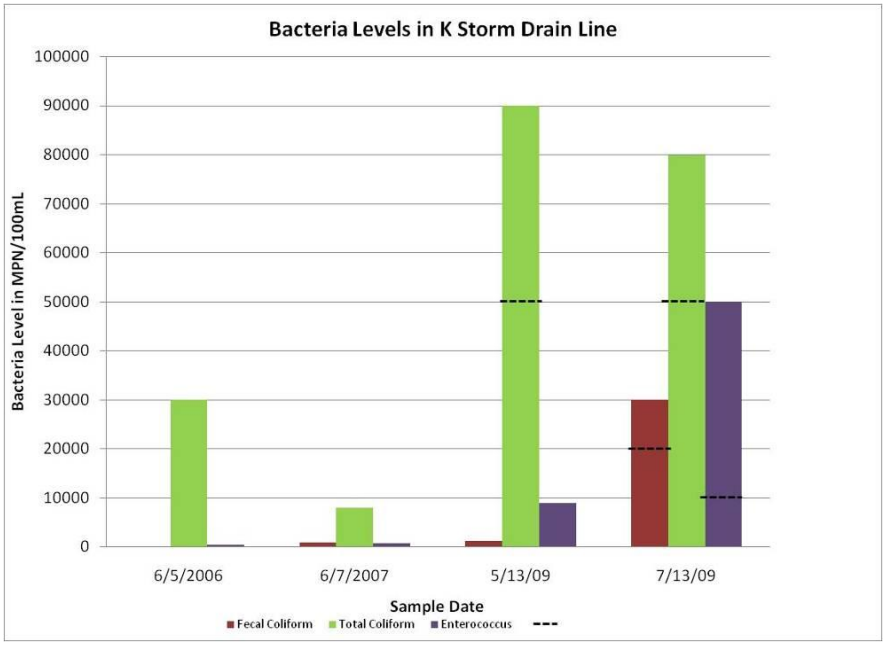
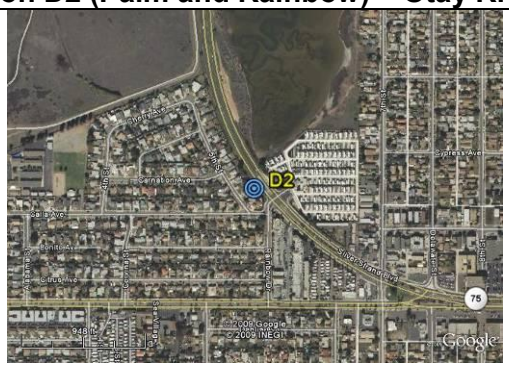


Figure 7-4. Follow up investigations up pipe during 2009 identified the two discharge sources. The 5/13/09 event was related to a resident washing a car and the 7/13/09 event was related to water flowing off a resident's property. The bacteria spikes are most likely related to the conditions in the storm drain and related to the one time discharge events. Rodents are also frequently spotted running in and out of the drain, so it is plausible that fecal bacteria come from animals.

- **Station D2 (Palm and Rainbow) – Otay River (San Diego Bay) Watershed**





The D2 outfall drains runoff from a mix area of residential and commercial land uses. The outfall discharges into a ditch along Highway 75 to a low laying area with dense vegetation and standing ground water. When there is sufficient enough flow, runoff will flow into a slightly elevated drainage pipe and discharges to the southwest end of San Diego Bay. This outfall has not been sampled in the past.

During the 2009 monitoring season a sample was collected from the standing ground water because the storm drain pipe leading into the area was completely dry. The sample had elevated ammonia and high bacteria, which is most likely related to the standing groundwater, dense vegetation, and aquatic organisms in the water. No necessary follow up investigations were needed at this location.

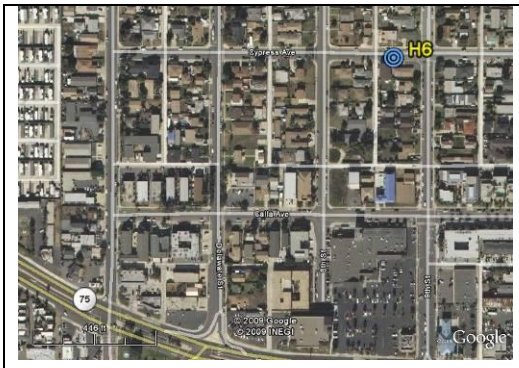
- **Station F7 (Connecticut and Grove) – Tijuana River Estuary**





Station F7 is a manhole along the F storm drain line that captures runoff from residential and commercial land uses before discharging into the Tijuana River Estuary. The F outfall gets inundated by tidal water during all tides and the sampling at Station F7 was an attempt to capture possible runoff flowing into the F storm drain. Unfortunately, the sample taken during 2009 indicates that the location is impacted by tidal water and the results of elevated ammonia and total choliform would be expected from an area of salt water, standing water, and organic debris. The manhole upstream (F10) did not have enough water to sample. Tree leaves, pollen, and trash in the curb gutter upstream may have also contributed to the elevated ammonia and choliform.

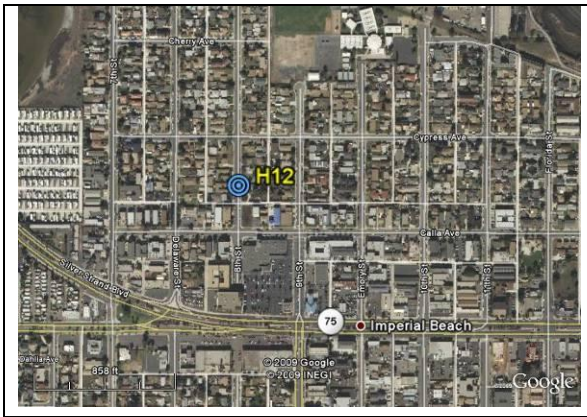
- **Station H6 (Cypress and 9th) – Otay River (San Diego Bay) Watershed**





Station H6 is a catch basin upstream from the tidally influenced H outfall location. The catch basin captures runoff water from a residential neighborhood before flowing into the H storm drain line. Monitoring results indicated elevated ammonia and MBAS, which are likely contaminates from residential areas. City staff responded to a storm water hotline tip that identified a resident using water to wash down impervious surfaces on a property that drains into H6. The City will continue to monitor the catch basin at H6.

- **Station H12 (8th between Calla and Cypress) – Otay River (San Diego Bay) Watershed**





Station H12 is a manhole that primarily drains commercial and small residential areas. A sample was collected during very low flow conditions and allowed for only bacterial analysis. The sample indicated elevated bacteria loads, which were most likely from the over irrigation of two nearby apartment complexes combined with

excessive trash from those complexes along the curb. The City followed up by notifying the property management firm of the necessary corrective actions.

7.2 Investigation of Illegal Discharges and Illicit Connections

Procedural Overview

The City of Imperial Beach Urban Runoff Management and Discharge Control Ordinance (I.B.M.C. 8.30) prohibits discharges and connections to the MS4 with only limited exception. City staff and members of the public are encouraged to report illicit discharges and other urban runoff violations to environmental staff for investigation. A storm water hotline, (619) 424-4095, and online reporting continue to facilitate this type of reporting.

ID/IC Investigations During FY 2008-09

The City performed 95 urban runoff investigations during FY 2008/09. Staff confirmed the presence of an illicit discharge or connection in 83 instances. A responsible party was identified in 71 cases. The following tables and figures summarize the types of violations observed and other informative statistics.

Referral Sources for Urban Runoff Investigations FY 2008-09

Code Enforcement	6
Streets	14
Other City Staff	2
General Public	15
Environmental Staff	48
Residents	10
Total	**95**

Table 7-3. Violator and Pollutant Types for Urban Runoff Investigations FY 2008-09

Violator Type	Auto Fluids	Auto Wash	Chemicals	Con. Debris	Oil & Grease	Detergents	Green Waste	Multiple	Over Irrigation	Paint	Pool Water	Potable Water	Sediment	Sewer Spill	Trash Debris	Unknown	Other	Pet Waste	Wash Water	**Total**
Construction			1	4									3						2	**10**
Commercial Business			1						1			1	1		2	2				**8**
Mobile Business				1	4								1				1		1	**8**
Unknown/Illicit	2			3											1					**6**
Resident	5	2			2				2	4	1	1	3		5	3	2		1	**31**
Property Management	1		1					1	6			2	2			3			1	**17**
Other																				**0**
Municipal	1												1		1					**3**
Totals	**9**	**2**	**3**	**8**	**6**	**0**	**0**	**1**	**9**	**4**	**1**	**4**	**11**	**0**	**9**	**8**	**3**	**0**	**5**	**83**

Illicit Discharge Violator Classification FY 2008-09

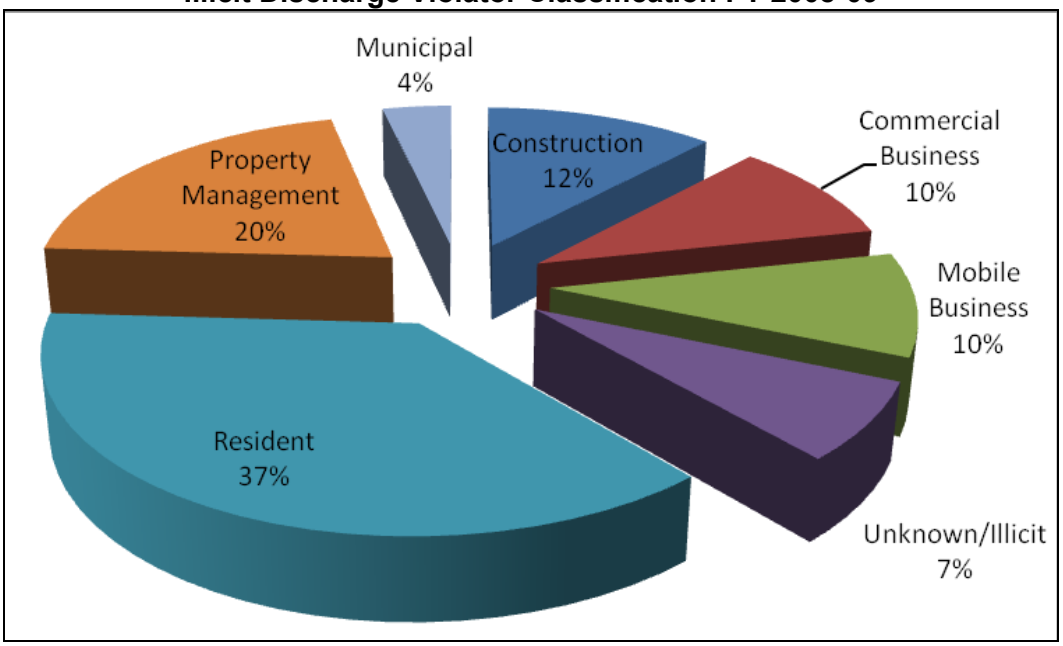


Figure 7-5. The graph above identifies the violator type identified during FY 2008-09. Over half of the identified violators were from residents.

Pollutant Type Distribution by Violator Classification FY 2008-09

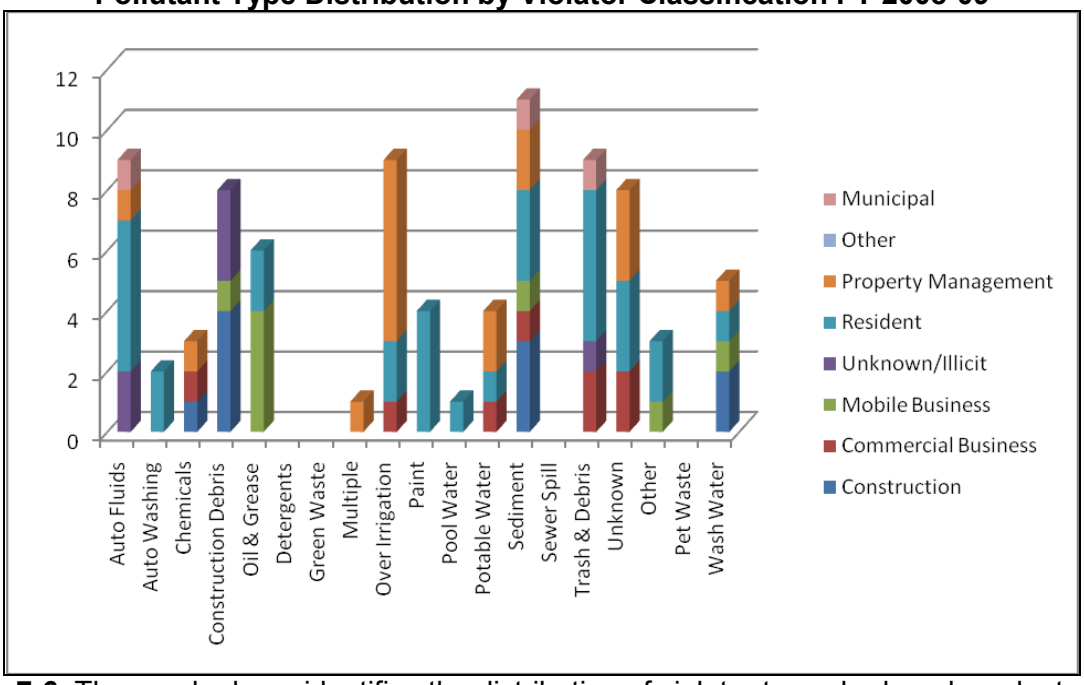


Figure 7-6. The graph above identifies the distribution of violator types broken down by types of pollutants. A lot of information is presnted on this graph but through a closer analysis some emerging trends start to appear. Over irrigation for exampe is a larger problem for appartment complexes than for house hold residents. Oil and grease is also a persistant problem for mobile businesses.

All urban runoff investigations were pursued until a satisfactory outcome could be attained. Usually, this involved remediation of spilled materials, elimination of illicit connections to the MS4, education of violtors, and/or installment of BMPs to prevent future discharges. Unless the illicit discharge is of immediate danger to public health or the environment, violators are typically given the first opportunity to clean up spilled materials. If unable or unwilling to do so, or if a violator cannot be identified, City staff is enlisted to perform the cleanup at the property owner's expense.

Attachment 7-5 presents a detailed description of each ID/IC investigation, including remedial steps and enforcement actions if any were taken. The City relies on a host of tools to ensure compliance. The following is a summary of enforcement actions taken during FY 2008-09.

Enforcement Actions Resulting from ID/IC Investigations FY 2008-09

Verbal Warning	12
Informational Letter	21
Notice of Abatement / Violation	23
Fine / Citation	4
Total	**60**

Historical Record of ID/IC Investigations Over the Past Three Reporting Periods (2006-09)

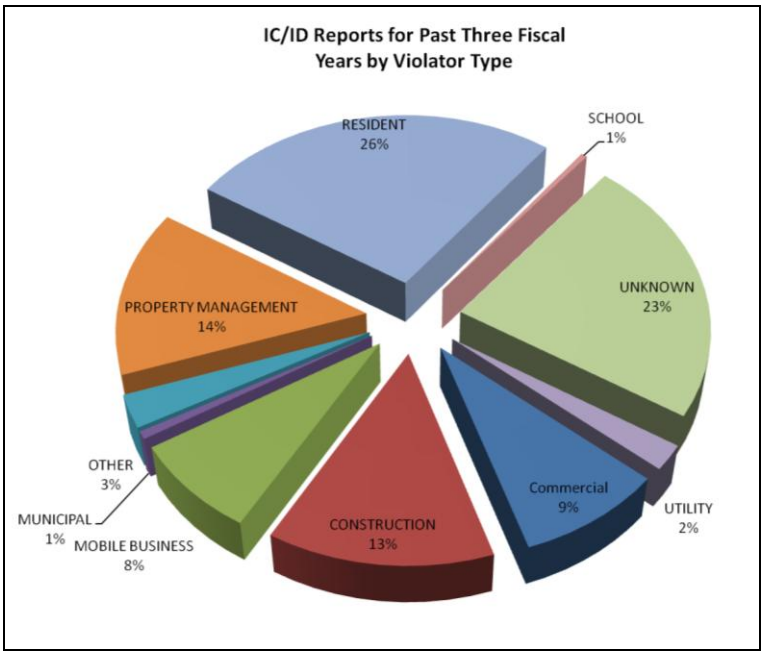


Figure 7-7. The graph above illustrates the types of violators observed over the past three fiscal reporting periods. Residents are shown to be the most common violator, but the number of unknown violators is also high. The results indicate that better descriptions and faster response times are needed to identify and educate violators on storm water issues

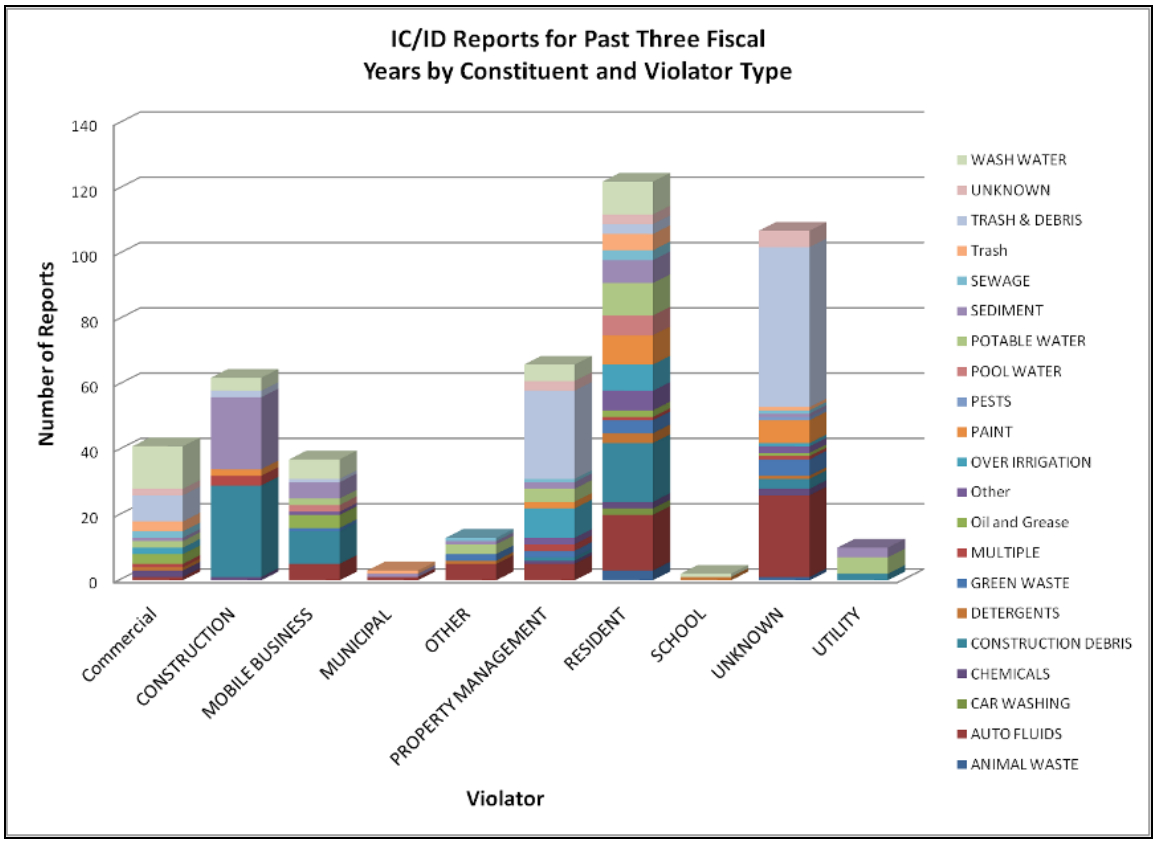


Figure 7-8. The above graph gives a more complex look over the past three fiscal reporting periods (FY 06-07, FY 07-08, and FY 08-09) of the pollutants being reported as discharges distributed by the violator type. By analyzing the data, trends start to appear. For example, residents at apartment complexes (Property Management category) generate significantly more trash than house hold residents. Apartment complexes, residents, and unknown sources receive over twice as many reports than commercial, construction, and mobile businesses. This type of analysis also helps support the general understanding of the types of pollutants and number of violators being generated by different sources.

7.3 Prevention of and Response to Sewage Spills

The City endeavors to clean 100% of the municipal sewer lines each year. More troublesome sewer lines around commercial areas may be cleaned more frequently if needed. The City responded to 5 sewage spills during FY 2008-09, all of which were on private laterals. Approximately 200 gallons were spilled and successfully recovered. Attachment 7-1 presents further details on each sewage spill and the City's response.

7.4 Program Review and Modifications

The following is a list of activities that the City anticipates implementing as part of its Illicit Discharge Detection and Elimination Component during FY 2009-10.

Existing Activities

- Continue to conduct annual dry weather monitoring
- Continue to investigate ID/ICs, including appropriate mitigation of materials and enforcement action against violators where appropriate
- Continue to investigate and mitigate sewage spills throughout the City
- Continue to support the highly successful used oil recycling and household hazardous waste collection programs for residents
- Continue investigation of suspicious dry weather flow at Outfall E-1B.
- City staff is working with property management companies to reduce pollutants from their properties.

New Activities Underway

- Environmental staff is working to reduce improperly discarded trash and other storm water pollutants at multi-family apartments and trailer parks. This will be conducted in conjunction with a program to increase solid waste diversion at these locations.
- Environmental staff is looking into the feasibility of using the same computer system as code compliance for more efficient enforcement of illegal connections and discharges.

Revisions to the JURMP

The Regional Monitoring Workgroup in November 2008 requested the Dry Weather Monitoring Sub-workgroup to evaluate dry weather action levels that were submitted in April 2003 by the County of San Diego on behalf of the Copermittees. The Dry Weather Sub-workgroup determined that the bacterial indicators action levels required additional analysis. All other action levels were deemed appropriate and will not change. The Dry Weather Sub-workgroup contracted the services of D-Max Engineering through the City of La Mesa to conduct the evaluation of historical bacterial data collected from dry weather monitoring from 2002 through 2007. Details of their evaluation are posted on the Project Clean Water Website at http://www.projectcleanwater.org/pdf/science_mon/dry_weather_2009bacteria_action_level_report_draft.pdf. The Regional Monitoring Workgroup on May 19, 2009 evaluated the recommendations of the Dry Weather Sub-workgroup and selected the 80th percentile values to

be proposed as the dry weather action levels for bacterial indicators beginning on May, 2010. The current levels and the levels proposed to effective as of May 1, 2010 are presented below.

Table 7-4. Bacterial Indicators Action Levels for Dry Weather Monitoring Program

	Total Coliform (MPN/100mL)	**Fecal Coliform** (MPN/100mL)	**Enterococcus** (MPN/100mL)
2003-2009 Action Levels	50,000	20,000	10,000
Proposed 2010-2012 Action Levels	130,000	13,000	7,000

7.5 Effectiveness Assessment

Order R9-2007-0001 (Municipal Stormwater Permit) requires Copermittees to detect, investigate, and eliminate illicit discharges and illicit connections in a timely manner. The City endeavors to reduce and prevent illicit discharges to the MS4 to the maximum extent practicable (MEP). The City uses targeted education and outreach programs and conducts routine inspections of construction and commercial facilities as preemptive efforts to prevent illegal discharges. In addition, the City conducts dry weather monitoring of major MS4 outfalls and locations May 1st through September 30th with the intent of identifying illegal storm water discharges. The City also responds to illicit discharges that are reported to the City's Stormwater Hotline or observed by City employees. The Department of Public Works Environmental Division follows through on all reported illegal discharges and ensures that the appropriate best management practices are used and maintained so no further discharges are detected.

The following section provides a description of the effectiveness of the ID/IC program using the *2003 Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs* that utilizes the hierarchy of outcome levels. (Outcome Levels 1 through Outcome Level 6). Outcome Levels 1, 2, 3, and to some degree Outcome Level 4 can be addressed on a jurisdictional scale, while Outcome Levels 4, 5, and 6 are best addressed at the watershed or regional scale.

Level 1 Outcomes- Compliance with Activity-based Permit Requirements

The City of Imperial Beach successfully met all Outcome Level 1 compliance with activity-based permit requirements. Table 7-5 below demonstrates compliance with all Order R9-2007-0001 (Municipal Stormwater Permit) Illegal Discharge Detection and Elimination Component requirements:

Table 7-5. Outcome Level 1 Permit Compliance

Permit Section	Requirement	Compliance Measure
J.3.a.(3)(f)i.	Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.	Spatial map of MS4 and monitoring locations is provided in a number of locations: 2008 JURMP, 2009 Dry Weather Monitoring Program provided in the attachments of this report, and within this section.
J.3.a.(3)(f)ii.	Reporting of all dry weather field screening and analytical monitoring results.	Dry weather monitoring results are reported within this section of the annual report and conducted in a manner consistent with the requirement in Attachment B of Order No. R9-2007-0001. The Imperial Beach SOP and 2009 Dry Weather Monitoring Program are provided in Attachment 7-2 and Attachment 7-3.
J.3.a.(3)(f)iii.	Any dry weather field screening and analytical monitoring consultant reports generated.	All field screening and analytical monitoring were conducted by Imperial Beach staff.
J.3.a.(3)(f)iv.	A brief description of any other investigations and follow-up activities for ID/IC	Summary of all follow up investigations are provided within this section of the annual report.
J.3.a.(3)(f)v.	Number and brief description of illicit discharges and connections identified.	The summary of ID/IC is provided in this section of the annual report and provided in the Attachments of this report.
J.3.a.(3)(f)vi.	The number of illicit discharges and connections eliminated.	The summary of ID/IC including the number eliminated is provided in this section of the report.
J.3.a.(3)(f)vii.	Identification and description of all spills to the MS4 and response to the spills.	The summary of spills to the MS4 and response is provided within this section of the annual report.
J.3.a.(3)(f)viii.	A description of activities implemented to prevent sewage and other spills from entering the MS4.	The City endeavors to clean 100% of the sewer system each year. A description of activities is provided within this section of the report.
J.3.a.(3)(f)ix.	A description of the mechanism whereby notification of sewage spills from private laterals.	The City follows the notification procedure as identified by the General Waste Discharge Requirements for Sanitary Sewer Over Flows (Order No. N2006-0003 DWQ as amended by Order No. WQ 2008-0002-EXEC)
J.3.a.(3)(f)x.	Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	Analysis of ID/IC reporting is provided within this section of the report.
J.3.a.(3)(f)xi.	A description of efforts to publicize and facilitate public reporting of illicit discharges.	Education and outreach as describe in previous sections of the report, inspections, and regional programs all publicize the efforts for the public to report ID/ICs either to the Storm Water Hotline 619-424-4095 or online reporting form.
J.3.a.(3)(f)xii.	The number of violations and enforcement actions taken for ID/ICs including information on any necessary follow-up actions taken.	Descriptions of ID/ICs and follow up actions are provided within this section and in Attachment 7-4.
J.3.a.(3)(f)Xiii.	A description of notable activities conducted to manage illicit discharges and connections.	One notable activity was the identification and elimination of an illegal outdoor shower connection at Mar Vista High School. A description is provided in this section.

Level 2 Outcomes- Changes in Knowledge and Awareness

Education is provided through face-to-face interaction with City staff in meetings, public workshops, community presentations, and inspections. In addition, the City disseminates brochures that outline the requirements for addressing urban runoff and water quality regulations. The efforts by the City to educate the public on detection of illegal discharges and elimination of future discharges are discussed in the JURMP Section 9.0. The education effort for City staff is discussed in the JURMP Section 10.0.

Level 3 Outcomes- Changes in Behavior (BMP Implementation)

The City is required by the Municipal Stormwater Permit to educate the public and enforce its storm water ordinances. The City's storm water ordinances include appropriate sanctions to achieve compliance and influence behavioral change. The City requires residents, commercial and industrial businesses, developers, construction companies, and municipal employees to implement storm water management BMPs. These BMPs are specific to each particular JURMP component and are tracked and monitored by the City. The City performed 95 urban runoff investigations during FY 2008-09. Staff confirmed the presence of an illicit discharge or connection in 83 instances and a responsible party to implement a correct BMP was identified in 71 cases.

Level 4 Outcomes- Load Reductions

Investigations of illegal discharges and illegal connections are logged and reported in the City's database. The City monitors and keeps track of treatment control BMPs, conducts storm water inspections of commercial businesses, and inspects construction and development projects. In 2008 the City started conducting trash assessments in conjunctions with its dry weather monitoring at targeted MS4 sites. The trash assessment provides a qualitative rating of each sampling location on a scale of Optimal, Suboptimal, Marginal, Submarginal, or Poor. The City also responds to sewer system overflows and other illegal discharges and uses a vactor truck if necessary to recover the spill. During FY 08-09 the City recovered 200 gallons of sewage from a private lateral spill. Lastly, the City provides means for residents to recycle used oil and household hazardous wastes (HHW) .The totals of which are provided in the Residential Component Section of the annual report.

Attachment 7-1 Spill Summary Table

AGENCY	SSO EVENT ID	SPILL TYPE	Spill Location	Address	City	Zip	Spill Reach Surface	Spill Reach Storm Drain	Spill Volume	Volume Recovered	SPILL RATE	Date	Fallure Occurred	OVERALL SPILL DESCRIPTION
IMPERIAL BEACH, CITY OF	730667	Category 2	831 13th Street	831 13th Street	Imperial Beach	91932	No	No	15	15	0	12/14/2008	Lower Lateral	This was a partial blockage first noticed by a renter who called the Sheriff. The Sheriff called the Sewer Division staff. Upon staff arrival, the renters had ceased using water and the lateral had stopped flowing. Sewer Division staff contacted Barker Plumbing to clear the partial blockage. The city Vactor truck was used to pressure wash and collect the spill.
IMPERIAL BEACH, CITY OF	732759	Category 2	Bernardo Shores RV Park Clean out	500 Hwy 75 State Hwy 75 Highway	Imperial Beach	91932	No	No	100	100	1	1/24/2009	Main	Upon arrival of city staff at manhole # 145, there was limited flow going through the manhole. This indicates that either we were receiving flow from the rest of the trailer park or that there was a partial blockage or both. The cleanout cap on the end of the city line was removed and no water was evident indicating a partial blockage or the problem was inside the trailer park. The Vactor truck cleaned the city main to 185 feet multiple times with no change in flow and the problem persisted. This was the full length of city main. The P.W Director was called to the site to observe was happening inside the trailer park for reporting purposes. The maintenance man at Bernardo shores was informed the problem was not in the city main and the recommendation was given for him to contact a local plumber. The Vactor water tanks were refilled and city staff took the cleaning hose to 200 feet. This additional distance was beyond the city line and into private property. Additional flow was seen inside the manhole indicating the blockage was alleviated. The maintenance man for Bernardo shores gave a “thumbs up” to indicate the problem was corrected. Maintenance
IMPERIAL BEACH, CITY OF	733487	Category 2	284 Imperial Beach Blvd	284 Imperial Beach Blvd Boulevard	Imperial Beach	91932	No	No	5	5	1	2/11/2009	Lower Lateral	City Staff Manuel Casas found the spill. Manuel spoke with residents and requested they use no water. The spill had appeared at the clean out and flowed to the concrete alley behind the property. The spill then flowed west where it was collected and the alley washed using the city vactor truck.
IMPERIAL BEACH, CITY OF	733993	Category 2	Private lateral clean out servicing 1113 Cypress Ave	1113 Cypress Avenue	Imperial Beach	91932	No	No	20	20	1	2/22/2009	Lower Lateral	
IMPERIAL BEACH, CITY OF	735017	Category 2	1360 Donax Ave	1360 Donax Avenue	Imperial Beach	91932	No	No	55	55	1	3/14/2009	Lower Lateral	The spill was intermittant. At operator arrival, the clean out was not spilling. Spill amount was based on visual of ponded water at the site.

City of Imperial Beach

Field Screening and Water Sample Collection Standard Operating Procedure

April 28, 2009

INTRODUCTION:

Under the Municipal Storm Water Permit (Order No. R9-2007-0001), the City is required to conduct water quality monitoring of urban runoff to identify, locate, and eliminate potential sources of pollutants that are either intentionally or inadvertently discharged into the City's municipal separate storm sewer system (MS4). This Standard Operating Procedure covers the procedures on conducting field observations, filed screening monitoring, and laboratory analytical sampling, which is required under Order No. R9-2007-0001. Investigative procedures for determining illegal discharges and source identification are not covered in this S.O.P., but are referred to in the 2008 City of Imperial Beach Jurisdictional Urban Runoff Management Program and in the 2009 City of Imperial Beach Dry Weather Monitoring Program.

FIELD SCREENING PROCEDURE

Field screening consists of filed observations, flow measurements, and field analysis of selected water quality parameters. Field screening will occur at all locations having ponded or flowing water. Water quality samples may also be sent to a professionally certified laboratory for analysis. The procedures for collecting laboratory samples are covered in the next section of this S.O.P. Visual observations will also be made at each site using the standardized copermittee field data sheet and trash assessment form. The following procedure is applicable for all urban runoff field screening:

1. Gather all necessary equipment and supplies (See attached Sampling Equipment Checklist)
2. Perform any equipment calibration before each sampling event and test the viability of test kit reagents. Refer to the equipment's manual.
3. Mobilize to the water quality monitoring location.
4. Take a picture of the sampling point and other areas of interest. For example; a picture of the outfall and drainage area to record pollutants discharged downstream.
5. Make visual observations of the sample location including general site description, atmospheric conditions, and runoff characteristics. Visual observations can be recorded on the San Diego Copermittees Monitoring Field Data Sheet. Additionally, make qualitative assessment of trash using the Copermittees Trash Assessment Form. (See attached Dry Weather Monitoring Field Datasheet and 2009 Trash Assessment Form).
6. Wear gloves during all sample collection.
7. At each site with ponded or flowing water, collect grab samples for analysis with the field test kit. Grab samples may be collected by hand, with the bailer method, or sampling pole depending on the site location.

Note: Field screening should be conducted at locations that have ponded or flowing water. Conductivity may be measured to determine if the water source is tidal or urban runoff in nature. Urban runoff normally has conductivities of 2 mS/cm or less. Salt water normally has high conductivities (i.e. 20- 40 mS/cm). Other factors might need to be considered in determining the source of the water. Water samples should **not** be screened or collected if tidal water is present.

8. Measure Flow Rate. If there is no flow check the appropriate "water flow" category (ponded, dry or tidal) on the Dry Weather Monitoring Field Datasheet. Place a container with a known quantity (ex. 1000 milliliter beaker) in the flow stream and record the time it takes to fill the container. Use a large container (ex. 5 gal bucket) to measure very high flow rates, common during the wet weather season. Record information on the Field Datasheet. Convert results to gallons per minute (gpm).
9. Prior to field screening measurements rinse all equipment probes 3x with the sample medium. Measure Temperature, Turbidity, PH, Conductivity, NH_3N, NO_3N, Ortho-PO_4. Measure Temperature and Turbidity followed by the remaining parameters. Follow measurement procedures listed in the sampling equipment manuals. Record all measurements on the Field Data Sheet.
10. Store all ampules used in testing in a small tightly secured container. Dispose of ampules following the disposal requirements listed in the testing manuals or Materials Safety Data Sheets.

WATER SAMPLE COLLECTION PROCEDURE FOR LAB ANALYSIS

The City also collects and sends off urban runoff samples for laboratory analysis. The City's Dry Weather Monitoring Program requires that at a minimum 25% of the locations with ponded or flowing water be tested for additional contaminates at an EPA-certified laboratory. At a minimum the following contaminates will be tested: a) dissolved cadmium, copper, lead, and zink; b) oil and grease; c) bacterial indicators; D) total hardness; E) organophosphate; F) pesticides –diazinon and chlorpyrifos.

1. Don safety glasses and latex gloves.
2. Ensure laboratory supplied sample containers match the analyte that is being sampled. Check integrity of containers and replace those that are defected.
3. With a fine point sharpie write the appropriate information on all sample container labels (Sample Date, Sample Time, Location, Preservative, etc.). Affix an appropriate label if a label does not exist.
4. Tape around labels with transparent tape.
5. Slowly fill a clean and rinsed (w/ sample medium 3x) High Density Polyethylene container (large beaker or sampling pole/beaker) with the sample medium. This container will be used to transfer the sample medium to the laboratory supplied sampling containers. Direct filling technique (no transfer container is used) may

be used during appropriate flow conditions, but caution is needed to prevent overspill of preservative. Refer to the notes below.

Note: *Check sample bottles to see if they contain any preservatives. Preserved sample containers should **not** be overfilled since this may result in the dilution of the preservative.
***Samples for Oil and Grease analysis should be collected at the top of the water surface since hydrocarbons, which are less dense than water, float at the top. This can be done by skimming the surface with the transfer container.

6. Slowly transfer the sample medium to the appropriate laboratory supplied container. The appropriate sampling containers are as follows:

Contaminate	Sampling Bottle
Hardness, Metals, and Phosphorus	Plastic HNO3 bottle, separate bottle for phosphorus
Pesticides/Organophosphate	1L glass bottle w/out HCL
Oil and Grease	Glass 1L with HCL
MBAS	Plastic bottle under pressure
Bacteria	Preservative plastic bottles
Ammonia	With H2SO4 preservative
Nitrate	Additional bottle with no preservatives

7. Ensure all sample container covers are properly secured to prevent sample spillage. Place all sample containers into a zip-lock bag(s) and seal.
8. Place bag(s) on ice in cooler.
9. Complete a Chain of Custody Form (See Attached).
10. Decontaminate all HDPE transfer containers, graduated cylinders, and equipment probes following the Decontamination Procedure listed in this S.O.P.
11. Site breakdown: Ensure manhole or other access points are locked and/or secure. Remove debris from site and ensure all equipment is turned off.
12. Transport samples to a designated Laboratory. Relinquish samples to the appropriate personnel and retain a copy of the C.O.C for your records.

Note: Bacteria samples have a holding time of 6 hours. Samples should be transported to the Laboratory within 4 hours after sample collection.

DECONTAMINATION PROCEDURES:

Decontaminating field screening equipment:

1. Using a small spray bottle filled with de-ionized (DI) water, rinse all equipment probes.

2. For a more thorough clean use a small spray bottle with a mixture of phosphate free liquinox and water. Rinse all small graduated cylinders (used with Chemetrics Sampling Kits) with a combination of phosphate free soap (liquinox) and water. Next, rinse cylinders with distilled or DI water using a designated pressurized water sprayer.

3. Dry containers, wrap completely with aluminum foil, and store in a clean storage bin.

QUALITY ASSURANCE/QUALITY CONTROL

The City of Imperial Beach may implement several types of QA/QC measures to assess the accuracy and precision of field and laboratory analysis. Additional samples such as replicates, field blanks, laboratory blanks, duplicates, or spiked samples may be collected during monitoring events. These samples are optional and are used to ensure the consistency and accuracy in the analytical results.

The City uses an ELAP certified lab- Enviro Matrix Analytical, Inc. for all laboratory analysis. Analytical methods and detection limits are included in all laboratory reports. As an ELAP certified lab, Enviro Matrix performs all the necessary QA/QC measures to ensure consistency and accuracy.

Replicates

Replicate samples are used to assess laboratory or field precision. They may be collected in the field in on container and split into two samples for analysis. Sample results should be within an acceptable standard deviation.

Field Blanks

Blanks are used to identify errors or contamination in sample collection and analysis. Field blanks are prepared by filling normal sample bottles with DI water and then submitting them to the laboratory with the normal batch of samples for analysis. Field blanks should be noted and marked with special notation (such as “B”) that indicates they are blanks. Analysis should then be performed with the regular samples. Lab analysis should result in non-detection of analytes.

Laboratory Blanks

Laboratory blanks are similar to field blanks with the distinction of being prepared and processed in the laboratory. The blank is used to identify errors or contamination in the laboratory analysis method or contaminates present in the laboratory environment.

Duplicates

Duplicates are used to estimate sampling and laboratory analysis precision. An internal field duplicate is an additional sample collected at the same time/place by the sampler. The duplicate is labeled as a regular sample but with special notation (such as "D") that indicates it is a duplicate. The duplicate is then analyzed with the regular samples. Lab analysis should produce comparable results for duplicates and regular samples.

Spiked Samples

Spiked samples are used to validate whether the laboratory method can accurately recover an artificially contaminated sample with a known amount of an analyte. The volume of the added spike should be small compared to the volume of the sample to which is adder.

GLOSSARY OF TERMS

Accuracy: Conforming closely to an exact value or a standard.

Ammonia: An inorganic form of nitrogen produced through bacteriological processes, decay of dead organisms, excretion of waste products by living animals, and fertilizer manufacturing. In Water, ammonia dissociates and exists in equilibrium of un-ionized and ionized ammonia. Determining how much of the total ammonia is in the un-ionized and ionized forms is important because organisms have different sensitivities to the different forms. The way in which ammonia is partitioned between the two forms is dependent on pH and temperature.

Beneficial Uses: The uses of water necessary for the survival or well being of man, plants, and wildlife. These uses of water serve to promote tangible and intangible economic, social, and environmental goals. "Beneficial Uses" of the waters of the State that may be protected against include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. "Beneficial Uses" are equivalent to "Designated Uses" under federal law. [California Water Code Section 13050(f)].

Biological Oxygen Demand (BOD): A measure of the amount of biodegradable organic matter present in an aquatic system or water sample. Low levels of BOD are always present in natural waters, but when large amounts are introduced, bacteria growth is stimulated. Because bacteria require oxygen to metabolize organic matter, the

expanding bacterial populations create a large demand for dissolved oxygen, and as a result, DO levels decline.

Chain of Custody (COC): A form that documents who has had authority and control over the samples from the time of collection to the time of analysis.

Chlorpyrifos: An organophosphate used in insecticides for agricultural applications, extermination, and residential lawn treatment.

Diazinon: An organophosphate used in agricultural applications and residential control of insects indoors and outdoors.

Enterococcus: A subgroup within the fecal streptococcus group. These bacteria are distinguished by their ability to survive in salt water, and in this respect they more closely mimic many pathogens than do other bacteriological indicators. Enterococci are typically more human-specific than the larger fecal streptococcus group, and seem to be consistently associated with warm blooded animals subsequent diseases. EPA recommends enterococci as the best indicator of health risk in salt water used for recreation.

Environmental Laboratory Accreditation Program (ELAP): A division of the California Department of Health Services that provides certification to qualified laboratories.

Fecal Coliform: A specific subgroup of total coliform bacteria. These organisms are separated from the total coliform group by their ability to grow at elevated temperatures, and are associated only with the fecal material of warm-blooded animals. Fecal coliform bacteria indicate the presence of sewage contamination in a waterway and the possible presence of other pathogenic organisms that can exist in fecal material. The presence of fecal coliform bacteria is an indicator that potential health risk exists for individuals exposed to contaminated water.

Heavy Metals: Copper, zinc, lead, mercury, cadmium, and chromium are all regarded as "heavy metals." Depending on their concentrations, heavy metals can be toxic pollutants that are hazardous to aquatic biota. Dissolved metals usually occur as cations, which tend to form complexes with anions to produce different chemical "species." This is important because the uncomplexed "free ion" is often more toxic than the complexed ion. The percentage of total metal ion that is "free" varies with the chemical properties of the water (i.e., pH).

Holding Time: Holding time is the time between sample collection and the time that sample analysis must begin. Exceedances of holding times will result in data being flagged and may contribute to inaccurate sample results.

Illegal Discharge (ID): A point source discharge of pollutants to the MS4, which is not comprised entirely of stormwater and not authorized by a NPDES permit. Wash water, sediment, spilled chemicals, and other pollutants allowed to enter the MS4 either intentionally or unintentionally contribute to the degradation of the local water quality. Illegal discharges include sewage spills. Releases from the sanitary sewer or private laterals can allow pathogens, ammonia, detergents, and other contaminants to enter the MS4.

Illicit Connections (IC): Conveyances that have been illegally connected to the MS4 system. These connections provide pathways for pollutants to enter the MS4. Improperly installed or defective rain diversion systems or devices that release pollutants into the stormwater conveyance system are also considered illicit connections.

Municipal Separate Storm Sewer System (MS4): A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, natural drainage features or channels, modified natural channels, man-made channels, or storm drains) that is owned or operated by any public body having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes. It is designated or used for collection of conveying storm water.

Nitrates: The chemically stable form of inorganic nitrogen in natural water. Nitrates occur in almost all aquatic systems, and are not considered to be a water contaminant at low concentrations.

Non-point Source Discharge: Discharge from a diffuse pollution source (i.e., without a single point of origin or not introduced into a receiving water from a specific outlet).

Non-Storm Water Discharge: Any discharge to a storm drain system or receiving water that is not composed entirely of storm water.

Nutrients: Any substance assimilated by living things that promote growth. The term generally refers to nitrogen and phosphorus in wastewater, but is also applied to other essential and trace elements.

Orthophosphate (Ortho-P): Sometimes referred to as soluble reactive phosphorus (SRP) because phosphate in this form is a readily available nutrient and is easily metabolized by green plants. Its presence in water can contribute to water pollution problems such as algal blooms and aquatic weed growth. Waters having high levels of Ortho-P are susceptible to eutrophication problems especially in warmer seasons of the year.

Outfall: The point source where a municipal storm sewer discharges to waters of the United States.

pH: A potentially critical factor in aquatic environments that can influence the chemistry and biology of the system. It can affect the solubility of chemical substances, chemical equilibria, availability of nutrients, relative toxicity of environmental contaminants, and the leechability of trace elements (i.e., cadmium, lead, copper, and zinc) from sediments and suspended material. The normal pH of surface marine waters is 8.1.

Sanitary Sewer: Underground pipes that carry only domestic or industrial wastewater, not storm water.

Sediment: Organic or inorganic material that is carried by or suspended in water and that settles out to form deposits in the storm drain system or receiving waters.

Specific Conductance (Conductivity): A measure of the ability of water to conduct electricity. Conductivity is dependent on the concentration of ions in water, and it is thus a rapid method of estimating the total dissolved solids (TDS) content of a water supply.

Conversion: mS/cm x 1 000 = µS/cm

Absolute pure water - 0.055 µS/cm
Distilled water - 0.5 µS/cm
Mountain water - 1.0 µS/cm
Most drinking water sources - 500 to 800 µS/cm
Sea water - 56 mS/cm (56000 µS/cm)
Max for potable water - 1055 µS/cm

Storm Drain Inlet: A drainage structure that collects surface runoff and funnels it into the conveyance system.

Storm Water (or Stormwater): Urban runoff and snowmelt runoff consisting only of those discharges that originates from precipitation events. Storm water is the portion of precipitation that flows across a surface to the storm drain systems or receiving waters. In general, runoff increases as the perviousness of a surface decreases. During precipitation events in urban areas, rain water picks up and transports pollutants through storm water conveyance systems, and ultimately to a receiving water body.

Storm Water Drainage (Conveyance) System: Streets, gutters, inlets, conduits, natural or artificial drains, channels and watercourses, or other facilities that are owned, operated, maintained and used for the purpose of collecting, storing, transporting, or disposing of storm water.

Surface Runoff: Precipitation, snow-melt or irrigation water that flows off of a surface when rainfall exceeds the rate at which it can infiltrate the surface or be stored in small surface depressions.

Surfactants (MBAS): Surfactants are substances that are typically found in cleaning chemicals and detergents. These substances operate by preventing dirt and debris from adhering to items. When introduced to the environment, surfactants can negatively impact an organism's normal biological processes.

Temperature: A physical parameter of water quality that is necessary in order to assess the significance of other parameters and to calculate the values of parameters that vary with temperature. It has an important influence on water density, DO saturation, the solubility and toxicity of constituents in water, pH, specific conductance, rate of chemical reactions, biological activity, and the type of biota found in an area.

Total Coliform: A natural part of the microbiology of the intestinal tract of cold- and warm blooded animals, including man. Because they are relatively easy to culture in the lab, the total coliform group has been selected as the primary indicator bacteria for the presence of disease causing organisms. If large numbers of coliforms are found in the water, there is a high probability that other pathogenic bacteria or organisms may be present.

Total Dissolved Solids (TDS): Inorganic salts and small amounts of organic matter that are dissolved in water. Potential sources include natural inputs, sewage, urban runoff, and industrial wastewater.

Total Hardness: A measure of the cations, most commonly calcium and magnesium that are dissolved in water. Water hardness increases with an increasing concentration of cations. Port JURMP Appendix G – Field Sampling Manual 26

Total Organic Carbon (TOC): TOC is associated with decaying organic matter. It is generally present in elevated levels when other harmful organic compounds are present. Testing for TOC is generally an effective tool for assessing the potential for these other harmful compounds.

Total Suspended Solids (TSS): TSS consists of any particles or substances that are neither dissolved nor settled in a water sample. They can originate from silt, decaying organic matter, industrial wastes, or sewage. In high concentrations, the particles result in turbid water.

Turbidity: Turbidity is a measure of water cloudiness, or the concentration of suspended solids in the water column. High levels of turbidity can block light from reaching submerged vegetation, trap infra-red (heat) waves which subsequently increase water temperature, and can result in an overload of particulates to filter-feeding organisms.

Water Quality Standards: The water quality objectives necessary to protect the beneficial uses of a water body.

City of Imperial Beach 2009 Dry Weather Monitoring Program

April 28, 2009

1.0 Introduction

In accordance with the Receiving Waters and Urban Runoff Monitoring and Reporting Program No. R9-2007-0001 Section II.B.3., the City of Imperial Beach (City) has developed a dry weather analytical and field screening monitoring program as part of its JURMP. The program aims to detect and eliminate illicit connections and illegal discharges to the municipal separate storm sewer system (MS4) during the dry season by conducting (1) field observations; (2) field screening monitoring; and (3) analytical monitoring at selected stations. The results will provide the City with another tool to further identify and eliminate illegal dischargers and connections into the MS4 system.

2.0 Municipal Separate Storm Sewer (MS4)

The City has developed a comprehensive set of MS4 maps in its GIS database complete with hydrologic subunits, receiving waters, sub-drainage areas, storm drains, MS4 outfalls, dry weather monitoring outfall locations, and alternative monitoring locations.

The City has a total drainage area of 2755 acres and falls into two major hydrologic units (Otay and Tijuana River). The boundary for these hydrologic unit areas bisects in the middle of the generally urbanized northern portion of the City (Attachment-2). For the most part, the City is completely built out and only has an estimated 4 acres of potentially developable land. The land use characteristics are estimated as follows:

- Residential 1,019 acres (37%)
- Commercial 118 acres (4%)
- Industrial 0 acres (0%)
- Navy Property and Schools 484 acres (18%)
- Permanent Open Space 1,134 acres (41%)

The existing MS4 system consists of open surface gutters, drainage ditches, and reinforced underground concrete storm drains. The City has approximately 5 miles of underground storm drain lines and 117 catch basin inlets. The MS4 system conveys storm water to the Otay River, San Diego Bay, Tijuana River and Estuary, or the Pacific Ocean. During the dry season it is often the case that outfalls and other conveyance structures are found to be completely dry. Because of the City's low elevation and coastal location, many of the outfalls are also impacted by tidal flows, which require investigations and monitoring further up the storm drain line.

3.0 Dry Weather Monitoring Station Locations

3.1 Station Criteria

Dry weather urban runoff monitoring is one of several tools utilized by the City to identify illicit discharges and illegal connections to its MS4. City staff collects samples at various conveyance structures including storm drain outfalls, manholes, catch basins, and other areas where urban runoff is commonly found each year between May 1 and September 30 (the dry weather season).

The City modified its dry weather field screening and analytical monitoring stations based on a review of its past Dry Weather Monitoring Program. Prior to FY 2007-08, the City used a grid system to identify monitoring stations. This proved to be inefficient because the City continually spent excessive amount

of time and resources searching for urban runoff throughout the entire grid system, only to find that in many instances the stations were dry. This updated dry weather monitoring program diverges away from the past grid system to a non-random targeted approach, which is outlined in Order No. 2007-0001 (Receiving Waters and Urban Runoff Monitoring and Reporting Program). The City now conducts field screening and analytical monitoring at targeted non-random monitoring stations that provides a comprehensive coverage of the entire MS4 system.

3.2 Dry Weather Monitoring Locations

After a through analysis of MS4 system, drainage basins, land uses, and past sampling experiences the City has selected six dry weather sampling sites that covers 65% of the total combined residential and commercial land use drainage areas in the City. If the coastal drainage areas that are served by the City's two storm drain diverters (Palm Ave and Date Ave) are subtracted from the land uses then the dry weather monitoring locations listed below cover 78% of the total residential and commercial drainage areas in the entire City.

Using guidelines written in the Receiving Waters and Urban Runoff Monitoring and Reporting Program No. R9 2007-0001 (II.B.3.a.), the City selected six sampling locations that best represents the land uses and spatial coverage of the entire MS4 system. These selected sites represent the furthest accessible outfall or manhole within each major drainage area and also includes all the major MS4 drainage lines in the City. Because of the low elevation in the City, most of the MS4 sampling outfalls are tidally influenced and therefore require an adaptive monitoring/sampling strategy. Even during low tides samples may need to be taken further up the storm drain line from manholes. Therefore, if an outfall is inundated by tidal water, field investigation will start at the furthest downstream manhole from the outfall location. Outfall naming strategy will always be based on where the sample is taken along the storm drain line. For example, storm drain line K outfall represents location site K. The first manhole upstream of the K outfall is K-2, second manhole K-3, and so forth.

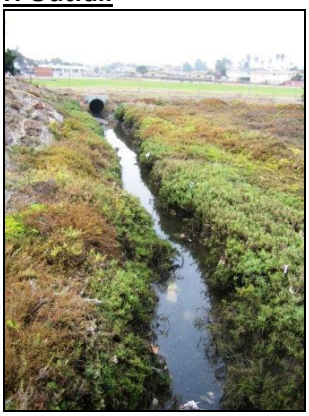
The City may also decide to take additional dry weather samples from any alternative location where water is present. This includes the smaller storm drain lines at D, P, and S, and grabs samples from open surface drains or street gutter.

K Outfall



The K outfall drains runoff from 120 acres and has a mix of residential and commercial land uses. The site is located between Florence and 12th Street along the San Diego Bay Shore bike path. This outfall discharges into the Otay River and is affected by tidal variations. Samples may be taken from the outfall during low tides. Samples may also be taken further up pipe at K-2 or K-3 when the outfall is affected by tidal conditions.

H Outfall



This outfall drains runoff from 139 acres and has a mix of commercial and residential land uses. This outfall received a large portion of runoff from the City's commercial businesses located along Palm Ave. The H outfall is located behind the Bayside School playground fence at 490 Emory. The outfall discharges into a ditch that leads to the Oray River. This outfall is affected by tidal flows during all tides and therefore requires samples to be taken up pipe at site H-3.

E-B Outfall (Collocated with E-A Outfall)



The E-B outfall is collocated with E-A outfall and share a combined drainage area of 119 acres. Both storm drain lines run parallel to one another but provide stormwater conveyance to uniquely different land uses. The E-B outfall primarily drains Mar Vista High School and the City of Imperial Beach Recreation Sports Park. The outfalls are located at the West end of Grove Avenue and discharge into the Tijuana Estuary. The E-B outfall is not affected by tidal water and may be sampled directly from the outfall.

E-25 Manhole



To capture the potential flow from the E-A outfall, the E-25 manhole sampling location was selected as a sampling site because it is above the tidal influence and has easy access to the sampling location. The E-25 manhole captures runoff from primarily residential areas. It is also located adjacent to Mar Vista HS (on the south side of Elm Ave) and captures some runoff from the street in front of the school. The E-25 sampling location eventually discharges in to the Tijuana Estuary out the E-1A outfall, which is seen in the previous sample location photo.

F Outfall



The F outfall location is immediately adjacent to the E-A and E-B outfalls at the end of Grove Avenue and discharges into the Tijuana Estuary. The outfall drains runoff from 298 acres of residential and commercial land uses. The F outfall is affected by tidal variations even at low tides and therefore requires samples to be taken up pipe. Samples may need to be collected as far up pipe as F-13.

M-3 Catch Basin



The M-3 sampling location is a catch basin along the M-storm drain line that discharges into the Tijuana River. Access to the M-1 outfall is not possible due to Ream Field Navy Base. Samples are therefore taken at the next easily accessible sampling location at M-3 catch basin located on Iris between 11th and 12th Streets just before the storm drain crosses onto Ream Field. The sampling site captures runoff from 54 acres of residential land use.

4.0 Sampling Frequencies

In accordance with the Receiving Waters and Urban Runoff Monitoring and Reporting Program No. R9 2007-0001 (II.B.3.), the City will conduct dry weather monitoring at each site identified above during the period May 1 through September 30. Each site will be visited twice during the dry weather monitoring period. All site visits will include: field observations and trash assessment of outfall locations, field screening analysis at all locations where water is present, and lab analysis at a minimum of 25% of the sites. Dry weather monitoring will not be performed during a rain event or within 72 hours after the end of a rain event.

5.0 Field Screening and Laboratory Analytical Sampling

5.1 Procedures

Field screening and laboratory analytical sampling will be conducted in accordance with the City's Standard Operating Procedures (SOP). The City's SOP covers details on sample collection, equipment preparation and maintenance, QA/QC, COC forms, and guidance for completing field data forms. All field personnel will have a copy of this dry weather monitoring program and the SOP manual for reference during field investigations.

5.2 Field Screening

Field screening will consist of qualitative field observations, flow measurement, and field analysis of selected water quality parameters. Information will be recorded on a standard field data form (Attachment-3), trash assessment form(Attachment-4), and logged on the City's database. The field screening process will involve the following:

1. Qualitative Observations

Qualitative field observations will be made during each site visit using the standardized San Diego Stormwater Copermittees Dry Weather Monitoring Field Datasheet (Attachment-3). Observations will be recorded whether or not water is present at the site. These observations are intended to provide a general assessment of the site. The following observations will be recorded:

a) General Site Description
b) Atmospheric Conditions
c) Runoff Characteristics
d) Flow Estimation
e) Trash Assessment using the Regional Trash Assessment Form

2. Field Water Quality Analysis

If water is present then field screening samples will be taken using the dry weather monitoring field test kits. The City of Imperial Beach uses Chemetric field test kits and Hatch Turbidimeter while conducting field analysis. If water is observed to be ponded or flowing then a grab sample will be collected and analyzed for the following constituents:

a) Nitrate
b) Amonnonia
c) Reactive Phosphorous
d) Temperature
e) pH
f) Surfactants (MBAS)
g) Turbidity
h) Electro Conductivity

Field personnel will be adequately trained to achieve consistent and accurate water quality analytical results. Field instruments will be calibrated as needed and the variability of test kits will be checked periodically. The City may also analyze duplicate samples in the field to assess precision. In addition, field staff may submit periodic sample splits and blanks for laboratory analysis to assess the accuracy of field testing methods and/or equipment. Documentation of calibration and sampling records will be kept in order to maintain high level of quality control.

5.3 Laboratory Analytical Monitoring

Grab samples will be collected and submitted to an EPA-certified laboratory for analysis at a minimum of 25% of sites where flowing or ponded water is observed. At a minimum, the following constituents will be analyzed:

a) Dissolved Cadmium, Copper, Lead, and Zink
b) Oil and Grease
c) Total Hardness
d) Bacterial Indicators
e) Organophosphate
f) Pesticides (Diazinon and Chlorpyrifos)

Field staff will follow strict sampling and chain-of-custody protocols when collecting dry weather laboratory analytical samples.

5.4 Trash Assessment

In accordance with the Receiving Waters and Urban Runoff Monitoring and Reporting Program No. R9 2007-0001 (II.B.3.c.), an assessment of the amount and extent of trash will be conducted at each dry weather screening or analytical monitoring station. The evaluation of trash will include an area surrounding the MS4 and receiving waters. The amount and extent of trash will be estimated upon first glance of the site. A qualitative ranking of optimal, suboptimal, marginal, submarginal, or poor will be assigned to each site. In addition, sites will also be evaluated on whether there is a threat to aquatic and/or human health. To aid in the assessment of trash, the San Diego Copermittees have developed a regional trash assessment form for dry weather monitoring, which will be used by the City (Attachment-4).

6.0 Source Identification Follow-Up Investigations

The primary objective of the dry weather monitoring program is to detect and eliminate illicit connections and illegal discharges (IC/ID) to the MS4 as required in Section D.4.c of the Permit. The City has established an IC/ID program presented in Chapter 9 of the JURMP Document. An IC/ID investigation is triggered by exceedances of field screening and laboratory monitoring results or from exceedances of qualitative observations. When an exceedance is triggered, the City had two business days to conduct an investigation to identify the source of the discharge or provide rational as to why the discharge does not pose a threat to water quality and does not need further investigation. The criteria to determine if monitoring results or qualitative observations necessitate an IC/ID investigation are described below.

6.1 Action Levels

The action levels for initiating a source identification investigation for field screening and laboratory analytical parameters are summarized in Attachment-1. These action levels will provide guidance when interpreting results of field and laboratory sampling. However, there may be instances when exceedances in actions levels may be misleading as a result of natural conditions such as influence of ground water, tidal influence, results of existing physical condition, or time of day. The use of best professional judgment will be utilized when interpreting water quality data. When exceedances are discovered using field test kits, the City typically follows up with an immediate investigation upstream to identify the source. Similarly when laboratory analysis results in the exceedance of action levels, the City will conduct a follow up investigation within two working days of receiving laboratory results.

6.2 Qualitative Observations

Qualitative observations such as dead animals, strong odor, and visual observations may indicate that a discharge of pollutants has occurred and that serious water quality problems are present. Qualitative observations may indicate serious water quality problems when field and analytical monitoring results are within action level limits or not immediately available. These observations will help the City in assessing the health and safety of the site.

7.0 Elimination of Illegal Connections and Discharges

The City will follow guidelines for eliminating illegal discharges or connections set forth in Chapter 9 of the JURMP. Once the discharge has been detected and stopped, the City may utilize escalating enforcement actions to ensure that the responsible party does not continue to discharge into the MS4 and receiving waters. If the discharge is wide spread or poses an immediate and severe threat to the public or environment, then other agencies will be notified (FWS, Tijuana River National Estuarine Research Reserve, Department of Environmental Health, Fire Department, ect.). In the case of a sewage spill or other pollutants which endanger environmental health, the RWQCB will be notified within 24 hours of detection.

8.0 Program Assessment

The dry weather monitoring program will be evaluated annually prior to May 1st and get updated as needed. A summary of findings will be included in the City's Jurisdictional URMP Annual Report. The criteria for evaluating the effectiveness of the dry weather monitoring program will include the number of sites monitored, frequency of monitoring, frequency of observed dry weather runoff, number of field screening and laboratory samples collected, number of follow up investigations conducted, and number of pollution sources identified and eliminated.

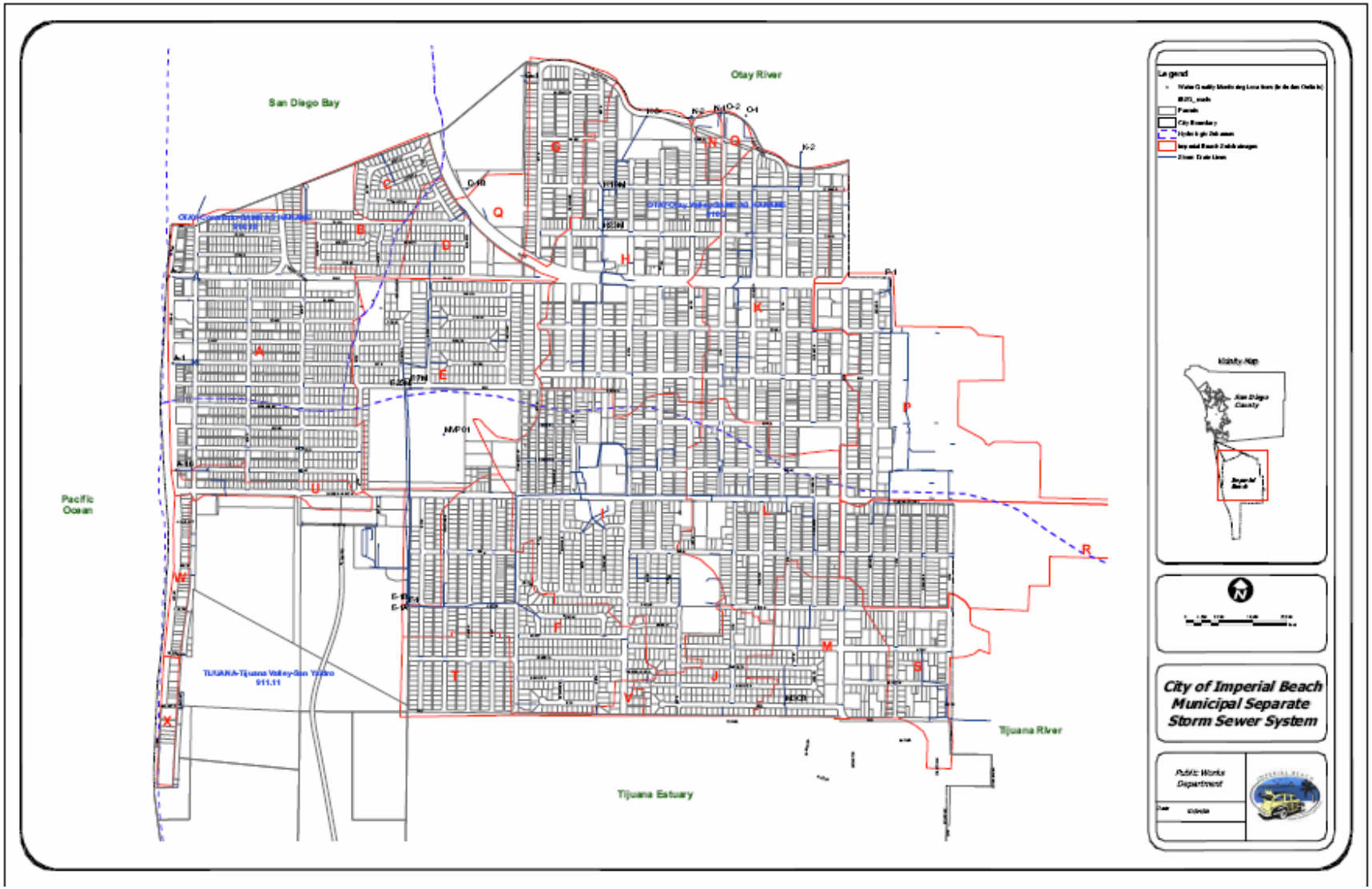
The City will use the annual assessment of the dry weather monitoring program to refine and focus its approach for the next dry season. Sampling locations that indicate the presence of contaminates may need to be monitored at a higher frequency, and monitoring locations that do not appear to have dry weather flows may be monitored less frequently.

Attachment-1

Table 6-1 Action Levels for Field Screening and Laboratory Parameters

Field Screening Analytes	Action Levels	Source / Notes
pH	<6.5 or >9.0	Basin Plan, with allowance for elevated pH due to excessive photosynthesis. Elevated pH is especially problematic in combination with high ammonia-nitrogen.
Orthophosphate-P (mg/L)	2.0	USEPA Multi-sector General Permit
Nitrate-N (mg/L)	10.0	Basin Plan and drinking water standards
Ammonia-N (mg/L)	1.0	Based on workgroup experience. May also consider unionized ammonia fraction
Surfactants (MBAS) (mg/L)	1.0	Basin Plan with allowance based on workgroup field experience and possible field reagent interferences
Turbidity (NTU)	Best Professional Judgment	WQOs relevant to inland surface waters are not available. Base judgment on channel type and bottom, time since last rain, background levels, and most importantly visual observations (e.g. unusual color and lack of clarity), and unusual odors.
Temperature (^oC)	Best Professional Judgment	Base judgment on season, air temperature, channel type, shading, ect.
Conductivity (mS/cm)	Best Professional Judgment	Values >5 mS/cm may indicate IC/ID however; EC maybe highly elevated in some regions due to high TDS groundwater exfiltation to surface water, mineral dissolution, drought, and sea water intrusion. Values < 0.75 mS/cm may indicate excessive potable water discharge or flushing.
Laboratory Analytes	**Action Levels**	**Source / Notes**
Oil and Grease (mg/L)	15	USEPA Multi-sector Feneral Permit. If petroleum sheen is observed, the sample should be collected from the surface. Visual observations may justify immediate investigation.
Diazinon (µg/L)	0.5	Response to diazinon and chlorpyrifos levels above 0.5 µg/L should focus education and outreach to potential dischargers in the targeted drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (µg/L)	0.5	
Dissolved Cadmium (µg/L)	California Toxic Rule	Use California Toxics Rule, 1-hour criteria to determine appropriate action level for individual samples. Table provides benchmarks based on hardness and dissolved metals concentrations, For example, at 300 mg/L hardness the following action levels would apply: Cd – 14ppb; Cu – 38ppb; Pb – 209 ppb; and Zn – 297 ppb.
Dissolved Copper (µg/L)	California Toxic Rule	
Dissolved Lead (µg/L)	California Toxic Rule	
Dissolved Zinc (µg/L)	California Toxic Rule	
Total Coliform (MPN/100mL)	50,000	Action levels are based on upper 90% confidence level of Copermittees 2002 dry weather analytical monitoring data.
Fecal Coliform (MPN/100MmL)	20,000	
Enterococcus (MPN/100ml)	10,000	

Attachment-2



Attachment-3

San Diego Stormwater Copermittees

Dry Weather Monitoring Field Datasheet

☐ **Routine Investigation** ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID		**Latitude**		**Watershed**	**Hydrologic Unit**	
Location		**Longitude**			**Hydrologic Area**	
Date		**TB Page**			**Hydrologic Subarea** (Optional)	
Time		**Observer**			**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog

Tide ☐ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.

Last Rain ☐ > 72 hours ☐ < 72 hours

Rainfall ☐ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☐ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☐ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)			

Analytical Lab Samples Collected? ☐ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Attachment-4

2009 Trash Assessment Form

SITE ID: _____ **DATE:** _____

LOCATION: _____ **TIME:** _____

OBSERVER: _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____ ____

ESTIMATED AREA OF ASSESSMENT L X W (FT): _____ __

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Attachment-4

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

Type	Ranking or Count by Type *	Potential Route (check up to 2)				Potential Source (check up to 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash present in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:

Attachment 7-4 FY 08-09 IC/ID Investigation Summary

IDIC NUMBER	DATE RECEIVED	REFERRAL SOURCE *(Choose from List)*	COMPLAINT/OBSERVATION DESCRIPTION	INVESTIGATION RESULTS	CONSTITUENT *(Choose from List)*	RECEIVING WATER *(Where observed or alleged violation is occurring)*	VIOLATOR TYPE *(Choose from List)*	FINE / CITATION *(Insert Date)*	INFORMATIONAL LETTER (Insert Date)	CITY CLEANUP? (Y, N, N/A)	COST RECOVERY? (Y, N, N/A)	COST RECOVERY/FINE AMOUNT	CORRECTIVE ACTIONS IMPLEMENTED
1	07/02/08	GENERAL PUBLIC	Resident called PW Admin to report trash, etc. at IB Liquor Market	801 Seacoast - Trash, litter, junk, liquor bottles, beer containers accumulated around commercial bldg.	Trash	Pacific Ocean	commercial	2-Jul-08	07/08/08	N	N	N/A	Administrative Citation issued by Code Compliance Officer; to be corrected by 7/9/08.
2	07/03/08	GENERAL PUBLIC	Resident called PW Admin to report a concrete washout occurring along 7th & Cypress	562 Delaware - contractor cut drywall and washed material into street	CONSTRUCTION DEBRIS	SD Bay	RESIDENT			Y	Y		Env Prog Mgr and Parks supervisor instructed owner to clean up site.
3	07/03/08	PW - Streets	PW employees reported discharge from vicinity of 7th and IB	1105 7th Street - auto leak from old truck + automotive repair discharged power steering fluid (per telecon with owner) to street at 1114 7th; some washing occurred around corner on IB Blvd	AUTO FLUIDS	Pacific Ocean	RESIDENT		07/07/08	N	N	N/A	VW to worker and to resident, Russ Peeples 254-7929, about 1105 7th Street re proper BMPs; no discharges allowed; no auto repairs to be done in streets
4	07/07/08	PW - Streets	PW employees reported discharge from vicinity of 1481 5th St	Old discharge of construction material washout	CONSTRUCTION DEBRIS	Tijuana Estuary	MOBIILE BUSINESS			N	N	N/A	
5	07/09/08	DRIVE BY	Env Prog Mgr noted bag of trash next to can at 13th and Bike path	13th & Bike path	Trash	Otay River	unknown			Y	N	N/A	PW-Streets picked up bag.
6	07/13/08	PW-ENV	cooking oil leaking in street	verified	COOKING OIL & GREASE	Pacific Ocean	MOBIILE BUSINESS		07/22/08	N	N/A		business owner cleaned it up
7	07/13/08	PW-ENV	cooking oil leaking in street	verified	COOKING OIL & GREASE	Pacific Ocean	MOBIILE BUSINESS		07/22/08	N	N/A		business owner cleaned it up
8	07/13/08	PW-ENV	cooking oil leaking in street	verified	COOKING OIL & GREASE	Pacific Ocean	MOBIILE BUSINESS		07/22/08	N	N/A		business owner cleaned it up

Attachment 7-4 FY 08-09 IC/ID Investigation Summary

9	07/15/08	GENERAL PUBLIC	Env Staff observed grey concrete slurry originating from **737 Hemlock** and following gutter to the end of the block at Connecticut	Concrete slurry and residue originates from freshly poured and stamped driveway at **737 Hemlock**	CONSTRUCTION DEBRIS	Estuary	Construction		07/22/08	N	N/A		property owner cleaned it up
10	07/15/08	GENERAL PUBLIC	maggots in the gutter in front of 1461 Fern	observed 5-6 maggots-no trash, or rotting matter- gutters clean otherwise - resident thinks someone washed out trash can and maggots were washed down the gutter	Other	Tijuana River	Resident			N	N		vehicle was cited by the sheriff
11	07/15/08	GENERAL PUBLIC	observed large oil stain in middle of street in front of 1185 12th and another next door at 1177 12th resident Said he believes EDCO truck was leaking oil 3 weeks ago - resident called EDCO and they said it wasn't their spill - resident wants stain removed	Env. Program Mgr. observed both large stains and drips in between- stains are at least 3 wks. Old	AUTO FLUIDS	Tijuana River	unknown			N	N	N/A	resident was notified by telephone and thanked for the info and told there was no way after 3 wks. To remove the stain
12	07/15/08	GENERAL PUBLIC	report of over irrigating at property to the right of 833 9th	No extra water observed- resident admits that sprinkler head was broken - actual site of violation was tri-plex at 845,847,849 9th	OVER IRRIGATION	Estuary	RESIDENT			N	N		
13	07/15/08	PW - ENV	fresh oil residue observed in Municipal parking spot	reported to PW superintendent and PW Director	AUTO FLUIDS	Otay River	MUNICIPAL			Y	N		

Attachment 7-4 FY 08-09 IC/ID Investigation Summary

14	07/17/08	resident	household hazardous waste containers in gutter	paint spilled in gutter	PAINT	Pacific Ocean	RESIDENT			Y	Y	106.23	
15	07/23/08	code enf.	dirt & construction residue discharged in the street	findings verified	CONSTRUCTION DEBRIS	Pacific Ocean	RESIDENT		07/31/08	N	N/A		verbal warning to remove all illegally discharged material
16	08/07/08	PW-ENV	water running down Palm from 2nd to Seacoast pooling at storm drain at corner of Palm and Seacoast	verified and followed stream to source	CAR WASHING	Pacific Ocean	RESIDENT		08/07/08	N	N/A		verbal education and flyer
17	08/07/08	PW-ENV	excessive amounts of water in parking lot of Carls Jr. & Hollywood Video	verified	WASH WATER	Otay River	MOBIILE BUSINESS			N	N/A		talked to mgr. at Carl's - they hire a mobile power washing company every 6 mo. to clean parking lot
18	08/11/08	PW-ENV	water coming out of cut in wall from pool sump	findings verified	POOL WATER	Otay River	RESIDENT			N	N/A		Property owner stopped disposal of water in street.
19	08/25/08	GENERAL PUBLIC	Below grade drainage sump in apartment parking lot was discharging untreated water onto the street	findings verified	unknown	Tijuana River	Property Manager			N	N/A		Property wet vacuumed out detention basin and installed hydrocarbon filters in the drain
20	09/04/08	PW - ENV	Mobile home leaking oil	findings verified	Auto Fluids	Otay River	unknown			N			the case was left with the sheriff
21	09/05/08	PW - Streets	Resident digging up dirt and depositing at sea wall	Reported to Env Div.	Sediment	Pacific Ocean	Resident			N			Construction inspector educated and informed the violator to clean up action
22	09/05/08	PW-ENV	Property owner scraping paint off vehicle in the street	findings verified	PAINT	Pacific Ocean	Resident			N			Immediately ceased paint scraping and cleaned all paint chip. Violator was educated and informed
23	09/12/08	PW - Streets	Automobile leaking radiator	finding verified	AUTO FLUIDS	San Diego Bay	Resident			N			Violator educated and informed to clean up spill
24	09/15/08	PW - Streets	Paint Spill during fight	findings verified	Paint	Pacific Ocean	RESIDENT			N			Sheriff took command of situation
25	09/19/08	PW - ENV	construction material being washed in the street	findings verified	Sediment	Pacific Ocean	Construction			N			PW-ENV educated and informed

Attachment 7-4 FY 08-09 IC/ID Investigation Summary

26	09/23/08	resident	illegal dumping trash and past dumping of oil	findings verified	Trash	Tijuana River	Resident			N			The resident installed a fence around dumpster and repaved concrete area
27	09/25/08	PW-ENV	Washing driveway, walkway with water	findings verified	sediment	Tijuana Estuary	Property Manager			N			Educated and informed
28	10/02/08	PW-ENV	illegal dumping of concrete residue/debris into curb and storm drain	findings verified	Construction debris	Tijuana River	Construction	15-Oct-08		Y	Y		The property owner did not clean debris from curb and was assessed the charges for the city clean up efforts
29	10/07/08	PW-ENV	Owner of building was power washing the building and runoff was flowing to the storm drain	Findings verified	Sediment	Tijuana Estuary	Resident			N	N		The power washing was immediately ceased and the owner returned the next day to finish the job with the proper BMPs installed
30	10/07/08	PW - ENV	Sprinklers were stuck on and left running all day	findings verified	OVER IRRIGATION	Tijuana River	RESIDENT			N	N		United water was called to turn off water and the apartment complex owner immediately fixed the problem by the next day
31	10/08/08	PW-ENV	Power washing paint off building	findings verified	CONSTRUCTION DEBRIS	Tijuana Estuary	Residential			Y	N		Was ordered to stop all work until all BMPs are in place
32	10/15/08	PW - Streets	Pile of sediment on private resident's yard was uncovered and was spilling over onto the sidewalk	findings verified	Sediment	San Diego Bay	Resident			N			Educated and informed resident on corrective BMPs and event was fixed by the next day
33	10/15/08	PW-ENV	Excessive water because hose on private residence was left on and runoff was flowing down the street	findings verified	WASH WATER	Tijuana River	Residence			N			Informed resident at which time he immediately fixed the violation
34	10/23/08	PW-ENV	Construction site not in compliance with control BMPs and property was littered with trash	findings verified	CONSTRUCTION DEBRIS	Otay River	Construction			N			All Phase Drywall company was cited and educated on proper construction BMPs

Attachment 7-4 FY 08-09 IC/ID Investigation Summary

35	10/27/08	PW - ENV	Resident power washing vehicle and water was flowing down the street	findings verified	CAR WASHING	Otay River	Residence			N			Educated and informed resident at which time he stopped and moved his washing onto a permeable area
36	10/28/08	PW - ENV	Roejack Roofing company (440-5600) was using a power washer to spray down the outside of building	findings verified	WASH WATER	Otay River	Construction			N			Workers were educated on proper BMPs and in the regulations required by the City's storm water permit
37	10/29/08	PW-ENV	Washington Mutual over irrigating and significant water was following off property and into the street	findings verified	OVER IRRIGATION	Otay River	Business		10/29/08	N			Hand delivered a letter and verbally instructed reasons and remedies for the offense
38	10/29/08	resident	Resident complained of neighbor watering down back dirt alley	Dirt was wet	OVER IRRIGATION	none	RESIDENT			N			Made a visit to the property and found no city code violation and no egregious wasting of water
39	11/03/08	PW - ENV	Broken sprinkler at apartment complex	findings verified	OVER IRRIGATION	Otay River	Property Manager			N			Made visit to property and made a call to Cal Am who immediately got the property manager to fix the problem
40	11/03/08	PW-ENV	Apartment complex over irrigating and flooding construction on Palm Ave	findings verified	OVER IRRIGATION	Pacific Ocean	Property Manager		11/03/08	N			Contacted HOA about violation by phone and letter
41	11/03/08	PW-ENV	Apartment complex over irrigating and flooding construction on Palm Ave	findings verified	OVER IRRIGATION	Pacific Ocean	Property Manager		11/03/08	N			Contacted property owner about violation and sent a letter
42	11/03/08	PW-ENV	Apartment complex over irrigating and flooding construction on Palm Ave	findings verified	OVER IRRIGATION	Pacific Ocean	Property Manager		11/03/08	N			Contacted the HOA about violation and sent letter

Attachment 7-4 FY 08-09 IC/ID Investigation Summary

43	11/06/08	resident	Complaint from resident on over irrigation on apartment complex that was already on our warning list	findings verified	OVER IRRIGATION	Otay River	Property Manager			N			Contacted property manager
44	11/06/08	PW - ENV	Resident working on vehicle in the street and had leaking auto fluids	findings verified	AUTO FLUIDS	Pacific Ocean	Residential	6-Nov-08		N			The vehicle was ticketed for working on vehicle in the street and also issued a NOV for leaking auto fluids in street and gutter. The violator has until the next day at 9:00am to clean up and remove the vehicle from the street. Verbally educated and I informed the resident on proper spill clean up and storm water regulations
45	11/17/08	PW - Streets	Resident property overwatering and flowing to the storm drain	findings verified	OVER IRRIGATION	Otay River	RESIDENT			N			Letter is to be sent to the property owner
46	11/17/08	PW - Streets	Edco trucks spilling trash while conducting collection service	findings verified	Trash	Otay River	MUNICIPAL			N	N		Contacted Edco who immediately responded to clean up. Edco then contacted the street crew responsible for the poor collection and took appropriate actions to educate and inform
47	11/25/08	PW-ENV	Pool draining	Findings verified	unknown	Otay River	Property Manager			N	N		Educated on storm water regulations pertaining to pool water
48	11/25/08	PW-ENV	Over irrigation with excessive trash	Findings verified	OVER IRRIGATION	Otay River	Property Manager			N	N		Made a site visit to the property managers and educated and informed on city code and storm water regulations

Attachment 7-4 FY 08-09 IC/ID Investigation Summary

49	11/26/08	PW-ENV	Improperly installed construction BMPs and illegal discharge of water pumped off construction site	Findings verified	Sediment	Otay River	Construction			N	N		Talked with contractors and delegated case over to the building inspector. I also talked with Pacific Point Property Mgr who own the property
50	12/02/08	resident	resident washing concrete down driveway into street	findings verified	Sediment	Tijuana Estuary	Property Manager		12/03/08	Y	Y		The City came across discharge after the fact. The City to clean the discharge and contacted the Property Manager
51	12/02/08	code enf.	Mobile business tracking dirt and soil in the street	findings verified	sediment	Otay River	MOBILE BUSINESS			N	N	N/A	Code enforcement officer issued a NOV to "All Phase Drywall" Note this was the second NOV to this Business
52	01/05/09	PW - ENV	hydraulic fluid from elevator discharged into the street	findings verified	Chemical	Tijuana Estuary	Property Manager	5-Jan-09		Y	Y		City cleaned and contacted FWS about discharge. Contacted property owner fined by FWS and corrective actions required
53	01/05/09	PW - ENV	Resident working on vehicle in the street and had leaking auto fluids	findings verified	AUTO FLUIDS	Otay River	Residential			N	N	N/A	Educated and informed resident on Storm water violation
54	01/05/09	code enf.	plant debris in street	findings verified	Trash	Tijuana Estuary	resident			N	N		street crew investigated and informed resident of storm water
55	01/12/09	GENERAL PUBLIC	report of RV dumping septic into street	report not verified	Multiple	Otay River	-			N	N	N/a	report not verified
56	01/12/09	PW - Streets	Water leaking out of wall and into street from business (7-11 Dominos)	findings verified	unknown	Tijuana Estuary	commercial			N	N		City and commercial businesses are working together to identify the source of the leaking water
57	01/21/09	code enf.	resident with garbage, and vegetation piled in gutter	findings verified	Trash	Otay River	resident			N	N	N	code enforcement contacted and informed

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58	01/29/09	code enf.	pressure washing Kentucky fried chicken trash area	findings verified	Trash	Tijuana Estuary	commercial	29-Jan-09		N	N	N	Kentucky fried chicken management has been a continued problem. Increase frequency of inspections
59	02/04/09	PW-ENV	residential property with leaking pipe	findings verified	unknown	Otay River	resident		02/05/09	N	N	N	Contacted Cal Am Water and sent letter to resident
60	02/04/09	PW - ENV	sump pump kicked on at Tropical fish store when hose was left on too long	findings verified	unknown	Otay River	Business			N	N	N	talked with business owner and workers and educated about storm water code
61	03/02/09	PW - Streets	hydraulic hose blew on a dump truck	findings verified	Chemical	Otay River	Construction			Y	Y		Driver of the truck contained the spill from getting into the storm drains. At which time the city responded to cleanup the spill. Educated and informed driver.
62	03/03/09	GENERAL PUBLIC	maintenance worker blowing trash into the street	findings non conclusive	trash	Tijuana River	Commercial			N	N	N	na
63	03/09/09	GENERAL PUBLIC	excessive amounts of water running down the street	findings non conclusive	water	Tijuana River	Resident			N	N	N	na
64	03/10/09	code enf.	cigarette butts and litter around property	findings verified	Trash	Pacific Ocean	Resident			N	N	N	informed and educated about trash and storm water
65	03/17/09	GENERAL PUBLIC	Washing machine waste water discharges into alley	Findings still under investigation	WASH WATER	Otay River	Resident			N	N	N	still under investigation
66	03/18/09	PW - Streets	Burger King washing parking area with hose and degreaser	Findings verified	Chemical	Otay River	commercial			N	N	N	Violator approached and informed to stop action. Further actions still pending.
67	03/19/09	PW - Streets	Portillo Concrete (Forman Dave) instructing crew to wash down sidewalk with water	findings verified	WASH WATER	Otay River	Contractor		03/23/09	N	N	N	contacted, educated and informed

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68	04/15/09	GENERAL PUBLIC	Resident auto painting in driveway	findings non conclusive	PAINT	Otay River	Resident			N	N	N	Citizen online complaint, responded to by code enf and env manager
69	04/15/09	GENERAL PUBLIC	Excessive Trash from apartments	findings verified	Trash	Tijuana River	Residents			N	N	N	Trash form this residents is a persistent problem. Need to contact HOA and each resident at apartment.
70	04/21/09	PW-ENV	Hosing down outside area	findings verified	WASH WATER	Pacific Ocean	Property Manager		04/21/09	N	N	N	Hand delivered NOV and storm water educational brochure
71	04/21/09	PW - Streets	Oil leaking from vehicle	findings verified	Oil and Grease	Otay River	Resident			Y	N	N	Env Specialist responded to event. Leaking vehicle is on private property however the car does not belong to anyone on the property. Contact info for apartment complex is wrong. Env contained the spill.
72	04/22/09	DRIVE BY	Water coming up from the ground	findings verified	potable Water	Pacific Ocean	Property Manager			N	N	N	Director identified the leak. City followed up with Tyco Property Mgr, Cal Am, and maintenance Tessie Clark.
73	05/04/09	PW - Streets	Water flowing down street from irrigation	findings verified	Potable Water	Otay River	Resident			N	N	N	Contacted Cal Am
74	05/13/09	PW-ENV	auto fluid spills at auto zone/ City of San Diego	findings verified	AUTO FLUIDS	Otay River	Property Manager			N	N	N	Passed info onto City of SD storm water
75	05/13/09	PW-ENV	Roach Coach on 13th St City of SD	Findings Verified	Oil and Grease	Otay River	MOBIILE BUSINESS			N	N	N	Passed info onto City of SD storm water
76	05/13/09	PW-ENV	Excessive trash, paint, oil, and debris on property	Findings Verified	Multiple	Pacific Ocean	Property Manager	13-May-09		N	N	N	Passed onto Dave Garcias b/c property management is repeat offenders

Attachment 7-4 FY 08-09 IC/ID Investigation Summary

77	05/13/09	PW-ENV	Construction crew getting ready to power wash without BMPs	Contacted workers and called contractor on cell phone	Other	Pacific Ocean	MOBIILE BUSINESS			N	N	N	Spent time to educate all the construction workers on the site about construction BMPs. Also contacted owner and made him aware of the situation and the City's BMP requirements
78	05/18/09	resident	Neighbor grass clippings in street	inconclusive findings	none	na	Resident			N	N	N	The report was unfounded
79	05/21/09	PW-ENV	Water leaking out of main down street	Finding Verified	potable Water	Pacific Ocean	Business			N	N	N	Contacted Cal American water and they responded to leak
80	05/21/09	PW - ENV	Sediment in gutter from water leak	Findings Verified	Sediment	Pacific Ocean	Business			N	N	N	Called Cal American and made them clean up after the water leak
81	05/26/09	PW - ENV	Over watering and trash	Findings Verified	potable Water	Otay River	Property Manager			N	N	N	sent letter to property management and contacted Cal Am about the over watering
82	05/21/09	resident	Over watering	Findings Under Investigation	Potable Water	Otay River	Property Manager			N	N	N	still under investigation
83	05/21/09	resident	Power washing paint off building	Findings Under Investigation	WASH WATER	Otay River	Business			N	N	N	still under investigation
84	05/28/09	resident	Washing Paint in the street. Wash water was contained before making it to the storm drain	Findings Verified	Paint	Otay River	Resident			N	N	N	resident was Chinese and did not speak English. Through the use of hand gestures and acting I was able to educate resident on storm water pollution.
85	05/29/09	PW-ENV	Oil puddle in street	Findings Verified	Oil	Tijuana Estuary	unknown			Y	N	N	Had the graffiti truck vacuum up the oil
86	06/03/09	PW-ENV	Over irrigation	Findings Verified	potable Water	Pacific Ocean	Resident		06/04/09	N	N	N	investigated and found over irrigation. Sent letter to and NOV to owner of property
87	06/04/09	PW - ENV	Washing boat and fish guts down street	Findings Verified	Other	Tijuana Estuary	Resident		06/04/09	N	N	N	Sent letter to property owner about boat washing and fish cleaning

Attachment 7-4 FY 08-09 IC/ID Investigation Summary

88	06/10/09	PW - ENV	white substance coming from back of property	Findings Verified	unknown	Tijuana Estuary	Resident		06/10/09	N	N	N	Send letter and brochure on storm water pollution and BMPs
89	06/10/09	PW - ENV	oil in driveway	Findings Verified	Oil and Grease	Otay River	Resident		06/10/09	N	N	N	Sent letter and brochure on storm water pollution. Educate and informed
90	06/10/09	PW-ENV	sediment in parking lot	Findings Verified	sediment	Pacific Ocean	Construction			N	N	N	Contacted Edco to get parking lot back on the street sweeping list.
91	06/12/09	PW - ENV	Contractors power washing street with solvent spray to dissolve asphalt	Findings Verified	CONSTRUCTION DEBRIS	Pacific Ocean	Construction			N	N	N	Contacted and informed and also sent Larry Martin out to manage with the contractors
92	06/15/09	resident	Street sweeping not occurring at 234 Daisy	findings non conclusive	Sediment	Pacific Ocean	MUNICIPAL		06/15/09	N	N	N	Contacted Edco who immediately responded an investigation. Edco then contacted the street sweeping service to verify that the street is being swept. PW also made a site visit for verification.
93	06/15/09	PW - ENV	Contractors power washing street with solvent spray to dissolve asphalt	Findings Verified	CONSTRUCTION DEBRIS	Pacific Ocean	Construction			N	N	N	Contractors were using a vacuum to collect water however wash water was still washing into the wet well at the end of Seacoast. Made contractors correct recovery method.
94	06/16/09	GENERAL PUBLIC	Fire dept was called out on a discharge of blackish water into the street. Leaking sprinklers triggered a sump pump which then kicked on arching back water out from the curb and into the street	Findings Verified	unknown	Tijuana Estuary	Property Manager			N	N	N	Contacted the owner 423-8402 who was already aware of the leaking sprinkler and was working on the problem. The issue on the sump pump is still under investigation.

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95	06/22/09	GENERAL PUBLIC	Inoperable wrecked vehicle leaking fluids	Findings Verified	AUTO FLUIDS	Otay River	Resident			N	N	N	Owner was cited and advised

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authorized Signatory(s)	Title	Phone No.	Date
H. A. Levien	Public Works Director	(619) 628-1369	8-25-10



2009-2010 JURMP Annual Report

City of Imperial Beach

9/14/2010

This Jurisdictional Urban Runoff Management Plan Annual Report contains a comprehensive description of the activities conducted during FY 2009-10 by the City to meet all requirements of section D of the Municipal Permit R9-2007-0001.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authorized Signatory(s)	Title	Phone No.	Date
	Public Works Director	(619) 628-1369	

H. A. Levien

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Executive Summary

This Annual Report summarizes the activities implemented by the City of Imperial Beach (City) in fulfillment of the Jurisdictional Urban Runoff Management Program (JURMP) requirements of Order R9-2007-0001 – the San Diego Municipal Storm Water Permit. With limited exception, the report covers activities conducted between July 1, 2009 and June 30, 2010 (FY2009-10).

The purpose of the JURMP Annual Report is threefold: 1) to document the City's compliance with Municipal Storm Water Permit requirements, 2) to assess the effectiveness of program implementation, and 3) to serve as a program planning tool for directing future activities. The report reflects the organization of the Municipal Storm Water Permit, and is divided into several components corresponding to major sources of pollutants or areas of activity. The following are highlights and major accomplishments for each major JURMP component during this fiscal year.

Development Planning

The Development Planning Component involves incorporating storm water and urban runoff management into the development review process. This includes reviewing priority and non-priority development projects for necessary best management practices (BMPs) to manage storm water runoff prior to the issuance of grading or construction permits. Major accomplishments during this fiscal year included the following:

- Conditioned 24 discretionary projects requiring developers or contractors to implement minimum best management practices (BMPs) and low impact development (LID) requirements to reduce pollutants and runoff to the maximum extent practicable (MEP). This compares to 51 projects during FY2006-07, 48 projects during FY 2007-08, and 24 projects during FY2008-09.
- No Water Pollution Control Plans subject to the Standard Urban Storm Water Mitigation Plan (SUSMP) requirements were approved during the reporting period. The City has 2 potential SUSMP projects in the planning stage and 4 SUSMP projects that are still going through the plan check process and have not been approved for development.
- Verified operation and maintenance of 22 permanent post construction treatment control BMPs.
- Participated with San Diego Copermittees in the development of the Hydromodification Management Plan (HMP). The Copermittees submitted the Final HMP to the Regional Board on 12/29/09. The HMP Plan received Regional Board revisions, public comments, and Copermittee revisions. The Regional Board is scheduled to vote on the final plan on 7/14/10.
- Provided storm water education to developers and contractors through face-to-face interactions with City staff in meetings, during counter hours held at the Community Development Department, and through informative brochures provided during the application process.

Construction Component

The Municipal Storm Water Permit requires the City to oversee compliance with construction-phase BMPs at all construction projects in the City. All construction projects are required to have a City approved Storm Water Management Plan prior to the start of the project. Projects over 1 acre in size are also required to obtain coverage under the State General Construction Permit. Major accomplishments during FY2009-10 included the following:

- Inspected a total of 72 active construction projects including 5 Capital Improvement Projects (CIP) during the reporting period. Approximately 495 inspections were performed to verify the proper installation and maintenance of construction phase BMPs.
- Performed daily oversight of construction BMP compliance at all 5 CIP projects that were in active construction phase.
- Responded to 15 reports of illegal discharges from construction sites. Only 4 notices of violations (NOVs) were issued to achieve compliance. Verbal warnings are usually sufficient to bring violators into compliance.
- Discussed urban runoff management requirements with all applicants during the plan check process and verified BMP requirements during follow-up inspections.

Municipal Component

City employees continued to implement best management practices (BMPs) to prevent the discharge of water and pollutants from municipal facilities and activities. Examples of BMPs implemented during the reporting period include:

- Vehicle washing in wash bays that drain to the sanitary sewer.
- Preventive maintenance of City vehicles to prevent fluid leakage.
- Use of high-power vacuum to capture runoff from graffiti abatement, sidewalk grinding, and spill cleanup.
- Strict limitations on the use of fertilizers and pesticides in parks and landscape areas.
- Monitoring of sprinkler systems to prevent over-topping onto roadways.
- Alarming of all sewage pump stations, thereby reducing the likelihood of a sewage spill to the storm drain system.
- Purchase and use of spill barriers, gravel bags, and absorbent rags for spill containment and cleanup.

- Annual storm water training for the Public Works Department on the use of BMPs in daily operations.

Other notable accomplishments during FY2009-10 include:

- Inspected and cleaned 100% of municipal storm drain system and removed 8,230 pounds of sediment, trash, and organic materials through storm drain cleaning.
- Removed an additional 177 tons of material through frequent street sweeping.
- Continued maintenance of the10th St. and Imperial Beach Blvd. vortech storm water interceptor to remove sediment, floating hydrocarbons, and debris from all levels of flow.
- Quarterly maintenance of 13 municipal storm drain filter inserts that prevented 852 pounds of material from getting into the storm drain system.
- Continued operation of the Date Avenue urban runoff diversion system, which diverts nuisance runoff to the sanitary sewer during low-flow conditions.
- Continued operation of the Palm Avenue urban runoff diversion system at Seacoast Avenue and diverted 156,000 gallons of urban runoff and first flush rain water into the sanitary sewer.
- Performed daily cleanup of trash, litter, and debris along the beach and tidelands area on Seacoast Drive.

Industrial and Commercial Component

The City is tasked with educating businesses about urban runoff management and overseeing their compliance with applicable Municipal Storm Water Permit requirements. Significant progress continues to be made on increasing knowledge on urban runoff management among local businesses. The following are the major accomplishments achieved during this reporting period:

- Conducted 71 inspections at high priority businesses, which include automotive repair shops, restaurants, bars, gas stations, car washes, grocery stores, and mobile home parks. This is 21 more inspections than were conducted last reporting period. Inspections revealed some BMP deficiencies, but on the whole, most businesses were knowledgeable of the urban runoff management requirements. Following each inspection the City mails the business owner a copy of the inspection form, an inspection report, and a BMP for your business brochure.
- Responded to 26 enforcement actions at businesses and issued 6 notices of violation as part of the enforcement and case resolution process. The City also conducted 9 follow up inspections as part of the annual storm water inspection program
- The City participated with the Copermittees in the Regional online mobile business database tracking system that became operational this reporting period. The database tracks active

mobile businesses and violations issued by other jurisdictions. The City also notified 46 mobile businesses of minimum BMP requirements through an educational mailer.

Residential Component

The Residential Component involves 1) educating Imperial Beach residents about urban runoff management, 2) overseeing residential compliance with BMP requirements and discharge prohibitions, and 3) facilitating proper disposal and recycling of household hazardous waste and used motor oil. Major accomplishments during this reporting period included the following:

- Identified and mitigated 94 residential violations. The most commonly observed violations involved construction debris, automotive fluids, wash water, detergents or chemicals, chlorinated swimming pool water, and green waste.
- Issued 24 notices of violations as part of the enforcement and case resolution process. Other deficiencies were resolved with verbal warnings and/or letters. No fines were issued to residents during this reporting period.
- Distributed educational brochures to residents throughout the year. Brochures target the following high priority activities: 1) pollution prevention around the home, 2) disposal of pet waste, 3) car washing, 4) proper disposal of motor oil, and 5) lawn and garden care.
- Educated residents on environmental issues including storm water in the City's semi-annual newsletters and a quarterly newsletter distributed by EDCO.
- Participated in the Regional Education and Residential Sources workgroup as co-chair of the group and chair of the Underserved Target Audience sub-workgroup.
- Approximately 10,337 pounds of household hazardous waste, universal and e-waste, and used oil and other fluids were properly disposed of at the South Bay Household Hazardous Waste facility in Chula Vista.
- The City held its annual Citywide Garage Sale event followed next week by the annual Home Front Clean Up, which resulted in the proper disposal of 175.6 tons of trash, construction, metal, and green waste.

Illicit Discharge Detection and Elimination Component

The City endeavors to prevent discharges from the Municipal Separate Storm Sewer System (MS4) from causing or contributing to a violation of water quality standards. The Illicit Discharge Detection and Elimination Component involves 1) water quality monitoring during the dry weather season (May through September) to detect illicit discharges to the storm drain system, and 2) year-round response to complaints and referrals of urban runoff discharge violations.

All components of the JURMP are represented in this report with the exception of this component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), extended the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

Education Component

The City endeavors to implement a diverse education program that promulgates the storm water management requirements of the Municipal Permit. Education activities target the following groups: 1) municipal departments and personnel, 2) construction site owners and developers, 3) commercial business owners and operators, 4) industrial business owners and operators (none exist in Imperial Beach) 5) residents, general public, and school children, and 6) underserved community. The City facilitates changes in behavior and implementation of BMPs by providing continuous education for each target audience using a variety of educational tools and media. The continual saturation of education for each target audience is gradually leading to a greater awareness about storm water pollution and the implementation of pollution prevention BMPs.

1.0 Introduction

1.1 Introduction

The City of Imperial Beach is required to submit its Jurisdictional Urban Runoff Management Program (JURMP) Annual Report each year by September 30th in compliance with the San Diego Regional Board Order Number R9-2007-0001 (Municipal Permit). The Annual Report contains a comprehensive description of all activities conducted by the City to meet all requirements of section D of the Municipal Permit. The annual reporting process is used to evaluate the overall effectiveness and efficiency of program elements. The reporting period for the Annual Report is the previous fiscal year July 1st to June 30th.

The following chapters in this Annual Report discuss the measures taken by the City to meet the regulatory requirements of the Municipal Permit and demonstrates that the City has achieved substantial compliance towards reducing sources of pollutants and urban runoff to the maximum extent practicable (MEP). All components of the JURMP are represented in this report with the exception of Section 7.0, Illicit Discharge Detection and Elimination Component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), which extended the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 Introduction

The City endeavors to reduce pollutants and runoff from development and redevelopment projects to the maximum extent practicable (MEP). This component is primarily applicable to the Community Development Department, the Capital Improvements Projects Division, the Environmental Program Division of the Department of Public Works, and the contracted engineering firm, BDS Engineering. This section of the Annual Report discusses program management, implementation, and changes made during FY 2009-10 to the JURMP Development Planning Component.

2.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Development Planning component is described in the *2008 JURMP Section 4.0*. This section has been updated to include the implementation of the Countywide Model SUSMP into the operations of the City. Municipal Code Chapter 8.32 was amended on February 3, 2010 to include the new requirements of the Model SUSMP. In addition, all development projects under went the appropriate environmental review and verification processes. Development and BMP inventories were maintained on record and site inspections were tracked using the City's database system HTE.

2.3 Outcome Level 1b: Implementation of Management Program Activities

The City requires all development and redevelopment projects to implement measures to reduce pollutants and runoff to the MEP. Minimum BMPs and LID requirements were established in the *2008 JURMP Section 4.0* and are required as conditions during the development review process. Priority development projects are given special consideration under the Standard Urban Stormwater Mitigation Plan (SUSMP) and have more stringent requirements. All municipal staff is knowledgeable in the storm water program and receives annual training as described in the 2008 *JURMP Section 10.0*. The Community Development Department also held counter hours and face-to-face meetings throughout FY 2009-10 to provide education and answer questions for developers. In addition, every development or redevelopment project regardless of its prioritization is formally inspected for applicable BMPs throughout the duration of the project. Post construction treatment control BMPs are also inspected annually for operation and maintenance verification. Finally, the City participated in the development of the Hydromodification Plan (HMP) through the Copermittee Land Development Workgroup.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Development Planning program element:

- Table 2.1 provides an overview of the development and planning projects as it was implemented during FY 2009-10.
- Table 2.2 presents and describes targeted FY 2009-10 outcomes and results
- Table 2.3 provides the updated treatment control BMP inventory.

- Table 2.4 provides an inventory of FY 2009-10 Development Review and SUSMP projects.

2.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Staff and Developers

Education is provided to the public through face-to-face interaction with City staff in meetings, through inspections, and through several local ordinances and brochures that outline the requirements for addressing urban runoff and water quality. The efforts by the City to educate the public on development planning are discussed in the *2008 JURMP Section 4.0.* The education effort for City staff is discussed in the *2008 JURMP Section 10.0.*

2.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Staff and Developers

City staff works with developers to ensure that all development projects and redevelopment project reduce pollutants and runoff to the MEP. The *2008 JURMP Section 4.0* defines minimum BMP and LID requirements applicable to development and redevelopment in the City. The County Model SUSMP also requires additional controls for priority development projects.

During FY 2009-10 the City continued to facilitate changes in behavior for development and redevelopment projects by reviewing and requiring conditions on projects to ensure program compliance. The City inspects active projects for violations and enforces compliance on all required conditions. All BMPs are verified for proper implementation, operation, and maintenance throughout the duration of construction. Post construction maintenance and operation of treatment control BMPs are also verified and inspected annual by the Environmental Division.

The City is required to enforce its storm water ordinances for all Development Projects and at all development sites as necessary to maintain compliance with the Municipal Storm Water Permit. City ordinances include appropriate sanctions to achieve compliance including non-monetary penalties, fines, bonding requirements, and/or permit or occupancy denials for non-compliance.

2.6 Outcome Level 4: Source Load Reductions

Source load reductions from development and redevelopment projects are achieved through the implementation of BMPs and LID strategies. The City requires specific project conditions for treatment control BMPs, LIDs, and site design BMPs to reduce pollutants and runoff to the MEP. Source load reductions may not be directly measured but can be implied by the proper implementation and maintenance of storm water BMPs.

Table 2.1 – Overview of Development Planning Inventory by Development Type and Priority Classification

Category	Number	Description
A. Type of Development		
New development	0	All development projects are required to undergo the City's urban runoff approval process and meet applicable requirements. Administrative procedures for development project review is discussed in *2008 JURMP Section 4.0.*
Redevelopment	24	
B. Priority Classification		
Discretionary Projects	18	No projects received a SUSMP waiver. All SUSMP-eligible projects were subject to applicable requirements. No SUSMP projects were approved for construction during the reporting period. SUSMP projects were either in the planning stage or plan check stage. Permits to begin construction on the six priority development projects will not be issued until acceptable SUSMP and Water Pollution Control Plans have been submitted and approved.
Priority Development (SUSMP) Projects	6	
C. Totals		
Discretionary Projects	18	Complete list of development projects that received an environmental review for storm water during the reporting period or projects requiring a SUSMP is provided in Table 2.4.
Priority Development (SUSMP) Projects	6	

JURMP Sections	Description of FY 2009-10 Changes
4.0 and Appendix C	I.B.M.C. 8.32 Standard Urban Storm Water Mitigation Plan was updated to include the elements of the Countywide Model SUSMP. Updates were made to the Treatment Control BMP inventory and Development Project inventory.

Table 2.2 - Development Planning Component Targeted Outcomes and Result

Development Planning FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per Permit requirements	Incorporated Model SUSMP into Municipal Code	Complete	Updates made to the Imperial Beach Municipal Code 8.32 on February 3, 2010 to include the elements of the Countywide Model SUSMP.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update program documentation for consistency with program updates	City project review procedures were updated as a result of the SUSMP	Complete	Updates made to Imperial Beach Municipal Code 8.32 to include the requirements of the SUSMP. The City is also looking into updating its Environmental Review forms (7-A and 7-B) and updating guidance documents to include further guidance for SUSMP, HMP, and General Construction Permits.
c) Year-End Program Review			
Complete annual year-end program review	Reviewed program for effectiveness and efficiency	Complete	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
d) Inventory of Development and Redevelopment Projects			
Update development and redevelopment inventory	Updates made to the inventory throughout the reporting period	Complete	The City maintains a database of active development projects and development review status on the City's database system HTE. Annual inventories are also maintained in excel with the Environmental Division.

Table 2.2 - Development Planning Component Targeted Outcomes and Result

Development Planning FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
e) Inventory of Treatment Control BMPs and Maintenance			
Update inventory for treatment control BMPs	Updates made to inventory and maintenance verified	Complete	The Environmental Division maintains an inventory of treatment control BMPs. During this reporting period there were changes made to the inventory layout, property owners, and operation and maintenance of the BMPs. One location was removed from the list (Tunes Lube & Ect.) because the building is in the process of being redeveloped.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Project Approval			
Require development projects to implement applicable project requirements, BMPs, and track information	BMPs are required as conditions for all development projects and BMPs are verified through the project application process	Complete	All development and redevelopment projects are required to implement measures to reduce pollutants and runoff to the MEP. The City's project review process further requires that any new construction or modification with a valuation more than $50,000 be subject to public improvements. Projects that meet the $50,000 criterion are routed from the Community Development Department to the Public Works Department for a review in regard to storm water and runoff. SUSMP projects are also required to implement additional storm water management controls and BMPs. SUSMP projects are reviewed by Community Development, Public Works, and contract Engineer BDS for compliance with all storm water regulations. All project applications are tracked through the permit approval process and recorded in HTE, excel databases, and Master File system.
b) Confirmation of SUSMP and HMP BMPs			
Verify that all applicable SUSMP and HMP BMPs are applied to priority projects and that the BMPs are inspected prior to occupancy	All SUSMP eligible projects were held to full SUSMP requirements. No projects required HMP interim criterion.	Complete	Six SUSMP high priority projects were subject to applicable requirements, with no project in active construction phase during this reporting period. Storm water BMPs are reviewed during the plan check process. BMPs are then verified during construction through field inspections. The final sign off on the project is not complete until the City receives a signed maintenance agreement for continuous maintenance of the BMPs from the property owner.

Table 2.2 - Development Planning Component Targeted Outcomes and Result

Development Planning FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
c) Example of a Priority Development Project and SUSMP BMPs			
List one example of a priority development project that was conditioned to meet SUSMP requirements	Seacoast Inn Redevelopment Project	Complete	The Seacoast Inn redevelopment project is in the final project review stage before demolition and construction begins. The SUSMP component of the project received review and comments from Community Development, Public Works, and contracted engineering firm BDS. The project is required to implement LID, source control, and treatment control BMPs and provide a post construction BMP maintenance agreement. All SUSMP components are required to be shown on the building plans before permits are approved for the project.
d) Priority Development Projects implementing BMPs with low removal efficiency rankings			
Listing and feasibility analysis of SUSMP projects using BMPs with low removal efficiency rankings	No projects implemented BMPs with low removal efficiency rankings	Complete	Development projects are required to implement BMPs that target priority pollutants. The selection of BMPs is verified during the plan check process. The City only allows less efficient BMPs after a feasibility analysis proves there is no better alternative.
e) HMP Collaboration			
Description of HMP development and collaboration	Participated in the development of the Copermittee HMP efforts	Complete	Participated in the development of the Countywide HMP through the Land Development Copermittee Workgroup. The Copermittees submitted the Final HMP to the Regional Board 12/29/09. The HMP Plan received Regional Board revisions, public comments, and Copermittee revisions. The Regional Board is scheduled to vote on the final plan on 7/14/10.

Table 2.2 - Development Planning Component Targeted Outcomes and Result

Development Planning FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
f) Municipal Staff Training			
Ensure that municipal staff are knowledgeable on storm water BMPs, SUSMP, and HMP requirements	Staff educated through meetings, workshops, and training s	Complete	Community Development and Public Works Departments meet weekly to review critical issues including storm water project development requirements. In addition the Planning Division, Building Division, Code Compliance Division, Redevelopment Division, and Environmental Division all received training outside the City on multiple storm water issues. Training topics include SUSMP, HMP, TMDLs, General Construction Permit, and code enforcement. Daily interaction with City staff ensures that storm water pollution prevention remains a high priory throughout the City.
g) Developer Education			
Provide education for developers	Counters hours held and meetings conducted during project review and throughout project	Complete	The Community Development Department held counter hours, face-to-face meetings, project review meetings, and performed inspections throughout the reporting period. Educational items are also proved online and through brochures.
h) Special Investigations			
Not Targeted	None	None	Special investigations were not conducted in FY 2009-10 and are not routinely conducted as part of the implementation strategy for this program element.

Table 2.2 - Development Planning Component Targeted Outcomes and Result

Development Planning FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND DEVELOPERS)			
Establish a baseline of staff and developer knowledge regarding applicable program content	Surveys were provided to Community Development staff during the previous two reporting periods. Staff is educated through meetings, workshops, and trainings.	Complete	The City incorporates surveys or pre and post tests into training programs and administers them when appropriate. The surveys administered during training sessions provide a baseline of knowledge of core concepts and helps in refining the municipal training program for the next reporting period. The overall results show a high level of knowledge on core storm water management concepts in the City. Knowledge and awareness of developers is implied through the implementation of appropriate storm water BMPs. Inspections of BMPs by Code Enforcement, Building Division, and Public Works also provides reinforcement on BMP requirements and strengthens knowledge and awareness. Surveys were not conducted in FY 2009-10 and are not routinely conducted as part of the implementation strategy for this program element. Changes in knowledge of contractors are evident by the increased level of compliance observed during inspections.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND DEVELOPERS)			
a) Procedural and Administrative Behaviors			
Review projects and prescribe necessary conditions of approval and BMPs	24 projects reviewed for conditions of approval	Complete	The City reviews all proposed projects and ensures that all necessary conditions and BMPs are met. High priority development projects are held to more stringent requirements including SUSMP, HMP, and General Construction Permit. The Department of Public Works reviews and requires conditions on all Discretionary Projects greater than $50,000 in costs. Once a project becomes active the City inspects and verifies that all BMPs are implemented. The Public Works Inspector also provides continual oversight during project management of CIP projects.

Table 2.2 - Development Planning Component Targeted Outcomes and Result

Development Planning FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
b) BMP Implementation, Operation and Maintenance			
Inspect projects for BMP compliance and verify BMP implementation	24 Projects, including the six SUSMP Projects were reviewed and received conditions All active projects inspected for BMPs	Complete	The Building Division, Code Enforcement, Environmental Division, and Public Works Inspector conduct inspections at all active development projects for compliance of minimum BMPs. The Public Works Inspector conducts inspections at all CIP and active SUSMP projects daily. The Building Inspector conducts inspections of all Discretionary permit projects and ensures the implementation of BMPs. Code Enforcement and Environmental Division respond to all reports of storm water violations from development projects. Construction inspections of Discretionary Projects are covered in the next Section of this Annual Report.
Verify operation and maintenance of treatment control BMPs	22 out of 22 or 100% compliance. Corrections were made on a voluntary basis without need for administrative enforcement.	Complete	The City annually verifies operation and maintenance of treatment control BMPs to ensure compliance with program. Verification is made through written contact with property owner or manager and followed up with an inspection. At a minimum all high priority treatment control BMPs are inspected for operation and maintenance annually.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM NEW DEVELOPMENT AND REDEVELOPMENT PROJECTS)			
a) Treatment Control BMPs			
Maintenance of treatment control BMPs	201.51 pounds of material removed from treatment control BMPs	Complete	The City verifies maintenance of treatment control BMPs and when possible tracks the amount of material collected during maintenance activities.

Table 2.2 - Development Planning Component Targeted Outcomes and Result

Development Planning FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
b) Low Impact Development (LID) and Site Design BMPs			
Implement LID and site design BMPs	No priority development projects were implemented during the reporting period	Complete	During the project review the City requires LID and site design BMPs for high priority projects. Non-priority development projects are required to implement public improvements such as source control BMPs and in some cases engineered LIDs and treatment control BMPs. Load reductions are not tracked but are implied for LID BMPs.

Table 2.3 - Treatment Control BMP Inventory and Maintenance Tracking

ID	Type	LOCATION	HU and WATERSHED	Installation Date	Party Responsible	Affiliation	Priority	Maintenance Verifications or Inspections	Findings Summary	Corrective Actions Summary	Waste (lbs)
1372-13-1	Drain Guard, sediment and hydrocarbon filters	1372 13TH ST	910.20 Otay	10/1/08	Cha-Cha Cervantes	Property Manager	High	3	No corrections needed		2
1450-IR-1	Sump Pump and Screen Mesh	1450 IRIS AVE	911.11 Tijuana	6/27/05	Alan Jurlina	Property Manager	High	2	No corrections needed		10
861-11-1	KriStar, Flo Gard Plus Catch Basin Insert	861 11TH ST	910.20 Otay	6/1/07	Kylie Kavanagh	Resident	Low	2	No corrections needed		1
861-11-2	KriStar, Flo Gard Plus Catch Basin Insert	861 11TH ST	910.20 Otay	6/1/07	Kylie Kavanagh	Resident	Low	2	No corrections needed		1.5
861-11-3	KriStar, Flo Gard Plus Catch Basin Insert	861 11TH ST	910.20 Otay	6/1/07	Kylie Kavanagh	Resident	Low	2	No corrections needed		2
481-PA-1	Drain Guard in back	481 PALM AVE	910.20 Otay	11/1/08	SimCal	Property Manager	Low	0	No corrections needed		
481-PA-2	sediment trap IN BACK	481 PALM AVE	910.20 Otay	11/1/08	SimCal	Property Manager	Low	0	No corrections needed		
481-PA-3	hydrocarbon filter in front parking area	481 PALM AVE	910.20 Otay	11/1/08	SimCal	Property Manager	Low	0	No corrections needed		
836-PA-1	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	High	2	Repair and maintenance required	Repaired and maintained	14.01
836-PA-2	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	High	2	Repair and maintenance required	Repaired and maintained	20.95
836-PA-3	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	High	2	Repair and maintenance required	Repaired and maintained	27.74

Table 2.3 - Treatment Control BMP Inventory and Maintenance Tracking

ID	Type	LOCATION	HU and WATERSHED	Installation Date	Party Responsible	Affiliation	Priority	Maintenance Verifications or Inspections	Findings Summary	Corrective Actions Summary	Waste (lbs)
836-PA-4	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	High	2	Repair and maintenance required	Repaired and maintained	8.49
836-PA-5	KriStar, Flo Gard Plus Catch Basin Insert w/ boom.	888 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	Low	2	No corrections needed		7.59
836-PA-6	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	888 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	Low	2	No corrections needed		12.23
1101-PA-1	KriStar, Catch Basin with insert	1101 PALM AVE	910.20 Otay	9/1/08	NORTH ISLAND C.U.	Primary Tenant	Low	1	No corrections needed		
1101-PA-2	KriStar, Catch Basin with insert	1101 PALM AVE	910.20 Otay	9/1/08	NORTH ISLAND C.U.	Primary Tenant	Low	1	No corrections needed		
1101-PA-3	KriStar FGP-0002	1101 PALM AVE	910.20 Otay	9/1/08	NORTH ISLAND C.U.	Primary Tenant	Low	1	No corrections needed		
1101-PA-4	KriStar FLOGARD Downspout Filter FG-DS4	1101 PALM AVE	910.20 Otay	9/1/08	NORTH ISLAND C.U.	Primary Tenant	Low	0	No corrections needed		
1126-13-1	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126 13TH ST	911.11 Tijuana	5/1/05	13th Street Market	Business Name	Low	2	Maintenance required	Maintained	17
1126-13-2	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126 13TH ST	911.11 Tijuana	5/1/05	13th Street Market	Business Name	Low	2	Maintenance required	Maintained	23
1126-13-3	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126 13TH ST	911.11 Tijuana	5/1/05	13th Street Market	Business Name	Low	2	Maintenance required	Maintained	28
1126-13-4	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126 13TH ST	911.11 Tijuana	5/1/05	13th Street Market	Business Name	Low	2	Maintenance required	Maintained	26
							Totals	**34**			**201.51**

Table 2.4 - Development Review and SUSMP Project Inventory FY 2009-10

Date	ID	File No.	SUSMP	Project Status	Address 1	Project Type	Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMP Needed	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Construction / Post-construction BMP Notification	Loamy soil to minimize runoff	Water Pollution Control Plan/SWPPP	Construction BMPs
No Date	1	MF 779	Yes	Planning	221-225 Palm Ave	Building add.	8 unit residential and commercial	X	X			X			X	X	X	X	X
No Date	2	MF 1034	Yes	Planning	536 13th 535 Florence St	Bike Village	Bay Shore Bike Path Bike Village and Hostel											X	X
5/29/2010	3	-270, 09-050, 09-0	Yes	Plan Check	800 Seacost	Hotel	Seacoast Inn demolition and development	X	X	X	X	X	X	X	X	X	X	X	X
11/9/2009	4	CIP MF 950	Yes	Plan Check	495 10th St	CIP	Public Works yard expansion											X	X
11/14/2007	5	MF 962	Yes	Plan Check	400 7th Street	SFR	New SFR behind existing SFR	X	X	X		X			X	X	X	X	X
6/1/2010	6	MF 1003	Yes	Plan Check	853 Emory St	Demolition/ new construction	demolition and const of new church	X		X	X	X			X	X		X	X
7/29/2009	7	CIP R05-201	No	Active	735 Palm Ave	NICU Demolition	Building demolition											X	X
7/10/2009	8	CIP F05-204	No	Active	865 Imperial Beach Blvd	Fire Department Kitchen	Kitchen remodel for fire department											X	X
12/17/2009	9	CIP P03-502	No	Active	Veterans Park	Soccer Field terf	Installed new artificail terf soccer field			X								X	X
4/9/2009	10	CIP	No	Active	825 Imperial Beach	Xeriscape City Hall	Xeriscape City Hall with drout tolerant plants											X	X
5/2/2010	11	CIP F05-50A	No	Active	1075 8th	Xeriscape Marina Vista Center	Xeriscape Marnia Vista Center											X	X
9/1/2009	12	MF 999	No	Plan Check	808 13th St	Remodel of church	Redevelopment of Church	X	X			X			X	X	X	X	X
40109	13	09-411	No	Plan Check	1468-1472 Holly	Building Conversion	Convert 4 existing units, garage conversion, and construction of car port to three remodel units	X	X			X			X	X	X	X	X
12/15/2009	14	09-411	No	Plan Check	1460 Holly	SFR Remodel	Home remodel	X	X	X		X			X	X	X	X	X
12/28/2009	15	MF 1030	No	Plan Check	1194 Connecticut	New SFR Unit	New SFR	X	X			X			X		X	X	X
3/2/2010	16	10-169	No	Plan Check	302 Calla	Building Add	Addition of second story	X	X			X			X			X	X
3/9/2010	17	MF 1034	No	Plan Check	536 13th and535 Florence	Building Conversion	Convert warehouse buildings into retail. commercial	X	X			X			X		X	X	X
4/22/2010	18	MF 1037 MF 788	No	Plan Check	253-255 Elm	Condo Conversion	Convert 2 units to condos	X	X			X			X		X	X	X
40302	19	MF 1040	No	Plan Check	1258 IB Blvd	Wireless Communication Facility	New wireless communication facility		X			X			X		X	X	X
5/27/2010	20	MF 1045	No	Plan Check	1174 Seacoast	Demolition	Demolition 5 unit complex	X	X			X			X		X	X	X
40330	21	MF 974	No	Plan Check	933 Seacoast	Wireless Communication Facility	New wireless communication facility					X			X		X	X	X
40331	22	MF 963	No	Plan Check	750 13th	Wireless Communication Facility	New wireless communication facility					X			X		X	X	X
No Date	23	09-543	No	Plan Check	311 Evergreen	SFR Remodel	Building addition	X	X			X			X		X	X	X
No Date	24	10-149	No	Plan Check	523 Spruce	Building Add	Building addition	X	X			X			X		X	X	X

3.0 CONSTRUCTION COMPONENT

3.1 Introduction

The City endeavors to reduce pollutants and runoff from construction sites to the MEP. This component is primarily applicable to the Community Development Department, the Capital Improvements Projects Division, the Environmental Division, and requirements that apply to the Building and Planning Division activities related to construction and construction permits, and compliance actions proposed by the City. This section of the Annual Report discusses program management, implementation, and changes made during FY 2009-10 to the JURMP Construction Component.

3.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Construction component is described in the *2008 JURMP Section 5.0*. This section has ben updated to include the implementation of the Countywide Model SUSMP into the operations of the City. Municipal Code Chapter 8.32 was amended on February 3, 2010 to include the new requirements of the Model SUSMP. The City is currently in the process of updating construction application forms and education materials. The City also maintains an ongoing database of active construction projects and tracks inspections though the City's database software HTE.

3.3 Outcome Level 1b: Implementation of Management Program Activities

The City requires all development and redevelopment projects, including Capital Improvement Projects (CIP), to reduce pollutants and runoff to the MEP through the implementation of BMPs. The designated minimum BMPs for construction projects are listed in the *2008 JURMP Section 5.0* and are required as project conditions prior to the approval and issuance of local construction and grading permits. All construction projects are formally inspected throughout the duration of the project. During the rainy season all priority projects were inspected at least biweekly, medium priority sites were inspected at least monthly, and low priority projects were inspected as needed. During the dry season, all construction sites were inspected as needed.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Construction program element:

- Table 3.1 provides an overview of the Construction element as it was implemented during FY 2009-10.
- Table 3.2 presents and describes targeted FY 2009-10 outcomes and results
- Table 3.3 FY 2009-10 active construction inventory and inspection frequency

3.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Staff and Contractors

Education is provided to contractors through face-to-face interaction with City staff in meetings, through inspections, and through several local ordinances and brochures that outline the requirements for addressing urban runoff, BMP implementation, and water quality. The education effort for City staff is discussed in the *2008 JURMP Section 10.0.*

3.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Staff and Contractors

The City facilitates changes in behavior and implementation of BMPs at construction sites by working with developers to ensure that all projects meet the requirements of the Regional Permit. Prior to the issuance of construction and grading permits the City requires developers to submit design plans that reduce pollutants and runoff to the MEP, develop a Project Storm Water Management Plan, and obtain coverage if necessary under the General Construction Permit. The City also inspects projects and enforces storm water ordinances at all construction sites. The *2008 JURMP Section 5.0* provides more information on the procedural and administrative mechanisms in the City that promote behavioral changes. The *2008 JURMP Appendix D* defines minimum BMP requirements applicable to construction in the City.

3.6 Outcome Level 4: Source Load Reductions

The primary goal of BMP implementation is to reduce the loading of pollutants and runoff to storm water discharges. During the reporting period the City successfully implemented all program requirements that relate to the Construction Component of the Regional Permit. Source load reductions were achieved at construction sites by implementing erosion and sediment control, requiring minimum BMPs, and enforcing general site management requirements. The City required 67 active construction projects and 5 Capital Improvement Projects to reduce pollutants and runoff to the MEP. Compliance with required minimum BMPs were then verified through 495 site inspections. Source load reductions may not be directly measured but can be implied by the proper implementation and maintenance of storm water BMPs.

Table 3.1 – Overview of Construction Inventory by Priority Classification

Category	Number	Description
A. Type of Construction		
Discretionary Projects	67	
Capital Improvement Projects (CIP)	5	
Priority Development (SUSMP) Projects	0	
B. Priority Classification		
High Priority Projects (SUSMP)	0	High priority projects are determined by City 7-A form and generally consist of new building construction projects plus SUSMP projects. Most development projects in the City are categorized as low priority.
Medium Priority Projects	2	
Low Priority Projects	70	
C. Totals		
Construction Projects	72	*The City no active SUSMP or Priority projects during the reporting period. All active construction projects were discretionary in nature or capital improvements.
Priority Development (SUSMP) Projects	0*	

JURMP Sections	Description of FY 2009-10 Changes
5.0 and Appendix D	BMP requirements of the JURMP applicable to construction were modified in accordance with the requirements of the updated Permit in March 2008.

Table 3.2 - Construction Component Targeted Outcomes and Results

Construction FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per new Permit requirements	No updates made during FY 2009-10	Complete	Applicable updates were included in *JURMP Section 5.0*.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update program documentation for consistency with program updates	Updates made to City SUSMP	Complete	Updates made to Imperial Beach Municipal Code 8.32 to include the requirements of the SUSMP. The City is also looking into updating its Environmental Review forms (7-A and 7-B) and updating guidance documents to include further guidance for SUSMP, HMP, and General Construction Permits.
c) Year-End Program Review			
Complete annual year-end program review	Review program for effectiveness and efficiency	Complete	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
d) Inventory of Construction Projects and Inspections			
Update inventory for construction projects and track inspections	Updates made to the inventory throughout the reporting period and inspections tracked	Complete	An inventory of construction projects and inspections is maintained on the City's database software HTE. Constructions site inspection records are also maintained on HTE. The Environmental Division also maintains an inventory of construction projects that require conditions from Public Works. An inventory of Capital Improvement Projects (CIP) is also maintained by the Environmental Division.

Table 3.2 - Construction Component Targeted Outcomes and Results

Construction FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Project Approval			
Require construction projects to implement BMPs	BMPs are required as conditions for development projects	Complete	All development and redevelopment projects are required to implement measures to reduce pollutants and runoff to the MEP. Designated minimum BMPs for construction projects are listed in the *2008 JURMP Section 5.0*. Construction BMPs are verified through the Project Review process and during site inspections.
b) Confirmation of Urban Runoff Approval Process			
Require construction projects to have adequate project review for storm water and pollution control	All construction projects received the necessary project review before being issued City permits	Complete	Prior to the issuance of construction and grading permits the City requires developers to submit design plans that reduce pollutants and runoff to the MEP, develop a Project Storm Water Management Plan, and obtain coverage if necessary under the State Water Resources Control Board's General Construction Permit. Construction projects with costs greater than $50,000 are channeled through Public Works Department and require additional public improvements before approval. Information on the City's project review and approval process is provided in the *2008 JURMP Section 4.0* and information on construction activities is provided in the *2008 JURMP Section 5.0*. Information is tracked in the City's HTE database and in excel spread sheets.
c) Confirmation of Designated BMPs			
Verify that designated BMPs were implemented, or required to be implemented	Construction projects undergo project review before being issued City permits. Construction projects are inspected for BMP compliance.	Complete	Designated minimum BMPs are required as project conditions during the urban runoff approval process. Projects then receive inspections during the construction phase to verify the proper implementation of BMPs. Projects are inspected for adequate storm water construction BMPs and project design, and source control BMPs.

Table 3.2 - Construction Component Targeted Outcomes and Results

Construction FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
d) Confirmation of Maximum Disturbed Area			
Verify that maximum disturbed area for grading was applied to applicable construction sites	Apply conditions for maximum disturbed area during project review and verify through inspections	Complete	Project applicants are made aware of storm water requirements during the grading and construction permit application process. The grading permit specifies conditions to control the erosion of sediment off the property.
e) Municipal Staff Training			
Ensure that municipal staff are knowledgeable on storm water BMPs related to construction activities, SUSMP, and HMP	Staff educated through meetings, workshops, and training s	Complete	Community Development and Public Works Departments meet weekly to review critical issues including storm water project development requirements. Monthly meetings are also held to discuss code enforcement related issues. Planning Division, Building Division, Code Compliance Division, Redevelopment Division, and Environmental Division all received training outside the City on multiple storm water issues. Training topics include SUSMP, HMP, TMDLs, General Construction Permit, and code enforcement. Daily interaction with City staff ensures that storm water pollution prevention remains a high priory throughout the City.
f) Construction Contractor Education			
Provide education for contractors	Counter hours held, meetings conducted throughout reporting period and provided construction brochure	Complete	The Community Development Department held counter hours, face-to-face meetings, project review meetings, and performed inspections throughout the reporting period. Public Works Department oversaw storm water compliance for the Capital Improvement Projects and provided education to contractors during meetings and inspections. A new construction brochure was also created to provide additional information on proper BMP implementation.

Table 3.2 - Construction Component Targeted Outcomes and Results

Construction FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
g) Confirmation of Construction Inspections			
Inspect construction activities	The Building Inspector, Public Works Inspector, and Environmental Division conducted inspections for BMP compliance at construction sites	Complete	All construction projects get formally inspected throughout the duration of the project. During the rainy season, all high priority sites are inspected at least biweekly, medium priority sites are inspected at least monthly, and low priority sites are inspected as needed. During the dry season, all construction sites are inspected as needed. The Public Works Department inspects all active CIP projects sites daily. The Community Development Department Building Inspector inspects discretionary projects that are not CIPs. The Environmental Division follows up an complaints and violations at construction sites.
h) Special Investigations			
Not Targeted	None	None	Special investigations were not conducted in FY 2009-10, and are not routinely conducted as part of the implementation strategy for this program element.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND DEVELOPERS)			
Establish a baseline of staff knowledge regarding applicable program content	Performed a survey on 9/30/10 of Public Works Department as part of annual training.	Survey consisted of 18 challenging questions. Public Works Department (20 surveys completed) average score of 84%.	The City incorporates surveys or pre and post tests into training programs and administers them when appropriate. The surveys administered during training sessions provide a baseline of knowledge of core concepts and helps in refining the municipal training program for the next reporting period. The overall results show a high level of knowledge on core storm water management concepts in the City. Surveys were only administered to Public Works employees in FY 2009-10. Surveys conducted for Community Development during the past two reporting periods scored very high on knowledge of storm water concepts.

Table 3.2 - Construction Component Targeted Outcomes and Results

Construction FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Establish a baseline of contractor knowledge regarding applicable program content	Community Development and Public Works Departments provide education opportunities for contractors	Knowledge and awareness through proper BMP implementation	The Community Development Department held counter hours and face-to-face meetings throughout FY 2009-10 to provide education and answer questions for contractors. The Public Works Department also held pre construction meetings and provided construction management throughout the duration of all CIP projects. Inspects of BMPs at project sites by Code Enforcement, Building Division, and Public Works Inspector also provided additional opportunities for education. Surveys were not conducted in FY 2009-10, and are not routinely conducted as part of the implementation strategy for this program element.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND CONTRACTORS)			
a) Procedural and Administrative Behaviors			
Review projects and prescribe necessary conditions of approval	All constructions projects (72 projects) were reviewed for conditions of approval and designated high, medium, or low priority ranking	Complete	The City reviews and conditions all proposed projects to ensure all necessary conditions and BMPs are met before any construction permits are issued. After a City permit is issued the project is in active construction phase and receives the necessary frequency of inspections for BMP compliance. Inspection frequency is based on high, medium, or low priority ranking. Storm water compliance is a component of every site inspection for a given project.
b) BMP Implementation			
Inspect projects and verify BMPs	Building Division conducted 306 BMP site inspections and PW performed 198 BMP inspections.	Complete	The City inspects and verifies BMPs at all projects to ensure compliance with storm water program. The Building Inspector, Public Works Inspector, Code Enforcement Officer, and Environmental Division share the responsibility of inspecting development projects and verifying BMP compliance. The Building Division conducted 306 BMP site inspections and the Public Works Inspector provided daily oversight at all CIP construction sites and performed 198 BMP inspections.

Table 3.2 - Construction Component Targeted Outcomes and Results

Construction FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Verify construction sites with advance treatment	No construction sites required advance treatment	Complete	No construction sites during the reporting period required the implementation of advanced treatment for sediment control. The City requires all construction sites to implement BMPs to contain sediment on the property during all stages of development. Advance treatment is required for high threat to water quality projects.
c) Inspections for Wet and Dry Weather			
Identify active construction and inspection frequencies for wet and dry season	The City conducted 495 BMP site inspections and exceeded the required minimum inspection frequency	Complete	During the rainy season, all high priority sites are inspected at least biweekly, medium priority sites are inspected at least monthly, and low priority sites are inspected as needed. During the dry season, all construction sites are inspected as needed. Most development projects are redevelopment and are less than one acre in size. The City generally inspects construction sites more frequently than the minimum requirement.
d) Inspection Results			
Provide general inspection results	Conducted the necessary minimum BMP inspections at construction sites	Complete	Most contractors are aware of the storm water BMP requirements and properly implement BMPs. Problems arise during the wet season when heavy rain or wind results in the blowout of poorly implemented BMPs. The highest numbers of storm water violations are reported by observant City staffs who observe inadequate BMPs or illegal discharges.
e) Violations and Enforcement Actions			
Number of violations and enforcement actions to achieve compliance.	The City responded to 15 construction related storm water violations. Only 4 violations were from discretionary projects.	Complete	Most construction related violations observed during the reporting period were from small home improvement projects that did not require a project review. Most violations were reported to City staff and followed up on by the Environmental Division. Typical violations include improper washing of equipment, power washing, stock piles of sediment, and trash. Each enforcement case is different but generally involves a verbal or written warning, a notice of violation for a repeat offender or blatant illegal discharger, and a follow up investigation.

Table 3.2 - Construction Component Targeted Outcomes and Results

Construction FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM NEW DEVELOPMENT AND REDEVELOPMENT PROJECTS)			
a) Erosion and Sediment Control			
Require erosion and sediment control when soil is disturbed	72 projects required installation of erosion and sediment control BMPs	Complete	The City requires installation of erosion and sediment control BMPs for all construction sites with a grading or building permit. Load reductions from construction sites can be implied through the proper implementation of BMPs.
b) Designated Minimum BMPs			
Require minimum BMPs and treatment control BMPs	72 projects required to implement BMPs. No projects required post construction treatment control BMPs	Complete	The City requires all construction sites to reduce discharges of pollutants to the MEP, and to prevent discharges from causing or contributing to a violation of water quality standards. Source load reductions from construction sites can be implied through the proper implementation of BMPs. Public Works requires source control and LID BMPs for all projects over $50,000 as conditions for approval. Treatment control BMPs are required for priority development projects or in cases when it is infeasible for runoff to be diverted to a permeable area. Through the implementation of construction BMPs, source control BMPs, and LIDs source load reductions can be implied.
c) Addition Controls for CWA 303(d) Waters			
Additional BMPs for projects discharging directly to 303(d) waters	No projects required to implement additional controls for CWA Section 303(d) waters	Complete	The City requires additional controls to be implemented for Clean Water Act (CWA) Section 303(d) waters. Load reductions are not tracked but can be implied.

Table 3.3 - FY 2009-10 Active Construction Inventory and Inspection Frequency

APPLICATION	PROPERTY ADDRESS	Priority	Weeks Active During Rainy Season (Oct.-Apr.)	Rainy Season Inspections	Dry Season Inspections	Total Inspections	General Results	Enforcement Action Type	Resolved
06 00000245	605 FLORENCE ST	Low	0	0	1	1	Approved		
06 00000246	1022 ELM AVE	Low	30	0	1	1	Approved		
06 00000346	811 CORVINA ST	Low	30	1	3	4	Approved		
06 00000371	861 10TH ST	Low	0	1	0	1	Approved		
06 00000447	177 CARNATION AVE	Low	0	0	1	1	Approved		
07 00000101	349 ELKWOOD AVE	Low	0	0	1	1	Approved		
07 00000277	545 11TH ST	Low	22	6	6	12	Approved		
07 00000394	754 HICKORY CT	Low	30	5	2	7	Insufficient BMPs	Stop Work	Yes
08 00000003	1174 EMORY ST	Low	2	1	3	4	Approved		
08 00000038	602 7TH ST	Low	24	2	1	3	Approved		
08 00000063	1470 5TH ST	Low	0	0	1	1	Approved		
08 00000156	815 ENCINA AVE	Low	30	2	3	5	Approved		
08 00000186	1461 5TH ST	Low	9	1	0	1	Approved		
08 00000225	1185 PALM AVE	Low	0	0	2	2	Approved		
08 00000428	1085 CHERRY AVE	Low	15	11	9	20	Approved		
08 00000443	1233 CALIFORNIA ST	Low	30	4	1	5	Approved		
09 00000017	646 ALABAMA ST	Low	30	1	0	1	Approved		
09 00000068	347 EVERGREEN AVE	Low	21	2	8	10	Approved		
09 00000123	1331 HOLLY AVE	Low	0	0	1	1	Approved		
09 00000160	776 10TH ST	Low	0	0	1	1	Approved		
09 00000221	784 8TH ST	Low	0	0	2	2	Approved		
09 00000233	280 PALM AVE	Low	24	7	13	20	Approved		
09 00000264	1311 CONNECTICUT ST	Low	1	1	4	5	Approved		
09 00000268	1100 PALM AVE	Low	1	2	3	5	Approved		
09 00000290	894 PALM AVE A	Low	0	0	1	1	Approved		
09 00000316	1245 EAST LN	Low	20	5	4	9	Approved		
09 00000330	834 FLORIDA ST	Low	30	8	2	10	Approved		
09 00000346	813 EMORY ST	Low	30	0	1	1	Approved		
09 00000349	735 PALM AVE	Low	3	1	0	1	Approved		
09 00000409	309 DAHLIA AVE	Low	9	2	3	5	Approved		
09 00000411	1468 HOLLY AVE	Low	12	5	6	11	Approved		
09 00000428	309 DAHLIA AVE	Low	9	4	1	5	Approved		
09 00000432	172 CITRUS AVE	Low	13	9	0	9	Approved		
09 00000439	834 HOLLY AVE	Low	27	8	0	8	Approved		
09 00000443	1274 11TH ST	Low	25	7	0	7	Approved		
09 00000445	659 SILVER STRAND BLVD	Low	0	1	0	1	Approved		
09 00000451	565 BONITO AVE	Low	16	13	0	13	No BMPs in Place	NOV	Yes
09 00000476	399 8TH ST	Low	0	1	0	1	Approved		
09 00000489	1178 14TH ST	Low	12	7	0	7	Approved		
09 00000508	739 FLORIDA ST	Low	9	7	0	8	No BMPs; ICID	NOV	Yes
09 00000510	747 FLORIDA ST	Low	21	7	0	1	Approved		
09 00000511	975 HEMLOCK AVE	Low	5	7	2	6	Approved		
09 00000535	1295 13TH ST	Low	5	7	1	4	Approved		
09 00000536	741 3RD ST	Low	12	7	0	8	Approved		
09 00000537	632 DAHLIA AVE	Low	6	7	0	7	Approved		
09 00000543	311 EVERGREEN AVE	Low	8	7	4	8	Approved		
09 00000544	941 ARRIBA AVENIDA	Low	13	7	1	4	Approved		
09 00000545	776 FLORENCE ST	Low	11	7	7	9	Approved		
10 00000011	1450 IRIS AVE	Low	2	7	2	6	Insufficient BMPs; Permits needed	Stop Work	Yes
10 00000027	1194 CONNECTICUT ST	Low	0	7	4	4	Approved		
10 00000076	941 ARRIBA AVENIDA	Low	3	7	0	1	Approved		
10 00000078	1410 10TH ST	Low	9	7	0	1	Approved		
10 00000082	527 BONITO AVE	Low	0	7	4	4	Approved		
10 00000099	425 IMPERIAL BEACH BLVD	Low	8	7	0	1	Approved		
10 00000106	538 CITRUS AVE	Low	1	7	0	1	Approved		
10 00000147	795 DELAWARE ST	Low	5	7	0	1	Approved		
10 00000158	1025 3RD ST	Low	0	7	4	4	Approved		
10 00000162	343 ELDER AVE	Low	0	7	6	6	Approved		
10 00000169	302 CALLA AVE	Low	0	7	1	1	Approved		
10 00000180	1440 CALIFORNIA ST	Low	0	7	5	5	Approved		
10 00000198	417 CALLA AVE	Low	0	7	2	2	Approved		
10 00000239	816 IRIS AVE	Low	0	7	1	1	Approved		
10 00000253	526 9TH ST	Low	0	7	2	2	Approved		
10 00000256	828 FLORENCE ST	Low	0	7	1	1	Approved		
10 00000264	311 EVERGREEN AVE	Low	0	7	2	2	Approved		
10 00000275	569 10TH ST	Low	0	7	3	3	Approved		
10 00000304	1124 CONNECTICUT ST	Low	0	7	2	2	Approved		
Public Works Capital Improvement Projects								**Project Discription**	
CIP R05-201	735 Palm Ave	Med	4	8	12	48		NICU Demolition	
CIP F05-204	865 Imperial Beach Blvd	Low	10	10	20	20		Fire Department Kitchen	
CIP P03-502	Veterans Park	Med	12	12	24	96		Soccer Field terf	
CIP	825 Imperial Beach	Low	0	20	20	20		Xeriscape City Hall	
CIP F05-50A	1075 8th	Low	0	5	5	5		Xeriscape Marina Vista Cen	

4.0 MUNICIPAL COMPONENT

4.1 Introduction

The City endeavors to reduce or eliminate pollutants and runoff from municipal discharges to the MEP. This component is primarily applicable to the Department of Public Works and its efforts to prevent municipal discharges from causing or contributing to a violation of water quality standards. This section of the Annual Report discusses program management, implementation, and changes made during FY 2009-10 to the JURMP Municipal Component.

4.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the municipal component is described in the 2008 JURMP Section 6.0. During FY 2009-10 the City continued implementation of its municipal training program that included significant updates and revisions to the BMP guidance documents for Municipal Facilities and Activities. This guidance document for employees can be found in a binder within every City vehicle. Updates were also made to the municipal facilities and activities inventory to match the regional reporting standard in development by the Copermittee Municipal Workgroup. Lastly, updates were made to Municipal Inspection Forms and MS4 maintenance forms to improve efficiency and effectiveness analysis in reporting.

4.3 Outcome Level 1b: Implementation of Management Program Activities

The City makes storm water pollution prevention and response a high priority for all Public Works employees. Each Public Works vehicle contains a binder of municipal storm water BMPs and contains a map of the entire MS4 system. The Environmental Division conducts annual training for all Public Works employees and daily interactions with staff ensures that storm water pollution prevention remains a high priory throughout the City. The Public Works Department provides the eyes and ears on the street and serve as the first line of defense for pollution prevention, response, and cleanup. The *2008 JURMP Section 6.0* provides a complete description of the management programs for the municipal component.

Routine maintenance, cleaning, and implementation of BMPs for municipal facilities and activities keep accumulated debris and other potential pollutants from entering the MS4. At a minimum the City conducts annual formal inspections of high priority municipal facilities and actives. The City also maintains a number of storm drain inlet filters that are cleaned and maintained quarterly by Downstream Services, Inc. Cleaning records are maintained on file and logged in a database on the Environmental Division server.

During FY 2009-10 the City conducted two projects categorized as Special Studies. The first was completion of the post construction monitoring and assessment of the Palm Ave low flow storm drain diverter. The storm drain diverter project, which was funded by a Clean Beach Initiative grant, has the capacity to divert up to 250 gallons per minute of urban runoff into the sanitary sewer. The second special study was an update to the Storm Drain Master Plan that will be complete in August 2010. Updates to the Master Plan include a review of previous storm drain studies (i.e. 1960 and 1991), GIS

and mapping updates, hydrologic and hydraulic modeling of the MS4, identification of system deficiencies, and recommendations.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Municipal program element:

- Table 4.1 Provides an overview of the Municipal inventory by facility type and priority classification
- Table 4.2 presents and describes targeted FY 2009-10 outcomes and results
- Figure 4.1 Street sweeping removal totals
- Figure 4.2 MS4 cleaning totals
- Table 4.3 Municipal storm drain filter inventory and maintenance records
- Table 4.4 Municipal facility and activity inventory and inspection records

4.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Staff

The City conducts annual training for all municipal employees. Training for the Municipal Component is specifically targeted at the Public Works Department because City Streets, Maintenance Workers, and Sewer crews are typically the first line of defense for storm water pollution. The training program focuses on the use of Best Management Practices in daily operations, and is designed to create an overall sensitivity to pollution prevention concerns. Open discussions are encouraged to further the importance and enhance the program. Pre training surveys are also conducted to assess the level of knowledge and effectiveness of the annual training events. This education effort for City staff is discussed in the *JURMP Section 10.0.*

4.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Staff

The *JURMP Appendix E* defines minimum BMP requirements applicable to streets, roads, highways, municipal areas, municipal activities, and parking facilities in the City. Major targeted outcomes for FY 2009-10 included streets and parking lot sweeping, MS4 cleaning, sewer system preventative maintenance, municipal storm drain BMP maintenance, integrated pest management at parks, and implementation of BMPs at municipal facilities. All BMPs are inspected and enforced for compliance.

4.6 Outcome Level 4: Source Load Reductions

The City continues to make source load reductions from municipal facilities and activities. The City maintained approximately 125 miles of curbed streets and uncurbed roads located throughout the City. Approximately 177 tons of trash and debris were collected through street sweeping operations. The City also collected 132 loads of large bulky items illegally dumped in City alleys through its franchise waste hauler EDCO.

The Sewer Division maintains the City's storm drain lines and catch basins. Approximately five miles of underground piping, 117 catch basins and inlets, and seven open drainage facilities were cleaned

through the year. A total of 8,230 pounds of trash, sediment, and organic matter was collected out of the MS4 system during the reporting period. Storm drain cleaning occurs between the months of May through September.

Lastly, over 30 acres of park facilities, athletic fields, beach accesses, landscapes at various facilities, and five community parks located throughout the City were maintained during FY 2009-10. The City has a dedicated Tidelands crew that picks up trash and debris and conducts landscaping duties 7 days a week on the beach and one block inland of the beach. In addition, the City contrast with Donovan Prison for a weekly crew to pick up trash and conducts landscape duties at City parks and unmaintained areas. The City tracks source loads whenever possible.

Table 4.1 – Overview of Municipal Inventory by Facility Type and Priority Classification

Category	Miles	Number	Description of Changes
A. Type of Facility			
Paved Roads	127.9	---	
Unpaved Roads	---	---	
Municipal Parking Facilities	---	4	
Underground storm drain piping	5	---	
Catch basins/Inlets	---	117	
Open Drainage Facilities	---	7	
B. Priority Classification			
<u>Streets, Roads, and Highways</u>			The City also contains 13.3 miles of paves alleys and 2.5 miles of unimproved alleys that are not on the municipal inventory. The alleys are not owned by the City and are maintained by the property owners. The City conducts monthly street sweeping on the paved alleys and provides pick up of large bulky items illegally dumped in the alleys.
High (Commercial areas)	19.2	---	
Medium (Beachfront residential areas)	9.6	---	
Low (Other residential areas and paved alleys)	99.1	---	
<u>Municipal Parking Facilities</u>			
High (Commercial)		4	
Medium (N/A)	---	---	
Low (N/A)	---	---	
<u>MS4 Facilities</u>			

Table 4.1 – Overview of Municipal Inventory by Facility Type and Priority Classification

Category	Miles	Number	Description of Changes
Underground piping	5	---	
Catch basins/Inlets	---	117	
Open Drainage Facilities	---	7	
Sanitary Sewer System			
Pump stations		12	
Underground piping	39.5		
C. Totals			
Streets, Roads, and Highways	127.9	---	
Unpaved Roads	---	---	
Municipal Parking Facilities	---	4	
Underground Piping	5	---	
Catch Basins/Inlets	---	117	
Open Drainage Facilities	---	7	
Sanitary Sewer Pump Stations		12	
Underground Sewer Pipe	39.5		

JURMP Sections	Description of FY 2009-10 Changes
6.0 and Appendix E	BMP requirements of the JURMP applicable to streets, roads, highways, and municipal parking facilities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 4.2 - Municipal Component Targeted Outcomes and Results

Municipal FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per Permit requirements	No updates were made	Complete	Applicable updates were included in *JURMP Section 6.0*. No significant updates are expected to be necessary during this permit cycle.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update program documentation for consistency with program updates	Updates made to Municipal Inspection Forms, MS4 maintenance forms, and Municipal BMP guidance document	Complete	The City made updates to its Municipal Inspection Forms and MS4 maintenance forms to improve efficiency in reporting. Updates were also made to the BMP guidance document for Municipal Facilities and Activities. Every City vehicle contains a binder with a storm drain map and information on proper BMPs for municipal facilities and activities.
c) Year-End Program Review			
Complete annual year-end program review	Review program for effectiveness and efficiency	Complete	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
d) Updates to Training Program			
Update training materials for municipal staff	Made updates to the Municipal Facility and Activity BMP program document	Complete	The City makes annual updates to the municipal training content and materials so that each education activity provides appropriate information for the target audience. This year updates were made to the BMP guidance document for municipal facilities and activities. Every City vehicle contains a binder with a storm drain map and information on proper BMPs for municipal facilities and activities.

Table 4.2 - Municipal Component Targeted Outcomes and Results

Municipal FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
e) Updates to Municipal Inventor or Prioritization			
Update municipal inventory	The municipal inventory was updated to match the Copermittee regional reporting standard	Complete	The City made updates to the municipal facilities and activities inventory to match the regional reporting standard developed by the Copermittee Municipal Workgroup. The new standardized reporting template will allow for greater collaboration between jurisdictions and may eventually lead to a regional reporting format.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Municipal Facilities and Activities			
Require municipal areas and activities to implement minimum BMPs	Implemented BMPs and verified through inspections and reinforced through annual training	Complete	Specific minimum BMP requirements for municipal facilities and activities, including pollution prevention methods, are described in the *2008 JURMP Appendix E*. Municipal BMPs are reviewed regularly and updated as necessary. In addition, each City vehicle contains a binder of Best Management Practices for Municipal Facilities and Activities that were updated in 2009. The binder is a reference tool for employees to properly implement BMPs for specific job tasks and a reference for responding to illegal discharges.
b) Confirmation of Designated Minimum BMPs			
Verify the implementation of minimum BMPs for municipal areas and activities	BMPs are implemented and verified through inspections and reinforced through annual training	Complete	Specific minimum BMP requirements for municipal facilities and activities, including pollution prevention methods, are described in the *2008 JURMP Appendix E*. Municipal BMPs are reviewed regularly and updated as necessary. In addition, each City vehicle contains a binder of Best Management Practices for Municipal Facilities and Activities that were updated in 2009. The binder is a reference tool for employees to properly implement BMPs for specific job tasks and a reference for responding to illegal discharges.

Table 4.2 - Municipal Component Targeted Outcomes and Results

Municipal FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
c) Confirmation of Municipal Inspections			
Verify that municipal inspections achieve BMP compliance	BMPs are verified through inspections and reinforced through annual training	Complete	Municipal inspections are used as means to verify the implementation of BMPs at municipal facilities and activities. Inspections also serve to educate staff, reinforce storm water concepts, and improve communication across City Divisions.
d) Municipal Staff Training			
Provide training opportunities for municipal staff	Staff educated through meetings, workshops, and trainings	Complete	Community Development and Public Works Departments meet weekly to review critical issues including storm water project development requirements. Monthly meetings are also held to discuss code enforcement related issues. Annual training is provided to Public Works staff and was conducted on 9/30/09. Municipal inspections serve as one-on-one training for Division supervisors. Regional workshops on SUSMP, HMP, GCP, TMDLs, and code enforcement made available to staff. Daily interaction with City staff ensures that storm water pollution prevention remains a high priory throughout the City.
e) Confirmation of Pesticide, Herbicide, and Fertilizer Management			
Verify designated BMPs for pesticides, herbicides, and fertilizer	IPM and BMPs implemented	Complete	The City limits the application of pesticides and herbicides applied to park and landscaping facilities in accordance with Integrated Pest Management Program policy.

Table 4.2 - Municipal Component Targeted Outcomes and Results

Municipal FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
f) Confirmation of Maintain for Municipal BMPs			
Verify maintenance of municipal storm water BMPs	Maintained operation and maintenance of existing storm water BMPs	Complete	The City maintains a number of storm water BMPs along the storm water conveyance system including two urban low flow and first flush storm drain diverters, 13 storm drain filters, 1 CDS unit, vegetated ditches, and infiltration areas with french drains.
g) Special Investigations			
No targeted	2010 update to the Storm Drain Master Plan	Partially Complete	The update of the Storm Drain Master Plan will be complete in August 2010. Updates include review of previous storm drain studies (i.e. 1960 and 1991), GIS and mapping, hydrologic and hydraulic modeling, identification of system deficiencies, and recommendations.
Not targeted	Palm Ave Diverter CBI Grant Final Report	Complete	The Final Monitoring Report for the Palm Ave Diverter Project was submitted to the State Water Board on January 20, 2010 in compliance with the Clean Beaches Initiative Prop 50 grant agreement.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF)			
Establish a baseline of staff knowledge regarding applicable program content	Performed a pre training survey on 9/30/10 of Public Works Department	Survey consisted of 18 challenging questions. Public Works Department (20 surveys completed) average score of 84%.	The City incorporates surveys or pre and post tests into training programs and administers them when appropriate. The surveys administered during training sessions provide a baseline of knowledge of core concepts and helps in refining the municipal training program for the next reporting period. The overall results show a high level of knowledge on core storm water management concepts in the City. Surveys were only administered to Public Works employees in FY 2009-10 and scores indicated an increase in knowledge from the previous reporting period (81% to 84%). Surveys conducted for Community Development during the past two reporting periods scored very high on knowledge of storm water concepts.

Table 4.2 - Municipal Component Targeted Outcomes and Results

Municipal FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF)			
a) BMP Implementation for Streets, Roads, Highway, and Parking Facilities			
Sweep all High trash areas at least twice per month	28.7 curb-miles swept at least twice per month and 4 municipal parking facilities swept weekly	Complete	Commercial areas (19.2 miles of curbed roads and 4 parking lots) are swept weekly. Beachfront residential areas (9.5 miles of curbed roads) are swept bi-weekly (high trash and debris). All other areas (99.1 curb miles) are considered moderate priority and are swept on a monthly basis. The City has a dedicated Tidelands Maintenance Division, funded by the Port of San Diego, whose mission is to keep the beach and one block inland from the beach free of trash, sand, and other debris. The City also maintains a contract with Donavan Correctional Facility to provide supervised labor for various needs including landscaping and trash pickup. The Streets and Parks Divisions play a crucial role in keeping the City free of trash. EDCO also conducts alley sweeps for large bulky items upon request from the City. Finally, the City provides a Home Front Cleanup event for residents to dispose of accumulated waste.
Sweep all Moderate trash areas at least monthly	99.1 curb-miles swept at least monthly	Complete	
Sweep improved streets, roads, and highways	127.9 curb-miles swept (2,392 total miles) swept)	Complete	
Collect trash and debris from non-sweeping activities	Collected trash and debris from parks, alleys, and tideland area	Complete	

Table 4.2 - Municipal Component Targeted Outcomes and Results

Municipal FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
b) BMP Implementation for Municipal Separate Storm Sewer System (MS4)			
Clean accumulations of trash and debris greater than 33% of design capacity	117 catch basins inspected (100%)	Complete	Storm drain cleaning generally occurs between the months of May and September. In this annual report we provide analysis for the specified reporting period (July 1st – June 30th), which includes records of both the 2009 and 2010 cleaning events. It is important to note that the City inspects all of its 117 catch basins and cleans them if necessary on an annual basis.
Inspect and clean MS4 line	100% of the MS4 inspected and 29,435 feet of storm drain cleaned	Complete	The City cleans and inspects 100% of the catch basins and endeavors to clean 100% of the 5 miles of storm drain lines annually. The Sever Division uses the vactor truck to jet and clean accumulated debris out of the MS4. Cleaning for the 2010 season will be finished in September.
Prioritization of MS4 system maintenance	Review underway	Partially Complete	Following two years of inspections, any MS4 facility that requires inspection and cleaning less than annually may be inspected as needed, but not less than every other year The Environmental Division is performing a review of past storm drain line cleaning records to identify areas of high trash and debris accumulation. Sections of the MS4 that are identified as low trash and debris accumulation areas may be cleaned and inspected less than annually.
Prevent and eliminate infiltration from the sanitary sewer to the MS4	Implementation of the 2008 Sewer System Maintenance Plan	Complete	The City has conducted a sewer capacity study and identified areas needing improvement. These will be undertaken through the Capital Improvement Projects program. A Sewer System Management Plan was also completed in accordance with Waste Discharge Requirements. The City is in the 3rd year of a 5-year CIP to CCTV the entire sewer system.
Conduct routine maintenance on sanitary sewer system	36 miles of sanitary sewer system maintained	Complete	Most sanitary sewer pipelines are cleaned at least annually, and known problem areas are cleaned more frequently. Twelve alarmed sewage pump stations are monitored daily.

Table 4.2 - Municipal Component Targeted Outcomes and Results

Municipal FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Respond to all sewer spills received and log in appropriate data bases	6 sewer spills reported with 3 from private laterals	Completed	In the event of a sewer spill, City staff follows procedures laid out in its Sanitary Sewer Overflow Response Plan. The City experienced 6 sewer spills during FY 2009-10 and 3 of those were from private laterals.
c) BMP Implementation for Municipal Facilities and Activities			
Implement BMPs and maintain municipal treatment control BMPs	Maintained 13 storm drain or catch basin filters, 2 storm drain diverters, 1 CDS unit, vegetated swales, and infiltration areas	Complete	The City enforces compliance of minimum BMPs at all municipal facilities and maintenance activities. In addition, the City maintains 13 storm drain filters that are maintained quarterly by contract. The City also operates 2 storm drain diverters, one CDS unit, and a number of vegetated swales and infiltration areas.
d) Municipal Facilities and Activities Inspection Results			
Provide general inspection results for municipal areas and activities	Inspected 100% of municipal facilities and provided training on BMPs for municipal activities	Complete	General inspection results include the following: quarterly maintenance of municipal storm drain filters, proper implementation of minimum BMPs by staff, internal review and training on BMPs for municipal areas and activities.
e) Violations and Enforcement Actions			
Number of violations and enforcement actions to achieve compliance.	No enforcement actions necessary to achieve compliance	Complete	Minor violations were noted during municipal inspects and corrected without enforcement actions. Such violations include replacement of old BMPs (i.e. straw waddles, spill response kits, drip pans). A sediment trap was also installed at the Public Works yard to prevent the traction of sediment into the street.

Table 4.2 - Municipal Component Targeted Outcomes and Results

Municipal FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM MUNICIAPL FACILITIES AND ACTIVITIES)			
a) Street Sweeping			
Track debris collected from street sweeping activities	Trash: 17.7 tons Debris: 141.6 tons Organics: 17.7 tons	Complete	The City collected a total of 177 tons of material from street sweeping activities. The City sweeps 19.2 miles of commercial area and 4 municipal parking lots weekly (high priority), 9.6 miles of beach front biweekly (medium priority), and 99.1 miles of residential area monthly (low priority).
b) Cleanup Activities			
Track EDCO alley sweeps and Home Front Clean Up totals	EDCO Alley Sweeps: 132 callouts Home Front Clean Up: 175.64 tons	Complete	EDCO conducts alley sweeps for large bulky items upon request from the City. In addition, the City provides a Home Front Cleanup event for residents to dispose of accumulated waste. The City also conducts a number of other cleanup activities to collect trash and debris from municipal areas; however, this waste is not tracked at this time.
c) MS4 Cleaning			
Track debris collected through MS4 cleaning	Trash: 1,056 lbs Debris: 2,012 lbs Organics: 5,161 lbs	Complete	There are approximately 117 catch basins and approximately 5 miles of storm drain pipe that is maintained and cleaned annually. The Sewer Division has successfully cleaned 100% of the MS4 system annually over the past 3 years and is on track to achieve the same results for 2010. MS4 cleaning starts in May and continues through September. During FY 2009-10 the Sewer Division cleaned a total of 8,230 lbs of material out of the MS4.
d) **Municipal Storm Drain Filters**			
Track debris collected from 13 municipal storm drain filters	Trash: 345.9 lbs Debris: 114.9 lbs Organic: 390.7 lbs	Complete	Downstream Services maintains 13 municipal storm drain filters quarterly. During the reporting period 851.5 pounds of debris was captured through municipal storm drain filters.

Table 4.2 - Municipal Component Targeted Outcomes and Results

Municipal FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
e) Storm Water Diverters			
Monitor storm water diversion from Palm Ave Diverter	Palm Ave Diverter: 156,000 gallons diverted into the sanitary sewer	Complete	The City operates two storm drain diverters (Palm Ave and Date Ave). Only the diverted flow from Palm Ave is monitored and tracked.

Figure 4.2-Street Sweeping Totals

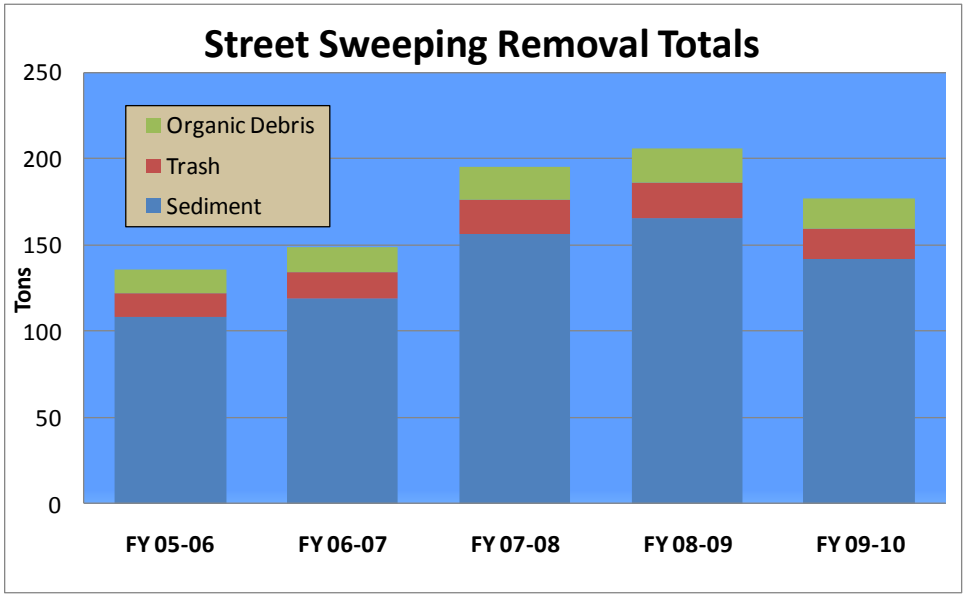


Figure 4.1- The street sweeping totals above are presented by fiscal year. Street sweeping is contracted through Clean Streets and EDCO. The City maintains approximately 127.5 miles of curbed streets and uncurbed roads located throughout the City. Sweeping activities collected 177 tons of materials during the reporting period.

Figure 4.3-MS4 Cleaning Totals

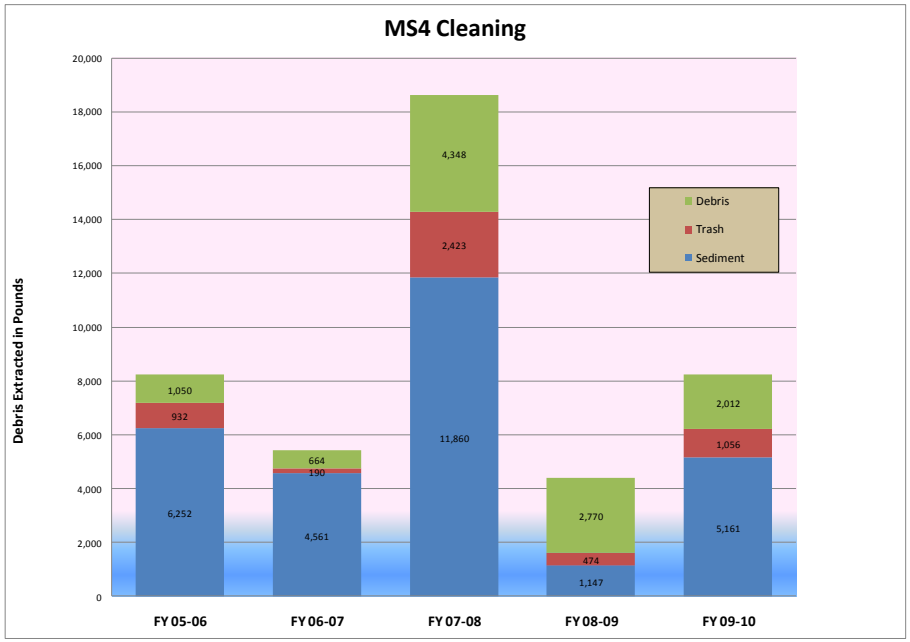


Figure 4.2- The MS4 cleaning totals above are presented by fiscal year. The City endeavors to clean 100% of the MS4 between the months of May through September. The MS4 system includes 117 catch basins, 7 open drain facilities, and approximately 5 miles of underground pipe. The Sewer Division cleaned 8,230 pounds of materials out of the MS4 system during FY 2009-10.

Table 4.3 - Municipal Storm Drain Filter Inventory and Maintenance Records

ID	Filter Type	Address	Location	Watershed	Date of Installation	Date of Service	Service Conducted			Weight of Debris Removed (lbs.)	Materials Collected (lbs.)				Volume Used % of Total
							Inspected	Cleaned	Boom(s) Replaced		Sediment	Trash	Organics	Other	
SDF1	Grate Inlet Skimmer Box	495 Tenth St.	Public Works Yard	910.20	13-Oct-03	23-Sep-09	X	X	X	0.1	0.0		0.0		1%
	18" X 18"		(Rear of Yard)			2-Dec-09	X	X		0.1	0.0		0.0		2%
	Bio-sorb oil absorbing polymers for hydrocarbon removal					18-Mar-10	X	X	X	0.1	0.0	0.0	0.0		0%
						22-Jun-10	X	X		1.0	0.3	0.3	0.3		10%
SDF2	Grate Inlet Skimmer Box - Round	495 Tenth St.	Public Works Yard	910.20	13-Oct-03	23-Sep-09	X	X	X	0.1	0.0		0.0		1%
	24" X 24"		(Front Parking Lot)			2-Dec-09	X	X		0.1	0.0		0.0		1%
	Bio-sorb oil absorbing polymers for hydrocarbon removal					18-Mar-09	X	X	X	50.0	46.7		3.3		30%
						22-Jun-10	X	X		10.0	5.0		5.0		5%
SDF3	Grate Inlet Skimmer Box	825 Imperial Beach Blvd.	City Hall	911.11	13-Oct-03	23-Sep-09	X	X	X	4.0	0.4		3.6		10%
	24" X 36"					2-Dec-09	X	X		18.0	4.5		13.5		20%
	Bio-sorb oil absorbing polymers for hydrocarbon removal					18-Mar-09	X	X	X	50.0	16.7		33.3		30%
						22-Jun-10	X	X		45.0	11.3		33.8		20%
SDF4	Grate Inlet Skimmer Box	865 Imperial Beach Blvd.	Fire Station	911.11	13-Oct-03	23-Sep-09	X	X	X	0.2	0.1	0.1	0.1		2%
	12" X 12"					2-Dec-09	X	X		0.1	0.0		0.0		1%
	Bio-sorb oil absorbing polymers for hydrocarbon removal					18-Mar-09	X	X	X	0.1	0.0	0.0	0.0		1%
						22-Jun-10	X	X		0.5	0.2	0.2	0.2		10%
SDF5	Grate Inlet Skimmer Box	1075 8th St.	Marina Vista Center	911.11	13-Jan-03	23-Sep-09	X	X	X	3.0	0.2		2.8		30%
	24" X 30"					2-Dec-09	X	X	X	21.0	14.0		7.0		30%
	Bio-sorb oil absorbing polymers for hydrocarbon removal					18-Mar-09	X	X	X	15.0	11.3		3.8		20%
						22-Jun-10	X	X		8.0	2.7	2.7	2.7		10%
SDF6	Grate Inlet Skimmer Box	Seacoast Dr. / Palm Ave.	City Parking Lot	910.10	13-Jan-03	23-Sep-09	X	X		1.5	0.2		1.4		10%
	24" X 36"					2-Dec-09	X	X		0.0	0.0		0.0		1%
	Bio-sorb oil absorbing polymers for hydrocarbon removal					18-Mar-09	X	X	X	6.0	0.6		5.4		20%
						22-Jun-10	X	X		1.0	0.3	0.3	0.3	0.3	5%
SDF7	Pipe Skimmer	1459 Hemlock	Behind Apartment	911.11	12-Jan-05	23-Sep-09	X			0.0					0%
	24" X 24"		City Easement			2-Dec-09	X	X		0.1		0.0	0.0		0%
	Bio-sorb oil absorbing polymers for hydrocarbon removal					18-Mar-09	X	X		0.4	0.1	0.1	0.1		10%
						22-Jun-10	X	X		0.4	0.2		0.2		10%
SDF8	KriStar, Flo Guard Plus Catch Basin Insert	839 10 St.	City Alley	910.20	3-Nov-05	23-Sep-09	X	X	X	1.0	0.2	0.4	0.4		5%
	18" X 36"	Alley east of 10th St.				2-Dec-09	X	X		1.0	0.3	0.3	0.3		1%
	Hydrocarbon absorption boom	between Elm & Donax				18-Mar-09	X	X	X	6.0	1.2	1.8	3.0		10%
						22-Jun-10	X	X		6.0	3.0		3.0		10%
SDF9	2 Grate Inlet Skimmer Boxes	Alley abutting 8th St	City Alley	910.20	22-Feb-07	23-Sep-09	X	X	X	0.5	0.3	0.1	0.1		1%
	24" X 36"	100 yd. south of Palm				2-Dec-09	X	X		15.0	1.5	1.5	12.0		10%
	Hydrocarbon absorption boom					18-Mar-09	X	X	X	50.0	16.7	16.7	16.7		30%
						22-Jun-10	X	X		20.0	6.7	6.7	6.7		10%
SDF10	Grate Inlet Skimmer Box	Alley b/w 8th St. &	City Alley	910.20	5-Feb-07	23-Sep-09	X	X	X	0.8	0.3	0.3	0.3		1%
	32" X 40"	Delaware St. just south				2-Dec-09	X	X		4.0	1.3	1.3	1.3		1%
	Hydrocarbon absorption boom	of Palm Commercial Ctr.				18-Mar-09	X	X	X	140.0	70.0		70.0		10%
						22-Jun-10	X	X		30.0	7.5		22.5		20%
SDF11	Grate-Inlet Box	Curb inlet at SW Corner	Curb Inlet	910.20	22-Feb-07	23-Sep-09	X	X	X	3.0	0.1	2.7	0.2		50%
	24" X 36"	9th St. / Palm Ave.				2-Dec-09	X	X		25.0	0.5	19.5	5.0		100%
	Hydrocarbon absorption boom					17-Mar-09	X	X	X	20.0	1.7	15.0	3.3		60%
						22-Jun-10	X	X		35.0	2.2	30.6	2.2		80%
SDF12	KriStar, Flo Guard Plus Catch Basin Insert	740-798 Florida Street	City Alley	910.20	17-May-07	23-Sep-09	X	X	X	1.0	0.2	0.5	0.3		6%
		alley behind apartment				2-Dec-09	X	X		15.0	6.0	3.0	6.0		25%
		complex				18-Mar-09	X	X	X	130.0	54.2	10.8	65.0		60%
						22-Jun-10	X	X		25.0	12.5		12.5		10%
SDF13	Round Hydro Flow Guard Plus and hydrocarbon booms	4th Street at Sports Park	South end of parking	911.11	29-Jun-09	23-Sep-09	X	X	X	3.0	1.0		2.0		15%
	24" Diameter Grate and 22" Diameter Inlet		lot at Sports Park			2-Dec-09	X	X		15.0	9.0		6.0		25%
						18-Mar-09	X	X	X	70.0	35.0		35.0		80%
						22-Jun-10	X	X		0.1	0.1	0.0	0.0		50%
									Totals	851.8	345.9	114.9	390.7	0.3	

Table 4.4 - Municipal Facility and Activity Inventory and Inspection Record

ID	Name	Inspection Date	Address	Type1	Type2	Type3	Watershed	Receiving Water	303(d) Tributary Status	ESA Status	Inspection Priority
M-1	Public Works Yard	2/18/10	495 10th Street	Office Building	Corporate Yard	Parking Lot	910.20	Otay River	No	Yes	High
M-2	Dempsey Holder Safety Center	3/15/10	950 Ocean Lane	Office Building	Corporate Yard		911.11	Pacific Ocean	Yes	Yes	High
M-3	Fire Station	3/11/10	865 Imperial Beach Boulevard	Office Building	Fire Station	Parking Lot	911.11	Tijuana Estuary	Yes	No	High
M-4	City Hall	3/11/10	825 Imperial Beach Boulevard	Office Building	Parking Lot		911.11	Tijuana Estuary	Yes	No	High
M-5	Marina Vista Center	3/15/10	1075 8th Street	Office Building	Parking Lot		911.11	Tijuana Estuary	Yes	No	Low
M-6	I.B. Boys & Girls Club	6/15/10	847 Encina Avenue	Office Building	Parking Lot		911.11	Tijuana Estuary	Yes	No	Med
M-7	Veteran's Park	3/11/10	9th Street / Imperial Beach Boulevard	Park	Parking Lot		911.11	Tijuana Estuary	Yes	No	High
M-8	Reama Park	6/15/10	Elder Avenue / Elkwood Avenue	Park	Parking Lot		911.11	Pacific Ocean	Yes	No	Med
M-9	Sports Park & Recreation Center	3/17/10	425 Imperial Beach Avenue	Park	Office Building	Parking Lot	911.11	Tijuana Estuary	Yes	No	High
M-10	Teeple Park	3/11/10	Calla Avenue / Florida Street	Park	Parking Lot		910.20	Otay River	No	No	Med
M-11	Triangle Park	6/15/10	7th Street / Palm Avenue	Park			910.20	Otay River	No	No	Med
M-12	Dunes Park	3/11/10	700 Seacoast Drive	Park	Parking Lot		910.10	Pacific Ocean	Yes	Yes	High
M-13	Pier Plaza	3/11/10	Evergreen Street / Seacoast Drive	Park			911.11	Pacific Ocean	Yes	Yes	High
M-14	Imperial Beach Pier	3/11/10	Evergreen Street / Seacoast Drive	Miscellaneous			N/A	Pacific Ocean	Yes	Yes	High
M-15	Beachfront	3/11/10	Mexican Border to YMCA Camp Surf	Miscellaneous			N/A	Pacific Ocean	Yes	Yes	Med
M-16	Seacoast & Palm Parking Lot	5/15/10	Seacoast Drive & Palm Avenue	Parking Lot			910.10	Pacific Ocean	Yes	Yes	High
M-17	Elkwood Parking Lot	3/15/10	Seacoast Drive & Elkwood Avenue	Parking Lot			911.11	Pacific Ocean	Yes	Yes	High
M-18	Underground MS4	Annually	Citywide	MS4			All	All	Yes	Yes	High
M-19	Pump Station #11 (Storm Drain)	3/11/10	Palm Avenue street end	MS4			910.10	Pacific Ocean	Yes	Yes	High
M-20	Underground Sewer	Annually	Citywide	Sewer			All	All	Yes	Yes	High
M-21	Pump Station #1A (Underground)	6/21/10	862 Seacoast Drive	Sewer			910.10	Pacific Ocean	Yes	Yes	High
M-22	Pump Station #1B (Underground)	3/18/10	1098 Seacoast Drive	Sewer			911.11	Pacific Ocean	Yes	Yes	High
M-23	Pump Station #2 (Above ground)	7/16/09	1306 South Seacoast Drive	Sewer			911.11	Tijuana Estuary	Yes	Yes	High
M-24	Pump Station #3 (Underground)	4/22/10	501 Elm Avenue	Sewer			911.11	Tijuana Estuary	Yes	No	High
M-25	Pump Station #4 (Underground)	12/17/10	755 Delaware Avenue	Sewer			911.11	Tijuana Estuary	Yes	No	High
M-26	Pump Station #5 (Underground)	5/20/10	133 Dahlia Avenue	Sewer			910.10	Pacific Ocean	Yes	No	High
M-27	Pump Station #6 (Underground)	11/19/09	498 Rainbow Street	Sewer			910.10	San Diego Bay	Yes	No	High
M-28	Pump Station #7 (Underground)	10/15/09	504 Oneonta Avenue	Sewer			911.11	Tijuana Estuary	Yes	No	High
M-29	Pump Station #8 (Underground)	1/21/10	895 Imperial Beach Boulevard	Sewer			911.11	Tijuana Estuary	Yes	No	High
M-30	Pump Station #9 (Underground)	8/21/09	1025 9th Street	Sewer			911.11	Tijuana Estuary	Yes	No	High
M-31	Pump Station #10 (Above ground)	2/13/10	814 Cypress Avenue	Sewer			910.20	Otay River	No	No	High
M-32	Streets	Annually	Citywide	Streets			All	All	Yes	Yes	High
M-33	Alleys	Annually	Citywide	Streets			All	All	Yes	Yes	High
M-34	Traffic Islands	Annually	Citywide	Streets			All	All	Yes	No	Med
M-35	Special Event Venues	As needed	Citywide	Miscellaneous			All	All	Yes	Yes	High
M-36	Graffiti Removal	Annually	Citywide	Miscellaneous			All	All	Yes	Yes	High
M-37	Serenity Garden	6/15/10	Silver Strand Blvd and Citrus Ave	Park			910.10	Otay River	No	No	Med

5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 Introduction

The City endeavors to prevent or eliminate the discharge of pollutants and runoff from industrial and commercial sources. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and its efforts to oversee compliance with urban runoff regulations at businesses within the City and reduce the discharge of pollutants to the MS4 to the maximum extent practicable (MEP). The City is tasked with educating businesses about urban runoff management and overseeing their compliance with applicable Municipal Storm Water Permit requirements.

5.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Industrial and Commercial Component is described in the *2008 JURMP Section 7.0*. During the reporting period the City made routine updates to the Commercial and Industrial business inventory and implemented the use of the new regional inventory template developed by the Industrial Commercial Copermittee Workgroup. The inventory is maintained on the Environmental Division Server and identifies all industrial and commercial facilities that could contribute pollutant loads to the MS4. The City currently does not have any industrial facilities on that inventory. Records are also maintained on each specific business for inspections, corrective actions, and illegal discharges. During the reporting period the City continued to incorporate fats, oils, and grease (FOG) management into the commercial business inspection for restaurants. Lastly, the Environmental Division incorporated an interactive effectiveness assessment into the commercial inspection program to assess the level of knowledge and effectiveness of BMP implementation.

5.3 Outcome Level 1b: Implementation of Management Program Activities

The Environmental Division provides notification and verification of minimum BMPs for commercial businesses, in addition to performing inspections at all high priority commercial businesses in the City. The City also inspects non-high priority business and mobile businesses during the year as necessary. Inspections are conducted and documented as outlined in the *2008 JURMP Section 7.0*.

In addition to City staff reporting illegal discharges, the Environmental Division also responds to calls to the storm water hotline and from online complaints. However, the vast majority of storm water violation reports are made from City staff. The low number of commercial businesses and relatively contained commercial zoning allows City staff to be the predominant eyes on the street for identifying storm water violations.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Commercial Industrial program element:

- Table 5.1 Provides an overview of the Industrial and Commercial inventory by facility type and priority classification
- Table 5.2 presents and describes targeted FY 2009-10 outcomes and results
- Table 5.3 Commercial Business Inventory FY 2009-10
- Table 5.4 Commercial Business Inspections FY 2009-10
- Table 5.5 Interactive Effectiveness Assessment of Commercial Businesses

5.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Businesses

Commercial businesses receive education on storm water BMPs through a number of different methods including direct mail before scheduled inspections, face-to-face interaction with City staff during commercial inspections, through dissemination of education material, and through a follow up inspection letter that summarizes the results of the commercial inspection. The City also provides education to businesses during ICID investigations.

Starting this reporting period the Environmental Division incorporated an interactive effectiveness assessment of commercial businesses during the annual storm water inspection at 21 of the 71 high priority businesses. The goal of the assessment is to get beyond BMP verification and assess the level of BMP effectiveness at commercial businesses in the City. General results showed a high level of knowledge among the businesses inspected. The results are outlined in Table 5.5.

5.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Businesses

The City facilitates changes in behavior and implementation of BMPs at commercial businesses by providing continuous education efforts through face-to-face interactions, routine inspections, dissemination of brochures, mailing of post inspection letters, and responding to illegal storm water discharges. The *2008 JURMP Appendix F* defines minimum BMP requirements applicable to industrial and commercial projects in the City. The *2008 JURMP Section 7.0* provides more information on the procedural and administrative mechanisms in the City that promote behavioral changes for commercial, industrial, and mobile businesses.

5.6 Outcome Level 4: Source Load Reductions

The two step approach of education on storm water pollution and enforcement of BMPs have unquestionably resulted in the source load reductions from commercial businesses. Although the City does not currently track source load reductions from commercial sites, the increased level of knowledge on storm water BMPs and cooperation among the local business community have successfully prevented the release of pollutants from commercial businesses. Source load reductions can be implied from commercial businesses through the proper implementation of BMPs.

Table 5.1 – Overview of Industrial and Commercial Component by Facility Type and Priority Classification

Category	Number	Description
A. Type of Facility		
Industrial	0	Industrial activity is extremely limited. Only one business in operation that can reasonably be classified as "industrial" is a surfboard manufacturing company that performs all of its operations indoors, and is very similar to a commercial facility. The term "commercial" is therefore used for the activities within the City. As such, there is no need in this jurisdiction to identify non-filers under the General Industrial Permit.
Commercial	327	
B. Priority Classification Totals		
High	71	Imperial Beach Municipal Code 8.30.090 defines commercial businesses as either high or non-high (low) priority. High priority businesses include all food service and auto service related businesses.
Low	256	
Mobile	46	Mobile business database is tracked and maintained on the new copermittee online Regional Mobile Business Inventory.
C. Inspection Totals		
Commercial Business Inspections	71	The Environmental Division conducts all commercial inspections. All high priority businesses receive inspections annually for storm water compliance. Commercial businesses that have a significant storm water violation receive a follow up investigation.
Follow Up Inspections	9	
Mobile	---	Mobile businesses do not currently receive annual inspections. The Environmental Division informally inspects mobile businesses while responding to illegal discharge reports and public service requests.

JURMP Sections	Description of FY 2009-10 Changes
7.0 and Appendix F	BMP requirements of the JURMP applicable to industrial and commercial facilities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 5.2 - Industrial and Commercial Component Targeted Outcomes and Results

Industrial and Commercial FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per Permit requirements	No updates were made during reporting period	Complete	Applicable updates were included in *JURMP Section 6.0*. No significant updates are expected to be necessary during this permit cycle.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update program documentation for consistency with program updates	Updates made to Commercial Inspection Form and Fats, oils, and grease (FOG) inspection program	Complete	The commercial inspection and assessment form was updated to include an interactive effectiveness assessment to assess the level on knowledge and effectiveness of BMP implementation. The assessment method was originally developed and implemented by Dmax Engineering in past reporting periods and modified for use in Imperial Beach. This was the first time Imperial Beach incorporated an effectiveness assessment into its commercial inspection program. The City also incorporating fats, oils, and grease (FOG) management as part of the commercial business inspection for restaurants.
c) Year-End Program Review			
Complete annual year-end program review	Review program for effectiveness and efficiency	Complete	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
d) Updates to Training Program			
Update training materials for consistency with *2008 JURMP Section 10.0*	Made updates to education materials and staff	Under review	The City makes annual updates to the municipal training content and materials so that each education activity provides appropriate information for the target audience. During the reporting period the City also hired a new Environmental Specialist who provided education to commercial businesses while conducting annual inspections.

Table 5.2 - Industrial and Commercial Component Targeted Outcomes and Results

Industrial and Commercial FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
e) Updates to Commercial Inventor or Prioritization			
Update commercial inventory and prioritization	Routine updates made to the commercial inventory	Complete	Regular updates were made to the commercial and industrial business inventory. Starting this reporting period the City updated its commercial inventory to match the regional copermittee standard template. Updates were also made to the prioritization ranking so that all food or automotive related businesses get categorized as high priority. The regional online mobile business database was also maintained online.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Commercial Businesses			
Require commercial and industrial businesses to implement BMPs and verify through inspections	Notified businesses through mail, conducted inspections, responded to ICIDs, and provided education materials	Complete	The City requires all commercial and industrial sites/sources to implement designated minimum BMPs and other measures to prevent the discharge of pollutants to the MEP. The City's Urban Runoff Management and Discharge Control Ordinance (Chapters: 8.30.070, 8.30.090, and 8.30.100) mandate the implementation of designated BMPs and control measures. The commercial inspection program and ICID program are the mechanisms used to educate businesses on BMPs.
b) Confirmation of Designated Minimum BMPs			
Verify the implementation of minimum BMPs for commercial businesses	Conducted commercial inspections and follow up inspections to verify BMPs	Complete	The City verifies the implementation of minimum BMPs at commercial businesses through the implementation of the commercial inspection program.

Table 5.2 - Industrial and Commercial Component Targeted Outcomes and Results

Industrial and Commercial FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
c) Confirmation of Commercial Inspections			
Verify that commercial inspections achieve BMP compliance	Inspected all high priority commercial businesses	Complete	Starting this reporting period the Environmental Division incorporated an interactive effectiveness assessment of commercial businesses during the annual storm water inspection. The goal of the assessment is to get beyond BMP verification and assess the level of BMP effectiveness.
d) Justification for Commercial Inspection Prioritization			
Provide rationale for the businesses that were inspected	IBMC 8.30.090 defines commercial businesses as either high or non-high (low) priority	Complete	High priority businesses include at a minimum all food service and auto service related businesses in the City. Businesses that have a treatment control BMPs also receive inspections as well as businesses that cause an ICID.
e) Efforts Made to Notify Businesses of BMPs			
Describe efforts made to notify businesses of BMPs	Notification made through pre mail notification, inspections, follow up inspections, and follow up letter	Complete	During this reporting period the City notified all high priority and mobile businesses of minimum BMPs through mail. High priority businesses then received a storm water inspection and a follow up inspection in the case of a violation. A post inspection letter is then mailed to the business outlining the results of the inspection.
f) Third Party Inspections			
Describe third party inspection results	None	None	All commercial inspections are conducted through the Environmental Division

Table 5.2 - Industrial and Commercial Component Targeted Outcomes and Results

Industrial and Commercial FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
g) General Industrial Permit Non-Filers			
Describe steps taken to identify non-filers under the General Industrial Permit	None	Complete	The City did not have any industrial businesses during the reporting period.
h) Mobile Businesses			
Describe efforts made to address mobile businesses	Mailed letter and brochure of minimum BMPs to mobile businesses	Complete	The City contacted each mobile business through mail with a letter and brochure that outlines the minimum BMP requirements. Mobile businesses do not typically receive annual inspections. The Environmental Division informally inspects mobile businesses while responding to illegal discharge reports and public service requests.
i) Special Investigations			
Not targeted	Conducted interactive assessment of commercial businesses during inspections	Complete	Starting this reporting period the Environmental Division incorporated an interactive effectiveness assessment of commercial businesses during the annual storm water inspection. The goal of the assessment is to get beyond BMP verification and assess the level of BMP effectiveness.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY COMMERCIAL BUSINESSES)			
Establish a baseline for knowledge of BMPs by commercial businesses	Conducted interactive assessment of commercial businesses during annual inspections	Assessment results provided in Table 5.5	Starting this reporting period the Environmental Division incorporated an interactive effectiveness assessment of commercial businesses during the annual storm water inspection. The goal of the assessment is to get beyond BMP verification and assess the level of BMP effectiveness.

Table 5.2 - Industrial and Commercial Component Targeted Outcomes and Results

Industrial and Commercial FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY COMMERCIAL BUSINESSES)			
a) Commercial Business BMP Implementation			
Inspect businesses for compliance	71 sites inspected and 9 follow up inspections	Complete	The City inspections 100% of high priority commercial businesses, non-high priority businesses, and mobile businesses as needed. Inspections consist of observing business operations, reviewing minimum BMPs, and enforcing pollution prevention practices.
Notify mobile and fixed commercial businesses of BMP requirements	71 fixed commercial and 46 Mobile Businesses contacted through mail	Complete	The City notifies business owners and operators, both fixed and mobile, of BMP requirements through a combination of methods including site inspections, follow-up inspection reports, direct mailings, inclusion of BMP information with business license and special event vendor packets, advertisements in newspapers, online resources such as the Project Clean Water website and City's website, and targeted workshops focused on specific business sectors.
b) Violations and Enforcement Actions			
Number of violations and enforcement actions to achieve compliance.	Follow up inspections required at 9 businesses. City also had 26 ICID cases which resulted in 6 NOVs	Complete	The City enforces compliance at all businesses, including mobile sources, using an escalating series of enforcement actions. Verbal or written warnings are used when violation in question is minor. Notices of Violations (NOVs) may be issued for any observed violation. And escalating administrative penalties, fines, and civil penalties may be enforced for non compliance. Violations are tracked and maintained on the Environmental server database.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM MUNICIAPL FACILITIES AND ACTIVITIES)			
a) BMP Implementation			
Load reductions from proper BMP implementation	60 out of 69 high priority businesses implemented proper storm water BMPs	Complete	Source load reductions are not easily tracked from commercial businesses but can be implied through proper implementation of BMPs.

Table 5.3 - Commercial Business Inventory FY 2009-10

No.	Facility Name	Address	Hydrologic Area	SIC Code	NAICS Code	Principal Product or Service	Bakeries	Gross Polluting Activities	Restaurants	Oil & Gas Operations	Outdoor Storage Activities	Vehicle Repair/Maintenance	Trash	Tributary to 303(d) Listed	Threat to water quality	Established Class	APN	Latitude	Longitude	Business Phone Number - Calc
1	19TH ST MARKET	1126 13TH ST	911.11	5921	445310	LIQU		x		x		x	x			H	6330221900	32.575943	117.109952	(619) 424-8255
2	7-ELEVEN 18322/RHJ ENTERPRISES	657 PALM AVE	911.10	5999	453998	RETL										H	6351912300	32.58378	117.108631	(619) 488-0400
3	7-ELEVEN #13062-2131	197 PALM AVE	911.10	5999	453998	RETL										H	6351912500	32.584167	117.108639	(619) 424-6231
4	7-ELEVEN STORE # 24348-2131	1311 PALM AVE	911.10	5999	453998	RETL		x		x		x	x			H	6270111800	32.58364	117.105344	(619) 575-6081
5	7-ELEVEN STORE #34882A-2131	1303 IMPERIAL BEACH BL	911.11	5999	453998	RETL		x		x		x	x			H	6350301600	32.575412	117.109527	(619) 000-0000
6	AB BRITE CLEANERS & LAUNDRY	674 PALM AVE	911.10	7200	56192	SERVICE										H	6351400700	32.58408	117.118594	(619) 424-8088
7	ADEPT PROCESS SERVICES LLC	706 SEACOAST DR	910.10	5999	453998	RETL										H	6351611307	32.583403	117.127666	(619) 934-8100
8	ALBERTO'S TACO SHOP	1183 13TH ST	911.10	5812	72211	EATING	x	x		x		x	x			H	6350313000	32.579166	117.109567	(619) 429-4662
9	ALL AMERICAN CAR WASH III	1158 PALM AVE	910.20	7200	56192	SERVICE		x	x		x	x	x	x	x	H	6352300500	32.58413	117.108042	(619) 429-7000
10	ALL PHASE DRYWALL	1187 13TH ST	911.10	1742	238310	DRYWALL										H	6330511500	32.579349	117.109547	(619) 429-3539
11	ALLSTATE INSURANCE	1228 PALM AVE	910.20	7389	561499	PROF										H	6352411900	32.58412	117.10735	(619) 424-6990
12	AMANDA'S HAIRSTYLING	837 9TH ST	910.20	7200	56192	SERVICE										H	6351212400	32.584087	117.104120	(619) 575-7350
13	AMERICAN LEGION POST NO 820	1268 PALM AVE	910.20	5812	72211	EATING										H	6352420500	32.584167	117.104639	(619) 423-7662
14	AMERICAN OMBUDSMAN ENTERPRISES	150 PALM AVE	910.10	7389	561499	PROF										H	6350140700	32.58408	117.109038	(800) 541-9275
15	AMERICA'S FINEST DRIVING/SCHOOL	936 PALM AVE	910.20	8299	611691	EDUC										H	6352123200	32.583416	117.10638	(619) 424-3007
16	AMOR FLOWERS & TUX	181 PALM AVE	910.10	5999	453998	RETL										H	6351917700	32.583935	117.130104	(619) 628-0440
17	ANCHOR MOTORS	740 PALM AVE	910.20	5521	441120	AUTO		x		x		x				H	6352023000	32.58413	117.117666	(858) 945-7762
18	ANTJE GERSTUNG	704 SEACOAST DR	910.10	7200	56192	SERVICE										H	6351811300	32.583595	117.128954	(619) 407-4135
19	AROMA THAI RESTAURANT	757 SEACOAST DR	910.10	5812	72211	EATING	x	x		x		x	x	x		H	6351102400	32.58251	117.130642	(619) 941-1656
20	ARTCO PICTURE FRAMES	716 BASSWOOD AVE	910.20	5999	453998	RETL										H	6350212100	32.580413	117.10504	(619) 423-2070
21	AUNT ELLEN'S WATER	600 PALM AVE	910.20	5999	453998	RETL										H	6351400400	32.584072	117.120629	(619) 423-5269
22	BEACH SHOP	710 SEACOAST DR	910.10	5999	453998	RETL										H	6351821040	32.583076	117.1318	(619) 252-3911
23	BEACH SIDE STATION	681 HIGHWAY 75	910.20	5541	447110	GAS	x	x		x		x	x			H	6352501200	32.584507	117.118603	(619) 424-3366
24	BERNARDO SHORES	500 HIGHWAY 75	910.20	7033	721211	RV/MOBIL		x								H	6351402000	32.580034	117.099211	(619) 429-9000
25	BEST 99 CENT	821 PALM AVE	910.20	5912	44611	DRUG										H	6352509600	32.583973	117.120629	(619) 575-0997
26	BIBBEY'S GIFT SHOP	903 SEACOAST DR	910.10	5999	453998	RETL										H	6352531000	32.580109	117.119501	(619) 423-5133
27	BIBBEY'S SHELLS AND ROCKS	903 SEACOAST DR	910.10	5999	453998	RETL										H	6352531000	32.580109	117.131601	(619) 423-5133
28	BEACH CLUB GRILLE	710 13TH ST	910.10	5812	72211	EATING	x	x		x		x	x			H	6351401900	32.583595	117.119854	(619) 429-6922
29	BIG KAHUNAS PIZZA N STUFFS	600 PALM AVE	910.20	5812	72211	EATING	x	x		x		x	x			H	6351401900	32.584072	117.120629	(619) 429-5224
30	BILBRAY TAX SERVICE	970 SEACOAST DR	910.10	7389	561499	PROF										H	6351400100	32.584072	117.120629	(619) 424-3240
31	BILLIE JEANS HAIRSTYLING	1144 PALM AVE	910.20	7200	56192	SERVICE										H	6351705500	32.58413	117.108567	(619) 423-7811
32	BILLS HAPPY HAIR	839 PALM AVE	910.20	7200	56192	SERVICE										H	6352509000	32.583749	117.119225	(619) 423-4311
33	BOWMANS MARKET	1008 PALM AVE	910.20	5999	453998	RETL										H	6352021100	32.584072	117.120629	(619) 424-3720
34	BOYS & GIRLS CLUB OF IB	847 ENCINA AVE	910.20	7999	713290	BINGO										H	6354001200	32.580074	117.10705	(619) 424-2266
35	BOYS & GIRLS CLUB OF IB	847 ENCINA AVE	910.20	7999	713990	MISC										H	6354002000	32.580074	117.107049	(619) 424-2266
36	BRENT JACKMAN CONSTRUCTION	708 BASSWOOD AVE	910.20	1750	238990	CENCONT										H	6350212400	32.580413	117.11765	(619) 300-5712
37	BRYANTS AUTO REGISTRATION SVS	1235 PALM AVE	910.20	7200	56192	SERVICE										H	6352111400	32.58364	117.107237	(619) 424-6669
38	BULL PEN	706 HIGHWAY 75	910.20	5812	72211	EATING	x	x		x		x	x			H	6352011100	32.584072	117.10705	(619) 575-3444
39	BURGER KING #606	1180 PALM AVE	910.20	5812	72211	EATING	x	x		x		x	x			H	6352302000	32.58413	117.108598	(619) 429-3180
40	C.R. DONUTS	1055 13TH ST	911.10	5812	72211	EATING	x	x		x		x	x			H	6350421000	32.579166	117.107049	(619) 423-5000
41	CA ALUMINUM&VINYL WINDOWS INC	704 10TH ST	910.20	5999	453998	RETL										H	6352821500	32.58209	117.11994	(619) 429-9739
42	CALIFORNIA AMERICAN WATER COMP	1019 CHERRY	910.20	7299	56192	SERVICE										H	6351923000	32.583539	117.11495	(619) 429-7752
43	CARL'S JR. #580	705 13TH ST	910.20	5812	72211	EATING	x	x		x		x	x			H	6351313000	32.583631	117.109445	(619) 423-5030
44	CHAT COMM	1223 PALM AVE	910.20	5999	453998	RETL										H	6352111400	32.58364	117.107528	(800) 634-4692
45	CHICO'S HAIRCUTTING	1250 IMPERIAL BEACH BL	911.11	7200	56192	SERVICE										H	6352420500	32.579073	117.108502	(619) 429-7940
46	CHRISTINA SCHUBERT	704 SEACOAST DR	910.10	7299	56192	SERVICE										H	6351811308	32.583595	117.119854	(619) 575-7047
47	CHURCH OF CHRIST OF IB	640 10TH ST	910.20	8661	813110	NONPROF										H	6350221800	32.584527	117.11994	(619) 423-9450
48	CIRCLE H LIQUOR	600 PALM AVE	910.20	5921	445120	LIQU										H	6351400400	32.584072	117.120629	(619) 423-5269
49	CITY NAILS	750 13TH ST	910.20	7299	56192	SERVICE										H	6351212400	32.583314	117.105830	(619) 423-1439
50	COCO AND GABOON	152 PALM AVE	910.20	5999	453998	RETL										H	6351401700	32.584072	117.120629	(619) 934-2060
51	COLWELL REALTY	134 PALM AVE	910.10	7389	561499	PROF										H	6352140500	32.584081	117.103909	(619) 423-2444
52	COMPREHENSIVE TRAINING SYSTEMS	497 11TH ST	910.20	7299	56192	SERVICE										H	6350605500	32.587617	117.104422	(619) 424-6552
53	COMPUTERVILLE	740 10TH ST	910.20	7299	56192	SERVICE										H	6352140500	32.58316	117.11663	(619) 575-2216
54	CORONADO BAY URGENT CARE	600 PALM AVE	910.20	8011	621111	HEALTH										H	6351401900	32.584072	117.120629	(619) 423-0100
55	COW-A-BUNGA CA SACKER FNAM	10 EVERGREEN AVE	910.20	5812	72211	EATING	x	x		x		x	x			H	6352111400	32.58364	117.107528	(619) 628-0008
56	COX BAIT & TACKLE	996 PALM AVE	910.20	5999	453998	RETL										H	6352211100	32.584093	117.12008	(619) 429-6942
57	CRAZY LADYS	600 PALM AVE	910.20	5999	453998	RETL										H	6351401900	32.584072	117.120629	(619) 421-4438
58	CRISS CROSS SALON	1115 PALM AVE	910.20	7200	56192	SERVICE										H	6351400500	32.584072	117.120629	(619) 424-9320
59	CROSSROAD PETROLEUM INC	1185 PALM AVE	910.20	5541	447110	GAS	x	x		x		x	x			H	6350021600	32.583976	117.10857	(619) 429-4628
60	CRYSTAL COVE COCKTAILS	995 PALM AVE	910.20	5921	445120	LIQU										H	6351912500	32.584167	117.108639	(619) 934-2060
61	CVS/PHARMACY #9120	800 PALM AVE	910.20	5999	453998	RETL										H	6351913600	32.584154	117.110976	(619) 429-6989
62	CYNTHIA SEPULVEDA	637 9TH ST	910.20	7299	56192	SERVICE										H	6351212400	32.584087	117.114135	(619) 575-7350
63	D & L LOCKSMITH	1148 PALM AVE	910.20	7299	56192	SERVICE										H	6351700300	32.584078	117.10904	(619) 424-3399
64	DAMES FITNESS	704 SEACOAST DR	910.10	7299	56192	SERVICE										H	6351811308	32.583595	117.119854	(619) 922-4184
65	DAWN SWANSON- POINDEXTER	704 SEACOAST DR	910.10	7299	56192	SERVICE										H	6351811308	32.583595	117.119854	(619) 379-9227
66	DEPENDABLE CARBURETOR EXCHANGE	660 EMORY ST	910.20	7539	56192	SERVICE		x		x		x				H	6351212400	32.584093	117.113213	(619) 424-7453
67	DESPHY'S CLEANERS	600 PALM AVE	910.20	7299	56192	SERVICE										H	6351401900	32.584072	117.120629	(619) 825-8827
68	DON PANCHO'S MEXICAN FOOD	690 HIGHWAY 75	910.20	5812	72211	EATING	x	x		x		x	x			H	6350705800	32.584154	117.10705	(619) 429-7034
69	DOS MUNDOS TACO SHOP	1004 PALM AVE	910.20	5812	72211	EATING	x	x		x		x	x			H	6352021100	32.584093	117.11452	(619) 397-9750
70	D & S PRODUCE	1177 13TH ST	911.10	5431	445230	FRUIT										H	6350313000	32.579166	117.110545	(619) 474-6300
71	D.N.S. CON LAUNDRY	1167 13TH ST	911.10	7200	56192	SERVICE										H	6350313000	32.579166	117.109546	(619) 429-5483
72	EAZY TAN	206 PALM AVE	910.10	7299	56192	SERVICE										H	6352023000	32.584073	117.122023	(619) 429-5944
73	ECONO LUBE N' TUBE	772 13TH ST	910.20	7539	56192	SERVICE		x		x		x				H	6351212100	32.582738	117.10935	(619) 429-6992
74	EDS SHOE REPAIR	638 9TH ST	910.20	7299	56192	SERVICE										H	6351214500	32.584651	117.114135	(619) 423-2970
75	EL CUNTRITO MEXICAN FOOD	794 13TH ST	910.20	5812	72211	EATING	x	x		x		x	x			H	6351212100	32.582838	117.108356	(619) 429-7492
76	EL TAPATIO CATERING	687 SILVER STRAND BL	910.10	5812	72211	EATING										H	6350412400	32.584344	117.14256	(619) 423-2440
77	EL TAPATIO RESTAURANT INC	280 PALM AVE	910.10	5812	72211	EATING	x	x		x		x	x			H	6351214500	32.584651	117.114135	(619) 423-3443
78	EL TASSON	633 9TH AVE	910.20	5812	72211	EATING	x	x		x		x	x			H	6351214400	32.584651	117.114134	(619) 462-6330
79	ELM ADULT DAY HEALTH CARE CTR	1235 ELM AVE	910.20	8351	624410	DAYCARE										H	6353412000	32.580855	117.1076	(619) 827-0973
80	EPISCOPAL COMMUNITY SERVICES	485 IMPERIAL BEACH BL	911.10	8351	624110	DAYCARE										H	6350841100	32.576464	117.122833	(619) 228-2800
81	EPISCOPAL COMMUNITY SERVICES	1340 IMPERIAL BEACH BL	911.11	8351	624110	DAYCARE										H	6352140500	32.584081	117.103909	(619) 946-1001
82	EVERYDAY FURNITURE	986 PALM AVE	910.20	5712	442110	RETL										H	6352211200	32.584108	117.112203	(619) 423-3685
83	EVERYDAY FURNITURE	1003 PALM AVE	910.20	5712	442110	RETL										H	6352211100	32.584093	117.113213	(619) 423-3685
84	FACTORY 2-U #631	880 PALM AVE	910.20	5999	453998	RETL										H	6351107700	32.584153	117.114878	(310) 324-9992
85	FAMILY BARBER SHOP	934 PALM AVE	910.20	7200	56192	SERVICE										H	6351212300	32.584108	117.113478	(619) 424-5440
86	FAMILY HAIRCUTTERS	770 13TH ST	910.20	7299	56192	SERVICE										H	6351213100	32.582838	117.10935	(619) 424-9797
87	FARMERS INSURANCE	932 PALM AVE	910.20	7389	561499	PROF										H	6352122200	32.584118	117.1352	(619) 423-0903
88	FIRST ASSEMBLY OF GOD	988 9TH ST	910.20	8661	813110	NONPROF										H	6351412300	32.584108	117.11452	(619) 424-6452
89	FITNESS WORLD	750 13TH ST	910.20	7299	56192	SERVICE										H	6351214600	32.583314	117.105830	(619) 423-6000
90	FLEET RESERVE CLUB	659 SILVER STRAND BL	910.10	5812	72211	EATING										H	6352041000	32.584744	117.128104	(619) 429-3480
91	FLESH SKIN GRAPHICS	1185 PALM AVE	910.20	7299	56192	TATTOO										H	6351902000	32.58413	117.108567	(619) 424-6983
92	FURNITURE 2000	817 PALM AVE	910.20	5712	442110	RETL										H	6352509500	32.583796	117.119235	(619) 424-5701
93	G & SE OIL #177	507 PALM AVE	910.20	5541	447110	GAS	x	x		x		x	x			H	6352810100	32.585116	117.116878	(619) 429-3952
94	G.E. BROWN SERVICE	497 11TH ST	910.20	7699	238990	SUBCONT										H	6350605500	32.587617	117.104422	(619) 575-1552
95	GENE'S AUTOMOTIVE	1085 PALM AVE	910.20	7538	56192	SERVICE										H	6352140500	32.584081	117.108502	(619) 423-6802
96	GENE'S TOWING SERVICE	750 10TH ST	910.20	7299	56192	SERVICE										H	6352915500	32.583313	117.11675	(619) 423-3000
97	GENE'S UNAUL	1085 PALM AVE	910.20	7539	56192	SERVICE										H	6352211400	32.583743	117.11075	(619) 424-8000
98	GIANT PIZZA KING #4	1070 13TH ST	911.10	5812	72211	EATING	x	x		x		x	x			H	6350313000	32.579166	117.108567	(619) 424-5422
99	GIANT PIZZA KING #5	600 PALM AVE	910.20	5812	72211	EATING	x	x		x		x	x			H	6351401400	32.584072	117.120629	(619) 423-7661
100	GUAD CORP DBA PACIFIC POINT	857 10TH ST	910.20	7389	453998	RETL										H	6352212100	32.584108	117.113478	(619) 423-4070
101	GLORIA BARRIOS	770 13TH ST	910.20	7299	56192	SERVICE										H	6351213100	32.582838	117.10935	(619) 890-7318
102	GOODWILL INDUSTRIES OF SD	849 PALM AVE	910.20	5999	453998	RETL										H	6352509000	32.583746	117.11493	(619) 225-2200
103	GREG MOON	280 PALM AVE	910.10	7389	453998	RETL										H	6352041300	32.584744	117.128104	(619) 423-5555
104	H & R BLOCK	1313 PALM AVE	910.20	7389	561499	PROF										H	6351118800	32.583935	117.10851	(619) 267-1040
105	HAWKINS AUTO BODY	519 FLORIDA ST	910.20	7200	56192	SERVICE										H	6351212300	32.587263	117.109165	(619) 429-3960
106	HEALING WAVE HOLISTIC H.C	667 PALM AVE	910.20	8049	621399	MASSTEC										H	6352509500	32.583796	117.119225	(619) 392-0883
107	HELFON HANCHO, OPTOMETRIST	894 PALM AVE	910.20	8042	621320	HEALTH										H	6352107700	32.584139	117.114504	(619) 423-9333
108	HERRERA & ASSOCIATES-MUNICIPAL	600 PALM AVE	910.20	7389	541990	PROF										H	6351401900	32.584072	117.120629	(619) 429-9415
109	HOLLYWOOD VIDEO #605-580	720 13TH ST	910.20	7841	532230	SE CHANG										H	6351212500	32.583383	117.109443	(619) 429-8063
110	HONG DEP TH LE	755 13TH ST	910.20	7299	56192	SERVICE										H	6351212400	32.583314	117.105830	(619) 788-1990
111	HS CARS COMPANY INC	1333 PALM AVE	910.20	5521	441120	AUTO		x		x		x				H	6350413100	32.579166	117.10936	(619) 429-4065
112	HUTCHINS REALTY	1138 PALM AVE	910.20	7389	561499	PROF										H	6351700600	32.58413	117.109951	(619) 423-6262
113	I B GROOMIN	1179 PALM AVE	910.20	7699	812990	MISC										H	6351401400	32.584072	117.120629	(619) 429-3797
114	I B LIQUOR	801 SEACOAST DR	910.10	5921	445310	RETL										H	6352721000	32.581635	117.13562	(619) 424-9838
115	I B. FLOWERS BY DESIGN	668 10TH ST	910.20	5999	453998	RETL										H	6352211000	32.584493	117.11552	(619) 423-1964
116	IB. PIZZA	1293 IMPERIAL BEACH BL	911.10	5812	72211	EATING	x	x		x		x	x			H	6352211300	32.584093	117.120629	(619) 575-3330
117	IB. UNITED METHODIST CHURCH	455 PALM AVE	910.20	8661	813110	NONPROF										H	6352302300	32.58377	117.123135	(619) 424-5181
118	IB BEAUTIFUL INC	600 PALM AVE	910.20	7299	56192	SERVICE										H	6351401900	32.584072	117.120629	(619) 869-2103
119	IB BY THE SEA GIFTS	862 SEACOAST DR	910.10	5999	453998	RETL										H	6352332100	32.580788	117.131864	(619) 423-9632
120	IB CHAMBER OF COMMERCE	702 SEACOAST DR	910.10	7299	56192	SERVICE										H	6351811303	32.583595	117.131864	(619) 424-3151
121	IB COIN LAUNDERLAND NO. 3	1010 PALM AVE	910.20	7299	56192	SERVICE										H	6352211400	32.584093	117.11452	(619) 423-6008
122	IB COIN LAUNDRY #5	760 13TH ST	910.20	7299	56192	SERVICE										H	6351212100	32.582887	117.109837	(619) 423-7227
123	IB DIVERS	641 9TH ST	910.20	7999	713930	RETL										H	6351214500	32.584651	117.114136	(619) 424-6547
124	IB FITNESS	600 PALM AVE	910.20	7299	56192	SERVICE										H	6351401900	32.584072	117.120629	(619) 423-9932
125	IB FORUM	1079 SEACOAST DR	911.10	5812	72211	EATING	x	x		x		x	x			H	6352302300	32.579038	117.13594	(619) 429-7507
126	IB GIFTS & BEACH GEAR	750 SEACOAST DR	910.10	5999	453998	RETL										H	6351811308	32.583595	117.119854	(619) 575-0050
127	IB MORTGAGE & REALTY	1258 IMPERIAL BEACH BL	911.11	7389	561499	PROF										H	6352420900	32.57659	117.108558	(619) 429-9474
128	IB NUTRITION STORE	688 PALM AVE	910.20	5499	446191	RETL										H	6352110700	32.584139	117.11452	(619) 423-2888
129	IB PET	600 PALM AVE	910.20	5999	453910	RETL										H	6351401400	32.584072	117.120629	(619) 822-1610
130	IB SUPER WASH N DRY	1220 PALM AVE	910.20	7215	812310	LAUND										H	6352412700	32.58412	117.10745	(619) 575-1000
131	IDEAL CHOICE INSURANCE AGENCY	1233 PALM AVE	910.20	7389	561499	PROF										H	6351114400	32.584118	117.107336	(619) 423-7712
132	IMPERIAL BEACH DENTALGROUP	1340 IMPERIAL BEACH BL	911.11	8021	621210	HEALTH										H	6352220400	32.576557	117.104613	(619) 429-6602
133	IMPERIAL BEACH EAGLE & TIMES	694 10TH ST	910.20	7299	56192	SERVICE										H	6352420500	32.584072	117.120629	(619) 423-5500
134	IMPERIAL BEACH HAIR DESIGNS	235 PALM AVE	910.10	7299	56192	SERVICE										H	6352010500	32.583788	117.128753	(619) 424-8366
135	IMPERIAL BEACH HEALTH CENTER	949 PALM AVE	910.20	8011	621111	HEALTH										H	6352811700	32.583725	117.113201	(619) 429-5387
136	IMPERIAL BEACH MANAGEMENT CO	120 ELDER AVE	910.20	7299	56192	SERVICE										H	6352023000	32.583631	117.109445	(619) 423-1290
137	IMPERIAL BEACH PET HOSPITAL	536 12TH ST	910.20	7699	56192	PROF										H	6351815800	32.581545	117.108205	(619) 424-3591
138	IMPERIAL BEACH PRESCHOOL	608 10TH ST	910.20	8351	624410	DAYCARE										H	6352211700	32.584072	117.120629	(619) 429-0018
139	IMPERIAL BEACH PRESCHOOL SOUTH	1179 IMPERIAL BEACH BL	911.11	8351	624410	DAYCARE										H	6351212400	32.57638	117.108631	(619) 423-7227
140	IMPERIAL BEACH ULTRAMAR	1300 IMPERIAL BEACH BL	911.11	5541	44719	GAS		x		x		x				H	6352201100	32.581597	117.108205	(619) 423-7770
141	IMPERIAL DONUTS	1002 PALM AVE	910.20	5812	72211	EATING	x	x		x		x	x			H	6352111400	32.58364	117.107236	(619) 575-1630
142	IMPERIAL GUEST HOME	1245 FLORIDA ST	911.10	7299	56192	SERVICE										H	6350605500	32.573843	117.108804	(619) 424-9791
143	IMPERIAL NAILS	704 SEACOAST DR	910.10	7299	56192	SERVICE										H	6351811308	32.583595	117.119854	(619) 423-7304
144	IMPERIAL TRAILER PARK	674 PALM AVE	910.20	7033	721211	RV/MOBIL										H	6351401700	32.584038	117.118594	(619) 428-9882
145	INNER VISIONS	803 PALM AVE	910.20	5999	453998	RETL										H	6352509500	32.583796	117.115355	(619) 575-1216
146	INTERNATIONAL BLENDS	208 PALM AVE	910.10	5812	72211	EATING	x	x		x		x	x			H	6352023000	32.583631	117.109445	(619) 423-0340
147	J & T NAILS	635 9TH ST	910.20	7299	56192	SERVICE										H	6351214500	32.584651	117.114135	(619) 424-9052
148	JAMES ROWLES STUDIO	497 11TH ST	910.20	7699	812990	MISC										H	6350605500	32.587617	117.104422	(619) 424-6300
149	JESSOP & SON LANDSCAPE	425 IMPERIAL BEACH BL	911.10	7299	56192	SERVICE										H	6352420500	32.58413	117.10995	(619) 423-1966
150	JORDYNDHORDICHK CHRISTMASTREE	0 *UNASSIGNED*	NA	5999	453998	RETL										H	6351700900	32.574	117.12	(541) 480-5916
151	KORGE AGUILA	277 EVERGREEN AVE	910.20	7299	56192	SERVICE										H	6352621400	32.584072	117.120629	(619) 427-7640
152	LP MORGAN CHASE BANK, N.A.	1100 PALM AVE	910.20	6021	52211	BANK										H	6351627700	32.583991	117.119573	(619) 424-8640
153	LUNA'S CAFE	704 SEACOAST DR	910.10	5812	72211	EATING	x	x		x		x	x			H	6351811308	32.583595	117.119854	(619) 423-0524
154	M-CS CHINESE FOOD	1299 IMPERIAL BEACH BL	911.11	5812	72211	EATING	x	x		x		x	x			H	6352322300	32.576476	117.102767	(619) 429-5418
155	KEYSTONE ESCROW INC	129 PALM AVE	910.10	5812	561499	PROF										H	6351912601	32.583812	117.103003	(619) 424-8182
156	KFC CORP #145029	1058 13TH ST	911.10	5812	72211	EATING	x	x		x		x	x			H	6350421000	32.577388	117.109501	(619) 424-3492
157	L & M TIRE CO / EXPRESS TIRE	950 PALM AVE	910.20	7539	56192	SERVICE		x		x		x				H	6352212000	32.584074	117.112905	(619) 429-3950
158	LA POSTA MARKET #2	1266 IMPERIAL BEACH BL	911.11	5999	445299	RETL										H	6352420900	32.57659	117.10842	(619) 423-6363
159	LEADINGHAM REALTY	1062 PALM AVE	910.20	7389	561499	PROF										H	6352023000	32.58413	117.10995	(619) 424-6900
160	LENS WIRELESS	639 7TH ST	910.20	4812	517310	RETL										H	6352012200	32.585107	117.117833	(619) 581-2061
161	LEON DISCOUNT TOBACCO FOOD MAR	185 PALM AVE	910.10	5999	453998	RETL										H	6351811700	32.583808	117.130335	(619) 429-0263
162	LINDA WHEELOCK WILLIS	204 PALM AVE	910.10	7299	56192	SERVICE										H	6352023000	32.584084	117.128771	(619) 575-0987
163	LITTLE BONANZA	940 PALM AVE	910.20	5812	72211	EATING	x	x		x

Table 5.4 - Commercial Business Inspections FY 2009-10

Facility Name	Address	Business Phone Number - Calc	Establishment Class	Date Inspected	Result	Follow Up Inspect
13TH ST MARKET	1126 13TH ST	(619) 424-8255	High	12/2/2009	Follow Up	
7-ELEVEN STORE # 24344B-2131	1311 PALM AVE	(619) 575-6081	High	12/9/2009	Follow Up	1/4/2010
7-ELEVEN STORE #23982A-2131	1303 IMPERIAL BEACH BL	(619) 000-0000	High	12/15/2009	OK	
ALBERTO'S TACO SHOP	1183 13TH ST	(619) 429-4802	High	12/15/2009	OK	
ALL AMERICAN CAR WASH IB	1158 PALM AVE	(619) 429-7000	High	12/17/2009	OK	
ANCHOR MOTORS	740 PALM AVE	(858) 945-7762	High	11/17/2009	OK	
AROMA THAI RESTAURANT	757 SEACOAST DR	(619) 941-1656	High	10/27/2009	OK	
BEACH SIDE STATION	681 HIGHWAY 75	(619) 424-3366	High	12/16/2009	Follow Up	12/16/2009
BERNARDO SHORES	500 HIGHWAY 75	(619) 429-9000	High	11/17/2009	OK	
BEACH CLUB GRILLE	710 SEACOAST DR	0	High	12/21/2009	OK	
BIG KAHUNA'S PIZZA N STUFFS	600 PALM AVE	(619) 429-5224	High	11/16/2009	OK	
BURGER KING #806	1180 PALM AVE	(619) 429-3180	High	12/17/2009	OK	
C.H. DONUTS	1070 13TH ST	(619) 575-3001	High	12/2/2009	OK	
CARL'S JR. #585	700 13TH ST	(619) 423-5025	High	12/9/2009	OK	
COW-A-BUNGA CA GLACIER FNAM	10 EVERGREEN AVE	(619) 628-0508	High	10/26/2009	OK	
CROSSROAD PETROLEUM INC.	1185 PALM AVE	(619) 429-4628	High	12/17/2009	Follow Up	
DEPENDABLE CARBURETOR EXCHANGE	660 EMORY ST	(619) 424-7453	High	11/19/2009	OK	
DON PANCHO'S MEXICAN FOOD	690 HIGHWAY 75	(619) 429-7034	High	12/16/2009	OK	
DOS MUNDOS TACO SHOP	1004 PALM AVE	(619) 397-9750	High	12/16/2009	OK	
ECONO LUBE N' TUBE	772 13TH ST	(619) 429-8882	High	12/1/2009	OK	
EL CILANTRO MEXICAN FOOD	764 13TH ST	(619) 429-7492	High	12/1/2009	OK	
EL TAPATIO CATERING	667 SILVER STRAND BL	(619) 423-2440	High	12/15/2009	OK	
EL TAPATIO RESTAURANT INC	260 PALM AVE	(619) 423-3443	High	12/15/2009	OK	
EL ZASON	633 9TH ST	(619) 462-6350	High	12/16/2009	OK	
G & M OIL #177	907 PALM AVE	(619) 429-3962	High	12/16/2009	OK	
GENES' AUTOMOTIVE	1085 PALM AVE	(619) 498-0820	High	12/17/2009	OK	
GIANT PIZZA KING #4	1070 13TH ST	(619) 575-2622	High	12/16/2009	OK	
GIANT PIZZA KING #5	600 PALM AVE	(619) 423-7601	High	12/17/2009	Follow Up	12/17/2009
HAWKINS AUTO BODY	519 FLORIDA ST	(619) 429-3960	High	11/30/2009	OK	
HS CARS COMPANY INC	1333 PALM AVE	(619) 429-4983	High	11/30/2009	OK	
I.B. PIZZA	1293 IMPERIAL BEACH BL	(619) 575-3330	High	12/1/2009	OK	
IB FORUM	1079 SEACOAST DR	(619) 429-7507	High	10/26/2009	OK	
IMPERIAL BEACH ULTRAMAR	1300 IMPERIAL BEACH BL	(619) 423-7770	High	12/15/2009	OK	
IMPERIAL DONUTS +	1002 PALM AVE	(619) 575-1830	High	12/16/2009	OK	
KATY'S CAFE	704 SEACOAST DR	(619) 863-5524	High	12/21/2009	OK	
K-C'S CHINESE FOOD	1299 IMPERIAL BEACH BL	(619) 429-5418	High	12/1/2009	OK	
KFC CORP #Y450025	1056 13TH ST	(619) 424-3492	High	12/1/2009	OK	
L & M TIRE CO./ EXPRESS TIRE	950 PALM AVE	(619) 429-3600	High	11/19/2009	OK	
LA POSTA MARKET #2	1266 IMPERIAL BEACH BL	(619) 423-6363	High	12/16/2009	Follow Up	1/4/2009
MARCO'S & RED HAWK	1205 PALM AVE	(611) 424-3636	High			
MARISA'S MEXICAN SEAFOOD GRILL	285 PALM AVE	(619) 227-7424	High	12/15/2009	OK	
MASON'S ALIGNMENT-BRAKE-MUFFLE	975 PALM AVE	(619) 424-5161	High	8/24/2009	OK	
MCDONALDS/SCAROB INC.	1135 PALM AVE	(619) 423-8811	High	12/17/2009	OK	
MEIJO SUSHI, INC.	600 PALM AVE	(619) 429-4373	High	11/16/2009	OK	
MICKIES BAR AND GRILL	220 PALM AVE	(619) 575-9805	High	12/22/2009	OK	
MZM SEACOAST BISTRO, LP	875 SEACOAST DR	(619) 424-5800	High	12/23/2009	OK	
NFAROOQI ENT. LLC/JACK IN BOX	890 PALM AVE	(619) 325-1801	High	8/21/2009	OK	
PIZZA INDUSTRY/DOMINO'S PIZZA	1307 IMPERIAL BEACH BL	(619) 575-2226	High	12/15/2009	OK	
PRECISION AUTO BODY & COLLISIO	989 PALM AVE	(619) 726-7932	High	12/16/2009	OK	
PRECISION FOREIGN	1240 PALM AVE	(619) 575-1767	High	12/9/2009	OK	
PRETZLES AND MUCH MORE	10 EVERGREEN AVE	(619) 591-9344	High	10/26/2009	OK	
RODRIGO'S MEXICAN FOOD	600 PALM AVE	(619) 425-9076	High	11/16/2009	OK	
ROLANDO'S TACO SHOP #5	805 SEACOAST DR	(619) 239-9825	High	12/21/2009	OK	
SANTANA MEXICAN FOOD	1337 PALM AVE	(619) 251-6743	High	11/30/2009	OK	
SEACOAST PIZZA	807 SEACOAST DR	(619) 423-1111	High	12/21/2009	OK	
SIESTA RV PARK, INC.	409 PALM AVE	(619) 420-7090	High	12/22/2009	OK	
SOMBRERO MEXICAN FOOD	189 PALM AVE	(619) 424-8822	High	12/22/2009	OK	
SOPHISTICATED AUTO	987 PALM AVE	(619) 423-7729	High	3/10/2009	OK	
STARDUST DONUT SHOP	698 HIGHWAY 75	(424) 000-6200	High	12/17/2009	OK	
SUBSMART DELI-FRESH	1231 PALM AVE	(619) 829-1780	High	12/9/2009	OK	
SUBWAY 20578	876 SEACOAST DR	(858) 337-1539	High	10/26/2009	OK	
THE BRIDGE	874 SEACOAST DR	(619) 423-6610	High	10/26/2009	OK	
THE SCOREBOARD	951 PALM AVE	(619) 424-9909	High	12/15/2009	OK	
THE TINFISH RESTAURANT	910 SEACOAST DR	(619) 628-8414	High	10/26/2009	OK	
THE WAVE CAFE	809 SEACOAST DR	(619) 423-9900	High	12/21/2009	OK	
TITO AUTO SERVICE	1335 PALM AVE	(619) 423-8690	High	11/30/2009	OK	
TNT SURFBOARDS	536 13TH ST	(619) 575-2303	High	11/30/2009	OK	
TUNES LUBES ETC.	741 PALM AVE	(619) 575-6087	High	11/17/2009	Follow Up	12/16/2009
WALLY'S IGA	836 PALM AVE	(619) 424-8129	High	12/16/2009	OK	
WIENERSCHNITZEL #358	1253 PALM AVE	(619) 423-7211	High	12/9/2009	Follow Up	1/4/2010
WOODYS AUTO CARE	200 PALM AVE	(619) 279-6525	High	12/22/2009	Follow Up	
YE OLDE PLANK INN	24 PALM AVE	(423) 000-5976	High	12/22/2009	OK	

Table 5.5 - Interactive Effectiveness Assessment of Commercial Businesses

Name of Facility	Type	Have you heard of our storm water program before? What have you heard?	When water leaves your site, where does it go?	Is Runoff Treated	What is the difference between the storm drain system and the sanitary sewer?	Runoff from your site eventually reaches what water body.	Name some key pollutants?	What are examples of actions you can take?	Overall Survey	BMP Implementation	Outcome Level Achieved
Beach Club Grille	Food Service	5	5	5	5	5	5	5	5	5	4
Katy's Café	Food Service	5	5	5	5	5	5	5	5	5	4
Wienerschnitzel	Food Service	5	2	0	0	0	0	0	1	4.5	3
Subsmart	Food Service	3	3	0	0	0	0	3	1.2857	5	3
Econo Lube N' Tube	Auto Service	0	0	5	5	5	0	3	2.5714	5	3
CH Donuts	Food Service	0	5	5	5	5	0	5	3.5714	5	4
Santana Mexican	Food Service	0	0	0	0	0	5	1	0.8571	5	3
Hawkins Auto Body	Auto Service	2	5	5	5	1	5	5	4	5	4
TNT Surfboard	Manufacturing/Finishing	0	5	5	5	5	5	5	4.2857	5	4
Tito Auto Service	Auto Service	4	5	4	5	5	5	5	4.7143	5	4
L&M Tire	Auto Service	0	5	5	5	4	5	5	4.1429	5	4
Dependable Carburator Exchange	Auto Service	5	5	5	5	5	0	2	3.8571	5	4
Imperial Donuts	Food Service	5	5	0	5	5	5	5	4.2857	4.5	4
Wally's IGA	Food Service	5	5	5	5	4	5	3	4.5714	4.5	4
Anchor Motors	Auto Service	5	5	5	1	5	5	1	3.8571	5	4
Tunes Lubes ETC	Auto Service	1	2	1	1	1	0	5	1.5714	5	3
Bernardo Shores	RV	5	5	5	5	5	0	5	4.2857	5	4
Beach Side Station	Gas Station	1	3	5	5	5	5	1	3.5714	4.5	4
Dominos Pizza	Food Service	0	5	5	5	4	5	3	3.8571	5	4
7 Eleven (IB BL)	Gas Station	5	5	5	5	5	5	5	5	5	4
Sombrero Mexican	Food Service	5	5	5	5	5	5	5	5	5	4
	Average	2.904761905	4.047619048	3.80952381	3.904761905	3.761904762	3.333333333	3.666666667	3.6327	4.90476190	3.8
	STD Deviation	2.27826166	1.687488977	2.08851736	2.022492569	1.972429008	2.415229458	1.74164673	1.3579	0.201186	0.436435

6.0 RESIDENTIAL COMPONENT

6.1 Introduction

The City endeavors to prevent or eliminate the discharge of pollutants and runoff from residential sources. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and the City's Code Enforcement Division. Efforts are made to educate the public and oversee compliance with local urban runoff regulations to reduce the release of pollutants to the MEP.

6.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Residential Component is described in the *2008 JURMP Section 8.0*. During the reporting period no updates were made to the high priority residential area inventory. All other program planning and administration elements remain unchanged from the *2008 JURMP Section 8.0*.

6.3 Outcome Level 1b: Implementation of Management Program Activities

The City enforces its storm water ordinances for all residential areas and activities to maintain compliance with the Municipal Storm Water Permit. Public outreach and education as outlined in the *2008 JURMP Section 10.0* encourages residents to comply with the minimum set of BMPs listed in Imperial Beach Municipal Code 8.30.080. The City encourages the use of pollution prevention methods for all residents and provides convenient and cheap house hold hazardous waste disposal. The City also participated as Co-Chair in the Education and Residential Sources Workgroup and Chair of the Underserved Target Audience sub-workgroup.

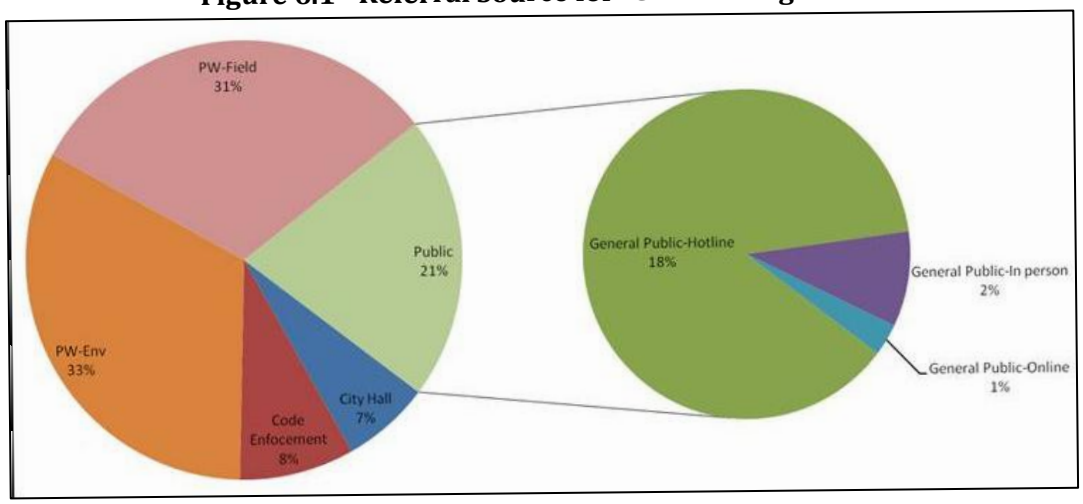
The following tables and figures presented in this section provide additional information on the implementation and assessment of the Municipal program element:

- Table 6.1 Provides an overview of the residential component as it was implemented
- Table 6.2 presents and describes targeted FY 2009-10 outcomes and results
- Figure 6.1 Show the referral source for ICIDs investigations

6.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Residents

Knowledge and awareness of the storm water program by residents is best assessed through the City's response to illegal connections and illicit discharge (ICID) investigations. Figure 6.1 below shows that 21% of the City's ICID cases continue to come from the public. When expanded to include sources other than the Environmental Division, the number of referrals increases to 66%. This shows that the City is effective in making different stakeholders aware of the importance of reporting storm water violations and more importantly aware of how their own actions effect water quality.

Figure 6.1 - Referral Source for ICID Investigations



6.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Residents

The City facilitates changes in behavior and implementation of BMPs for high threat to water quality activities and residential areas by providing education through face-to-face interactions, disseminating education materials through various media, and responding to illegal discharges. The *2008 JURMP Appendix G* defines minimum BMP requirements applicable to residential areas and activities in the City.

6.6 Outcome Level 4: Source Load Reductions

The City continues to quantify load reductions whenever feasible for disposal of household hazardous waste, used oil, and special clean up events. Pest waste collected by the Ocean Blue foundation is also estimated. The City does not normally track individual source load reductions to receiving waters from residential areas or activities but load reductions can be implied by proper implementation of BMPs.

Table 6.1 – Overview of Residential Component

Category	Pounds	Number	Description
A. Residential Threat to Water Quality Prioritization			
High	---	6	All residential areas in the City are considered high priority.
Medium	---	---	
Low	---	---	
B. House Hold Hazardous, Electronic, and Universal Waste Disposal			
Flammable and Poison	2,637	---	Imperial Beach residents have a variety of options for the collection and disposal of house hold hazardous waste. Most residents utilize the South Bay HHW Collection center at the City of Chula Vista. Residents can also drop off used oil at the Auto Zone located at 13th and Palm. The City coordinates used oil disposal that is part of CalRecycle Used Oil Block Grant with the City of Chula Vista. The amount of waste dropped off by Imperial Beach residents is provided in the table to the left. The City also offers curbside pickup of HHW, used oil, and a number of regional collection events for electronic and universal waste. The disposal totals for these additional activities are not provided in this report.
Acid, Base, Oxidizer, and PCB-containing	96	---	
Reclaimable (Antifreeze, Car batteries, Latex Paint, Used Oil and filters)	3,763	---	
Other HHW	816		
Universal and Electronic Waste	3,025		
Total Waste Disposed	10,337		

JURMP Sections	Description of FY 2009-10 Changes
8.0 and Appendix G	BMP requirements of the JURMP applicable to residential areas and activities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 6.2 - Residential Component Targeted Outcomes and Results

Residential FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per Permit requirements	No updates made during FY 2009-10	Complete	Applicable updates were included in *JURMP Section 6.0*. No significant updates are expected to be necessary during this permit cycle.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update program documentation for consistency with program updates	No updates made during FY 2009-10	Complete	No updates made this reporting period.
c) Year-End Program Review			
Complete annual year-end program review	Review program for effectiveness and efficiency	In progress	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Residential Areas			
Identify high threat to water quality areas	Update not needed	Complete	The City has previously identified the high threat to water quality residential areas and activities. All residential areas in the City are considered high threat to water quality areas. Figure 6.2 provides a map of the high priority residential areas. The *2008 JURMP Section 8.0* provides a list of high threat to water quality activities.

Table 6.2 - Residential Component Targeted Outcomes and Results

Residential FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
b) Confirmation of Designated Minimum BMPs			
Require residents to implement BMPs	Requirements implemented	Complete	The City requires all residential areas to implement designated minimum BMPs and other measures to prevent the discharge of pollutants to the MEP. The City enforces its *Urban Runoff Management and Discharge Control Ordinance* and provides education and outreach to local residents.
c) Facilitate Proper Disposal of Household Hazardous Waste and Used Oil			
Facilitate proper management and disposal of used oil and household hazardous waste (HHW)	Provided a variety of disposal options for used oil, toxic materials, and other hazardous waste	Complete	The City provides a variety of options for the proper management and disposal of used oil, toxic materials, and other HHW. Residents are generally directed to drop off hazardous materials at the South Bay HHW center at the City of Chula Vista. The City also provides curb side pickups and a number of regional collection events for HHW, used oil, electronic waste, and universal waste.
d) Enforcement of Residential Areas and Activities			
Enforce minimum BMPs in residential areas	Responded to storm water violations reported by staff and public	Complete	The City enforces its storm water ordinance and the Municipal Permit for all residential areas and activities through the use of verbal warnings with distribution of BMP literature, Notices of Violation, Notices of Abatement, and additional penalties or fines and civil and/or criminal court actions. The Environmental Division responds to storm water violations, which are reported by City staff and public.
e) Evaluate Methods of Oversight for Residential Areas and Activities			
Evaluate methods of oversight and enforcement for residential areas and activities	Operate storm water hotline and utilizes monthly sewer and street inspections to identify deficiencies	Complete	Operated a Storm Water Hotline (619-424-4095) during the reporting period. The City received 28 reports on the Storm Water Hotline (619-424-4095) for storm water violations in residential areas. The Environmental Division responded to another 65 residential violations reported by City staff. The City also operates an online complaint form and received 1 residential complaint. City staff also identified storm water BMP deficiencies or violations while conducting residential neighborhood inspections for sewer and street maintenance.

Table 6.2 - Residential Component Targeted Outcomes and Results

Residential FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
f) Regional Residential Education Program			
Participate in Regional Residential Education Program	Held co-chair position of the Education and Residential Sources Workgroup and chair position of the Underserved Target Audience Sub-workgroup	On going	During this reporting period, the City participated in the Education and Residential Sources Workgroup with the San Diego Copermittees and held the responsibility of co-chair for the group. Significant progress continues to be made in the areas of media and public relations, materials development, outreach to underserved target audiences, partnership development, regional website development, regional brand, regional events, and program assessment through a county-wide telephone survey.
g) Special Investigations			
Not targeted	None	None	Special investigations were not conducted in FY 2009-10, and are not routinely conducted as part of the implementation strategy for this program element.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY RESIDENETS			
Establish a baseline for knowledge of BMPs implementation by residents	No additional assessments were targeted at residents outside of education activities	Assessment results provided in Section 8.0 for residential and general public outreach	Knowledge and awareness of storm water issues by residents is assessed through the education program. The City uses brochures, special events, presentations, and ICID investigations as tools to educate local residents on storm water.

Table 6.2 - Residential Component Targeted Outcomes and Results

Residential FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY RESIDENTS)			
a) BMP Implementation			
Facilitate pet waste program with the Ocean Blue Foundation	10 pet waste bag dispensers are maintained by the Ocean Blue Foundation	Complete	The pet waste bag dispenser program is maintained and operated by the Ocean Blue Foundation, a local not for profit group. The City works with the Ocean Blue Foundation to ensure that the pet waste bag dispensers are maintained and the program has adequate funding. The City Council supports the foundation through an annual community grant.
Cleanup activities in residential areas	Implemented cleanup activities as part of the Municipal Component	Complete	Under the Municipal Component of the JURMP the City conducts street sweeping, alley sweeps, and cleanup activities in residential neighborhoods.
b) Violations and Enforcement Actions			
Number of violations and enforcement actions to achieve compliance	Responded to a total of 94 ICID cases from residents and issued 24 NOVs	Complete	The City tracks statistics for storm water violations. The City received 28 reports on the Storm Water Hotline (619-424-4095) for storm water violations in residential areas. The Environmental Division responded to another 65 residential violations identified by City staff. The City also operates an online complaint form and complaints reported in person. Most violations were corrected by verbal warnings but the City did issue 24 NOVs.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM RESIDENTIAL AREAS AND ACTIVITIES)			
a) BMP Implementation			
Household hazardous waste (HHW) collection	10,377 pounds of HHW collected	**Year**: 2008, 2009, 2010 / **Pounds**: 6,000, 10,367, 10,377	The City's HHW disposal program is available to all residents, and the City partners with other jurisdictions in the South Bay to offer convenient, low-cost HHW disposal options.

Table 6.2 - Residential Component Targeted Outcomes and Results

Residential FY 2009-10 Results					
Targeted Outcome	Implementation Result	Assessment Result			Explanation
Used oil collection	3,763 pounds of Reclaimable (Antifreeze, Car batteries, Latex Paint, Used Oil and filters) collected	**Year** 2008 2009 2010	**Pounds** 2,110 2,173 3,763		The City is required to facilitate the proper management and disposal of used oil, toxic materials, and other HHW through educational and public information activities, and establishment of collection sites operated by the City or a private entity.
Universal and electronic waste collection	3,025 pounds of electronic and universal waste collected	**Year** 2009 2010	**Pounds** 2,433 3,025		The City facilitates the proper management and disposal of universal and electronic wastes.
Pet waste collection	10 pet waste bag dispensers; 72,800 bags replaced, and an estimate of 18,200 lbs of pet waste collected	Complete			The pet waste bag dispenser program is maintained and operated by the Ocean Blue Foundation, a local not for profit group. The City works with the Ocean Blue Foundation to ensure that the pet waste bag dispensers are maintained and the program has adequate funding. If the average pet waste weighs 4 ounces then an estimate of 18,200 lbs of waste was collected. The City Council supports the foundation through an annual community grant.
Special event recycling and waste management	Home Front Cleanup event had 822 participants and collected 175.6 tons of materials	**Year** 2009 2010	**No.** 732 822	**Tons** 154.3 175.6	The City holds an annual Home Front Cleanup event. The Home Front Clean Up had 822 participants and disposed a total of 175.6 tons of materials. That includes 19.7 tons of green waste, 33.4 tons of metal, and 32.4 tons of concrete that was recycled.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

7.1 Introduction

The City endeavors to prevent municipal discharges from the Municipal Separate Storm Sewer System (MS4) from causing or contributing to a violation of water quality standards. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and its efforts to reduce municipal discharges of pollutants to the MS4 to the maximum extent practicable (MEP).

All components of the JURMP are represented in this report with the exception of this component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), extending the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

The City's implementation and assessment strategy for the illicit discharge detection and elimination component is described in the *JURMP Section 9.0*.

8.0 EDUCATION COMPONENT

8.1 Introduction

The City endeavors to implement a diverse education program in the community to reduce the impacts of urbanization on water quality. Education activities are targeted at the following groups: 1) municipal departments and personnel, 2) construction site owners and developers, 3) commercial business owners and operators, 4) industrial business owners and operators (none exist in the City of Imperial Beach), 5) residents, general public, and school children, and 6) underserved communities. This component is applicable to all City departments, in particular the Environmental Program Division of the Department of Public Works, which spearheads the City's education efforts and is responsible for the annual training for municipal employees on the components and goals of the JURMP. Note that each section of this JURMP Annual Report already includes a description of education activities for each element. The City recognizes the importance education plays in facilitating the necessary behavioral changes to successfully reduce and eliminate pollutants from urban runoff.

8.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Education Component is described in the *2008 JURMP Section 10.0*. During the reporting period the City made no significant updates to the education program. The City continues to focus education efforts at the five targeted community groups. The City tailors each individual education activity to best suit the message and content for the target community; however, the overall message is consistent with the *2008 JURMP Section 10.0*. Minor changes to the program include changes to materials such as handouts, surveys, and educational guidance documents, which are continuously updated throughout the year. The City also continues to seek for ways to expand and improve the effectiveness assessment of the education program.

8.3 Outcome Level 1b: Implementation of Management Program Activities

The Environmental Division oversees the implementation and assessment of the Education Component for the five targeted communities. The following tables and figures presented in this section provide additional information on the implementation and assessment of the Education program element:

- Table 8.1 Provides an overview of the Education program
- Table 8.2 presents and describes targeted FY 2009-10 outcomes and results
- Table 8.3 provides the education activity inventory by target community for FY 2009-10

8.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Target Community

The City implements an education program for each target community using all media as appropriate to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably

change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment. During the reporting period the Environmental Division implemented a variety of techniques to capture changes in knowledge and awareness among the targeted communities. These techniques include the use of surveys, pre and post test, interactive assessments and evaluations during inspections, and regional assessment programs through the Education and Residential Sources (ERS) Workgroup.

8.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Target Community

The City facilitates changes in behavior and implementation of BMPs by providing continuous education for each target audience using a variety of educational tools and media. The continual saturation of education for each target audience is gradually leading to a greater awareness about storm water pollution and the implementation of pollution prevention BMPs. Gauging the level of effectiveness of the education program from one year to the next is a challenging task because of the gradual nature of behavior change, but the City strives to measure this level of effectiveness and behavior change for each target audience whenever possible. Table 8.3 provides a description of how outcome level 3 is assessed for each targeted community.

8.6 Outcome Level 4: Source Load Reductions

Education is a key component of getting to source load reductions through the implementation of BMPs. Source load reductions are not easily tracked from education activities but can be implied through the proper implementation of BMPs.

Table 8.1 – Overview of Education

Category	Number	Description
A. Educational Efforts		
Municipal Departments and Personnel Events	15	Employees are trained annually on the use of BMPs in their daily operations. Face-to-face meetings are held on a regular basis with employees to discuss the JURMP and its application in their operations. Construction Site Owners, Contractors and Developers are trained through face-to-face meetings with the Community Development Department and the Publics Works Department during the permitting process, in inspections, and in investigations of illegal discharges. Commercial Site Owners and Operators are trained through scheduled inspections by the Public Works Department Environmental Division, and through investigations of illegal discharges. All residents receive educational information in the City's newsletter, a newsletter sent out by the City's waste franchisee, website updates, materials provided at City Hall and the Public Works Department, through community presentations, etc. The City held an information booth at the U.S. Open Sand Castle competition and Auto Show. The City also participated with other Co-Permittees in regional outreach events that target the underserved community.
Construction Site Owners, Contractors and Developer Training Events	2	
Public Participation	8	
Commercial Site Owners and Operators Training Events	3	
Residential Community and General Public Outreach Events	15	
Underserved Community	2	
School Children Outreach Events	6	

JURMP Sections	Description of FY 2009-10 Changes
10.0 and Appendix I	BMP requirements of the JURMP applicable to educational areas and activities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 8.2 - Education Component Targeted Outcomes and Results

Education FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per Permit requirements	No updates made during the reporting period	Complete	Applicable updates were included in *JURMP Section 6.0*. No significant updates are expected to be necessary during this permit cycle.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update program documentation for consistency with program updates	Minor updates made to program	Complete	The City implements surveys when feasible at education events to establish a baseline level of knowledge. Minor program updates were made throughout the year to program content to more effectively present education materials.
c) Updates to Training Program			
Update training materials for consistency with *2008 JURMP Section 10.0*	Minor updates made to program including brochures	Complete	The City makes annual updates to training content and materials so that each education activity provides appropriate information for the target audience. For example the City developed a new construction site BMP brochure and made minor updates to the commercial business, car washing, pet waste, and residential brochures. The Environmental Division also made updates to the Municipal Facility and Activity BMP workbook that is kept in each City vehicle.
d) Year-End Program Review			
Complete annual year-end program review	Review program for effectiveness and efficiency	Complete	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.

Table 8.2 - Education Component Targeted Outcomes and Results

Education FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Education Component			
Provide education to construction site owners and developers	Provided education to construction site owners and developers	Complete	Construction Site Owners, Contractors and Developers are trained through face-to-face meetings with the Community Development Department and the Publics Works Department during the permitting process. Community Development holds counter hours for project applicant. Education is reinforced through inspections and in investigations of illegal discharges. The City also developed a new construction BMP brochure.
Provide education for municipal staff	Provided annual training and additional education opportunities to municipal staff	Complete	The Environmental Division provided 15 municipal training activities including the annual storm water training for Public Works on 9/30/09. All new employees receive one-on-one training for storm water at the beginning of employment. City staffs are encouraged to attend training activities for storm water program outside the City. Face-to-face meetings are held on a regular basis with employees to discuss the JURMP and its application in their operations. Updates also made to the Municipal Facility and Activity BMP workbook that is kept inside every City vehicle.
Provide education to industrial and commercial owners and operators	Provided education to commercial businesses and owners	Complete	Commercial businesses receive education on storm water BMPs through a number of different methods including direct mail before scheduled inspections, face-to-face interaction with City staff during commercial inspections, through dissemination of education material, and through a follow up inspection letter that summarizes the results of the commercial inspection. The City also provides education to businesses during ICID investigations.
Provide education to underserved community	Provided education to underserved community	Complete	Education materials are provided in both English and Spanish. The environmental division also works with underserved youth at the Imperial Beach Job Corps through presentations and community projects. The City also Co-chairs the ERS Workgroup and Chairs the Underserved Target Audience Sub-Workgroup.

Table 8.2 - Education Component Targeted Outcomes and Results

Education FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Provide education to residential community, general public, and school children	Provided education to residential community, general public, and school children	Complete	The Environmental Division provided 22 education activities targeted to residential community, general public, and school children. Some of the activities included presentation to schools, County splash lab, after school activities at IB Sports Park, media education, Recycling All-Star award, and City Council proclamation for Environmental Awareness Month in April. The Tijuana Estuary, State Park, FWS, YMCA Camp Surf, and Wildcoast also conduct environmental education and community outreach that is not currently tracked by the City but represents a significant effort to promote clean water.
Provide opportunity for public participation	Provided opportunities for public education	Complete	Public participation is encouraged in the development and implementation of the JURMP. The annual JURMP Report is presented at City Council during an open public hearing process. The Environmental Division also facilitates and participates in public cleanup activities that serve as mechanism for public participation in watershed activities.
b) Special Investigations			
Not targeted	Council Proclamation for the month of April as Environmental Awareness Month	Complete	Starting this reporting period the Imperial Beach proclaimed the month of April as "Environmental Awareness Month". Environmental Division scheduled a number of education activities for the month with the afterschool youth at IB Sports Park and selected a weekly recipient for the Recycling All-Star award for the month. These activities were in addition to the normal Earth Day celebrations in the region.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION)			
a) Construction Site Owners and Developers			
Assess knowledge and awareness for construction site owners and operators	Assessed knowledge whenever possible	Complete	Most construction activity in the City is from small discretionary projects and CIPs. Knowledge and awareness is achieved through proper submittal of storm water documents and proper implementation of BMPs. All projects are required to submit the necessary storm water documents and implement BMPs. Deficient projects receive proper education from staff. General outcomes reveal a high level of knowledge from larger contractors and a lesser understanding of BMPs from smaller general contractors.

Table 8.2 - Education Component Targeted Outcomes and Results

Education FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
b) Municipal Departments and Personnel			
Assess knowledge and awareness for municipal staff	Assessed knowledge though surveys and regular meetings	Public Works survey score of 84% correct answers	Surveys are administered during annual storm water training events. The surveys are generally challenging in nature because personnel staff are expected to have a high level of understanding of storm water program. Surveys are administered at the beginning of the training session and used as a tool to highlight specific topics during the training session.
c) Industrial and Commercial Site Owners and Operators			
Assess knowledge and awareness for commercial businesses	Assessed through interactive assessment process	Assessment results provided in Table 5.5 in the Industrial Commercial Section	Starting this reporting period the Environmental Division incorporated an interactive effectiveness assessment of commercial businesses during the annual storm water inspection. The goal of the assessment is to get beyond BMP verification and assess the level of BMP effectiveness.
d) Underserved Community			
Assess knowledge and awareness for underserved community	Assessed though Regional Copermittee group	Complete	The Education and Residential Sources Workgroup provides targeted assessment of the underserved community through event surveys and a countywide phone survey.
e) Residential Community, General Public, and School Children			
Assess knowledge and awareness for residential community, general public, and school children	Assessed through surveys during presentations and at events	Complete	The City hired ILACSD to conduct targeted education and assessment for school children in elementary schools. The City also provided event surveys at the US Open Sandcastle Competition and Auto Show special events. Results indicated a change in knowledge from school presentations based on pre and post test scores. Event surveys also revealed a 69% understanding among the general public of the difference between storm water and sewer systems.

Table 8.2 - Education Component Targeted Outcomes and Results

Education FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION FROM EDUCATION ACTIVITIES)			
a) Construction Site Owners and Developers			
Number of construction projects that were not in compliance with BMPs	5 of 72 construction projects were out of compliance with BMPs	93% of active construction projects in compliance with site BMPs	Most construction projects (93%) implemented the necessary BMPs to contain potential contaminates on site. Non-compliant projects received additional education and a follow up investigation to ensure the proper BMPs were implemented and maintained.
b) Municipal Departments and Personnel			
Number of ICIDs identified and reported by municipal staff	Municipal Staff identified 98 out of 153 ICID during the reporting period	Total ICID: 153 PW Env: 50 PW Other: 48	One component of the annual municipal training is the proper identification of ICIDs. During FY 2009-10 64% of the identified ICIDs were reported by Public Works staff with the Environmental Division only making up 50 cases and the non-environmental Public Works staff making up 48 cases.
c) Industrial and Commercial Site Owners and Operators			
Number of commercial businesses not in compliance with minimum BMPs	9 out of 71 commercial businesses were out of minimum BMP compliance	87% of high priority businesses in compliance with minimum BMPs	The City inspects 100% of high priority commercial businesses annually for proper implementation of BMPs. During the reporting period the city inspected 71 commercial businesses with the result of 9 businesses out of compliance for minimum BMPs. Those 9 businesses were educated and then subsequently re-inspected at a later date and found to be incompliance with the minimum BMPs.
d) Underserved Community			
Not targeted	None	None	The underserved community is not specifically targeted by the city when assessing behaviors and BMP implementation because this task is more effectively addressed through the Regional Copermittee group.

Table 8.2 - Education Component Targeted Outcomes and Results

Education FY 2009-10 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
e) Residential Community, General Public, and School Children			
Number of education activities that target behavior change	29 education activities during the reporting period	Complete	Assessing changes in behavior and BMP implementation across the whole community is best addressed through regional programs. Imperial Beach focuses on targeting education through a variety of media and interactive programs that target the most people possible. Anecdotal observations from City staff reveal a continuous improvement in BMP implementation across all targeted audiences as the persistent storm water education message gradually changes public behavior.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM EDUCATION ACTIVITIES)			
a) BMP Implementation			
Not targeted	None	None	Source load reductions are not easily tracked from education activities but can be implied through proper implementation of BMPs. Source load reductions from cleanup activities are tracked and reported separately.

Table 8.3 - Education Activity Inventory by Targeted Community

Education Activity	Date	Activity or Event Description	Topics	No.	Effectiveness Assessment	Comments
Municipal Departments and Personnel						
FYI to City Staff and Council	Weekly	Provided updates on the storm water program and Environmental Division through a weekly email newsletter sent to City staff and Council	Storm Water program	130	No	25 FYIs for the year
Code Enforcement Meeting	Monthly	Monthly meeting with Code Enforcement, Fire Inspector, Building Inspector, Community Development, and Environmental Division	Code enforcement issues many of which pertain to storm water	8	No	
Emergency Response Training	8/21/2009	Annual training of PW staff on emergency response including vactor truck use, spill response, municipal BMPs	Stormwater training on spill response, municipal BMPs, and pollution prevention.	24	No	
LTEA Workshop for Environmental Division	8/27/2009	Copermittee workshop for combining the LTEA and Diamond rating systems	JURMP and WURMP effectiveness assessment	1	No	
Supervisor Meeting	9/4/2009	Environmental Manager updated PW Supervisors on SDGE vault dewatering	Vault dewatering, BMPs, illegal discharge response	6	No	
Public Works Annual Storm Water Training	9/30/2009	Annual training for PW staff on components of the JURMP and BMPs for municipal facilities and activities	Pollution prevention and response, BMPs for municipal facilities and activities	22	Yes	Survey
New Employee Storm Water Training	9/28/2009	Indoctrination for new Environmental Specialist employee Guy Nelson	Review the requirements of the MS4 Permit and tour	1	No	
CASQA Conference	11/2-11/4/09	Annual storm water conference	Storm water program development	3	No	
New Employee Storm Water Training	11/23/2009	Indoctrination for new PW Administrator Bobbie Ortero	Review the requirements of the MS4 Permit and tour	1	No	
SCCWRP Symposium	1/20/2010	Symposium	Presentation on yearly culmination of work by SCCWRP	1	No	
Construction General Permit Training	2/25/2010	Training on the new Construction General Permit	Overview of the new Construction General Permit	2	No	
SUSMP Workshop	3/3/2010	Workshop on new Countywide Model SUSMP	Overview of new SUSMP requirements and LIDs and BMPs	4	No	
New Employee Storm Water Training	3/23/2010	Indoctrination for new PW sewer division Maintenance Worker Eric Bennet	Review the requirements of the MS4 Permit and tour	1	No	
EPA Enforcement Workshop	3/23/2010	EPA enforcement workshop hosted by the commercial industrial workgroup	Enforcement strategies, standards, and methods	1	No	
SWAMP Webinar	6/3/2010	Online Webinar training	Overview of SWAMP program and projects in SD	1	No	
Construction Site Owners and Developers						
Grading and Building permits with BMP Construction brochure	On going	Community Development Department disseminates BMP and storm water information with permits	BMP, pollution prevention, City storm water requirements	---	No	
Community Development counter hours	On going	Counter hour for education relating to construction and development in the City	BMPs, pollution prevention, City storm water regulations	---	No	
Commercial Owners and Operators						
Sand Castle vender packed and inspections	7/17th-19th/2009	Provided education materials for street venders and conducted commercial inspections during event	Mobile business, pollution prevention recycling	---	No	
Commercial Inspection	On going	Commercial business inspections	Pollution prevention, BMPs, storm water regulations	71	Yes	Interactive Assessment
Follow up inspection report and letter	On going	Each commercial inspection is followed up with summary report and BMP brochures by mail	Commercial BMPs, recycling and pollution prevention	9	No	
Residents and General Public						
FY 2008-09 JURMP Public Hearing	8/2/2009	Public hearing at City Council meeting	Overview of the FY 2008-09 JURMP AR components	---	No	
Annual Home Front Cleanup	5/1/2010	EDCO bulky item collection at Mar Vista HS	Trash, recycling and waste	822	No	175.6 tons
Booth at U.S. Open Sand Castle competition	7/18th-19th/2009	City booth for storm water and pollution prevention; Conducted survey	Pollution prevention, HHW, recycling, and storm water	300,000	Yes	Survey
Booth at Auto Show	8/1/2009	City booth for storm water and pollution prevention; Conducted survey	Pollution prevention, HHW, recycling	1,000	Yes	Survey
City Semi-Annual news letter (Winter)	12/1/2009	5 Articles in City' winter news letter sent to all residents	Storm water BMPs; Recycling HHW; FOG, street sweeping	27,000	No	

EDCO Environmental Times	Quarterly	Published a variety of environmental articles in the Summer , Fall, Winter, and Spring EDCO news letters sent to all residents	Pollution prevention, special events, HHW, recycling, and storm water regulations	27,000	Na	
Eagle and Times newspaper	On going	Articles on variety of topics advising the community on storm water related issues	Storm water pollution, reusable bag day, City	City wide	No	
San Diego Union Tribune	8/29/2009	Request for public comment on JURMP	Public comment on JURMP	Region	No	
Ewaste and Universal Waste Event	10/24/09	Collection of e-waste and universal waste at Civic Center parking lot. Post card advertisement sent to all residents	HHW and recycling information provided during Citywide event	150	No	
Ewaste and Universal Waste Event	2/20/2010	Collection of e-waste and universal waste at the Chula Vista old PW Yard. Partnered with Chula Vista. Post card advertisement.	HHW and recycling information provided during Citywide event	---	No	
Community Bulletin Board (Channel 24-Cox)	On going	The Community Bulletin Board broadcasts seven-days a week	Storm water pollution, special events, general info	City wide	No	
Fix a Leak Week	3/1/2010	Public outreach with Cal Am Water company to raise awareness about water leaks	Water conservation and storm water pollution	Region wide	No	
Environmental Awareness Month	4/1/2010	City Council dedicated the month of April as Environmental Awareness Month	Promote public awareness on environmental issues	City wide	No	
Website	On going	Information about storm water program, recycling, and online reporting	Pollution prevention, storm water BMPs, Recycling	---	No	
Recycling All-Star	Monthly	Award a Recycling All-Star from the community at City Council meeting	Recycling and waste management	12	No	
Underserved Community						
Underserved Target Audience Sub workgroup	On going	Co-chair of Education Residential Sources Workgroup, Chair of Underserved Target Audience sub-workgroup	Representation of the underserved community in all ERS sub-workgroups	---	No	
Presentation to Job Corps	10/20/09	Storm water presentation to Job Corps (Federal education program for 16-25 yrs to earn GED and job training)	Watershed and basics on storm water pollution.	30	No	
School Children						
Mar Vista HS Presentation	2/10/2010	ILACSD gave 2 presentation for 10th-12th graders at Mar Vista HS	Storm Water, watersheds, urban runoff	50	Yes	Pre and Post
Mar Vista HS Presentation	2/24/2010	ILACSD gave 4 presentation for 9th-12th graders at Mar Vista HS	Storm Water, watersheds, urban runoff	65	Yes	Pre and Post
Mar Vista HS Presentation	3/10/2010	ILACSD gave 1 presentation for 9th-12th graders at Mar Vista HS	Storm Water, watersheds, urban runoff	25	Yes	Pre and Post
Splash Lab at IB Sports Park	4/21/2010	County Splash education lab	Storm Water, watersheds, urban runoff	45	No	
TJ Estuary Education Staff at IB Sports Park	4/27-28/10	Geocashing with GPS with TJ Estuary Education Staff	Watersheds, storm water pollution	65	No	
Imperial Beach Elementary	5/27/10	Watershed model presentation to 3rd and 5th graders	Watersheds, storm water pollution for 3rd and 5th grade	135	No	
Public Participation						
Coastal Clean Up Day	9/19/2009	ILACSD and Coastkeeper Coastal Cleanup Day. Multiple sites in IB	Watershed awareness and public participation	Region wide	Yes	Per and Post tests
Make a Difference Day (Job Corps Volunteers)	10/20-22/09	Unimproved alley sweep for trash and debris. Bike path and South Seacoast trash collection	Appreciation of clean streets and clean environment	30	Yes	185 trash bags, 15 truck loads and 6 tons
Tijuana River Valley Clean up (Wildcoast)	10/24/09	Clean up of tires and trash off Dairy Mart road bridge. Provided supplies and support	Bi-national watershed stewardship	300	Yes	700 tires and 5 tons of trash
Community Service Training (Job Corps)	11/15/09	Indoctrination for Job Corps for community service projects that improve water quality	Pollution preventions and watershed awareness	1	No	
Job Corps Bike Path Clean up (Braxton Ford)	2/10/10	Worked with Job Corps student to organize a community clean up event	Watershed awareness and pollution prevention	20	Yes	200 lbs of trash
Creek to Bay Clean Up	4/24/2010	ILACSD sponsorship for annual Creek to Bay Clean up. Participated at two cleanup locations	Pollution prevention and storm water	---	No	
Citywide Garage Sale	4/24/2010	Citywide garage sale	Reuse	96	No	
Wildcoast Tijuana River Valley Clean Up	6/5/2010	Wildcoast Clean up event in TJ River	Bi-national watershed stewardship	60	Yes	1000 lbs trash and 100 tires

9.0 Public Participation

9.1 Introduction

The City is required to incorporate a mechanism for Public Participation in the updating, development, and implementation of the JURMP. Public involvement in the JURMP leads to a greater understanding of public perception and attitudes towards the problem of storm water pollution and helps the City implement a more effective storm water program. The Environmental Division regularly interacts with residents, commercial businesses, municipal staff, and developers while conducting inspections, education activities, BMP enforcement, and other JURMP implementation components. The City also makes additional efforts to include public participation in the implementation and development of the JURMP by providing opportunities throughout the year to provide comments and feedback.

9.2 Public Participation Efforts

The City holds a public hearing and solicits public comments prior to the adoption and submittal of the JURMP and its Annual Reports. The public was notified on this Annual Report in the Imperial Beach *Eagle & Times* newspaper and through public hearing notices that were posted at City Hall and the Imperial Beach Public Library. A draft of this JURMP Annual Report was made available for public viewing at the Imperial Beach City Hall, posted on the City's website, and presented at a public hearing to City Council on September 22, 2010.

Other public participation mechanisms the City uses include the operation of a storm water hotline and online reporting tool to report violations, coordination of cleanup activities such as the pet waste bag program and trash clean ups with local organizations, involvement with local environmental groups to spread awareness of urban runoff pollution, participation with civic organizations, and City special events.

10.0 Fiscal Analysis Component

10.1 Introduction

The Environmental Program Division of the Department of Public Works is responsible for the fiscal analysis of the storm water program. Implementation costs for the JURMP are approximately $1,000,000. The revenue source used by the City to fund the requirements of the Municipal Permit is the City general fund.

10.2 General Budget Information

The costs of implementing the JURMP are spread across the whole City. Each Department and associated Divisions has an established role in implementing the components of the JURMP. However, the primary responsibility of implementing the storm water program is split between the Department of Public Works and Community Development Department.

10.3 Fiscal Analysis Methods

The Standardized Fiscal Analysis Methods and Format (Fiscal Analysis Methods) were collaboratively developed and adopted by the Copermittees in January 2009 in accordance with sections G, J.1.a(3)(k), and J.1.c(1)(d) of NPDES Order No. R9-2007-0001. The Fiscal Analysis Methods document was submitted to the San Diego RWQCB by January 31, 2009, as Attachment 1 of the Regional Urban Runoff Management Plan (RURMP) Annual Report for 2008-2009.

10.4 Fiscal Analysis Results

10.4.1 Expenditures

The expenditures for FY 2009-10 are provided in the tables below. The standardized fiscal analysis method does not exactly correspond to the line item budget maintained by the City. The values presented in Table 10.1 are therefore an extrapolation of the expenditures made that correspond to the itemized categories. Table 10.2 is also provided for the expenditures related to the two Prop 50 Clean Beach Initiative grants during the reporting period.

The implementation of all the JURMP Components involves every City Department and Division and the actual implementation costs for the program may exceed the amount posted below.

Table 10.1 - Expenditures on JURMP for FY 2009-10

Administration	$236,427
Development Planning	$79,900
Construction	---
Municipal	$292,580
Industrial Commercial	$8,725
Residential	---
IDDE	$49,921
Education	$9,415
Public Participation	---
Special Investigations	$13,270
Non-Emergency Firefighting	$102,385
Regional Costs	$42,413
Total	**$835,036**

Table 10.2 - Clean Beach Initiative Grant Projects and Expenditures FY 2009-10

Palm Ave Low Flow Diverter	$50,867
Tijuana River Bacteria Study	$13,498

10.4.2 Funding Source

The general fund provides the only revenue source used by the City to fund the requirements of the Municipal Stormwater Permit. The City also relies on grant funding for additional studies or infrastructure projects that are above and beyond the requirements of the Permit. Other revenue sources such as building permit fees and redevelopment agency funds contribute to infrastructure projects that are indirectly related to the storm water program, but these expenditures are not enumerated above.

11.0 Program Effectiveness Assessment

11.1 Introduction

The Environmental Program Division is responsible for the effectiveness assessment of JURMP activities and implementation of BMPs for each major component of the storm water program. Effectiveness assessments are incorporated into the storm water program when ever feasible is to gauge whether the processes and procedures put into place are working toward protecting the quality of receiving waters.

The structure of this Annual Report evaluates the level of effectiveness for each JURMP component in the context of program planning, management, and implementation. The City uses the structural hierarchy of levels that were established in the *2003 Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*. Each section of this Annual Report incorporates program effectiveness on Outcome Level 1through Outcome Level 4. In general, Outcome Levels 1, 2, and 3 are best addressed on a Jurisdictional scale. Outcome Level 4 measurements of load reductions are provided whenever possible, but for the most part, assessment of changes to water quality (Levels 4, 5, and 6) are best addressed at the watershed or regional scale.

11.2 Outcome Level 1a: Administration of Management Program Activities

The administration of management program activities addresses modifications to the *2008 JURMP*, updates to program documentation or procedures, end of the year program review, and updates to inventories for next fiscal year.

The City's implementation and assessment strategy for the program effectiveness is described in the *JURMP Section 13.0*.

11.3 Outcome Level 1b: Implementation of Management Program Activities

The implementation of management program activities addresses BMP confirmation requirements, proper documentation, training, inspections, public awareness and response, and special investigations for each component of the *2008 JURMP*. The tables in each section of the Annual Report present and describe targeted outcomes and results based on program implementation for the reporting period.

11.4 Outcome Level 2: Knowledge and Awareness of Program Implementation

Knowledge and awareness are targeted and assessed as necessary within each element of this Annual Report independently.

11.5 Outcome Level 3: Behaviors and Best Management Practice (BMP)

Behaviors and BMP implementation are assessed within the tables located in each section of this Annual Report.

11.6 Outcome Level 4 – Source Load Reductions

Source load reductions are targeted and assessed as necessary within each element of this Annual Report independently.

12.0 Special Investigations

12.1 Introduction

This section describes special investigations that were conducted above and beyond Permit requirements, but with the ultimate goal of better understanding and controlling urban runoff and storm water pollution. Special investigations relevant to each JURMP component are assessed in the tables of each section of this Annual Report. The discussion presented in this section provides additional details on the special investigation for the Palm Avenue Low Flow Urban Runoff Diverter and the Tijuana River Bacterial Source Identification Study, and 2010 Storm Drain Master Plan.

12.2 Palm Avenue Low Flow Urban Runoff Diverter Project

The Palm Avenue Low Flow Urban Runoff Diverter became operational in the beginning of 2009. The diverter project, which was mostly funded under a Prop 50 CBI Grant, diverts up to 250 gallons per minute of nuisance flow urban runoff and first-flush rain water into the sanitary sewer. As part of the conditions on the Grant, the City conducted weekly post construction water quality monitoring for a one year period from January 2009 through December 2009. The final monitoring report for the project was submitted to the State Water Resource Control Board in February 2010.

The following bullet points summaries the effectiveness and benefits from the project:

- Bacterial data collected during the monitoring phase shows that, in the absence of the Palm Avenue Diverter, low-flow urban runoff and first-flush stormwater with high levels of bacteria would have been discharged to the receiving waters.
- Comparison of the concentration of bacteria in the wet well with the AB411 water quality benchmarks indicates that for total coliform 98% of the samples exceeded benchmarks, and for *Enterococcus* 91% of the readings exceeded the benchmarks.
- Data analysis shows that 100% of the samples collected at the diverter wet well exceeded at least one of the bacterial indicator benchmarks.
- The Palm Avenue Diverter directs an average of 23,000 gallons per month of urban runoff to the sanitary sewer.
- Only the Carnation Avenue receiving water sampling station had exceedances of bacterial indicators during the project's monitoring period. On February 17 and 18, 2009, during a storm event greater than 1/10th of an inch, when the diverter operated in storm discharge mode, water quality exceeded AB411 benchmarks. During the same period, the southern-most sampling location at Seacoast Drive also provides evidence of high bacteria levels likely originating from other sources including the Tijuana River Valley and Mexico.
- This project was successful in combining access to recreation, aesthetic improvements, public infrastructure, and water quality benefits. It received the "Project of the Year" award from the San Diego & Imperial Counties Section of the American Public Works Association (APWA).

12.3 Tijuana River Bacteria Source Identification Study

During last reporting period State funding was pulled from the Tijuana River Bacteria Source Identification Study. The City was forced to halt a grant project to identify and quantify the sources of bacterial contamination along the U.S. portion of the Tijuana River Watershed. The purpose of the study is to contribute to the regional efforts to identify sources of bacterial contamination and recommend appropriate actions and activities to reduce the input of those sources to the Tijuana River and adjacent Pacific Ocean.

The Bacteria Study was stalled for 15 months until March 2010 when the City received notification from the State that funding was available to restart the project. The project is now in full implementation and is on track to finish by March 2012.

12.4 2010 Storm Drain Master Plan

During the reporting period the City took on the task of updating its Storm Drain Master Plan. The purpose of the 2010 Storm Drain Study is to update the previous drainage study for Imperial Beach conducted in 1991 by BDS Engineering *(Bement-Dainwood-Sturgeon, August 1991)*. The results from the Study provide the preliminary analysis in the Storm Drain Master Planning process that will lead to the identification and prioritization of capital improvement projects that increase the capacity of the storm drain system. The project is on track to be complete September 2010. The scope of work for the Study includes the following tasks:

- Review of Existing Data
- GIS Mapping and Field Verification
- Hydraulic and Hydrologic Modeling
- Identification of System Deficiencies

This Storm Drain Study is intended to be used as a planning tool for evaluating impacts to the storm drain system whether it is from new developments, capital improvement projects, or collection system improvements. The report provides hydraulic and hydrologic analysis for 7 large drainage areas and 15 smaller drainage areas in the City for the 2-year, 5-year, and 10-year storm flow conditions. This report identifies the existing capacity for each drainage area and provides preliminary recommendations on how to increase the capacity for the system.

13.0 Non-Emergency Fire Fighting

13.1 Introduction

The City requires pollution prevention measures and BMPs to reduce or eliminate non-emergency fire fighting flows. The Environmental Division assists the Fire Department in implementing control measures to prevent or control pollutants from both emergency and non-emergency fire fighting activities. The 2008 JURMP Section 2.2 identifies the BMPs that are implemented as part of fire fighting activities.

Non-emergency fire fighting activities, such as training activities that simulate emergency responses, are performed in a manner that eliminates discharges to the storm water system whenever practicable, and minimizes discharges to the storm water conveyance system when elimination of discharges is practicably unavoidable. The following best management practices are implemented as part of these activities:

- Water flows are directed to landscaped areas whenever possible
- When flowing water to an area where landscaping does not prevent runoff, the area selected shall be surveyed by the Officer in charge prior to training activities to ensure that debris will not enter into the storm water system as a result of the drill
- Areas that have debris, which could potentially enter the storm water system as a result of the drill activities, will not be used for training until debris has been removed. Referrals to the Department responsible for the debris removal will be made as needed
- Live fire training activities will be pre-planned to allow integration of barriers to off-site runoff, which could contribute to storm water discharges
- Discharges from maintenance of equipment and restoration of hoses, vehicles, tools, ladders and other emergency response equipment are directed to the sewage, and dry methods are used whenever practical
- Staff is trained on good housekeeping practices to be used during standard facility maintenance procedures
- The fire fighting personnel and inspectors receive annual pollution prevention training
- Vehicle washing or equipment cleaning is conducted over a wash bay that drains to the sewer

14.0 JURMP Revisions

14.1 Introduction

The Environmental Program Division of the Department of Public Works is responsible to maximize program effectiveness by identifying and describing any JURMP modifications that are made during the reporting period, or that are proposed or planed for the next reporting period. Under the reporting format of this Annual Report, any modification or proposed changes made to the *2008 JURMP* are identified in the Program Planning and Administration subsection within each preceding Section of this report.

15.0 Conclusions and Recommendations

15.1 Introduction

The City made great progress in further developing and refining its urban runoff and management program during FY 2009-10. The management programs and activities implemented by municipal staff demonstrate a high level of compliance with the regulatory mandates of the Municipal Storm Water Permit, and underscore the City's commitment to reducing and eliminating pollutants related to urban runoff. The Components of the JURMP require the City to reduce to the maximum extent practicable sources of pollutants from three distinct phases of urban development: 1) planning and design phase, 2) construction and development phase, and 3) existing development phase. The City's urban runoff management program outlined in this Annual Report successfully meets these regulatory requirements and in some cases exceeds the minimum Permit requirements.

Looking forward to FY 2010-11 and beyond, the City is committed to continuing with many of the programs and management activities implemented in this report. Recommendations for future Reports is to enhance the program's end-of-year review and effectiveness assessment in order to further refine and improve each JURMP Component and to most effectively target sources of pollutants. The JURMP and all the Annual Reports are a living document that evolve over time and build upon the success and sometimes failure of management program activities. The City endeavors to implement the most effective storm water program possible, building upon the existing program, and given the resources that are available to the City.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authorized Signatory(s)	Title	Phone No.	Date
H. A. Levien	Public Works Director	(619) 628-1369	12-8-10

7.0 Illicit Discharge Detection and Elimination Component

7.1 Introduction

Illicit discharges and connections to the MS4 can be a significant source of pollutants. The Municipal Stormwater Permit (R9-2007-0001) requires the City of Imperial Beach to establish an illegal discharge and illicit connection (ID/IC) program to actively seek and eliminate illicit discharges. Section 9.0 in the JURMP describes the complete illegal discharge detection and elimination program in the City. The primary goal of the ID/IC component is the implementation of a program, which will enable the City to find and eliminate illegal discharges and connections. The City's ID/IC program includes dry weather monitoring of the MS4, investigation of illicit discharges and connections, and spill response and prevention. This section describes implementation of the City's Illicit Discharge Detection and Elimination Program during FY 2009-10. Attachment 7-2 in the appendix provides the City of Imperial Beach Field Screening and Water Sample Collection Standard Operating Procedure and Section 7.6 of this report describes effectiveness assessment measures related to this program component.

7.2 Investigation and Response to Illegal Discharges and Illicit Connections

The City of Imperial Beach Urban Runoff Management and Discharge Control Ordinance (I.B.M.C. 8.30) prohibits discharges and connections to the MS4 with only limited exception. City staff and members of the public are encouraged to report illicit discharges and other urban runoff violations to environmental staff for investigation. A storm water hotline, (619) 424-4095, online reporting, and constant communication with Public Work field staff continue to facilitate this type of reporting.

All urban runoff investigations were pursued until a satisfactory outcome could be attained. Usually, this involved remediation of spilled materials, elimination of illicit connections to the MS4, education of violators, and/or installment of BMPs to prevent future discharges. Unless the illicit discharge is of immediate danger to public health or the environment, violators are typically given the first opportunity to clean up spilled materials. If unable or unwilling to do so, or if a violator cannot be identified, City staff is enlisted to perform the cleanup at the property owner's expense. Attachment 7-4 presents a detailed description of each ID/IC investigation, including remedial steps and enforcement actions if any were taken.

7.2.1 ID/IC Investigations and Enforcement

The City performed 153 urban runoff investigations during FY 2009-10. Staff confirmed the presence of an illicit discharge in 126 instances that resulted in 60 enforcement actions. The City identified no illegal connections to the storm drain system. The following tables and figures summarize the types of violations, enforcement actions, and other informative statistics over the reporting period.

Referral Sources for Urban Runoff Investigations FY 2009-10

Referral Source	FY 08-09 Qty	FY 09-10 Qty
City Hall	2	10
Code Enforcement	6	13
General Public-Hotline	15	28
General Public-In person	10	3
General Public-Online	NA	1
PW-Env	48	50
PW-Field	14	48
Grand Total	**95**	**153**

Table 7- 1 A summary of referral sources for FY 2009-10. The table represents how ICID's get reported to the Environmental Division. Most ICIDs are identified by Public Works employees in the field.

Violator and Pollutant Types for Urban Runoff Investigations FY 2009-10
Illicit Discharge Violator Classification FY 2009-10

Violator Type	Auto Fluids	Construction Debris	Oil & Grease	Green Waste	Multiple	Over Irrigation	Paint	Pool Water	Potable Water	Sediment	Sewer Spill	Trash & Debris	Unknown	Pet Waste	Wash Water	Total
Construction	0	6			1					5		2			1	**15**
Commercial Business	1		2	1	1	1			3	1	2	5			2	**19**
Mobile Business							1		3		1		1		1	**7**
Residential	10	5	8	1	3	4	3	2	9	9	6	13	7	2	12	**94**
Municipal						1			1		2					**4**
Utility									3	1						**4**
School						1			2						2	**5**
Unknown			1													**1**
Other	1			1						1		1				**4**
Totals	**12**	**11**	**11**	**3**	**5**	**7**	**4**	**2**	**21**	**17**	**11**	**21**	**8**	**2**	**18**	**153**

Table 7- 2 A cross tabulation of pollutant types with violator classification is shown. The table shows most violators are residents discharging potable water, sediment, trash, and wash water.

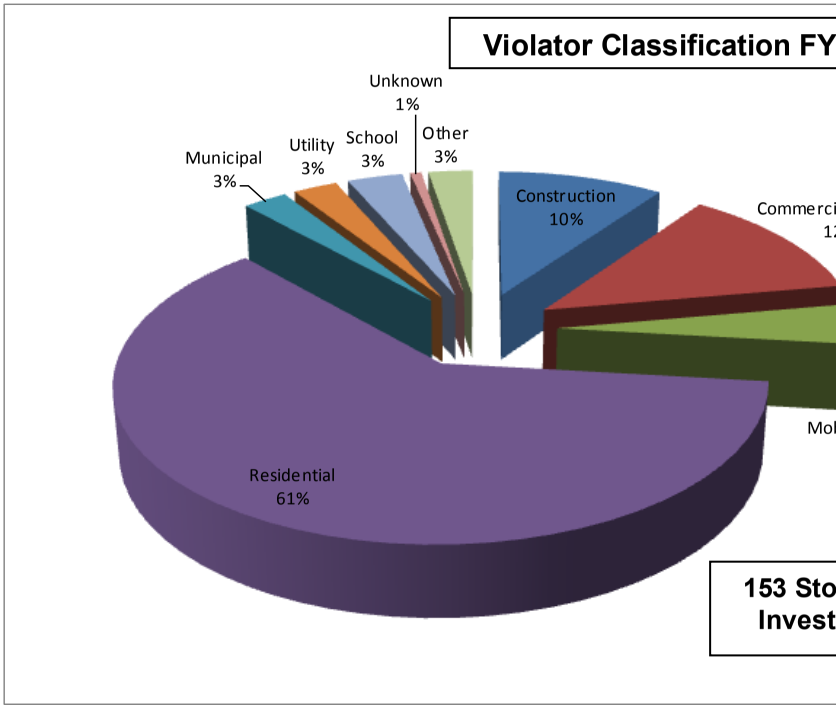


Figure 7-1 The graph above identifies the violator type identified during FY percent of the identified violators were residents. Our number of unknown one percent, showing an increase in our abilities to respond to and track vi source.

Pollutant Type Distribution by Violator Classification FY 20

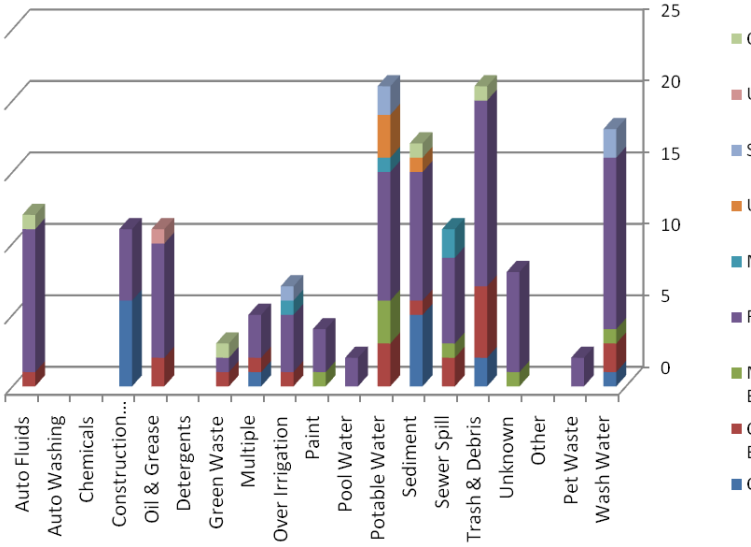


Figure 7- 2 The graph above identifies the distribution of violator types bro pollutants. The top four common pollutants include potable water, wash wa and sediment. The City also had 11 sewer system overflows from sources laterals, main line spills, and illegal dumping. The number of sewer spills w this reporting period.

Enforcement Actions Resulting From ID/IC Investigations FY 2009-10

Enforcement Action	Qty
Verbal Warning	12
Informational Letter	21
Notice of Abatement / Violation	23
Fine / Citation	4
Total	**60**

Table 7- 3 A summary of enforcement actions is shown. Enforcement actions are taken when appropriate to abate pollution or prevent future violations. The City reposned to 60 incedents that required enforcment actions.

7.2.2 Assessment of IC/ID Program

Analysis of data over the last four reporting periods yields few significant changes in the referral source, pollutant type, or watershed location of incidents reported to the Environmental Division as shown in the tables below. The City very rarely comes across violators who intentionally dump into a storm drains or wash materials into the street. Most ICID investigations are preventative in nature such as responding to over irrigation, sediment stock pile BMPs, accumulation of trash and debris on private property, or vehicle maintenance in the street.

Referral Sources For ID/IC Investigations FY 2006-07 Through 2009-10

FISCAL YEAR	Code Enforcement	General Public	Other City Staff	PW-ENV	PW-Field	Total
FY 2006-07	3	28	11	142	48	232
FY 2007-08	2	30	17	46	41	136
FY 2008-09	6	25	2	48	14	95
FY 2009-10	13	32	10	50	48	153
Total	**24**	**115**	**40**	**286**	**151**	**616**

Table 7- 4 Table shows consistent resident involvement in the process as well as a consistent commitment from City staff in all divisions to reducing storm water pollution.

Pollutants Type for ID/IC Investigations FY 2006-07 Through 2009-10

Fiscal Year	Oil & Grease	Auto Fluids	Chemicals	Construction	Green Waste	Multiple	Other	Over Irrigation	Paints	Pet Waste	Pool Water	Potable Water	Sediment	Sewage	Trash & Debris	Unknown	Wash Water	Total
FY 2006-07	2	28	4	44	12	2	1	5	10	4	4	9	24	4	52	2	25	232
FY 2007-08	1	22	1	9	2	4	6	4	5		3	10	8	4	38	4	14	136
FY 2008-09	7	9	3	9		2	4	11	5		1	7	11		10	7	9	95
FY 2009-10	11	12		11	3	5		7	4	2	2	22	17	11	21	7	18	153
Total	**21**	**71**	**8**	**73**	**17**	**13**	**11**	**27**	**24**	**6**	**10**	**48**	**60**	**19**	**121**	**20**	**66**	**616**

Table 7- 5 Table shows a significant reduction in incidents where auto fluids and construction debris is discharged over the last four reporting periods. The number of incidents remains consistent with previous years.

Watershed Location For ID/IC Investigations FY 2006-07 Through 2009-10

Fiscal Year	Otay River	Pacific Ocean	San Diego Bay	Tijuana Estuary	Tijuana River	Not Documented	Total
FY 2006-07	91	42	10	83	5	1	232
FY 2007-08	50	28	10	40	6	2	136
FY 2008-09	37	28	3	15	11	1	95
FY 2009-10	48	22	11	49	23		153
Total	**226**	**120**	**34**	**187**	**45**	**4**	**616**

Table 7- 6 Table shows the watershed affected by illegal discharges and connections. Over time, no trends can be seen indicating one watershed is more impacted than others.

7.3 Sewer Spill Reporting, Response, and Prevention

The City endeavors to clean 100% of the municipal sewer lines each year. More troublesome sewer lines around commercial areas may be cleaned more frequently if needed. The City responded to 11 sewage incidents during FY 2009-10 that included 3 SSO occurring on the City main line, 4 SSO occurring from private laterals, and 4 additional miscellaneous sewer related incidents that did not result in a SSO. In total, approximately 1340 gallons were spilled and 129 gallons successfully recovered. Attachment 7-1 presents further details on each sewage spill and Attachment 7-4 presents the City's response for each ICID incident.

7.4 Dry Weather Urban Runoff Monitoring

Dry weather urban runoff monitoring is one of several tools utilized by the City to identify ID/ICs to its MS4. Each year between May 1 and September 30 – the dry weather season – City staff collects samples from storm drain outfalls, manholes, catch basins, and other areas where urban runoff is commonly found. Where water volume is sufficient for collection, samples are analyzed in the field for several water quality parameters. This is referred to as "field screening". A sub-set of collected samples is also sent to a certified laboratory for additional analysis. Whenever field screening or lab analysis results exceed the dry weather monitoring Action Levels a timely follow up investigation is undertaken to identify and eliminate the pollutant source. Additionally, a trash assessment is conducted for each sampling location using the San Diego Copermittees Trash Assessment form. The complete overview of the dry weather monitoring program is provided in Attachment 7-3, City of Imperial Beach Dry Weather Monitoring Program 2010 and in Table 7-7 below. Attachment 7-5 presents a map of the dry weather monitoring locations in the City.

Summary of Dry Weather Monitoring Activity

Activity	Qty
Monitoring Site Locations	20
Field Screening Samples Analyzed	11
Samples Submitted for Lab Analysis	4
Trash Assessments Conducted	31

Table 7- 7 Dry weather monitoring was conducted as outlined in the 2010 Dry Weather Monitoring Program in Attachment 7-3. Attachment 7-5 provides a map of the dry weather monitoring site locations. Field screening samples were collected when ever water was present and lab analysis was only conducted when flowing water was present. The preferred procedure is to take samples from outfall locations whenever possible but due to the tidal influence at most outfalls and unpredictable nature of dry weather flows in Imperial Beach, samples were generally taken whenever and where ever water was encountered. Ponded water in catch basins were also sampled.

7.4.1 Dry Weather Monitoring Field Screening and Lab Results

Table 7-8, Table 7-9, Table 7-10, and Table 7-11 present the field screening and laboratory data for 2010. Monitoring was conducted at 20 sample locations with a total of 11 field screening samples and four laboratory samples collected and analyzed. Attachment 7-5 provides a map of the dry weather monitoring sample locations. Field samples were collected whenever water was present and lab samples were collected when water was flowing. The City also conducted 4 ICID follow up investigations and one sampling event at M6A from an illegal discharge.

During the 2010 dry weather season, field screening exceedances were observed for ammonia, orthophosphates and detergents. Follow up investigations were conducted to identify and abate the sources of pollutants. Follow up investigations were conducted in the field for the exceedances observed at site locations D2, E8, E1B, M6A, H23, K, A3, and H6. Additional samples were collected to identify the exceedances at site locations E1B, D2, H6, and E8. Section 7.5 presents information on the results of the follow up investigations.

Laboratory analysis was performed for four samples and resulted in exceedances of bacteria at E1B and H23 and copper at E1B. Section 7.5 presents information on the results of the follow up investigations for exceedances found at E1B and H23.

The following tables below present the results for the 2010 dry weather field screening and lab analysis.

Table 7-8 Field Screening Analysis

Date	Station ID	Station Type	Sample Event Type	Water Flow	pH	Temp	Conductivity	Turbidity	Ammonia (NH3-N)	Nitrate (NO3-N)	Orthophosphate (PO4-P)	Detergents (MBAS)
					(pH unit)	(oC)	(mS/cm)	(NTU)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
5/12/2010	D2	DWM	Field Screening	Ponded	7.140	22.900	1.103	27.300	*1.491	0.057	0.465	
5/12/2010	K	DWM	Field Screening	Dry								
5/17/2010	E8	DWM	Field Screening	Ponded	7.890	19.300	1.246	37.200	*4.936	0.370	1.984	
5/17/2010	M3	DWM	Field Screening	Dry								
5/19/2010	D2	DWM	IC/ID	Ponded					*1.524			
5/19/2010	D4	DWM	ID/IC	Ponded					*2.157			
5/19/2010	E17	DWM	ID/IC	Ponded					*3.651		0.771	
5/19/2010	E8	DWM	IC/ID	Ponded					*7.534		*2.519	
5/25/2010	H6	DWM	Field Screening	Ponded	7.780	21.000	24.500	54.500	*7.365	0.322	1.116	*2.500
5/25/2010	K	DWM	Field Screening	Dry								
6/1/2010	K	DWM	Field Screening	Dry								
6/2/2010	K	DWM	Field Screening	Dry								
6/2/2010	F48	DWM	Field Screening	Dry								
6/3/2010	E1B	DWM	Field Screening	Flowing	8.610	19.200	1.200	5.660	0.647	1.263	0.406	*1.750
6/8/2010	K	DWM	Field Screening	Dry								
6/8/2010	H6	DWM	Field Screening	Ponded	7.920	21.000	19.050	10.200	*14.000	0.340	1.217	*1.500
6/9/2010	A18G	DWM	Field Screening	Flowing	8.800	26.400	1.215	21.600	0.843	0.704	0.705	0.875
6/10/2010	(blank)	(blank)	Field Blank	(blank)						0.359	0.040	
6/10/2010	(blank)	(blank)	Field Blank	(blank)						0.375	0.048	
6/14/2010	H23	DWM	Field Screening	Flowing	8.310	22.000	1.064	14.100	*1.401	0.228	0.552	*1.000
6/24/2010	M6A	ID/IC*	Field Screening	Ponded	8.110	27.600	1.551	153.000	*5.661	1.287	1.502	0.000
7/14/2010	K	DWM	Field Screening	Dry								
7/14/2010	H23	DWM	Field Screening	Flowing	8.940	28.000	1.404	13.900	*2.992	0.787	0.549	0.750
8/2/2010	K	DWM	Field Screening	Dry								
8/2/2010	E1B	DWM	Field Screening	Dry								
8/2/2010	S1	DWM	Field Screening	Dry								
8/4/2010	K	DWM	Field Screening	Flowing	8.440	21.800	1.274	1.810	*2.251	0.537	0.852	0.500
8/5/2010	E1B	DWM	Field Screening	Dry								
8/5/2010	H12	DWM	Field Screening	Dry								
8/5/2010	P4	DWM	Field Screening	Dry								
8/5/2010	F48	DWM	Field Screening	Dry								
8/5/2010	F7	DWM	Field Screening	Dry								
8/9/2010	A3	DWM	Field Screening	Ponded	7.890	27.300	36.300	5.740	*1.425	3.516	0.333	*3.00

Table 7- 8 Table shows dry weather field screening data for the 2010 dry weather monitoring season. During the reporting period not every sampling location was noted when the conditions were dry. The City does not have a persistent level of dry weather flow, which made a challenge for dry weather sampling. Sample results showed that ammonia continued to be an issue especially where water was ponded or had high conductivity. The City will take a closer look at the issue on ammonia exceedances during the 2011 dry weather season to determine possible sources or causes for the high results.

Analytical Lab Results for Metals

Station ID	Station Type	Sample Event Type	Date	Cadmium, Diss (mg/L)	Copper, Diss (mg/L)	Hardness, Total as CaCO3 (mg/L)	Lead, Diss (mg/L)	Zinc, Diss (mg/L)
E1B	DWM	Field Screening	6/3/2010	ND	*0.061	307	ND	0.147
H23	DWM	Field Screening	6/14/2010	ND	ND	265	ND	0.108
K	DWM	Field Screening	8/4/2010	ND	0.010	343	ND	0.031
A3	DWM	Field Screening	8/9/2010	ND	ND	5280	ND	ND

Table 7- 9 Table shows the lab results for samples submitted for metals analysis. Only one exceedance in copper was found at the E1B outfall. The E1B outfall drains from mar Vista HS. All other metals tests were below action levels including cadmium and lead which consistently produced no detectable amounts.

Analytical Lab Results for Pesticides and Oil And Grease

Station ID	Station Type	Sample Event Type	Date	Chlorpyrifos (µg/L)	Diazinon (µg/L)	Malathion (µg/L)	Oil & Grease (mg/L)
E1B	DWM	Field Screening	6/3/2010	ND	ND	ND	ND
H23	DWM	Field Screening	6/14/2010	ND	ND	ND	ND
K	DWM	Field Screening	8/4/2010	ND	ND	ND	ND
A3	DWM	Field Screening	8/9/2010	ND	ND	ND	ND

Table 7- 10 Table shows lab results for pesticides, oil, and grease. No pesticides, oil, or grease was found during the 2010 dry weather monitoring season.

ANALYTICAL LAB RESULTS FOR BACTERIA

Station ID	Station Type	Sample Event Type	Date	Fecal Coliform (MPN/100 mL)	Total Coliform (MPN/100 mL)	Enterococcus (MPN/100 mL)
E1B	DWM	Field Screening	6/3/2010	5000	*170000	1300
H23	DWM	Field Screening	6/14/2010	5000	110000	*30000
K	DWM	Field Screening	8/4/2010	3000	17000	3500
A3	DWM	Field Screening	8/9/2010	11000	28000	51

Table 7- 11 Table shows lab results for bacteria tests conducted during the 2010 dry weather monitoring season. Two exceedances were found for total coliform and enterococcus bacteria. These exceedances are largely due to ponding of water and animal waste.

7.4.2 Trash Assessment

The city continued performing trash assessments in conjunctions with its dry weather monitoring at targeted MS4 sites. Trash assessments are done on the following scale: Optimal, Suboptimal, Marginal, Submarginal, or Poor. Table 7-12 below provides the results for the 2010 Dry Weather monitoring season.

Trash Rating at 31 Sites

Overall Rating (Amount and Extent)	Total
Optimal	29
Suboptimal	2
Grand Total	31

Table 7- 12 Trash ratings are shown. Very little trash was seen around dry weather monitoring sites. Only two suboptimal ratings were reported at location A18G and S1. When the results of the trash assessment are suboptimal then the City performs a cleanup of the area.

7.5 Follow Up Investigations and Analysis For Dry Weather Monitoring

Follow up investigations to identify and abate the sources of pollutants were conducted when water quality samples exceeded the Copermittees Action Levels. The City follows the guidelines for eliminating illegal discharges or connections set forth in Chapter 9 of the JURMP and outlined in Attachment 7-3, City of Imperial Beach Dry Weather Monitoring Program 2010. This section provides the results of the 2010 dry weather monitoring follow up investigations and also presents analysis of data to reveal possible pollutant trends. Significant findings are presented by major outfall or pollutant source.

Outfall E-1B (Grove & 5th Street) – Tijuana River Estuary Watershed



During the recent dry weather season, the E1B outfall was closely monitored for continued flow that was observed during last reporting period. The drainage area for E1B primarily collects runoff from Mar Vista High School. The outfall continued to have a slow and intermittent flow occurring whenever school was in session. Lab samples indicated elevated levels of total

coliform and copper, which is consistent with previous samples at this location. These results lead the City to conduct a follow up investigation at Mar Vista HS.

On November 10th a site investigation on Mar Vista HS revealed a previously unknown drainage connection from the school's pool deck that received over spray from an adjacent outdoor shower. The issue was corrected by maintenance crews and for a period of time after the incident no flows were observed. However, a slow trickle of intermittent flow has returned to this outfall which indicates there is still another possible discharge at Mar Vista HS. It is possible that flows are from underground leaking irrigation, air conditioning condensation, or possibly still from the pool area. Investigations will continue into next reporting period with a focus at the pool area because that location has been the source of previous discharges.

Station E8 (South side of Elm in front of Mar Vista High) – Tijuana River Watershed

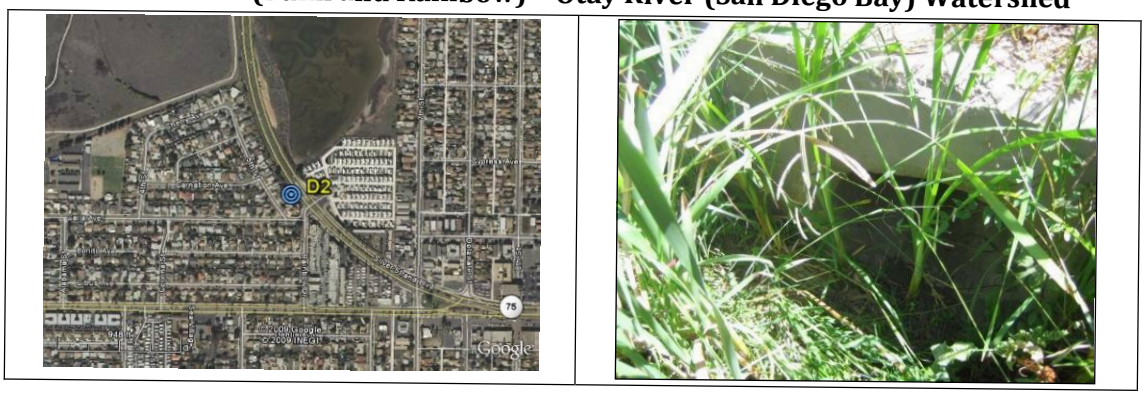




In an attempt to find possible sources of orthophosphate and ammonia in the E Storm Drain Line, sites were chosen upstream of E25 for investigation and follow up. Only one orthophosphate exceedance was found in these tests. Ammonia exceedances for 2010 remained consistent as in previous years for this storm drain line. Elevated ammonia exceedances were observed in ponded samples where the conductivity was also elevated.

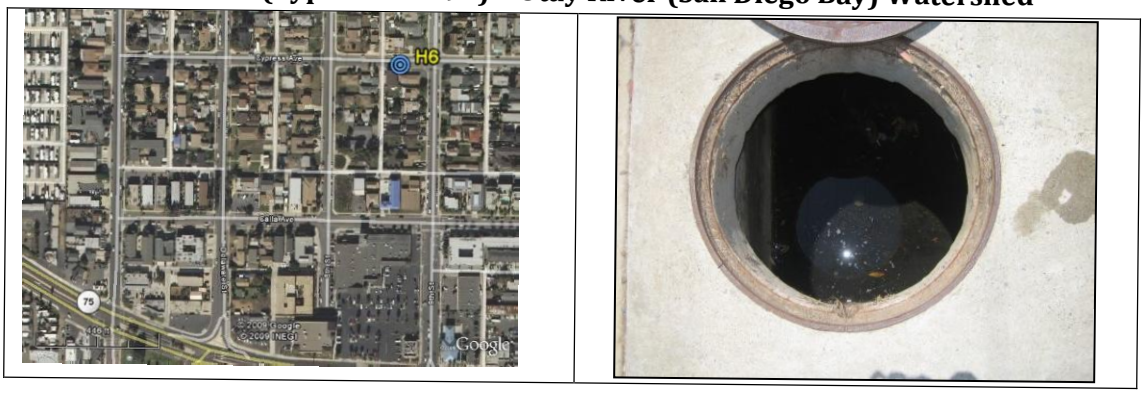
Upstream investigations focused on a channel north of the E8 sample site where large amounts of pet waste and grass clippings may be a factor in the ammonia exceedances. No identifiable illicit sources of water were found on the E line during follow up investigations. Some backyard drainage pipes were found leading from properties along the open channel near the E8 site. These pipes were fitted with collectors to determine if there was discharge coming from the pipes. After several months of observation, no discharges were discovered and no water was ever observed flowing through the open ditch. Ammonia exceedances were found throughout the City during this dry weather season and will be addressed later in this section.

Station D2 (Palm and Rainbow) – Otay River (San Diego Bay) Watershed



Testing confirmed last year's findings of high ammonia at D2. Follow up investigations showed exceedances of ammonia at site D4 as well. Higher levels upstream indicate there may be other sources including dead vegetation and animal waste consistently found in the drainage ditch at D2. Ammonia exceedances were found throughout the City during this dry weather season and will be addressed later in this section.

Station H6 (Cypress and 9th) – Otay River (San Diego Bay) Watershed



Testing of the H6 station during 2010 confirmed previous reports of elevated ammonia levels combined with high amounts of detergents and conductivity. Follow up investigations identified a drainage pipe into the City alley from a private resident at 568 9th Street. This discharge point was identified as a persistent source of intermittent dry weather flow and was required to be removed by the City. However, analysis of the water discharging from that drainage pipe only indicated clean water.

Analysis of the H23 line, upstream from H6 showed no exceedances in detergents, but did show an exceedance in enterococcus bacteria. The presence of bacteria indicates that decomposing vegetation may be raising the ammonia levels in this storm drain line. High conductivity levels may also be impacting the test results. Further investigations will continue into next reporting period.

Ammonia Exceedances at Multiple Dry Weather Stations

The 2010 dry weather season persistently indicated ammonia exceedances to be a problem throughout the City. The highest exceedances during 2010 correlates with samples high in conductivity indicating there might be an issue using the field test kit method when the water is brackish. Ponded samples also had higher ammonia levels most likely as a result of decomposing organic material. An attempt was made to find illicit sources in each and every case, but no conclusive source for ammonia was found. Fortunately, the overall contribution of ammonia to the receiving waters is small because exceedances were primarily observed in ponded catch basins.

During the 2011 dry weather season, steps will be taken to identify and eliminate exceedances. In order to do this we will use multiple testing procedures, inspect storm drain lines more intensely for sources we may have missed, and conduct more intensive neighborhood investigations such as along the E line. Information on our efforts will be included in the next JURMP annual report.

7.6 Effectiveness Assessment

Order R9-2007-0001 (Municipal Stormwater Permit) requires Co-Permittees to detect, investigate, and eliminate illicit discharges and illicit connections in a timely manner. The City endeavors to reduce and prevent illicit discharges to the MS4 to the maximum extent practicable (MEP). The City uses targeted education and outreach programs and conducts routine inspections of construction and commercial facilities as preemptive efforts to prevent illegal discharges. In addition, the City conducts dry weather monitoring of major MS4 outfalls and locations May 1st through September 30th with the intent of identifying illegal storm water discharges. The City also responds to illicit discharges that are reported to the City's Stormwater Hotline or observed by City employees. The Department of Public Works Environmental Division follows through on all reported illegal discharges and ensures that the appropriate best management practices are used and maintained so no further discharges are detected.

The following section provides a description of the effectiveness of the ID/IC program using the 2003 Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs that utilizes the hierarchy of outcome levels. (Outcome Levels 1 through Outcome Level 6). Outcome Levels 1, 2, 3, and to some degree Outcome Level 4 can be addressed on a jurisdictional scale, while Outcome Levels 4, 5, and 6 are best addressed at the watershed or regional scale.

7.6.1 Level 1 Outcomes- Compliance with Activity-based Permit Requirements

The City of Imperial Beach successfully met all Outcome Level 1 compliance with activity-based permit requirements. Table 7-13 below demonstrates compliance with all Order R9-2007-0001 (Municipal Stormwater Permit) Illegal Discharge Detection and Elimination Component requirements:

Outcome Level 1 Permit Compliance Requirements and Measures

Permit Section	Requirement	Compliance Measure
J.3.a.(3)(f)i.	Correction of any inaccuracies in either the MS4 map or the Dry Weather Field Screening and Analytical Stations Map.	Spatial map of MS4 and monitoring locations is provided in a number of locations: 2008 JURMP, 2010 Dry Weather Monitoring Program provided in the appendix of this report, and within the text of this section.
J.3.a.(3)(f)ii.	Reporting of all dry weather field screening and analytical monitoring results.	Dry weather monitoring results are reported within this section of the annual report and conducted in a manner consistent with the requirement in Attachment B of Order No. R9-2007-0001. The Imperial Beach SOP and 2010 Dry Weather Monitoring Program are provided in Attachment 7-2 and Attachment 7-3.
J.3.a.(3)(f)iii.	Any dry weather field screening and analytical monitoring consultant reports generated.	All field screening and analytical monitoring were conducted by Imperial Beach staff. Supporting documents are provided in the Appendix.
J.3.a.(3)(f)iv.	A brief description of any other investigations and follow-up activities for ID/IC	Summary of all follow up investigations are provided within this section of the annual report and in Attachment 7-4 of the appendix.
J.3.a.(3)(f)v.	Number and brief description of illicit discharges and connections identified.	The summary of ID/IC is provided in provided in this section of the annual report and provided in the Appendix of this report.
J.3.a.(3)(f)vi.	The number of illicit discharges and connections eliminated.	The summary of ID/IC including the number eliminated is provided in this section of the report.
J.3.a.(3)(f)vii.	Identification and description of all spills to the MS4 and response to the spills.	The summary of spills to the MS4 and response is provided within this section of the annual report.
J.3.a.(3)(f)viii.	A description of activities implemented to prevent sewage and other spills from entering the MS4.	The City endeavors to clean 100% of the sewer system each year. A description of activities is provided within this section of the report.
J.3.a.(3)(f)ix.	A description of the mechanism whereby notification of sewage spills from private laterals.	The City follows the notification procedure as identified by the City's Sanitary Sewer Maintenance Plan (SSMP)
J.3.a.(3)(f)x.	Number of times the hotline was called, as compared to previous reporting periods, and a summary of the calls.	Analysis of ID/IC reporting is provided within this section of the report.
J.3.a.(3)(f)xi.	A description of efforts to publicize and facilitate public reporting of illicit discharges.	Education and outreach as describe in previous sections of the report, inspections, and regional programs all publicize the efforts for the public to report ID/ICs either to the Storm Water Hotline 619-424-4095 or online reporting form.
J.3.a.(3)(f)xii.	The number of violations and enforcement actions taken for ID/ICs including information on any necessary follow-up actions taken.	Descriptions of ID/ICs and follow up actions are provided within this section and in Attachment 7-4.
J.3.a.(3)(f)Xiii.	A description of notable activities conducted to manage illicit discharges and connections.	One notable activity was the identification and elimination of an illegal outdoor shower connection at Mar Vista High School. A description is provided in this section.

Table 7- 13 Order R9-2007-0001 (Municipal Stormwater Permit) Illegal Discharge Detection and Elimination Component compliance requirements and measures.

7.6.2 Level 2 Outcomes- Changes in Knowledge and Awareness

Education is provided through face-to-face interaction with City staff in meetings, public workshops, community presentations, and inspections. In addition, the City disseminates brochures that outline the requirements for addressing urban runoff and water quality regulations. The efforts by the City to educate the public on detection of illegal discharges and elimination of future discharges are discussed in the JURMP Section 9.0. The education effort for City staff is discussed in the JURMP Section 10.0.

7.6.3 Level 3 Outcomes- Changes in Behavior (BMP Implementation)

The City is required by the Municipal Stormwater Permit to educate the public and enforce its storm water ordinances. The City's storm water ordinances include appropriate sanctions to achieve compliance and influence behavioral change. The City requires residents, commercial and industrial businesses, developers, construction companies, and municipal employees to implement storm water management BMPs. These BMPs are specific to each particular JURMP component and are tracked and monitored by the City. The City performed 153 urban runoff investigations during FY 2009-10. Staff confirmed the presence of an illicit discharge or connection in 126 instances and a responsible party to implement a correct BMP was identified in 152 cases.

7.6.4 Level 4 Outcomes- Load Reductions

Investigations of illegal discharges and illegal connections are logged and reported in the City's database. The City monitors and keeps track of treatment control BMPs, conducts storm water inspections of commercial businesses, and inspects construction and development projects. In 2010 the City conducted trash assessments in conjunctions with its dry weather monitoring at targeted MS4 sites. The trash assessment provides a qualitative rating of each sampling location on a scale of Optimal, Suboptimal, Marginal, Submarginal, or Poor. The City also responds to sewer system overflows and other illegal discharges and uses a vactor truck if necessary to recover the spill. See section 7.3 for further information.

7.7 Program Review and Modifications

No significant changes or modifications are proposed for the IC/ID program for next fiscal year. Minor changes in the administration and management to improve the efficiency and effectiveness of the program is anticipated based on lessons learned from multiple years of implementation. The following is a highlight of activities that the City anticipates implementing as part of its Illicit Discharge Detection and Elimination Component for next reporting period.

- Continue to conduct annual dry weather monitoring
- Continue to investigate and abate ID/ICs
- Continue investigation of suspicious dry weather flow at Outfall E-1B.
- Step up investigations to find sources of ammonia throughout the City of Imperial Beach.

- Environmental staff is working to reduce improperly discarded trash and other storm water pollutants at multi-family apartments and trailer parks. This is conducted in conjunction with a program to increase solid waste diversion at these locations.
- Environmental staff using the same computer system as code compliance for more efficient enforcement of illegal connections and discharges.

Attachment 7-1 Sewer System Overflows in FY 2009-10

AGENCY	SSO EVENT ID	SPILL CAT	SPILL LOC NAME	SPILL ADDRESS	CITY	ZIP	REACH SURFACE	REACH STORM DRAINPIPE	VOLUME	VOLUME RECOVERED	SPILL RATE	WHERE FAILURE OCCUR	DATE	Overall Spill Description
City Of Imperial Beach CS	748982	2	600 Palm Ave	600 Palm Avenue	Imperial Beach	91932	No	No	15	0	0	clean out	1/31/2010	<Debri-General> caused 15 gallons of sewage to spill from <Manhole;seeping from the clean out in front of the liquor store in the Silver Strand Plaza> at <600 Palm Ave> to <Street/curb and gutter>. No surface water body affected.; Cleaned-up (mitigated effects of spill)
City Of Imperial Beach CS	748651	1	1128-1130 12th Street	1128-1130 12th Street	Imperial Beach	91932	Yes	Yes	900	4	0	Private Lateral	1/14/2010	; Educated and informed the property owner; Tijuana River Estuary; Na; No; 40198.5833333333; Using the vactor truck; the street was pressure washed and sanitized with heat.; Cleaned-up (mitigated effects of spill);Contained all or portion of spill; Private lateral that was clogged with debris.
City Of Imperial Beach CS	748334	2	1260 Calla Ave	1260 Calla Avenue	Imperial Beach	91932	No	No	30	30	0	Private Lateral	1/13/2010	; Resonded to call and identified a private lateral spill. Had the property management turn the water off to the building and call a plumber. The City contained and cleaned up all of the spill that reached the street and curb gutter.; Cleaned-up (mitigated effects of spill);Contained all or portion of spill
City Of Imperial Beach CS	748204	1	7th Stree and Basswood	7th Street	Imperial Beach	91932	Yes	Yes	300	0	0	Main	1/7/2010	<Grease deposition (FOG);Spill occured in a residential neighborhood where there was no imput of grease from commercial businesses.> caused 300.0 gallons of sewage to spill from <Manhole> at <7th Stree and Basswood> to <Storm drain;Street/curb and gutter;Other (specify below);The spill reached the storm drain system. Once the plug was cleared the Sewer division pumped out the storm drain catch basin and recovered some of the spill; however; most of the spill made it into Pond 10A on the south end of San Diego Bay where it was unrecoverable.>. Surface water body affected.; Adjusted schedule/method of preventive maintenance; Pond 10A; NA; No; 40185.3541666667; Once the plug was cleared the Sewer division pumped out the storm drain catch basin and recovered some of the spill; however; most of the spill made it into Pond 10A on the south end of San Diego Bay where it was unrecoverable.; Restored flow;Other (specify below); Spill occured in a residential neighborhood where there was no imput of grease from commercial businesses.
City Of Imperial Beach CS	746798	2	753 13th Street	753 13th Street	Imperial Beach	91932	No	No	15	15	0	Camper Trailer	11/14/2009	; No affect/impact to receiving waters; Cleaned-up (mitigated effects of spill);Contained all or portion of spill;Returned all or portion of spill to sanitary sewer system; Sewage spilled as a result of the resident disconnecting the camper trailer's drainage piping; Blockage in resident's camper trailer plumbing system
City Of Imperial Beach CS	745493	2	Fern Ave - MH 434	Fern Avenue	Imperial Beach	91932	No	Yes	75	75	0	Main	10/8/2009	(Debri-General) caused 75 gallons of sewage to spill from (Manhole) at "Fern Ave - MH 434" to (Storm drain) . No surface water body affected.; Spill did not reach receiving waters. All fluids were contained within storm drain pipe; Cleaned-up (mitigated effects of spill);Contained all or portion of spill;Restored flow;Returned all or portion of spill to sanitary sewer system
City Of Imperial Beach CS	741943	2	MH 168	856 Seacoast Drive	Imperial Beach	91932	No	No	5	5	0	Main	7/18/2009	Spill occurred at manhole #168. Approximately 5 gallons of liquid seeped from the mahole cover. The spill was due to a failure at pump station 1B.; Spill did not reach receiving water; Cleaned-up (mitigated effects of spill);Contained all or portion of spill;Restored flow;Returned all or portion of spill to sanitary sewer system

Attachment 7-2

City of Imperial Beach

Field Screening and Water Sample Collection Standard Operating Procedure

January 5, 2010

Attachment 7-2

INTRODUCTION:

Under the Municipal Storm Water Permit (Order No. R9-2007-0001), the City is required to conduct water quality monitoring of urban runoff to identify, locate, and eliminate potential sources of pollutants that are either intentionally or inadvertently discharged into the City's municipal separate storm sewer system (MS4). This Standard Operating Procedure covers the procedures on conducting field observations, filed screening monitoring, and laboratory analytical sampling, which is required under Order No. R9-2007-0001. Investigative procedures for determining illegal discharges and source identification are not covered in this S.O.P., but are referred to in the 2008 City of Imperial Beach Jurisdictional Urban Runoff Management Program and in the 2010 City of Imperial Beach Dry Weather Monitoring Program.

FIELD SCREENING PROCEDURE

Field screening consists of filed observations, flow measurements, and field analysis of selected water quality parameters. Field screening will occur at all locations having ponded or flowing water. Water quality samples may also be sent to a professionally certified laboratory for analysis. The procedures for collecting laboratory samples are covered in the next section of this S.O.P. Visual observations will also be made at each site using the standardized copermittee field data sheet and trash assessment form. The following procedure is applicable for all urban runoff field screening:

1. Gather all necessary equipment and supplies (See attached Sampling Equipment Checklist)
2. Perform any equipment calibration before each sampling event and test the viability of test kit reagents. Refer to the equipment's manual.
3. Mobilize to the water quality monitoring location.
4. Take a picture of the sampling point and other areas of interest. For example; a picture of the outfall and drainage area to record pollutants discharged downstream.
5. Make visual observations of the sample location including general site description, atmospheric conditions, and runoff characteristics. Visual observations can be recorded on the San Diego Copermittees Monitoring Field Data Sheet. Additionally, make qualitative assessment of trash using the Copermittees Trash Assessment Form. (See attached Dry Weather Monitoring Field Datasheet and 2009 Trash Assessment Form).
6. Wear gloves during all sample collection.
7. At each site with ponded or flowing water, collect grab samples for analysis with the field test kit. Grab samples may be collected by hand, with the bailer method, or sampling pole depending on the site location.

Attachment 7-2

Note: Field screening should be conducted at locations that have ponded or flowing water. Conductivity may be measured to determine if the water source is tidal or urban runoff in nature. Urban runoff normally has conductivities of 2 mS/cm or less. Salt water normally has high conductivities (i.e. 20- 40 mS/cm). Other factors might need to be considered in determining the source of the water. Water samples should **not** be screened or collected if tidal water is present.

8. Measure Flow Rate. If there is no flow check the appropriate "water flow" category (ponded, dry or tidal) on the Dry Weather Monitoring Field Datasheet. Place a container with a known quantity (ex. 1000 milliliter beaker) in the flow stream and record the time it takes to fill the container. Use a large container (ex. 5 gal bucket) to measure very high flow rates, common during the wet weather season. Record information on the Field Datasheet. Convert results to gallons per minute (gpm).
9. Prior to field screening measurements rinse all equipment probes 3x with the sample medium. Measure Temperature, Turbidity, PH, Conductivity, NH_3N, NO_3N, Ortho-PO_4. Measure Temperature and Turbidity followed by the remaining parameters. Follow measurement procedures listed in the sampling equipment manuals. Record all measurements on the Field Data Sheet.
10. Store all ampules used in testing in a small tightly secured container. Dispose of ampules following the disposal requirements listed in the testing manuals or Materials Safety Data Sheets.

WATER SAMPLE COLLECTION PROCEDURE FOR LAB ANALYSIS

The City also collects and sends off urban runoff samples for laboratory analysis. The City's Dry Weather Monitoring Program requires that at a minimum 25% of the locations with ponded or flowing water be tested for additional contaminates at an EPA-certified laboratory. At a minimum the following contaminates will be tested: a) dissolved cadmium, copper, lead, and zink; b) oil and grease; c) bacterial indicators; D) total hardness; E) organophosphate; F) pesticides –diazinon and chlorpyrifos.

1. Don safety glasses and latex gloves.
2. Ensure laboratory supplied sample containers match the analyte that is being sampled. Check integrity of containers and replace those that are defected.
3. With a fine point sharpie write the appropriate information on all sample container labels (Sample Date, Sample Time, Location, Preservative, etc.). Affix an appropriate label if a label does not exist.
4. Tape around labels with transparent tape.
5. Slowly fill a clean and rinsed (w/ sample medium 3x) High Density Polyethylene container (large beaker or sampling pole/beaker) with the sample medium. This container will be used to transfer the sample medium to the laboratory supplied sampling containers. Direct filling technique (no transfer container is used) may

be used during appropriate flow conditions, but caution is needed to prevent overspill of preservative. Refer to the notes below.

Note: *Check sample bottles to see if they contain any preservatives. Preserved sample containers should **not** be overfilled since this may result in the dilution of the preservative.
***Samples for Oil and Grease analysis should be collected at the top of the water surface since hydrocarbons, which are less dense than water, float at the top. This can be done by skimming the surface with the transfer container.

6. Slowly transfer the sample medium to the appropriate laboratory supplied container. The appropriate sampling containers are as follows:

Contaminate	Sampling Bottle
Hardness, Metals, and Phosphorus	Plastic HNO3 bottle, separate bottle for phosphorus
Pesticides/Organophosphate	1L glass bottle w/out HCL
Oil and Grease	Glass 1L with HCL
MBAS	Plastic bottle under pressure
Bacteria	Preservative plastic bottles
Ammonia	With H2SO4 preservative
Nitrate	Additional bottle with no preservatives

7. Ensure all sample container covers are properly secured to prevent sample spillage. Place all sample containers into a zip-lock bag(s) and seal.
8. Place bag(s) on ice in cooler.
9. Complete a Chain of Custody Form (See Attached).
10. Decontaminate all HDPE transfer containers, graduated cylinders, and equipment probes following the Decontamination Procedure listed in this S.O.P.
11. Site breakdown: Ensure manhole or other access points are locked and/or secure. Remove debris from site and ensure all equipment is turned off.
12. Transport samples to a designated Laboratory. Relinquish samples to the appropriate personnel and retain a copy of the C.O.C for your records.

Note: Bacteria samples have a holding time of 6 hours. Samples should be transported to the Laboratory within 4 hours after sample collection.

Attachment 7-2

DECONTAMINATION PROCEDURES:

Decontaminating field screening equipment:

1. Using a small spray bottle filled with de-ionized (DI) water, rinse all equipment probes.

2. For a more thorough clean use a small spray bottle with a mixture of phosphate free liquinox and water. Rinse all small graduated cylinders (used with Chemetrics Sampling Kits) with a combination of phosphate free soap (liquinox) and water. Next, rinse cylinders with distilled or DI water using a designated pressurized water sprayer.

3. Dry containers, wrap completely with aluminum foil, and store in a clean storage bin.

QUALITY ASSURANCE/QUALITY CONTROL

The City of Imperial Beach may implement several types of QA/QC measures to assess the accuracy and precision of field and laboratory analysis. Additional samples such as replicates, field blanks, laboratory blanks, duplicates, or spiked samples may be collected during monitoring events. These samples are optional and are used to ensure the consistency and accuracy in the analytical results.

The City uses an ELAP certified lab- Enviro Matrix Analytical, Inc. for all laboratory analysis. Analytical methods and detection limits are included in all laboratory reports. As an ELAP certified lab, Enviro Matrix performs all the necessary QA/QC measures to ensure consistency and accuracy.

Replicates

Replicate samples are used to assess laboratory or field precision. They may be collected in the field in on container and split into two samples for analysis. Sample results should be within an acceptable standard deviation.

Field Blanks

Blanks are used to identify errors or contamination in sample collection and analysis. Field blanks are prepared by filling normal sample bottles with DI water and then submitting them to the laboratory with the normal batch of samples for analysis. Field blanks should be noted and marked with special notation (such as “B”) that indicates they are blanks. Analysis should then be performed with the regular samples. Lab analysis should result in non-detection of analytes.

Attachment 7-2

Laboratory Blanks

Laboratory blanks are similar to field blanks with the distinction of being prepared and processed in the laboratory. The blank is used to identify errors or contamination in the laboratory analysis method or contaminates present in the laboratory environment.

Duplicates

Duplicates are used to estimate sampling and laboratory analysis precision. An internal field duplicate is an additional sample collected at the same time/place by the sampler. The duplicate is labeled as a regular sample but with special notation (such as "D") that indicates it is a duplicate. The duplicate is then analyzed with the regular samples. Lab analysis should produce comparable results for duplicates and regular samples.

Spiked Samples

Spiked samples are used to validate whether the laboratory method can accurately recover an artificially contaminated sample with a known amount of an analyte. The volume of the added spike should be small compared to the volume of the sample to which is adder.

GLOSSARY OF TERMS

Accuracy: Conforming closely to an exact value or a standard.

Ammonia: An inorganic form of nitrogen produced through bacteriological processes, decay of dead organisms, excretion of waste products by living animals, and fertilizer manufacturing. In Water, ammonia dissociates and exists in equilibrium of un-ionized and ionized ammonia. Determining how much of the total ammonia is in the un-ionized and ionized forms is important because organisms have different sensitivities to the different forms. The way in which ammonia is partitioned between the two forms is dependent on pH and temperature.

Beneficial Uses: The uses of water necessary for the survival or well being of man, plants, and wildlife. These uses of water serve to promote tangible and intangible economic, social, and environmental goals. "Beneficial Uses" of the waters of the State that may be protected against include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. "Beneficial Uses" are equivalent to "Designated Uses" under federal law. [California Water Code Section 13050(f)].

Biological Oxygen Demand (BOD): A measure of the amount of biodegradable organic matter present in an aquatic system or water sample. Low levels of BOD are always present in natural waters, but when large amounts are introduced, bacteria growth is stimulated. Because bacteria require oxygen to metabolize organic matter, the

expanding bacterial populations create a large demand for dissolved oxygen, and as a result, DO levels decline.

Chain of Custody (COC): A form that documents who has had authority and control over the samples from the time of collection to the time of analysis.

Chlorpyrifos: An organophosphate used in insecticides for agricultural applications, extermination, and residential lawn treatment.

Copper: Copper is a natural occurring metal that has historically been used in a variety of products. Copper is used in the manufacturing of electronic equipment, but also as a product used in automobiles (e.g., brake pads) and building construction (e.g., piping and wiring). Additionally, copper has a wide spectrum of effectiveness against the many biological agents of timber and fabric decay. It renders them unpalatable to insects and protects them from fungus attack. Copper sulphate has been in use since 1838 for preserving timber and is today the base for many proprietary wood preservatives. Copper is also present in some algaecides used in fountains, spas and swimming pools.

Diazinon: An organophosphate used in agricultural applications and residential control of insects indoors and outdoors.

Enterococcus: A subgroup within the fecal streptococcus group. These bacteria are distinguished by their ability to survive in salt water, and in this respect they more closely mimic many pathogens than do other bacteriological indicators. Enterococci are typically more human-specific than the larger fecal streptococcus group, and seem to be consistently associated with warm blooded animals subsequent diseases. EPA recommends enterococci as the best indicator of health risk in salt water used for recreation.

Environmental Laboratory Accreditation Program (ELAP): A division of the California Department of Health Services that provides certification to qualified laboratories.

Fecal Coliform: A specific subgroup of total coliform bacteria. These organisms are separated from the total coliform group by their ability to grow at elevated temperatures, and are associated only with the fecal material of warm-blooded animals. Fecal coliform bacteria indicate the presence of sewage contamination in a waterway and the possible presence of other pathogenic organisms that can exist in fecal material. The presence of fecal coliform bacteria is an indicator that potential health risk exists for individuals exposed to contaminated water.

Heavy Metals: Copper, zinc, lead, mercury, cadmium, and chromium are all regarded as "heavy metals." Depending on their concentrations, heavy metals can be toxic pollutants that are hazardous to aquatic biota. Dissolved metals usually occur as cations, which tend to form complexes with anions to produce different chemical "species." This

is important because the uncomplexed "free ion" is often more toxic than the complexed ion. The percentage of total metal ion that is "free" varies with the chemical properties of the water (i.e., pH).

Holding Time: Holding time is the time between sample collection and the time that sample analysis must begin. Exceedances of holding times will result in data being flagged and may contribute to inaccurate sample results.

Illegal Discharge (ID): A point source discharge of pollutants to the MS4, which is not comprised entirely of stormwater and not authorized by a NPDES permit. Wash water, sediment, spilled chemicals, and other pollutants allowed to enter the MS4 either intentionally or unintentionally contribute to the degradation of the local water quality. Illegal discharges include sewage spills. Releases from the sanitary sewer or private laterals can allow pathogens, ammonia, detergents, and other contaminants to enter the MS4.

Illicit Connections (IC): Conveyances that have been illegally connected to the MS4 system. These connections provide pathways for pollutants to enter the MS4. Improperly installed or defective rain diversion systems or devices that release pollutants into the stormwater conveyance system are also considered illicit connections.

Mercury: Mercury is a naturally occurring persistent, bioaccumulative metal that does not degrade in the environment. Historically, mercury has been used in a variety of products. In 1976, U.S. consumption of mercury was 2240 metric tons, and since that time, the consumption of mercury in the US has drastically decreased to 346 metric tons in 1997 (USGS, 2002). Primary among the over 3000 historical industrial uses in the US were battery manufacturing and chlorine-alkali production. Paints and industrial instruments have also been among the major uses. Until paint manufacturers agreed to eliminate the use of mercury in interior paints, 480,000 pounds of mercury were used in paints and coatings each year. Mercury is also used in laboratories for making thermometers, barometers, diffusion pumps, and many other instruments, including mercury switches and other electrical apparatuses. Mercury is used as an electrode in some types of electrolysis and in some types of batteries (mercury cells). Gaseous mercury is used in mercury-vapor lamps (e.g., fluorescent tubes) and advertising signs. Mercury is also the basis of dental amalgams and preparations, and can be a byproduct of burning fossil fuels and refining petroleum.

Municipal Separate Storm Sewer System (MS4): A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, natural drainage features or channels, modified natural channels, man-made channels, or storm drains) that is owned or operated by any public body having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes. It is designated or used for collection of conveying storm water.

Attachment 7-2

Nickel: Like mercury and copper, nickel is a naturally occurring hard, malleable, ductile, silvery-white metal that is used in alloys, magnets, coinage, and stainless steel. Nickel is also used for armor plate, plating, and produces a green color in glass. Nickel is an alloy metal, and its chief use is in the nickel steels and nickel cast irons, of which there are many varieties. It is also widely used for many other alloys, such as nickel brasses and bronzes, and alloys with copper, chromium, aluminum, lead, cobalt, silver and gold.

Nitrates: The chemically stable form of inorganic nitrogen in natural water. Nitrates occur in almost all aquatic systems, and are not considered to be a water contaminant at low concentrations.

Non-point Source Discharge: Discharge from a diffuse pollution source (i.e., without a single point of origin or not introduced into a receiving water from a specific outlet).

Non-Storm Water Discharge: Any discharge to a storm drain system or receiving water that is not composed entirely of storm water.

Nutrients: Any substance assimilated by living things that promote growth. The term generally refers to nitrogen and phosphorus in wastewater, but is also applied to other essential and trace elements.

Orthophosphate (Ortho-P): Sometimes referred to as soluble reactive phosphorus (SRP) because phosphate in this form is a readily available nutrient and is easily metabolized by green plants. Its presence in water can contribute to water pollution problems such as algal blooms and aquatic weed growth. Waters having high levels of Ortho-P are susceptible to eutrophication problems especially in warmer seasons of the year.

Outfall: The point source where a municipal storm sewer discharges to waters of the United States.

PBDEs: Polybrominated diphenyl ethers (or PBDEs) are flame-retardants in the sub-family of the brominated flame-retardant group. They have been used in a wide array of household products, including fabrics, furniture, and electronics. There are three main types, referred to as penta, octa and deca for the number of bromine atoms in the molecule. The manufacture, distribution and processing of products containing pentabrominated diphenyl ether (pentaBDE) and octabrominated diphenyl ether (octaBDE) flame retardants were prohibited in California as of June 1, 2006. This prohibition was prompted by findings that exposures to PBDEs are widespread, and may pose health risks.

PCBs: Polychlorinated biphenyls are mixtures of up to 209 individual chlorinated compounds (known as congeners). PCBs were manufactured in the United States and used widely from the late 1920s through the 1970s. Due to their non-flammability,

chemical stability, high boiling point and electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications including electrical, heat transfer, and hydraulic equipment; as plasticizers in paints, plastics and rubber products; in pigments, dyes and carbonless copy paper and many other applications. Because of their persistent qualities, and physical and chemical characteristics, PCBs are found in environmental media worldwide.

pH: A potentially critical factor in aquatic environments that can influence the chemistry and biology of the system. It can affect the solubility of chemical substances, chemical equilibria, availability of nutrients, relative toxicity of environmental contaminants, and the leechability of trace elements (i.e., cadmium, lead, copper, and zinc) from sediments and suspended material. The normal pH of surface marine waters is 8.1.

Pyrethroid Pesticides: Pyrethroids are a category of insecticides that have recently gained a large market share of the overthe- counter insecticides that are used in urban areas (TDC Environmental, 2003). Pyrethroids are usually broken down by sunlight and the atmosphere in one or two days, and do not significantly affect groundwater quality, although surface water quality effects have been documented (Amweg and Weston 2006).

Sanitary Sewer: Underground pipes that carry only domestic or industrial wastewater, not storm water.

Sediment: Organic or inorganic material that is carried by or suspended in water and that settles out to form deposits in the storm drain system or receiving waters.

Specific Conductance (Conductivity): A measure of the ability of water to conduct electricity. Conductivity is dependent on the concentration of ions in water, and it is thus a rapid method of estimating the total dissolved solids (TDS) content of a water supply.

Conversion: mS/cm x 1 000 = µS/cm

Absolute pure water - 0.055 µS/cm
Distilled water - 0.5 µS/cm
Mountain water - 1.0 µS/cm
Most drinking water sources - 500 to 800 µS/cm
Sea water - 56 mS/cm (56000 µS/cm)
Max for potable water - 1055 µS/cm

Storm Drain Inlet: A drainage structure that collects surface runoff and funnels it into the conveyance system.

Storm Water (or Stormwater): Urban runoff and snowmelt runoff consisting only of those discharges that originates from precipitation events. Storm water is the portion of

precipitation that flows across a surface to the storm drain systems or receiving waters. In general, runoff increases as the perviousness of a surface decreases. During precipitation events in urban areas, rain water picks up and transports pollutants through storm water conveyance systems, and ultimately to a receiving water body.

Storm Water Drainage (Conveyance) System: Streets, gutters, inlets, conduits, natural or artificial drains, channels and watercourses, or other facilities that are owned, operated, maintained and used for the purpose of collecting, storing, transporting, or disposing of storm water.

Surface Runoff: Precipitation, snow-melt or irrigation water that flows off of a surface when rainfall exceeds the rate at which it can infiltrate the surface or be stored in small surface depressions.

Surfactants (MBAS): Surfactants are substances that are typically found in cleaning chemicals and detergents. These substances operate by preventing dirt and debris from adhering to items. When introduced to the environment, surfactants can negatively impact an organism's normal biological processes.

Temperature: A physical parameter of water quality that is necessary in order to assess the significance of other parameters and to calculate the values of parameters that vary with temperature. It has an important influence on water density, DO saturation, the solubility and toxicity of constituents in water, pH, specific conductance, rate of chemical reactions, biological activity, and the type of biota found in an area.

Total Coliform: A natural part of the microbiology of the intestinal tract of cold- and warm blooded animals, including man. Because they are relatively easy to culture in the lab, the total coliform group has been selected as the primary indicator bacteria for the presence of disease causing organisms. If large numbers of coliforms are found in the water, there is a high probability that other pathogenic bacteria or organisms may be present.

Total Dissolved Solids (TDS): Inorganic salts and small amounts of organic matter that are dissolved in water. Potential sources include natural inputs, sewage, urban runoff, and industrial wastewater.

Total Hardness: A measure of the cations, most commonly calcium and magnesium that are dissolved in water. Water hardness increases with an increasing concentration of cations. Port JURMP Appendix G – Field Sampling Manual 26

Total Organic Carbon (TOC): TOC is associated with decaying organic matter. It is generally present in elevated levels when other harmful organic compounds are present. Testing for TOC is generally an effective tool for assessing the potential for these other harmful compounds.

Attachment 7-2

Total Suspended Solids (TSS): TSS consists of any particles or substances that are neither dissolved nor settled in a water sample. They can originate from silt, decaying organic matter, industrial wastes, or sewage. In high concentrations, the particles result in turbid water.

Turbidity: Turbidity is a measure of water cloudiness, or the concentration of suspended solids in the water column. High levels of turbidity can block light from reaching submerged vegetation, trap infra-red (heat) waves which subsequently increase water temperature, and can result in an overload of particulates to filter-feeding organisms.

Water Quality Standards: The water quality objectives necessary to protect the beneficial uses of a water body.

Attachment 7-3

City of Imperial Beach 2010 Dry Weather Monitoring Program

May 1, 2010

1.0 Introduction

In accordance with the Receiving Waters and Urban Runoff Monitoring and Reporting Program No. R9-2007-0001 Section II.B.3., the City of Imperial Beach (City) has developed a dry weather analytical and field screening monitoring program as part of its JURMP. The program aims to detect and eliminate illicit connections and illegal discharges to the municipal separate storm sewer system (MS4) during the dry season by conducing (1) field observations; (2) field screening monitoring; and (3) analytical monitoring at selected stations. The results will provide the City with another tool to further identify and eliminate illegal dischargers and connections into the MS4 system.

2.0 Municipal Separate Storm Sewer (MS4)

The City maintains a GIS database of the MS4 that includes hydrologic subunits, receiving waters, sub-drainage areas, storm drains, MS4 outfalls, dry weather monitoring outfall locations, and alternative monitoring locations.

Imperial Beach is located in the southwestern portion of San Diego County and includes a total area of 2755 acres that falls within two major hydrologic units: Otay HU 910.0 and Tijuana HU 911.0. The City's MS4 system collects runoff from roughly 1,400 acres of urban residential and light commercial land uses located in the northern portion of the City (Attachment – 2). This northern portion of the City is completely built out and only has an estimated 4 acres of potentially developable land. The land use in the southern portion of the City includes permanent open space and Navy property that is not maintained by the City. The land use characteristics are estimated as follows:

- Residential 1,019 acres (38%)
- Commercial 118 acres (4%)
- Industrial 0 acres (0%)
- Navy Property and Schools 484 acres (18%)
- Permanent Open Space 1,134 acres (41%)

The existing MS4 system consists of open surface gutters, drainage ditches, and reinforced underground concrete storm drains. The City has approximately 5 miles of underground storm drain lines and 117 catch basin inlets. The MS4 system conveys storm water to the Otay River, San Diego Bay, Tijuana River and Estuary, or the Pacific Ocean. During the dry season it is often the case that outfalls and other conveyance structures are found to be completely dry. Because of the City's low elevation and coastal location, many of the outfalls are also impacted by tidal flows, which require investigations and monitoring further up the storm drain line.

3.0 Dry Weather Monitoring Station Locations

3.1 Station Criteria

Dry weather urban runoff monitoring is one of several tools utilized by the City to identify illicit discharges and illegal connections to its MS4. City staff collects samples at various conveyance structures including storm drain outfalls, manholes, catch basins, and other areas where urban runoff is commonly found each year between May 1 and September 30 (the dry weather season).

The City modified its dry weather field screening and analytical monitoring stations based on a review of its past Dry Weather Monitoring Program. Prior to FY 2007-08, the City used a grid system to identify

monitoring stations. This proved to be inefficient because the City continually spent excessive amount of time and resources searching for urban runoff throughout the entire grid system, only to find that in many instances the stations were dry. This updated dry weather monitoring program diverges away from the past grid system to a non-random targeted approach, which is outlined in Order No. 2007-0001 (Receiving Waters and Urban Runoff Monitoring and Reporting Program). The City now conducts field screening and analytical monitoring at targeted non-random monitoring stations that provides a comprehensive coverage of the entire MS4 system.

3.2 Dry Weather Monitoring Locations

After a thorough analysis of the MS4 system, drainage basins, land uses, and past sampling experiences the City has selected six dry weather sampling sites that covers 65% of the total combined residential and commercial land use drainage areas in the City. If the coastal drainage areas that are served by the City's two storm drain diverters (Palm Ave and Date Ave) are subtracted from the land uses then the dry weather monitoring locations listed below cover 78% of the total residential and commercial drainage areas in the entire City.

Using guidelines written in the Receiving Waters and Urban Runoff Monitoring and Reporting Program No. R9 2007-0001 (II.B.3.a.), the City selected six sampling locations that best represents the land uses and spatial coverage of the entire MS4 system. These selected sites represent the furthest accessible outfall or manhole within each major drainage area and also includes all the major MS4 drainage lines in the City. Because of the low elevation in the City, most of the MS4 sampling outfalls are tidally influenced and therefore require an adaptive monitoring/sampling strategy. Even during low tides samples may need to be taken further up the storm drain line from manholes. Therefore, if an outfall is inundated by tidal water, field investigation will start at the furthest downstream manhole from the outfall location.

Outfall naming strategy is based on the Imperial Beach Storm Drain Master Plan Study (1991) where each storm drain line is assigned a letter and each man hole or catch basin is assigned a number. For example, the storm drain outfall on the K line represents the location site K-1. The first manhole upstream of the K outfall is K-2, second manhole K-3, and so forth.

The City may also decide to take additional dry weather samples from any alternative location where water is present. This includes the smaller storm drain lines at D, P, and S, and grabs samples from open surface drains or street gutters.

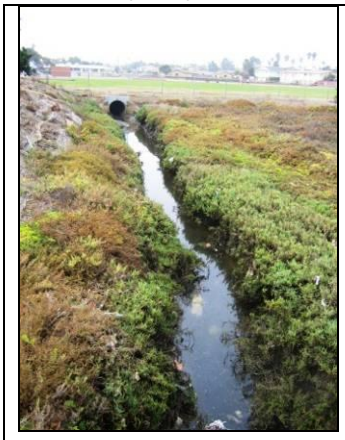
K-Outfall



Land Use and Site Information: The K-outfall collects runoff from approximately 120 acres of mixed commercial and residential land uses. The primary land use in the drainage area is residential with some contributing flow from Highway 75 (Palm Ave). The outfall discharges into the tidally influenced area of the lower Otay River. The outfall location is located between Florence and 12th Street along the San Diego Bay Shore bike path.

Sampling Location: Samples can be collected directly from the outfall location. The outfall gets partially inundated at high tide so tidal conditions will need to be considered when sampling.

H-Outfall, H-6, and H-12







Land Use and Site Information: The H-outfall collects runoff from 139 acres and has a mix of commercial and residential land uses. This outfall received a large portion of runoff from the City's commercial businesses located along Palm Ave. The outfall location is situated between Bayside Elementary, Public Works Yard, and Bay Shore Bike Path. The outfall discharges into a ditch that leads under the Bay Shore Bike Path and into the Otay River. This outfall is affected by tidal flows during all tides and therefore not an appropriate sampling location.

Sampling Location: The H-outfall is affected by tidal flows during all tides and therefore requires samples to be taken up pipe in a catch basin at site H-6 or from a manhole at site H-12. Site H-6 collects runoff into a ponded catch basin from the surrounding residential area. Site H-12 is a sampling location from a shallow manhole that collects flow from a commercial shopping center as well as flow from Highway 75.

E-1A and E-1B Outfall, E-8, and E-25







Land Use and Site Information: The E-1B outfall is collocated with E-1A outfall and shares a combined drainage area of 119 acres. Both storm drain lines run parallel to one another but provide storm water conveyance to uniquely different land uses. The E-1B outfall primarily drains Mar Vista High School and a small portion of the Imperial Beach Recreation Sports Park. The E-1A outfall primarily collects runoff from residential neighborhoods and some commercial from lower Palm Ave. The outfalls are located at the West end of Grove Avenue and discharge into the Tijuana Estuary.

Sampling Location: The E-1A outfall is affected by tidal flows during all tides and therefore requires samples to be taken up pipe from a manhole at site E-8. Sampling location E-8 is located behind the Baptist church in a city right of way off 5th St. The E-1B samples can be collected directly from the outfall location as well as a catch basin where water ponds in front of Mar Vista High School at site E-25.

F Outfall





Land Use and Site Information: The F outfall location is immediately adjacent to the E-1A and E-1B outfalls at the end of Grove Avenue and discharges into the Tijuana Estuary. The outfall drains runoff from 298 acres of residential and commercial land uses, as well as runoff from Imperial Beach Blvd.

Sampling Location: The F outfall is affected by tidal variations even at low tides and therefore requires samples to be taken up pipe. Samples can be collected at site F-48 at 11th and Imperial Beach Blvd. where runoff consists of mixed commercial and residential.

M-3 Catch Basin



Land Use and Site Information: The M-3 sampling location is a catch basin along the M-storm drain line that discharges into the Tijuana River. Access to the M-1 outfall is not possible due to Ream Field Navy Base. Samples are therefore taken at the M-3 catch basin before the flow enters onto Navy property. Sampling site M-3 captures runoff from 54 acres of residential land use and is located between 11th and 12 St on Iris.

Sampling Location: The M-3 sampling location collects runoff from open channels and surface flows from a residential area. Water does not pond in this catch basin and can only be sampled with flow.

4.0 Sampling Frequencies

In accordance with the Receiving Waters and Urban Runoff Monitoring and Reporting Program No. R9 2007-0001 (II.B.3.), the City will conduct dry weather monitoring at each site identified above during the period May 1 through September 30. Each site will be visited at least twice during the dry weather monitoring period. All site visits will include: field observations and trash assessment of outfall locations, field screening analysis at all locations where water is present, and lab analysis at a minimum of 25% of the sites. Dry weather monitoring will not be performed during a rain event or within 72 hours after the end of a rain event.

5.0 Field Screening and Laboratory Analytical Sampling

5.1 Procedures

Field screening and laboratory analytical sampling will be conducted in accordance with the City's Standard Operating Procedures (SOP). The City's SOP covers details on sample collection, equipment preparation and maintenance, QA/QC, COC forms, and guidance for completing field data forms. All field personnel will have a copy of this dry weather monitoring program and the SOP manual for reference during field investigations.

5.2 Field Screening

Field screening will consist of qualitative field observations, flow measurement, and field analysis of selected water quality parameters. Information will be recorded on a standard field data form (Attachment-3), trash assessment form(Attachment-4), and logged on the City's database. The field screening process will involve the following:

1. Qualitative Observations

Qualitative field observations will be made during each site visit using the standardized San Diego Stormwater Copermittees Dry Weather Monitoring Field Datasheet (Attachment-3). Observations will be recorded whether or not water is present at the site. These observations are intended to provide a general assessment of the site. The following observations will be recorded:

a) General Site Description
b) Atmospheric Conditions
c) Runoff Characteristics
d) Flow Estimation
e) Trash Assessment using the Regional Trash Assessment Form

2. Field Water Quality Analysis

If water is present then field screening samples will be taken using the dry weather monitoring field test kits. The City of Imperial Beach uses Chemetric field test kits and Hatch Turbidimeter while conducting field analysis. If water is observed to be ponded or flowing then a grab sample will be collected and analyzed for the following constituents:

a) Nitrate
b) Amonnonia
c) Reactive Phosphorous
d) Temperature
e) pH
f) Surfactants (MBAS)
g) Turbidity
h) Electro Conductivity

Field personnel will be adequately trained to achieve consistent and accurate water quality analytical results. Field instruments will be calibrated as needed and the variability of test kits will be checked periodically. The City may also analyze duplicate samples in the field to assess precision. In addition, field staff may submit periodic sample splits and blanks for laboratory analysis to assess the accuracy of field testing methods and/or equipment. Documentation of calibration and sampling records will be kept in order to maintain high level of quality control.

5.3 Laboratory Analytical Monitoring

Grab samples will be collected and submitted to an EPA-certified laboratory for analysis at a minimum of 25% of sites where flowing or ponded water is observed. At a minimum, the following constituents will be analyzed:

a) Dissolved Cadmium, Copper, Lead, and Zink
b) Oil and Grease
c) Total Hardness
d) Bacterial Indicators
e) Organophosphate
f) Pesticides (Diazinon and Chlorpyrifos)

Field staff will follow strict sampling and chain-of-custody protocols when collecting dry weather laboratory analytical samples.

5.4 Trash Assessment

In accordance with the Receiving Waters and Urban Runoff Monitoring and Reporting Program No. R9 2007-0001 (II.B.3.c.), an assessment of the amount and extent of trash will be conducted at each dry weather screening or analytical monitoring station. The evaluation of trash will include an area surrounding the MS4 and receiving waters. The amount and extent of trash will be estimated upon first glance of the site. A qualitative ranking of optimal, suboptimal, marginal, submarginal, or poor will be assigned to each site. In addition, sites will also be evaluated on whether there is a threat to aquatic and/or human health. To aid in the assessment of trash, the San Diego Copermittees have developed a regional trash assessment form for dry weather monitoring, which will be used by the City (Attachment-4).

6.0 Source Identification Follow-Up Investigations

The primary objective of the dry weather monitoring program is to detect and eliminate illicit connections and illegal discharges (IC/ID) to the MS4 as required in Section D.4.c of the Permit. The City has established an IC/ID program presented in Chapter 9 of the JURMP Document. An IC/ID investigation is triggered by exceedances of field screening and laboratory monitoring results or from exceedances of qualitative observations. When an exceedance is triggered, the City had two business days to conduct an investigation to identify the source of the discharge or provide rational as to why the discharge does not pose a threat to water quality and does not need further investigation. The criteria to determine if monitoring results or qualitative observations necessitate an IC/ID investigation are described below.

6.1 Action Levels

The action levels for initiating a source identification investigation for field screening and laboratory analytical parameters are summarized in Attachment-1. These action levels will provide guidance when interpreting results of field and laboratory sampling. However, there may be instances when exceedances in actions levels may be misleading as a result of natural conditions such as influence of ground water, tidal influence, results of existing physical condition, or time of day. The use of best professional judgment will be utilized when interpreting water quality data. When exceedances are discovered using field test kits, the City typically follows up with an immediate investigation upstream to identify the source. Similarly when laboratory analysis results in the exceedance of action levels, the City will conduct a follow up investigation within two working days of receiving laboratory results.

6.2 Qualitative Observations

Qualitative observations such as dead animals, strong odor, and visual observations may indicate that a discharge of pollutants has occurred and that serious water quality problems are present. Qualitative observations may indicate serious water quality problems when field and analytical monitoring results are within action level limits or not immediately available. These observations will help the City in assessing the health and safety of the site.

7.0 Elimination of Illegal Connections and Discharges

The City will follow guidelines for eliminating illegal discharges or connections set forth in Chapter 9 of the JURMP. Once the discharge has been detected and stopped, the City may utilize escalating enforcement actions to ensure that the responsible party does not continue to discharge into the MS4 and receiving waters. If the discharge is wide spread or poses an immediate and severe threat to the public or environment, then other agencies will be notified (FWS, Tijuana River National Estuarine Research Reserve, Department of Environmental Health, Fire Department, ect.). In the case of a sewage spill or other pollutants which endanger environmental health, the RWQCB will be notified within 24 hours of detection.

8.0 Program Assessment

The dry weather monitoring program will be evaluated annually prior to May 1st and get updated as needed. A summary of findings will be included in the City's Jurisdictional URMP Annual Report. The criteria for evaluating the effectiveness of the dry weather monitoring program will include the number of sites monitored, frequency of monitoring, frequency of observed dry weather runoff, number of field screening and laboratory samples collected, number of follow up investigations conducted, and number of pollution sources identified and eliminated.

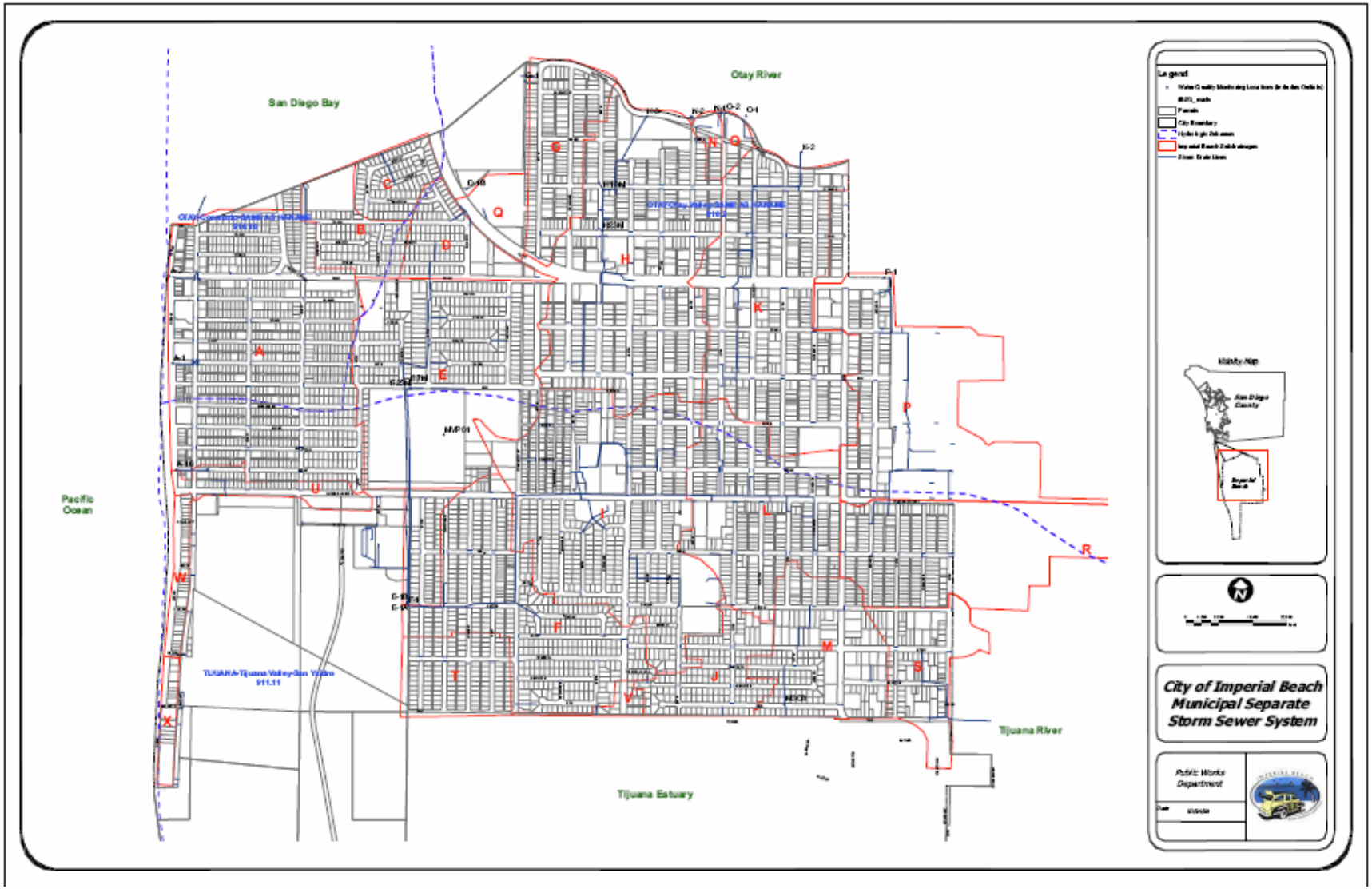
The City will use the annual assessment of the dry weather monitoring program to refine and focus its approach for the next dry season. Sampling locations that indicate the presence of contaminates may need to be monitored at a higher frequency, and monitoring locations that do not appear to have dry weather flows may be monitored less frequently.

Attachment-1

Table 6-1 Action Levels for Field Screening and Laboratory Parameters

Field Screening Analytes	Action Levels	Source / Notes
pH	<6.5 or >9.0	Basin Plan, with allowance for elevated pH due to excessive photosynthesis. Elevated pH is especially problematic in combination with high ammonia-nitrogen.
Orthophosphate-P (mg/L)	2.0	USEPA Multi-sector General Permit
Nitrate-N (mg/L)	10.0	Basin Plan and drinking water standards
Ammonia-N (mg/L)	1.0	Based on workgroup experience. May also consider unionized ammonia fraction
Surfactants (MBAS) (mg/L)	1.0	Basin Plan with allowance based on workgroup field experience and possible field reagent interferences
Turbidity (NTU)	Best Professional Judgment	WQOs relevant to inland surface waters are not available. Base judgment on channel type and bottom, time since last rain, background levels, and most importantly visual observations (e.g. unusual color and lack of clarity), and unusual odors.
Temperature (^oC)	Best Professional Judgment	Base judgment on season, air temperature, channel type, shading, ect.
Conductivity (mS/cm)	Best Professional Judgment	Values >5 mS/cm may indicate IC/ID however; EC maybe highly elevated in some regions due to high TDS groundwater exfiltation to surface water, mineral dissolution, drought, and sea water intrusion. Values < 0.75 mS/cm may indicate excessive potable water discharge or flushing.
Laboratory Analytes	**Action Levels**	**Source / Notes**
Oil and Grease (mg/L)	15	USEPA Multi-sector Feneral Permit. If petroleum sheen is observed, the sample should be collected from the surface. Visual observations may justify immediate investigation.
Diazinon (µg/L)	0.5	Response to diazinon and chlorpyrifos levels above 0.5 µg/L should focus education and outreach to potential dischargers in the targeted drainage basin. Highly elevated levels should be investigated aggressively as with other potential IC/IDs.
Chlorpyrifos (µg/L)	0.5	
Dissolved Cadmium (µg/L)	California Toxic Rule	Use California Toxics Rule, 1-hour criteria to determine appropriate action level for individual samples. Table provides benchmarks based on hardness and dissolved metals concentrations, For example, at 300 mg/L hardness the following action levels would apply: Cd – 14ppb; Cu – 38ppb; Pb – 209 ppb; and Zn – 297 ppb.
Dissolved Copper (µg/L)	California Toxic Rule	
Dissolved Lead (µg/L)	California Toxic Rule	
Dissolved Zinc (µg/L)	California Toxic Rule	
Total Coliform (MPN/100mL)	130,000	Action levels based on Copermittee Dry Weather Monitoring levels 2009.
Fecal Coliform (MPN/100MmL)	13,000	
Enterococcus (MPN/100ml)	7,000	

Attachment-2



Attachment-3

San Diego Stormwater Copermittees

Dry Weather Monitoring Field Datasheet

☐ **Routine Investigation** ☐ **IC/ID Follow-Up For** _____

GENERAL SITE DESCRIPTION (NAD 83 decimal degrees to 5th place)

Site ID		**Latitude**		**Watershed**	**Hydrologic Unit**	
Location		**Longitude**			**Hydrologic Area**	
Date		**TB Page**			**Hydrologic Subarea** (Optional)	
Time		**Observer**			**Discharge Area** (Optional)	

Land Use (Primary) (Check one only) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open

Land Use (Secondary) (Optional, greater than 10%) ☐ Residential ☐ Commercial ☐ Industrial ☐ Agricultural ☐ Parks ☐ Open ☐ None

Conveyance (Check one only) ☐ Manhole ☐ Catch Basin ☐ Outlet ☐ Concrete Channel ☐ Natural Creek ☐ Earthen Channel ☐ Curb/Gutter

ATMOSPHERIC CONDITIONS

Weather ☐ Sunny ☐ Partly Cloudy ☐ Overcast ☐ Fog
Tide ☐ N/A ☐ Low ☐ Incoming ☐ High ☐ Outgoing **Tide Height:**_____ft.
Last Rain ☐ > 72 hours ☐ < 72 hours
Rainfall ☐ None ☐ < 0.1" ☐ > 0.1"

RUNOFF CHARACTERISTICS

Odor	☐ None	☐ Musty	☐ Rotten Eggs	☐ Chemical	☐ Sewage	☐ Other
Color	☐ None	☐ Yellow	☐ Brown	☐ White	☐ Gray	☐ Other
Clarity	☐ Clear		☐ Slightly Cloudy	☐ Opaque		☐ Other
Floatables	☐ None	☐ Trash	☐ Bubbles/Foam	☐ Sheen	☐ Fecal Matter	☐ Other
Deposits	☐ None	☐ Sediment/Gravel	☐ Fine Particulates	☐ Stains	☐ Oily Deposits	☐ Other
Vegetation	☐ None	☐ Limited	☐ Normal	☐ Excessive		☐ Other
Biology	☐ None	☐ Insects ☐ Algae	☐ Fish ☐ Snails	☐ Mussels/ Barnacles	☐ Insect/ Algae	☐ Insect/ Snail ☐ Other

Water Flow ☐ Flowing ☐ Ponded ☐ Dry ☐ Tidal

Does the storm drain flow reach the Receiving Water? ☐ Yes ☐ No ☐ N/A

Evidence of Overland Flow? ☐ Yes ☐ No ☐ Irrigation Runoff ☐ Other: _____

Photo Taken ☐ Yes ☐ No **Photo #** _____

Field Screening Samples Collected? ☐ Yes ☐ No

Water Temp (°C)		NH_3-N (mg/L)		NO_3-N (mg/L)		Ortho-PO_4 (mg/L)	
pH (pH units)		TURB (NTU)		COND (mS/cm)			

Analytical Lab Samples Collected? ☐ **Yes** ☐ **No**

FLOW ESTIMATION WORKSHEETS

Flowing Creek or Box Culvert

Width		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

Filling a Bottle or Known Volume

Volume		mL
Time to Fill		sec
Flow		gpm

Flowing Pipe

Diameter		ft
Depth		ft
Velocity		ft/sec
Flow		gpm

COMMENTS: _____

Attachment-4

2009 Trash Assessment Form

SITE ID: _____ **DATE:** _____

LOCATION: _____ **TIME:** _____

OBSERVER: _____

PREVIOUS TRASH ASSESSMENT RATING (IF APPLICABLE): _____ ____

ESTIMATED AREA OF ASSESSMENT L X W (FT): _____ __

Amount and Extent of Trash	
EVALUATION OF TRASH INCLUDES*: ☐ **MS4** ☐ **RECEIVING WATER** ☐ **BOTH**	
☐ **Optimal**	On first glance, no trash visible. Little or no trash (<10 pieces) evident when evaluated area is closely examined for litter and debris.
☐ **Suboptimal**	On first glance, little or no trash visible. After close inspection small levels of trash (~10-50 pieces) evident in evaluated area.
☐ **Marginal**	Trash is evident in low to medium levels (~51-100 pieces) on first glance. Evaluated area contains litter and debris. Evidence of site being used by people: scattered cans, bottles, food wrappers, blankets, or clothing present.
☐ **Submarginal**	Trash distracts the eye on first glance. Evaluated area contains substantial levels of litter and debris (>100- 400) . Evidence of site being used frequently by people: many cans, bottles, food wrappers, blankets, or clothing present.
☐ **Poor**	Site is significantly impacted by trash. Evidence of trash accumulation behind a constriction point or evidence of excessive dumping. Evaluated area contains substantial levels of litter and debris (>400 pieces).

* In areas where receiving water is accessible and adjacent to dry weather site, trash evaluation must include receiving water.

Site Evaluation for Potential Threat to Human Health and/or Aquatic Health (applies to area of assessment)	
☐ **Potential Threat to Human Health**	Presence of more than one of, or a combination of the following items: hypodermic needles or other medical waste; used diapers, animal waste, or human feces; any toxic substance such as chemical containers, vehicle batteries, or fluorescent light bulbs. Alternatively high prevalence of any one item (e.g. Greater than 50 items that present a puncture or laceration hazard); or observations of mosquito larvae directly observed in water ponded due to trash. All subject to best professional judgment. Describe potential threat on back of form.
☐ **Potential Threat to Aquatic Health**	Large amount* of persistent, buoyant litter such as: hard or soft plastics, balloons, Styrofoam (equivalent to a cup), or large amount of settleable, degradable and nontoxic debris; cigarette butts. Presence of more than one of, or a combination of the following items: toxic items such as vehicle batteries, or spray cans; any evidence large clumps of yard waste from landscape maintenance such as yard waste or dumped leaf litter (not naturally occurring). All subject to best professional judgment. Describe potential threat on back of form. *Large amount is defined as 50 pieces or more.

Attachment-4

- **Complete the following section for Submarginal, and Poor Evaluations ONLY**

Type	Ranking or Count by Type *	Potential Route (check up to 2)				Potential Source (check up to 2)						
		Dumping	Littering	Upstream	Unable to determine	Household	Construction	Commercial	Industrial	School	Transient	Unable to determine
Automotive												
Biohazard Waste												
Business Related												
Cigarette Butts												
Construction												
Fabric/Clothing												
Food Packaging												
Food Waste												
Household												
Shopping Carts												
Toxic												
Yard Waste												

* Only rank the types of trash present in evaluated area from 1 through 12 (1 is most prevalent – 12 is least prevalent).
DO NOT rank types of trash that are not present in evaluated area.

Comments:

Attachment 7-4

IDIC NUMBER	DATE	REFERRAL SOURCE	COMPLAINT/ OBSERVATION DESCRIPTION	CONSTITUENT	LOCATION	RECEIVING WATER	VIOLATION VERIFIED	VIOLATOR TYPE	VERBAL WARNING	INFORMATIVE LETTER (Date)	NOV (Date)	CITY CLEANUP	COST RECOVERY AMOUNT	CORRECTIVE ACTIONS IMPLEMENTED
1	7/1/2009	PW-Field	Power washing parking lot	Wash Water	9th and Palm	Otay River	Yes	Construction	Yes			No		Contractor was sweeping water from the parking lot into the vegetation upon arrival. He was informed that the water could not enter the storm drain and encouraged to continue sweeping it into the vegetation. He was also informed of current regulations to capture the water if powerwashing.
2	7/2/2009	City Hall	Power washing dry paint	Wash Water	IB Elementary School 650 IB Blvd.	Tijuana Estuary	No	Schools	No			No		Environmental Specialist visited elementary school. Found painters and power washer, but no evidence of runoff.
3	7/2/2009	PW-Env	Power washing gymnasium bathrooms	Wash Water	Mar Vista High School	Tijuana Estuary	Yes	Schools	Yes			No		School employees were asked to prevent water from entering the storm drain with a barrier. Employees were thanked for sweeping water into bathroom drains, which they were already doing, and educated about storm drains.
4	7/6/2009	PW-Env	Loyd Pest Control discharging water sock used for footings on termite tents	Potable Water	300 Block Daisy	Pacific Ocean	Yes	Mobile	Yes			No		Loyd Pest Control workers were removing a termite tent over a house. A plastic tube (sock) of water is use to secure the footing of the termite tent. After each project water is discharged. This may be a region issue to address with the copermittees. Corrective actions were made to educate and inform.
5	7/10/2009	General Public-Hotline	Homeless encampment behind Bayside School with needles	Trash & Debris	Bayside School	Otay River	No	Other	No			Yes		Superintendent of Baside School contacted the City about a homeless encampment between the school fence and PW property. The PW-env responded immediately to clean up needles, trash, and debris.
6	7/18/2009	PW-Field	Field overflow from failure at pump station 1B	Field Spill	1098 Seacoast	Pacific Ocean	No	Municipal	No			Yes		Pump station 1B failed and spilled 5 gallons of sewage. All overflow was contained and cleaned up with the vacuum truck.

IDIC NUMBER	DATE	REFERRAL SOURCE	COMPLAINT/ OBSERVATION DESCRIPTION	CONSTITUENT	LOCATION	RECEIVING WATER	VIOLATION VERIFIED	VIOLATOR TYPE	VERBAL WARNING	INFORMATIVE LETTER (Date)	NOV (Date)	CITY CLEANUP	COST RECOVERY AMOUNT	CORRECTIVE ACTIONS IMPLEMENTED
7	7/20/2009	PW-Env	Grass from yard work being blown into street	Green Waste	200 I.B. Blvd	Tijuana Estuary	Yes	Residential	No	7/20/2009		No		Residents were not home. A letter was left in their mailbox. Tony Serrano reported violation and took pictures. Grass dispersed by the time Env department investigated, but still evident.
8	7/20/2009	PW-Env	Tipped over portapotty	Field Spill	20 Date Ave	Pacific Ocean	No	Mobile	No			No		Portapotty company came out to clean up the spill. By the looks most of the spill was contained in the street. Any liquid that coupld have escapped into the storm drain would have been diverted at the Date Ave storm drain diverter.
9	7/20/2009	Code Enfoce ment	Resident doing construction making an illigal connection through a curb cut	Construction Debris	1370 5th St	Tijuana Estuary	Yes	Residential	Yes	7/20/2009	Stop Work Notice	No		Resident was given a stop work notice. The case was refered to PW. The Street supervisor contacted the owner and informed of City code and illigal connections to the storm drain system.
10	7/24/2009	PW-Env	Resident cleaning driveway with hose and letting copious amounts of water run into the street	Wash Water	Cheery Ave	Otay River	Yes	Residential	Yes			No		Residence was told to keep water on in grass and not let it run off into street. Resident was handed a brochure.
11	7/24/2009	PW-Field	A mess in the alley behind KFC	Potable Water	13th and Imperial Blvd		No	Fixed Commercial	No					"A big mess" was reported. The only runoff I witnessed upon investigation was from KFC. Appeared to be fresh water from condensation that had been dripping consistently for more than a few days.
12	7/29/2009	PW-Env	Thick auto oil spots in two locations on street in front of house	Auto Fluids	1430 California Street	Tijuana Estuary	Yes	Residential	No					

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13	7/29/2009	PW-Env	Water Runoff from Tree Cutting Cleanup	Potable Water	1137 5th Street/ Mobile Business Arriola Tree Services 585-2352	Tijuana Estuary	Yes	Mobile	Yes	No				Talked to manager of Arriola Tree Services and told him as a mobile business he needs to know that water runoff into the street is prohibited. Told him to direct water into the lawn or vegetated areas.
14	7/29/2009	PW-Env	Water into stormdrain	Potable Water	Seacoast Drive and Beach Ave	Tijuana Estuary	Yes	Mobile	Yes	No				Talked to two guys working. They said water runoff was Potable water, not wash water, and complained that the same thing happens when it rains. They knew they were supposed to be capturing wash water, which they said they were doing earlier. I told them it was illegal to let even Potable water run into storm drains and encouraged them to direct into lawn or put a barrier around the storm drain.
15	7/30/2009	PW-Field	oil container outside with no secondary containment	Oil & Grease	Cherry Ave Warehouse next to Public Works. "Express Appliance Delivery"	Otay River	Yes	Fixed Commercial	Yes	No				Spoke with woman at front desk. Explained that oil containers need to be stored inside in a secondary container. She appologized and said they should have taken oil directly to auto center to recycle as soon as they collected it. Workers changed oil in truck and then left it there in containers. She said she would take it to recycling within next few hours.
16	8/4/2009	PW-Field	cooking oil from Tin Fish leaking out of storage container and poor cleanup attempt with kitty litter	Oil & Grease	Alley behind Pier Plaza	Pacific Ocean	Yes	Fixed Commercial	Yes	No	No	No		Contacted the Tin Fish and passed the case onto the Port of San Diego for enforcement actions.
17	8/4/2009	General Public-Hotline	CalAm water main break	Potable Water	Delaware and Grove	Tijuana Estuary	Yes	Utility	Yes	No	No	No		Contacted CalAm and they reported to the water main break and cleaned up any debris left along the curb.
18	8/10/2009	PW-Env	Over Irrigation	Potable Water	284 Elm Street		Yes	Residential	No	8/10/2009	No	No		Letter

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19	8/10/2009	PW-Env	Kitty Litter and Oily Water in Street from Oil Spot Cleanup attempt	Multiple	1430 California Street		Yes	Residential	Yes	8/10/2009	No	No		Follow up from 07-29-09 letter request to clean up oil spots on street. Follow up investigation revealed attempted clean up, with water and kitty litter remaining in gutter. Knocked on door and spoke with child of resident. Sent a second letter asking them to pick up the kitty litter and use absorbent towels or pans to prevent further leaks.
20	8/10/2009	PW-Env	Heavy Oil Spots on Street	Oil & Grease	1341 5th Street		Yes	Residential	No	8/10/2009	No	No		Letter
21	8/10/2009	PW-Env	Heavy Oil Spots on Street	Oil & Grease	1353 5th Street		Yes	Residential	No	8/10/2009	No	No		Letter
22	8/11/2009	Code Enfoce ment	Sediment in curb and gutter from resident	Sediment	1120 13th St	Tijuana Estuary	Yes	Residential	Yes	8/11/2009	Yes	No		Code enforcement case. Contacted Mr Nona who also owns 13th St market about his rental property and tenants parking on the lawn and tracking dirt into the roadway. Proper education on stormwater and sediment made.
23	8/11/2009	PW-Field	Charity Car Wash	Wash Water	3rd and Palm	Diverter	Yes	Residential	Yes	8/11/2009	No	No		Just spoke with them about using non-toxic soaps. They were conducting car wash in parking lot and letting water run into small drains. Small drains said to lead to sewage outside old building. (see pics) They said they had called the city about car wash. I gave them a copy of our charity car wash letter for future reference.
24	8/12/2009	PW-Env	Oil spots in street	Oil & Grease	1054 and 1056 12th Street	Tijuana Estuary	Yes	Residential	No	8/12/2009	No	No		Letter and Pictures
25	8/12/2009	PW-Env	trash	Trash & Debris	1174 Imperial Beach Blvd	Tijuana Estuary	Yes	Residential	No	8/12/2009	No	No		Letter and Pictures

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26	8/12/2009	PW-Env	Sedimen in curb and gutter from over irrigation runoff	Sediment	13th and Calla apartment complex (1265-1299 Calla Ave) and New Triplex on Florence and Calla (1255 Calla, 1265 Calla, and 605 Florence)	Otay River	Yes	Residential	Yes	8/12/2009	No	No		Hand Delivered Letter and Pictues
27	8/13/2009	General Public-Hotline	Hosing down driveway, oil sheens in water going to storm drain 5 houses down.	Sediment	754 Hickory Ct.	Tijuana Estuary	No	Residential	No	8/13/2009	No	No		Spoke with the homeowner at 754 Hickory while investigating a misspoken address (755 Hickory). Therefore, I did not speak to him with the knowledge that he was the one in violation. I did not take any pictures. His house is completely under construction and he is doing the construction himself. There was evidence of sediment in the gutter and on the driveway, but no water runoff. He claimed to be aware that power washing the driveway is illegal. A storm drain inlet exists 5 houses downhill of his house in line with his gutter.
28	8/17/2009	General Public-Hotline	Street sweeper is missing the street	Sediment	1207 Downing St	Tijuana Estuary	Na	Other	Na	No	No	No		Contacted EDCO John Snyder to follow up on the street sweeping activities and to follow up with the resident
29	8/17/2009	PW-Field	Grass clippings in the street	Green Waste	1056 13th	Tijuana Estuary	Yes	Fixed Commercial	Yes	No	No	No		Contacted landscape company and required them to clean up grass clipings in the street. Also contacted KFC tolet them know their landcapers were blowing grass clippings into the street.

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30	8/17/2009	PW-Env	Over Irrigation	Potable Water	Sandpiper II Apartments 0110-1015 Calla Ave	Otay River	Yes	Residential	No					Wrote a letter, but waiting to find out the property management company associated with complex so I can mail letter. Barzal & Scotti Sandpiper 1333 Camino Del Rio South, #302 San Diego, CA 92108-3520 Tel. (619) 291-2230 Alt. (619) 481-2690
31	8/17/2009	PW-Env	greasy transmission and vehicle refuse dumped in alley	Trash & Debris	1380 East Lane	Tijuana Estuary	Yes	Residential	Yes	8/17/2009	No	No		When I arrived, a guy was loading the refuse into his truck and the homeowners were in the alley trying to communicate with him. Due to language barrier, it was difficult to determine why he was loading the refuse into his truck, but it's likely that he was the person who originally dumped it. The homeowner of the house bordering the alley is Judy Creveling. The person who picked up the refuse had a Baja License plate = BM-22-575 and reportedly lived at 1401 Lauden around the corner. No grease remained behind, just some rusted metal. (see pics)
32	8/17/2009	PW-Field	Pool Draining	Pool Water	9th and Calla	Otay River	Yes	Residential	No	No				No evidence of any wrong doing. Did not see pool water being discharged, but did see the water in the street. The water in the street looked murkey and gray, but no way of knowing if murkeyness was from pool water or street. The pool water at time of investigation looked clear and clean.
33	8/17/2009	PW-Field	Pile of dirt in Right of Way	Construction Debris	11th and Calla	Otay River	Yes	Construction	No	No	No	No		Approached construction manager and he said it would be removed within the hour. Debris was from digging up the streets associated with utility work.
34	8/17/2009	General Public-Hotline	4 Piles of Masonry Debris in alley	Construction Debris	Alley behind 1380 East Lane	Tijuana Estuary	Yes	Residential	No	No				Suzanne took pictures and put on list for EDCO pickup. Not sure exactly who is responsible, but residents at 1308 East Lane complained about it.
35	8/18/2009	PW-Env	Water runoff	Wash Water	9th and Palm	Otay River	Yes	Fixed Commercial						Will perform a commercial inspection

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36	8/20/2009	General Public-Hotline	Broken Sprinkler	Potable Water	363 Citrus	San Diego Bay	Yes	Residential	No	No	No	No		PW responded because resident broke sprinkler in the City right-of-way
37	9/3/2009	PW-Field	Poor BMP at KFC. Employees dumping wash water	Wash Water	1056 13th	Tijuana Estuary	Yes	Fixed Commercial	Yes	No	9/4/2009	No		
38	9/3/2009	General Public-Hotline	Over Irrigation	Potable Water	152 Date	Pacific Ocean	No	Residential	No	--	No	No		Report of over irrigation is still under investigation.
39	10/1/2009	PW-Field	hosing down sidewalk	Wash Water	564 13th	Otay River	Yes	Residential	No	10/5/2009	No	no		Sent letter informing resident of proper bmp's
40	10/1/2009	PW-Field	Property has illigal connection and white discharge	Unknown	568 5th Street	San Diego Bay	Yes	Residential	No	10/5/2009	10/5/2009	No		Sent letter informing resident of proper bmp's and issued NOV. Follow up to occur Oct. 20
41	9/23/2009	General Public-Hotline	Neighbor reported a number of complaints including insufficient BMPs	Construction Debris	754 Hickory Ct.	Tijuana Estuary	Yes	Residential	Yes	No	9/24/2009	No		Community dev inspector contacted owner and educated and informed on constrution BMPs
42	9/10/2009	Code Enfoce ment	broken sprinkler and sprinkler timing	Over Irrigation	1224 Georgia	Tijuana Estuary	Yes	Residential	Yes	No	9/10/2009	No		Contacted owner and educated and informed on proper BMPs
43	9/28/2009	PW-Field	Trash and stock pile of material	Trash & Debris	255 Elm	Pacific Ocean	Yes	Residential	No	No	9/28/2009	No		Issued a NOV with correction date
44	10/5/2009	General Public-Hotline	Neighbor sweeping water into the street	Unknown	1300 Block East Lane	Tijuana Estuary	No	Residential	No	No				The violation was unverified. Env Div will keep a closer eye on the 1300 block of East Lane
45	10/5/2009	PW-Env	Excessive water emanating from property into storm drain.	Over Irrigation	572 Emory	San Diego Bay	Yes	Residential	No	10/6/2009				Sent email and photos informing property management company of the issue. Colwell realty informs us sprinkler was mis timed and will be fixed.
46	10/6/2009	PW-Env	Illegal connection spotted by Field employees and confirmed by env.		272 Elm	Pacific Ocean	Yes	Residential	No	10/6/2009	10/6/2009			Sent letter and NOV to tenant and owner. Follow up to occur October 21.

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47	10/13/2009	PW-Field	Streets sight illicit discharge	Wash Water	981 Cypress	San Diego Bay	Yes	Residential	Yes		10/13/2009			Issued a NOV with correction date
48	10/19/2009	Code Enfoce ment	Construction activity and sediment in the right of way	Construction Debris	1254 15th	Tijuana Estuary	Yes	Construction	Yes		10/19/09 (Stop Work)			Code enforcement issued a Stop Work Notice
49	10/12/2009	Code Enfoce ment	Trash and debris stockpiled on property	Trash & Debris	981 Cypress	Otay River	Yes	Residential	Yes		10/13/2009			Code enforcement issued a nov for trash, abondon vehicle, and vehicle parking
50	10/21/2009	General Public-Hotline	Hosing off driveway and excessive water	Wash Water	553 9th	Otay River	Yes	Residential	No	10/21/2009				Resonded to hotline call and found residence with a wet driveway and water flowing all the way to the storm drain. Sent letter to resident
51	10/20/2009	General Public-Hotline	Illegally dummped waste in alley	Green Waste	13th - Georgia on Elder	Tijuana Estuary	No	Other	No			Yes		City reponded to collect the waste. The used the resources of Job Corps who were volunteering at the time.
52	10/22/2009	PW-Env	Leaking planter box on SE corner putting trash and excess water into storm drain.	Trash & Debris	1185 Palm	Otay River	Yes	Fixed Commercial	Yes	10/22/2009	10/22/2009			Tony Cerrano reported broken planter box. Confirmed by GN. Sent letter and NOV to owner and establishment.
53	10/27/2009	General Public-Online	excessive trash on property and cars parking on lawn	Trash & Debris	625 Corvina	San Diego Bay	Yes	Residential	No	10/27/2009				Code enforcement tracked down the property owner and informed of the messy tennants.
54	10/28/2009	PW-Env	Pile of dirt not covered and accessible at Marcos and Red Hawk	Multiple	1205 Palm Ave	Otay River	Yes	Fixed Commercial	Yes					Warned owners of Marcos and Red Hawk about leaving dirt uncovered. They agreed to put tarp over dirt. I will be heading back to check.
55	10/29/2009	PW-Field	person observed illegally dumping into storm drain on south side of cypress between 12th and florence	Wash Water	between 12th and florence in street	Otay River	Yes	Mobile	No			yes		None because suspect got away.

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56	11/9/2009	PW-Field	Dynamic concrete coatings observed discharging small amount of water with dirt and possibly concrete into street	Sediment	1385 5th Street	Tijuana Estuary	Yes	Construction	Yes			no		Tony Cerrano told them to clean up mess and they agreed. Environmental staff arrived shortly thereafter and made sure they knew it had to be cleaned to avoid fine.
57	11/10/2009	Code Enfoce ment	Vehicles parked off a paved surface.Dischargi ngs oil and other pollutants into the stormwater	Multiple	604 Dahlia	Tijuana Estuary	Yes	Residential	Yes			no		Cited by Code enforcement, told to pay 100 dollar penalty.
58	11/14/2009	PW-Field	Waste discharge into storm drain	Field Spill	753 13th	Otay River	Yes	Residential	No			yes		AJ Moeler responded to incident; cost recovery pending; asked Dave Garcias to add stormwater to violation to citation
59	11/17/2009	General Public-Hotline	Construction activity on roof discharged into drain	Construction Debris	1140 Seacoast	Pacific Ocean	No	Construction	No					
60	11/18/2009	PW-Field	Rock pile in right of way constitutes an illegal stockpile	Construction Debris	1221 Emory	Tijuana River	Yes	Residential	Yes		11/18/2009			Peter Lau issued NOV in person.
61	11/18/2009	PW-Field	Transmission fluid leaking into street	Auto Fluids	1120 Oneonta	Tijuana River	Yes	Residential			11/18/2009	no		Tony Cerrano issued NOV and instructed cleanup.
62	11/19/2009	General Public-Hotline	Pool Draining	Pool Water	1146 East Lane	Tijuana Estuary	No	Residential	No					None; investigation showed discharge was within limits of the storm water permit. PH levels did not show chlorine and flow was reduced by vegetation. No odors from water.
63	11/23/2009	PW-Field	No Construction BMPs	Sediment	739 Florida	Otay River	Yes	Construction	Yes		11/23/2009	no		Investigation showed no bmps in place and small amount of discharge. Mess was cleaned up by specified time.
64	12/1/2009	General Public-Hotline	Pipe with illegal connection to storm drain.	Unknown	571 Thorn	Otay River	Yes	Residential	No	12/1/2009	12/1/2009	No		Issued NOV with correction date of 12/15 for illicit discharge and connection.

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65	12/1/2009	Code Enfoce ment	Storage of hazardous waste.	Multiple	1425 Fern	Tijuana Estuary	Yes	Residential	Yes		12/1/2009			David Garcias issued NOV to clean up by 12/3.
66	12/9/2009	PW-Field	suspicious substance under motorhome	Unknown	Approx. 1300 Seacoast	Pacific Ocean	No	Mobile	No					
67	12/9/2009	PW-Env	Soapy water from power washer at apartment	Wash Water	637 10th Street	Otay River	Yes	Residential	No	12/10/2009				Informative letter sent, no specific violator found.
68	12/14/2009	Code Enfoce ment	Transient Camp with trash and debris on vacant property	Trash & Debris	550 HWY 75	Otay River	Yes	Fixed Commercial	Yes		12/14/2009			Code Enforcement contacted the owner of abandonded El Camino Motel to clean up the trash and remove the dead and over grown vegetation that has allowed the site to become a harbor for transients.
69	12/17/2009	PW-Env	Transient camp behind all american car wash	Trash & Debris	APN: 626 230 13 00 Vacant Lot	Otay River	Yes	Residential	No	12/21/2009				Sent letter (with NOV language) to property owner, dorothy baker, requested monthly clean up.
70	12/21/2009	PW-Env	Trash area at 1002 Palm	Trash & Debris	1002 Palm AVE	Otay River	Yes	Fixed Commercial	Yes	12/21/2009				Sent letter to property owner stating need to have area cleaned up.
71	12/23/2009	General Public-Hotline	Elementary School at IB and Conn	Over Irrigation	650 IB BL	Tijuana River	No	Schools	No					
72	12/28/2009	General Public-Hotline	Car severely leaking oil in street	Oil & Grease	711 Oneonta	Tijuana River	No	Residential	No			yes		By the time the city responded the vehicle had already left but oil was visible in the street. The PW Superintendent used the 529 vaccum truck to clean the spill.
73	1/5/2010	City Hall	Excessive Overwater	Over Irrigation	207 Elkwood	Pacific Ocean	Yes	Fixed Commercial	Yes			no		Called property manager to stop sprinkler from flowing. Manager eventually complied
74	1/7/2010	PW-Field	Field Spill	Field Spill	Drain between basswood and boulevard on 7th	San Diego Bay	Yes	Municipal	No					Field staff removed some material from catch basin. Flow was seen going into outfall at pond 10A
75	1/7/2010	General Public-Hotline	Water leak	Potable Water	12th and Florence	Otay River	Yes	Utility	No					Notified cal am and they are implementing bmps

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76	1/8/2010	General Public-Hotline	Water Leak	Sediment	586 7th	Otay River	Yes	Residential	Yes			no		Notified owner via phone and got cal am to turn off water. Water was turned off. Owner also told to clean up sediment.
77	1/8/2010	City Hall	Illegal Connection	Unknown	527 Delaware	Otay River	Yes	Residential	No			no		Working with property owner. None taken, pump seems to be fine
78	1/8/2010	Code Enfoce ment	Construction BMPs	Construction Debris	1450 Iris	Tijuana Estuary	Yes	Construction	No		1/7/2010	no		Stop work notice issued by code enforcement
79	1/11/2010	General Public-Hotline	Dog feces not being cleaned up	Pet Waste	145 Evergreen	Pacific Ocean	Yes	Residential	No	1/12/2010		no		SENT information to all tenants in the buildings at 134 and 140 regarding pet waste.
80	1/11/2010	General Public-Hotline	Car washing	Wash Water	1132 IVY	Tijuana Estuary	No	Residential	No					None taken. Vehicle washing was taking place in parking lot of residence, which is legal.
81	1/12/2010	General Public-Hotline	Private lateral leak from water meter box	Sewer Spill	1260 Calla	Otay River	Yes	Residential	Yes			yes		Recovering cost from owner for city clean up. (4562/2)
82	1/19/2010	PW-Env	Construction BMPs	Sediment	Vetrans Park	Tijuana Estuary	Yes	Construction	Yes			no		Heavy rains washed out BMPs at the construction site for the new soccer field. The contractor was notified via the PW inspector and Superintendent.
83	1/20/2010	PW-Field	Private lateral leak from cleanout	Field Spill	1128-1130 12th	Tijuana River	Yes	Residential	Yes			yes		Recovering cost from owner for city clean up.
84	1/21/2010	PW-Field	Discharge from Driveway	Sediment	1146 Georgia Street	Tijuana River	Yes	Residential	Yes		1/21/2010	no		Told resident to maintain driveway to prevent discharge; returned to issue NOV for BMPs. Correction for 4:30; BMPS IMPLEMENTED
85	1/22/2010	City Hall	suspicious substance in storm water	Auto Fluids	197 Palm Ave	Pacific Ocean	No	Other	No			no		None taken, as it was impossible to determine if sheen was from more than standard storm water runoff
86	1/27/2010	PW-Field	Spill on street; blue liquid	Paint	381 Calla	Otay River	Yes	Residential	Yes		1/27/2010			Issued NOV for 1pm cleanup. Job Completed
87	1/27/2010	PW-Field	Rusty discharge into street at Precision Foreign	Sediment	1240 Palm Ave	Otay River	Yes	Fixed Commercial	Yes		1/27/2010	no		Issued NOV for 3pm cleanup. Job Completed
88	1/28/2010	PW-Field	Possible vehicle repair	Auto Fluids	1023 Florida	Tijuana River	No	Residential	Yes					None, vehicle being towed. Resident informed of risk for storm water pollution.

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89	1/31/2010	PW-Field	Sewage Spill	Field Spill	600 Palm	San Diego Bay	Yes	Fixed Commercial	No	2/1/2010				City crew removed 15 gallons of sewage near the silver strand plaza shopping center.
90	2/1/2010	City Hall	Vehicle Fire leaks fuel	Auto Fluids	1310 Connecticut	Tijuana River	Yes	Residential	Yes			yes		Fire responded and put out fire. Fuel leak flow was stopped and little to none entered storm drain. Sewer crew removed waste from street. Cost recovery to be made.
91	2/3/2010	General Public-In person	Small sewer leak	Sewer Spill	533 8th	San Diego Bay	Yes	Residential	Yes		1/3/2010	no		Issued NOV with correction date of 2/10.
92	2/5/2010	PW-Field	Washing construction driveway	Construction Debris	739 Florida	San Diego Bay	No	Construction	Yes					Tony Cerrano issued verbal warning. I will write letter once I obtain an address.
93	2/5/2010	PW-Env	Washing sidewalk	Wash Water	852 9th street	Otay River	Yes	Residential	Yes					Told unidentified individual to discontinue washing into the sidewalk.
94	2/8/2010	Code Enfoce ment	Construction BMPs	Sediment	134 Date	Pacific Ocean	Yes	Residential	Yes		2/9/2010			Admin Cite by Tommy Simmons for 200 for bmps and ID
95	2/16/2010	PW-Field	Water coming from sidewalk drain	Potable Water	740 Georgia	Otay River	Yes	Fixed Commercial	Yes					Informed Maintenance person, George, of our issue with it. He is working to solve the problem. Problem solved on 2/18
96	2/18/2010	General Public-In person	Spilled oil from vehicle repair	Oil & Grease	553 9th	San Diego Bay	Yes	Residential	Yes		2/18/2010			Issued NOV at property with 8am correction time. Resident Denies, has cleaned up mess. I will be sweeping up the residue. No further enforcement possible.
97	2/19/2010	City Hall	Leaking backflow valve on sprinkler system.	Potable Water	1070 Georgia	Otay River	No	Residential	No					Will send advisory letter informing landowner that if leak grows a violation could exist.
98	2/19/2010	PW-Env	Roofing company doing work before rain and generating a considerable amount of debris	Trash & Debris	1600 Seacoast	Tijuana Estuary	Yes	Construction	Yes					Warned roofing company of impending rain and they cleaned up the debris around the area.

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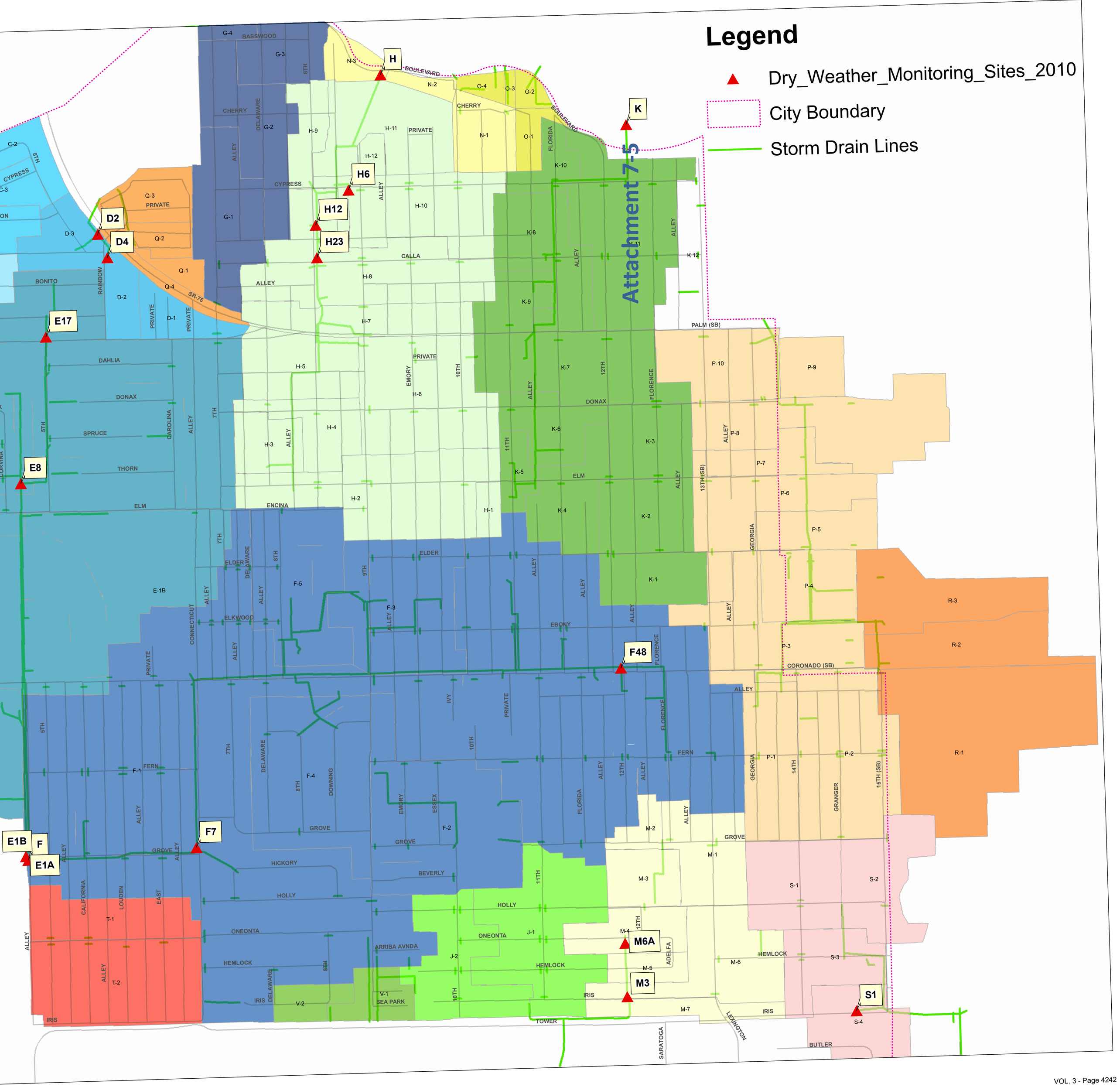
99	2/19/2010	PW-Env	Water line break on Mar Vista HS from construction activity	Potable Water	505 Elm - Mar Vista High School	Tijuana Estuary	Yes	Schools	Yes					Contacted Francisco the 24hr maintenance person. Francisco was off site so he directed another maintenance worker, David to meet me at the site of the water discharge. I was told at 4:20 p.m. that the problem would be taken care of or the water would be turned off to the area. Water was flowing out of a curb cut on Elm into an immediate storm drain at a rate of about 25 gpm.
100	3/2/2010	PW-Env	Foam tiles breaking off sea wall	Trash & Debris	714 Seacoast	Pacific Ocean	Yes	Residential	No			yes		Tidelands cleaned debris from beach.
101	3/3/2010	PW-Env	Gasoline coming out of outfall H3	Oil & Grease	9th and Cypress	San Diego Bay	Yes	Residential	No					Environmental attempted to clean oil. No violator found
102	3/5/2010	PW-Env	Paint Spill on sidewalk	Paint	163-199 Elder	Pacific Ocean	Yes	Residential	No					Spill appears to have been cleaned up. No proof of responsible party.
103	3/5/2010	PW-Env	Pipes entering alley and discharging	Unknown	566 9th	Otay River	Yes	Residential	No	3/5/2010				Sent letter requiring explaination or removal.
104	3/9/2010	PW-Field	Grass clippings in the street and in yard	Trash & Debris	1370 11th	Tijuana Estuary	Yes	Residential	No	3/9/2010				Sent letter to owner and copy to Tenant
105	3/10/2010	PW-Env	Sprinkler discharging large amount of water into storm drain	Potable Water	584 11th	Otay River	Yes	Residential	Yes					Called property manager to stop sprinkler from flowing. Called owner. Landscaper is coming to fix.
106	3/15/2010	General Public-Hotline	Concern over piles from cable burying	Sediment	740 Georgia	Otay River	No	Construction	No					Explained to property owner at 740 that work was being done legally and there was no legal issue.
107	3/15/2010	PW-Field	Oil pan is leaking in driveway	Oil & Grease	835 Corvina	Tijuana Estuary	Yes	Residential	No					None taken. Oil pan is only leaking slightly. All oil is still on driveway. Will re inspect.
108	3/18/2010	PW-Env	Excessive water emanating from property into storm drain.	Over Irrigation	1401 13th	Tijuana River	Yes	Residential	Yes					Warned leasing office about over watering in IB
109	3/19/2010	City Hall	Diesel Fuel Leak	Auto Fluids	155 Carnation	Pacific Ocean	Yes	Residential	No			yes		Fire ended up cleaning the spill. Chief Sotelo let them know to make responsible party clean up in future.

IDIC NUMBER	DATE	REFERRAL SOURCE	COMPLAINT/ OBSERVATION DESCRIPTION	CONSTITUENT	LOCATION	RECEIVING WATER	VIOLATION VERIFIED	VIOLATOR TYPE	VERBAL WARNING	INFORMATIVE LETTER (Date)	NOV (Date)	CITY CLEANUP	COST RECOVERY AMOUNT	CORRECTIVE ACTIONS IMPLEMENTED
110	3/22/2010	PW-Field	Vault Dewatering	Potable Water	1220 Elm	Tijuana Estuary	No	Residential	No					ATandT followed proper procedures of testing before legally dishcharging into the storm drain.
111	3/23/2010	General Public-Hotline	Concrete residue along curb	Construction Debris	268 Elkwood	Pacific Ocean	Yes	Residential	No	3/23/2010	3/23/2010			Sent NOV. No correction date.
112	3/23/2010	PW-Field	Poor construction BMPs	Sediment	Georgia and Palm	Otay River	Yes	Utility	Yes					Contacted CalAm because water main contractors had inpropperly set up BMPs around storm drain inltes.
113	3/23/2010	PW-Env	Power Washing	Multiple	705 3rd	Pacific Ocean	Yes	Construction	Yes					While on inspection came across a contractor who was power washing a fense in preparation for painting. Notified contractor of clean water regulations.
114	3/24/2010	PW-Field	Rust and Sediment into street via contractor	Sediment	1500 Seacoast DR	Tijuana Estuary	Yes	Construction	Yes	3/24/2010	3/24/2010	yes		Verbally warned contractor and told them to continue work when proper BMPs could be implemented to capture water. Also issued NOV to HOA and NUFlow
115	3/24/2010	Code Enfoce ment	Paint Chips washed into street	Paint	967 Iris	Tijuana Estuary	Yes	Mobile	Yes					Told Vance to be more careful when washing van. Suggested fiber roll
116	3/30/2010	PW-Field	Kitchen Drain Leak	Wash Water	1421 Louden LN	Tijuana Estuary	Yes	Residential	Yes					Verbally warned property owner to clean up mess by the end of the day. No NOV issued. Compliance achieved
117	4/1/2010	PW-Field	Trash, debris, and greenwaste in the public right of way	Trash & Debris	1251 12th St.	Tijuana Estuary	Yes	Residential	Yes		4/1/2010			Dave Garcias issues NOV for 5pm clean up. Dumpster to be removed by 10am 4/2/10
118	4/1/2010	PW-Env	Rust and Sediment into street	Sediment	Cortez and Seacoast	Tijuana Estuary	Yes	Residential	No					No violator located.
119	4/7/2010	Code Enfoce ment	Trash at site	Trash & Debris	1083 Cherry Ave.	Otay River	Yes	Construction	Yes		4/7/2010			NOV issued by Josh Lane with 4/12 correction date.
120	4/12/2010	City Hall	Cars parked on sidewalk and some leakage onto street	Auto Fluids	200 Palm Ave	Pacific Ocean	Yes	Fixed Commercial	Yes		4/12/2010			NOV issued by Josh Lane
121	4/12/2010	General Public-Hotline	Overgrown vegetation on sidewalk and property	Trash & Debris	1104 9th	Tijuana Estuary	Yes	Residential	Yes		4/12/2010			NOV issued by GN for correction on 4/19

IDIC NUMBER	DATE	REFERRAL SOURCE	COMPLAINT/ OBSERVATION DESCRIPTION	CONSTITUENT	LOCATION	RECEIVING WATER	VIOLATION VERIFIED	VIOLATOR TYPE	VERBAL WARNING	INFORMATIVE LETTER (Date)	NOV (Date)	CITY CLEANUP	COST RECOVERY AMOUNT	CORRECTIVE ACTIONS IMPLEMENTED
122	4/14/2010	PW-Env	Litter in ms4 and stockpiles on property	Trash & Debris	1402 Hemlock Ave.	Tijuana Estuary	Yes	Fixed Commercial	No		4/14/2010			
123	4/14/2010	General Public-Hotline	Oil pan is leaking in driveway and into storm drain. Also oil in street unchecked; Rain allowed to wash oil into ms4	Auto Fluids	835 Corvina	Tijuana Estuary	Yes	Residential	No		4/15/2010			
124	4/20/2010	Code Enfoce ment	WASHING CARPETS INTO ALLEY	Wash Water	757 7th st.	Tijuana Estuary	Yes	Residential	Yes		4/20/2010			NOV issued by Dave Garcias
125	4/20/2010	PW-Field	Broken Sprinkler/Overwa tering	Over Irrigation	1446 15th St.	Tijuana River	Yes	Residential	No					Violation was corrected by the time I arrived.
126	4/26/2010	PW-Field	Concrete cutting and wash water	Construction Debris	1486 Seacoast	Tijuana Estuary	Yes	Construction	Yes					Educated and informed violator on violation. The discharge was cleaned up and proper BMPs installed before any concrete cutting resumed.
127	4/27/2010	PW-Field	Water Line Leak	Potable Water	1025 9th	Tijuana Estuary	Yes	Utility	Yes					Cal Am Notified by Peter Lau and is responding
128	4/28/2010	PW-Field	Trash at La Posta et al. Alley	Trash & Debris	1266 IB Blvd	Tijuana Estuary	Yes	Fixed Commercial						Tony Cerrano reported "messy marvins" at la posta. I found unacceptable amount of debris. Final NOV to be issued to elminate regular problem.
129	4/29/2010	PW-Env	Barrel of haz waste in alley	Unknown	1104 Florence	Tijuana Estuary	Yes	Residential	Yes					Will be calling number on barrel to determine ownership.
130	4/30/2010	PW-Env	Bin of Gas	Auto Fluids	1049 12th	Tijuana Estuary	Yes	Residential	No					No owner identified. Resident told by fire to have it removed.
131	5/12/2010	PW-Env	Over Irrigation	Trash & Debris	805 10th	Otay River	Yes	Residential	No	5/14/2010				Sent to owner of property, business, and AMI property management advising them to discontinue
132	5/19/2010	PW-Field	Field ponding	Field Spill	533 8th st	Otay River	Yes	Residential			5/19/2010			Previous case involved resident not repairing Field lateral and leak. Repair was unpermitted and unsuccessful, so Tommy issued stop work.
133	5/20/2010	PW-Env	Over Irrigation	Trash & Debris	573 Delaware	Otay River	Yes	Residential		5/20/2010				Obvious over watering. Good opportunity for education.

IDIC NUMBER	DATE	REFERRAL SOURCE	COMPLAINT/ OBSERVATION DESCRIPTION	CONSTITUENT	LOCATION	RECEIVING WATER	VIOLATION VERIFIED	VIOLATOR TYPE	VERBAL WARNING	INFORMATIVE LETTER (Date)	NOV (Date)	CITY CLEANUP	COST RECOVERY AMOUNT	CORRECTIVE ACTIONS IMPLEMENTED
134	5/26/2010	PW-Field	Toilet Overflow	Field Spill	741 Palm	Otay River	Yes	Fixed Commercial	Yes			yes		Owners of Tunes and Lubes were informed of problem and cut water off immediately.
135	5/26/2010	City Hall	Pet waste in the alley and encroaching on others property	Pet Waste	1351 IB	Otay River	No	Residential	No					None. Citizen complaint cannot be verified. Will keep an eye on it.
136	5/26/2010	PW-Env	Driveway Washing	Wash Water	1207 5th	Tijuana River	Yes	Residential	Yes					Informed cleaning lady of rules regarding driveway washing. Encouraged use of broom to sweep driveway.
137	5/28/2010	PW-Env	Dog Washing	Wash Water	204 Evergreen	Pacific Ocean	Yes	Residential	Yes					Educated resident about washing pets over the grass.
138	6/3/2010	General Public-In person	sewer pit on property	Sewer Spill	533 8th	Otay River	Yes	Residential	Yes					Previous case involved resident not repairing sewer lateral and leak. Case was turned back over to code enforcement. 6/3 update -- code enforcement to order correct sewer violation
139	6/9/2010	PW-Field	Broken irrigation	Potable Water	182 Elkwood	Pacific Ocean	Yes	Residential	No	6/10/2010				Owner of complex unaware of problem. Spoke to cal am and problem was solved. I am not sure how.
140	6/11/2010	PW-Env	Irrigation sprays in street	Potable Water	847 Encina	Otay River	Yes	Municipal	Yes			yes		Spoke with Superintendant who had sprinklers adjusted accordingly
141	6/17/2010	PW-Env	hose left running	Potable Water	998 7th	Tijuana River	Yes	Residential	Yes					Spoke with resident, who did not realize hose was on. He turned it off.
142	6/17/2010	PW-Env	Broken irrigation	Potable Water	505 Elm	Tijuana River	Yes	Schools	Yes					Spoke with construction manager and francisco, maintenance supervisor. They deposited remaining water over landcaping and stopped the leak. Fiber roll was installed while leak was being taken care of.
143	6/21/2010	PW-Env	Broken irrigation	Potable Water	1187 13th	Tijuana River	Yes	Fixed Commercial	No					No need to correct problem. Once I arrive water was turned off.
144	6/21/2010	PW-Field	Vehicle repair in street	Auto Fluids	300 Daisy	Pacific Ocean	No	Residential	No					No evidence found
145	6/21/2010	PW-Env	Trash at dumpster	Trash & Debris	584 11th	Otay River	Yes	Residential	Yes					6/22: Left message with property manager to have mess cleaned up by tomorrow. Recived confirmation that it will be cleaned. 6/23: mess cleaned

IDIC NUMBER	DATE	REFERRAL SOURCE	COMPLAINT/ OBSERVATION DESCRIPTION	CONSTITUENT	LOCATION	RECEIVING WATER	VIOLATION VERIFIED	VIOLATOR TYPE	VERBAL WARNING	INFORMATIVE LETTER (Date)	NOV (Date)	CITY CLEANUP	COST RECOVERY AMOUNT	CORRECTIVE ACTIONS IMPLEMENTED
146	6/22/2010	PW-Field	Auto Repair in Street	Auto Fluids	13th St. at Palm Ave.	Otay River	Yes	Residential	Yes					Warned gentlemen conducting repair that they would have to do that off of the street. Upon reinspection repair was ceased.
147	6/22/2010	PW-Field	Auto Repair in Street	Auto Fluids	13th St. at Palm Ave.	Otay River	Yes	Residential	Yes					Warned gentlemen conducting repair that they would have to do that off of the street. Upon reinspection repair was ceased.
148	6/23/2010	PW-Field	Paint spill	Paint	Seacoast Dr and Citrus Ave	Otay River	Yes	Residential	No			yes		City graffiti crew cleaned spill.
149	6/24/2010	General Public-Hotline	City planter improperly irrigated	Over Irrigation	815 Encina	Tijuana River	No	Municipal	Yes			yes		City to investigate and readjust sprinkler.
150	6/24/2010	City Hall	Dirt being discarded in the street	Sediment	953 and 976 Holly Ave	Tijuana River	Yes	Residential	Yes					Verbally warned two workers to have cleaned up within two hours.
151	6/24/2010	PW-Env	Suspected pool leak causes large sediment dump into streets and storm drain	Sediment	1258/1260 13th St.	Tijuana River	Yes	Residential	Yes					after talking with residents of duplex I could not determine if they were at fault. No action to be taken other then to educate owner.
152	6/25/2010	General Public-Hotline	2 gallons of chain oil tossed from vehicle onto street/curb gutter	Oil & Grease	IB Blvd between 11th and Florida	Tijuana Estuary	No	Unknown	No			Yes		City contained the spill and used graffiti crew to clean the spill.
153	6/25/2010	General Public-Hotline	Vehicle maintenance in street	Oil & Grease	1211 Grainger	Tijuana River	No	Residential	No					Investigated report of vehicle maintenance in the street but no violation was observed. There was an old grease spot in the street.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2010-2011 JURMP Annual Report

City of Imperial Beach

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Environmental Programs Manager
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9/7/2011

This Jurisdictional Urban Runoff Management Plan Annual Report contains a comprehensive description of the activities conducted during FY 2010-11 by the City to meet all requirements of section D of the Municipal Permit R9-2007-0001.

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CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authorized Signatory(s)	Title	Phone No.	Date
H. A. Levien	Public Works Director	(619) 628-1369	9-16-11

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Executive Summary

This Annual Report summarizes the activities implemented by the City of Imperial Beach (City) in fulfillment of the Jurisdictional Urban Runoff Management Program (JURMP) requirements of Order R9-2007-0001 – the San Diego Municipal Storm Water Permit. With limited exception, the report covers activities conducted between July 1, 2010 and June 30, 2011 (FY2010-11).

The purpose of the JURMP Annual Report is threefold: 1) to document the City's compliance with Municipal Storm Water Permit requirements, 2) to assess the effectiveness of program implementation, and 3) to serve as a program planning tool for directing future activities. The report reflects the organization of the Municipal Storm Water Permit, and is divided into several components corresponding to major sources of pollutants or areas of activity. The following presents the highlights and major accomplishments for each JURMP component during this fiscal year.

Development Planning Component Section 2.0

The Development Planning Component involves incorporating storm water and urban runoff management into the development review process. This includes reviewing priority and non-priority development projects for necessary best management practices (BMPs) to manage storm water runoff prior to the issuance of grading or construction permits. Major accomplishments during this fiscal year included the following:

- Provided conditions for 13 discretionary projects and 7 CIP projects through Public Works requiring developers or contractors to implement minimum best management practices (BMPs) and low impact development (LID) to reduce pollutants and runoff to the maximum extent practicable (MEP). This compares to 24 for FY 2009-10, 24 projects during FY2008-09, 48 projects during FY 2007-08, and 51 projects during FY 2006-07.
- One high priority SUSMP project (Seacoast Inn redevelopment project) received final review and started construction during the reporting period. The project includes LID features and site design BMPs that meet the SUSMP requirements.
- Verified operation and maintenance of 22 permanent post construction treatment control BMPs which prevented 88 lbs of debris from entering the storm drain system.
- Incorporated the final Hydromodification Management Plan (HMP) criteria into the Imperial Beach SUSMP through resolution 2010-1112 on November 17, 2010.
- Developed an educational guidance document for meeting SUSMP requirements.
- Updated the City's Storm Water Management Plan form.
- Provided storm water education to developers and contractors through face-to-face interactions with City staff in meetings, during counter hours held at the Community Development Department, and through informative brochures provided during the application process.

Construction Component Section 3.0

The Municipal Storm Water Permit requires the City to oversee compliance with construction-phase BMPs at all construction projects in the City. All construction projects are required to have a City approved Storm Water Management Plan prior to the start of the project. Projects over 1 acre in size are also required to obtain coverage under the State General Construction Permit and be in compliance with the City's SUSMP. Major accomplishments during FY2010-11 included the following:

- Inspected a total of 104 active construction projects including 8 Capital Improvement Projects (CIP) and 1 high priority SUSMP project during the reporting period.
- Conducted 580 inspections to verify the proper installation and maintenance of construction phase BMPs.
- Responded to 7 reports of illegal discharges from construction sites, which resulted in 1 notices of violation (NOV), 3 stop work notices, and 3 verbal warnings.
- Discussed urban runoff management requirements with all applicants during the plan check process and verified BMP requirements during follow-up inspections.

Municipal Component Section 4.0

City employees continued to implement best management practices (BMPs) to prevent the discharge of water and pollutants from municipal facilities and activities. Examples of BMPs implemented during the reporting period include:

- Vehicle washing in wash bays that drain to the sanitary sewer.
- Preventive maintenance of City vehicles to prevent fluid leakage.
- Use of high-power vacuum to capture runoff from graffiti abatement, sidewalk grinding, and spill cleanup.
- Strict limitations on the use of fertilizers and pesticides in parks and landscape areas.
- Monitoring of sprinkler systems to prevent over-topping onto roadways.
- Alarming of all sewage pump stations, thereby reducing the likelihood of a sewage spill to the storm drain system.
- Purchase and use of spill barriers, gravel bags, and absorbent rags for spill containment and cleanup.
- Annual storm water training for the Public Works Department on the use of BMPs in daily operations.
- Annual department training on storm water.

Other notable accomplishments during FY2010-11 include:

- Updated the Storm Drain Master Plan 2010.
- Updated GIS database for storm drainage basins and MS4 inventory.
- Inspected and cleaned 100% of catch basins and open grates and 80% of City storm drain lines through jetting. In total 6,585 pounds of sediment, trash, and organic materials were removed through storm drain cleaning activities. This compares to 8,230 pounds from last reporting period.
- Removed an additional 174.95 tons of material through frequent street sweeping of 127.9 curb miles of road. This compares to 177 tons from last reporting period.
- Removed 800 lbs of material from of the vortech storm water interceptor on Imperial Beach Blvd. The vortex separator removes sediment, floating hydrocarbons, and debris from all levels of flow.
- Quarterly maintenance of 13 municipal storm drain filter inserts that prevented 398 pounds of material from getting into the storm drain system.
- Continued operation of the Date Avenue urban runoff diversion system, which diverts nuisance runoff to the sanitary sewer during low-flow conditions.
- Continued operation of the Palm Avenue urban runoff diversion system at Seacoast Avenue and diverted 495,650 gallons of urban runoff and first flush rain water into the sanitary sewer.
- Performed daily cleanup of trash, litter, and debris along the beach and tidelands area on Seacoast Drive.

Industrial and Commercial Component Section 5.0

The City is tasked with educating businesses about urban runoff management and overseeing their compliance with applicable Municipal Storm Water Permit requirements. Significant progress continues to be made on increasing knowledge on urban runoff management among local businesses. The following are the major accomplishments achieved during this reporting period:

- Conducted 65 inspections and 45 follow up inspections at high priority businesses, which include automotive repair shops, restaurants, bars, gas stations, car washes, grocery stores, and mobile home parks. Following each inspection the City mails the business owner a copy of the inspection form, an inspection report, and educational material for BMPs.
- Conducted 33 enforcement actions at businesses and issued 11 notices of violation as part of the enforcement and case resolution process. The City also conducted 45 follow up inspections as part of the annual storm water inspection program

Residential Component Section 6.0

The Residential Component involves 1) educating Imperial Beach residents about urban runoff management, 2) overseeing residential compliance with BMP requirements and discharge prohibitions,

and 3) facilitating proper disposal and recycling of household hazardous waste and used motor oil. Major accomplishments during this reporting period included the following:

- Identified and mitigated 127 residential violations. The most commonly observed violations involved construction debris, automotive fluids, wash water, detergents or chemicals, chlorinated swimming pool water, and green waste.
- Distributed educational brochures to residents throughout the year. Brochures target the following high priority activities: 1) pollution prevention around the home, 2) disposal of pet waste, 3) car washing, 4) proper disposal of motor oil, and 5) lawn and garden care.
- Educated residents on environmental issues including storm water in the City's semi-annual newsletters and a quarterly newsletter distributed by EDCO.
- Participated in the Regional Education and Residential Sources workgroup as co-chair of the group and chair of the Underserved Target Audience sub-workgroup.
- Approximately 16,697 pounds of household hazardous waste, universal and e-waste, and used oil and other fluids were properly disposed of at the South Bay Household Hazardous Waste facility in Chula Vista. This compares to 10,377 from last reporting period.
- The City held its annual Citywide Garage Sale event followed next week by the annual Home Front Clean Up, which had 153 participants resulted in the proper disposal of 178.8 tons of trash, construction, metal, and green waste.

Illicit Discharge Detection and Elimination Component Section 7.0

The City endeavors to prevent discharges from the Municipal Separate Storm Sewer System (MS4) from causing or contributing to a violation of water quality standards. The Illicit Discharge Detection and Elimination Component involves 1) water quality monitoring during the dry weather season (May through September) to detect illicit discharges to the storm drain system, and 2) year-round response to illicit discharges of urban runoff. This section of the report is due by December 15th per San Diego RWQCB Addendum No. 2 to Order No. R9-2007-0001 and therfore will be reported at that time.

Education Component Section 8.0

The City endeavors to implement a diverse education program that promulgates the storm water management requirements of the Municipal Permit. Education activities target the following groups: 1) municipal departments and personnel, 2) construction site owners and developers, 3) commercial business owners and operators, 4) industrial business owners and operators (none exist in Imperial Beach) 5) residents, general public, and school children, and 6) underserved community. The City facilitates changes in behavior and implementation of BMPs by providing continuous education for each target audience using a variety of educational tools and media. The continual saturation of education for each target audience is gradually leading to a greater awareness about storm water pollution and the implementation of pollution prevention BMPs.

Public Participation Component Section 9.0

Public involvement is an important component of implementing an effective JURMP program. Each year the JURMP annual reports are presented to City council through a public hearing process. The FY 2010-11 JURMP annual report was presented at the September 7th council meeting.

Fiscal Analysis Component Section 10.0

The approximate cost for implementing the components of the FY 2010-11 JURMP is $831,000.

Program Effectiveness Assessment Component Section 11.0

The Environmental Program Division is responsible for the effectiveness assessment of JURMP activities and implementation of BMPs for each major component of the storm water program. Effectiveness assessments are incorporated into the storm water program when ever feasible to gauge whether the processes and procedures put into place are working toward protecting the quality of receiving waters. Each section of this Annual Report incorporates a discussion on program effectiveness when applicable.

Special Investigation Component Section 12.0

This section provides additional details on special investigations during the reporting period that go above and beyond the JURMP requirements. The report contains information on the Tijuana River Bacteria Source Identification Study and the 2010 update for the City's Storm Drain Master Plan.

Non Emergency Fire Fighting Component Section 13.0

Pollution prevention activities related to non emergency fire fighting are reported in this section.

JURMP Revisions Section 14.0

Revisions made to any of the components of the JURMP are reported in this section.

JURMP Conclusions and Recommendations Section 15.0

The City's urban runoff management program outlined in this Annual Report successfully meets these regulatory requirements and in some cases exceeds the minimum Permit requirements.

1.0 Introduction

The City of Imperial Beach is required to submit its Jurisdictional Urban Runoff Management Program (JURMP) Annual Report each year by September 30th in compliance with the San Diego Regional Board Order Number R9-2007-0001 (Municipal Permit). The Annual Report contains a comprehensive description of all activities conducted by the City to meet all requirements of section D of the Municipal Permit. The annual reporting process is used to evaluate the overall effectiveness and efficiency of program elements. The reporting period for the Annual Report is the previous fiscal year July 1st to June 30th.

The following chapters in this Annual Report discuss the measures taken by the City to meet the regulatory requirements of the Municipal Permit and demonstrates that the City has achieved substantial compliance towards reducing sources of pollutants and urban runoff to the maximum extent practicable (MEP). All components of the JURMP are represented in this report with the exception of Section 7.0, Illicit Discharge Detection and Elimination Component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), which extended the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 Introduction

The City endeavors to reduce pollutants and runoff from development and redevelopment projects to the maximum extent practicable (MEP). This component is primarily applicable to the Community Development Department, the Capital Improvements Projects Division, the Environmental Program Division of the Department of Public Works, and the contracted engineering firm, BDS Engineering. This section of the Annual Report discusses program management, implementation, and changes made during FY 2010-11 to the JURMP Development Planning Component.

2.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Development Planning component is described in the *2008 JURMP Section 4.0*. All development projects under went the appropriate environmental review and verification processes, treatment control BMP inventories were maintained on record, and each project including site inspections were tracked using the City's database system HTE. During last reporting period the City adopted the Countywide Model SUSMP into the local municipal code. The code was once again amended this reporting period through Ordinance Resolution 2010-1112 to include the final hydromodification requirements contained in the Model SUSMP. And finally, an update to the local building code was made through Ordinance Resolution 2010-1113 that further strengthens the ability of the City to require the implementation of BMPs by clarifying the authority of the City to regulate development from "all property, facilities, and structures".

2.3 Outcome Level 1b: Implementation of Management Program Activities

The City requires all development and redevelopment projects to implement measures to reduce pollutants and runoff to the MEP. Minimum BMPs and LID requirements were established in the *2008 JURMP Section 4.0* and are required as conditions during the development review process. In addition, discretionary projects valued over $50,000 get channeled through Public Works for enhanced pubic improvement conditions related to storm water. Priority development projects are also given special consideration under the Standard Urban Stormwater Mitigation Plan (SUSMP). All municipal staff is knowledgeable in the storm water program and receives annual training as described in the 2008 *JURMP Section 10.0*. The Community Development Department also held counter hours and face-to-face meetings throughout the reporting period to provide education and answer questions for developers. In addition, every development or redevelopment project regardless of its prioritization is formally inspected for applicable BMPs throughout the duration of the project. Continued maintenance of post construction treatment control BMPs are also verified annually. Finally, the City participated in the development of the regional Hydromodification Plan (HMP) and incorporated the final plan into the Imperial Beach municipal code through resolution ordinance number 2010-1112.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Development Planning program element:

- Table 2.1 provides an overview of the development and planning projects as it was implemented during FY 2010-11.
- Table 2.2 presents and describes targeted FY 2010-11 outcomes and results
- Table 2.3 provides the updated treatment control BMP inventory.
- Table 2.4 provides an inventory of FY 2010-11 Development Review and SUSMP projects.
- Attachment 2A and 2B include Resolutions for Municipal Code updates
- Attachment 2C presents the new Storm Water Management Plan form
- Attachment 2D presents the new guidance document for meeting SUSMP requirements

2.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Staff and Developers

Education is provided to the public through face-to-face interaction with City staff in meetings, through inspections, and through several local ordinances and brochures that outline the requirements for addressing urban runoff and water quality. The efforts by the City to educate the public on development planning are discussed in the *2008 JURMP Section 4.0.* The education effort for City staff is discussed in the *2008 JURMP Section 10.0.*

2.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Staff and Developers

City staff works with developers to ensure that all development projects and redevelopment project reduce pollutants and runoff to the MEP. The *2008 JURMP Section 4.0* defines minimum BMP and LID requirements applicable to development and redevelopment in the City. The County Model SUSMP also requires additional controls for priority development projects.

During the reporting period the City continued to facilitate changes in behavior for development and redevelopment projects by reviewing and requiring conditions on projects to ensure program compliance. All BMPs are verified for proper implementation, operation, and maintenance throughout the duration of construction. City ordinances include appropriate sanctions to achieve compliance including non-monetary penalties, fines, bonding requirements, and/or permit or occupancy denials for non-compliance. Post construction maintenance and operation of treatment control BMPs are also verified and inspected annual by the Environmental Division.

2.6 Outcome Level 4: Source Load Reductions

Source load reductions from development and redevelopment projects are achieved through the implementation of BMPs and LID strategies. The City requires specific project conditions for treatment control BMPs, LIDs, and site design BMPs to reduce pollutants and runoff to the MEP. Source load reductions may not be directly measured in every case but can be implied by the proper implementation and maintenance of storm water BMPs.

Table 2.1 – Overview of Development Planning Inventory by Development Type and Priority Classification

Category/Project Type	Number	Description
A. Discretionary Development		
Discretionary projects reviewed for public enhancements for storm water	13	All development projects are required to undergo the City's urban runoff approval process and meet applicable requirements. Administrative procedures for development project review is discussed in *2008 JURMP Section 4.0.*
Capital Improvement Projects (CIP)	7	All CIP projects are required to complete a Storm Water Management Plan. Projects include street repairs, ADA ramps, sewer maintenance, and park improvements.
B. Priority Development (SUSMP)		
Sea Coast Inn (MF-616, 09-270, 09-050)		The redevelopment of the Sea Coast Inn was the only active SUSMP project during the reporting period that received a final plan check and approval for a building permit. Six other SUSMP projects are still in the planning stages and have not received a final plan check and therefore not being reported in this annual report.
C. Totals		
Discretionary Projects	13	These totals only represent development and redevelopment that were channeled through Public Works for review. Smaller discretionary projects (less than $50,000) are reviewed by Community Development for storm water compliance and do not generally require public enhancements. Complete list of development and SUSMP projects that received an environmental review for storm water during the reporting period is provided in Table 2.4.
Priority Development (SUSMP) Projects	1	
JURMP Sections	Description of FY 2010-11 Changes	
4.0 and Appendix C	I.B.M.C. 8.32 Standard Urban Storm Water Mitigation Plan was updated again this reporting period to include the Final Hydromodicifation requirements of the Countywide Model SUSMP (Attachment 2A). The City building code was also amended to include greater authority to require BMPs for redevelopment projects (Attachment 2B). The City also updated its Storm Water Management Plan form for development projects (Attachment 2C) and developed a guidance document for meeting SUSMP compliance for priority development projects (Attachment 2D).	

Table 2.2 - Development Planning Component Targeted Outcomes and Results

Development Planning FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per Permit requirements	Incorporated Final HMP into Municipal Code	Complete	Updates made to the Imperial Beach Municipal Code 8.32 on November 17th, 2010 to include the elements of the Countywide Model SUSMP Final Hydromodification requirements. An update to the City Building Code 15.02 was also on November 17th, 2010 to provide greater authority to the City to require the implementation of BMPs. (Attachment 2A and 2B)
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update Storm Water program for consistency with program updates	Municipal code, storm water forms, and procedures were updated as a result of the HMP and CGP update.	Complete	Updates made to Imperial Beach Municipal Code 8.32 to include the requirements of the HMP and to Municipal Building Code 15.02. The City also updated its Storm Water Management Plan (Form 7A and 7B) to provide further guidance for SUSMP, HMP, and General Construction Permits. This update created one simplified form called the Imperial Beach Storm Water Management Plan (Attachment 2C). The City also developed a guidance document for meting SUSMP compliance, which is also presented in Attachment 2D.
c) Year-End Program Review			
Complete annual year-end program review	Reviewed program for effectiveness and efficiency	Complete	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
d) Inventory of Development and Redevelopment Projects			
Update development and redevelopment inventory	Updates made to the inventory throughout the reporting period	Complete	The City maintains a database of active development projects and development review status on the City's database software HTE. Annual inventories are also maintained in excel with the Environmental Division.
e) Inventory of Treatment Control BMPs and Maintenance			

Development Planning FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Update inventory for treatment control BMPs	Updates made to inventory and maintenance verified	Complete	The Environmental Division maintains an inventory of treatment control BMPs and ensures annual maintenance compliance through inspections and contact with property owners.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Project Approval			
Require development projects to implement applicable project requirements, BMPs, and track information	BMPs are required as conditions for all development projects and BMPs are verified through the project application process	Complete	All development and redevelopment projects are required to implement measures to reduce pollutants and runoff to the MEP. The City's project review process further requires that any new construction or modification with a valuation more than $50,000 be subject to public improvements. Projects that meet the $50,000 criterion are routed from the Community Development Department to the Public Works Department for a review in regard to storm water quality public improvements. SUSMP projects are also required to implement additional storm water management controls and BMPs. SUSMP projects are reviewed by Community Development, Public Works, and contract Engineer BDS for compliance with all storm water regulations. All project applications are tracked through the permit approval process and recorded in HTE, excel databases, and Master File system.
b) Confirmation of SUSMP and HMP BMPs			
Verify that all applicable SUSMP and HMP BMPs are applied to priority projects and that the BMPs are inspects prior to occupancy	All SUSMP eligible projects were held to full SUSMP requirements and verified through inspections during construction and prior to occupancy. No projects required HMP interim criterion.	Complete	One SUSMP high priority project (Seacoast Inn) received a final plan check and was approved for a building permit during the reporting period. Six other SUSMP projects are still in the planning stage and have not received a final plan check and therefore not reported in this annual report. Storm water BMPs are reviewed during the plan check process. BMPs are then verified during construction through field inspections. The final sign off on the project is not complete until the City receives a signed maintenance agreement for continuous maintenance of the BMPs from the property owner.

Development Planning FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
c) Example of a Priority Development Project and SUSMP BMPs			
List one example of a priority development project that was conditioned to meet SUSMP requirements	Seacoast Inn Redevelopment Project	Complete	Construction on the Seacoast Inn commenced this reporting period. The SUSMP component of the project received multiple reviews and comments from Community Development, Public Works, and contracted engineering firm BDS prior to the issuance of construction permits. The project is required to implement LID, source control, and treatment control BMPs and provide a post construction BMP maintenance agreement. The building plans include applicable BMPs that will be in construction during the next reporting period. Weekly inspections will ensure that the site is built according to approved plans.
d) Priority Development Projects implementing BMPs with low removal efficiency rankings			
Listing and feasibility analysis of SUSMP projects using BMPs with low removal efficiency rankings	No projects implemented BMPs with low removal efficiency rankings	Complete	Development projects are required to implement BMPs that target priority pollutants. The selection of BMPs is verified during the plan check process. The City only allows less efficient BMPs after a feasibility analysis proves there is no better alternative.
e) HMP Collaboration			
Description of HMP development and collaboration	Participated in the development of the Final HMP	Complete	Participated in the development of the Countywide HMP through the Land Development Copermittee Workgroup. The Final HMP was approved by the Regional Board on 7/14/10 and subsequently incorporated in the Imperial Beach Municipal Code on 11/17/10.
f) Municipal Staff Training			

Development Planning FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Ensure that municipal staff are knowledgeable on storm water BMPs, SUSMP, and HMP requirements	Staff educated through meetings, workshops, and training	Complete	Community Development and Public Works Departments meet weekly to review critical issues including storm water project development requirements. In addition the Planning Division, Building Division, Code Compliance Division, Redevelopment Division, and Environmental Division all received training outside the City on multiple storm water issues. Training topics include SUSMP, HMP, TMDLs, General Construction Permit, and code enforcement. Daily interaction with City staff ensures that storm water pollution prevention remains a high priory throughout the City.
g) Developer Education			
Provide education for developers	Counters hours held and meetings conducted during project review and throughout project	Complete	The Community Development Department held counter hours, face-to-face meetings, project review meetings, and performed inspections throughout the reporting period. Educational material is also available online, at City Hall, Public Works, and provide during building application process.
h) Special Investigations			
---	---	---	Special investigations are not routinely conducted as part of the implementation strategy for this program element.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND DEVELOPERS)			
Increase staff and developer knowledge regarding applicable program content	Surveys were provided to Community Development staff during the first three reporting periods.	See Education Component Section 8.0.	See Education Component Section 8.0.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND DEVELOPERS)			
a) Procedural and Administrative Behaviors			

Development Planning FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Review projects and prescribe necessary conditions of approval and BMPs	13 discretionary projects, 7 CIPs, and 1 SUSMP project reviewed for conditions of approval	Complete	The City reviews all proposed projects and ensures that all necessary conditions and BMPs are met. High priority development projects are held to more stringent requirements including SUSMP, HMP, and General Construction Permit. The Department of Public Works reviews and requires additional conditions on all Discretionary Projects greater than $50,000 in costs. Once a project becomes active the City inspects and verifies that all BMPs are implemented. The Public Works Inspector also provides continual oversight during project management of CIP projects.
b) BMP Implementation, Operation and Maintenance			
Inspect projects for BMP compliance and verify BMP implementation	13 Projects, 7 CIPs, and 1 SUSMP Project reviewed and received project conditions All active projects inspected for BMPs	Complete	The Building Division, Code Enforcement, Environmental Division, and Public Works Inspector conduct inspections at active development projects for compliance of minimum BMPs. The Public Works Inspector conducts inspections at all CIP projects daily. The Building Inspector conducts inspections of all Discretionary permit projects and ensures the implementation of BMPs for SUSMP projects. Code Enforcement and Environmental Division also respond to reports of storm water violations from development projects. Construction inspections of Discretionary Projects are covered in the next Section of this Annual Report.
Verify operation and maintenance of treatment control BMPs	22 out of 22 or 100% compliance. Corrections were all made on a voluntary basis without need for administrative enforcement.	Complete	The City annually verifies operation and maintenance of treatment control BMPs to ensure compliance with program. Verification is made through written contact with property owner or manager and often followed up with an inspection. At a minimum all high priority treatment control BMPs are inspected for operation and maintenance annually.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM NEW DEVELOPMENT AND REDEVELOPMENT PROJECTS)			
a) Treatment Control BMPs			

Development Planning FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Maintenance of treatment control BMPs	88.08 pounds of material removed from treatment control BMPs	Complete	The City verifies maintenance of treatment control BMPs and when possible tracks the amount of material collected during maintenance activities.
b) Low Impact Development (LID) and Site Design BMPs			
Implement LID and site design BMPs	No projects required LID BMPs during the reporting period	Complete	During the project review the City requires LID and site design BMPs for high priority projects. Load reductions are not tracked but are implied for LID BMPs.

Table 2.3
Treatment Control BMP Inventory and Maintenance Tracking

ID	Type	LOCATION	HU and WATERSHED	Installation Date	Party Responsible	Affiliation	Priority	Maintenance Verification Date	# Inspections	Findings Summary	Corrective Actions Summary	Waste (lbs)
1372-13-1	Drain Guard, sediment and hydrocarbon filters	1372 13TH ST	910.20 Otay	10/1/08	Cha-Cha Cervantes	Property Manager	High	3/8/11	1	Cleaning and Maintenance Required	Cleaned and Maintained	4
1450-IR-1	Sump Pump and Screen Mesh	1450 IRIS AVE	911.11 Tijuana	6/27/05	Alan Jurlina	Property Manager	High	6/30/11	1	Cleaning and Maintenance Required	Cleaned and Maintained	8
861-11-1	KriStar, Flo Gard Plus Catch Basin Insert	861 11TH ST	910.20 Otay	6/1/07	Kylie Kavanagh	Resident	Low	6/30/11	2	Cleaning Required	Extension due to military deployment	0
861-11-2	KriStar, Flo Gard Plus Catch Basin Insert	861 11TH ST	910.20 Otay	6/1/07	Kylie Kavanagh	Resident	Low	6/30/11	2	Cleaning Required	Extension due to military deployment	0
861-11-3	KriStar, Flo Gard Plus Catch Basin Insert	861 11TH ST	910.20 Otay	6/1/07	Kylie Kavanagh	Resident	Low	6/30/11	2	Cleaning Required	Extension due to military deployment	0
481-PA-1	Drain Guard in back	481 PALM AVE	910.20 Otay	11/1/08	SimCal	Property Manager	Low	6/3/11	1	Maintenance required	Corrections Required	n/a
481-PA-2	sediment trap IN BACK	481 PALM AVE	910.20 Otay	11/1/08	SimCal	Property Manager	Low	6/3/11	3	Maintenance required	Maintained after enforcement action	n/a
481-PA-3	hydrocarbon filter in front parking area	481 PALM AVE	910.20 Otay	11/1/08	SimCal	Property Manager	Low	6/3/11	3	Maintenance required	Maintained after enforcement action	n/a
836-PA-1	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	High	3/5/11	2	Repair and maintenance required	Repaired and maintained	1.7
836-PA-2	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	High	3/5/11	2	Cleaning Required	Cleaned and Maintained	3.25

ID	Type	LOCATION	HU and WATERSHED	Installation Date	Party Responsible	Affiliation	Priority	Maintenance Verification Date	# Inspections	Findings Summary	Corrective Actions Summary	Waste (lbs)
836-PA-3	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	High	3/5/11	2	Cleaning Required	Cleaned and Maintained	3.5
836-PA-4	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	High	3/5/11	2	Cleaning Required	Cleaned and Maintained	2.75
836-PA-5	KriStar, Flo Gard Plus Catch Basin Insert w/ boom.	888 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	Low	3/5/11	2	Cleaning Required	Cleaned and Maintained	2
836-PA-6	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	888 PALM AVE	910.20 Otay	5/1/02	Imperial Beach Promenade LCC	Property Owner	Low	3/5/11	2	Cleaning Required	Cleaned and Maintained	2.35
1101-PA-1	KriStar, Catch Basin with insert	1101 PALM AVE	910.20 Otay	9/1/08	NORTH ISLAND C.U.	Primary Tenant	Low	3/22/11	3	Cleaning and Maintenance Required	Cleaned and Maintained	28.4165
1101-PA-2	KriStar, Catch Basin with insert	1101 PALM AVE	910.20 Otay	9/1/08	NORTH ISLAND C.U.	Primary Tenant	Low	3/22/11	2	Cleaning Required	Cleaned	1.702
1101-PA-3	KriStar FGP-0002	1101 PALM AVE	910.20 Otay	9/1/08	NORTH ISLAND C.U.	Primary Tenant	Low	3/22/11	2	Cleaning and Maintenance Required	Cleaned and Maintained	28.4165
1101-PA-4	KriStar FLOGARD Downspout Filter FG-DS4	1101 PALM AVE	910.20 Otay	9/1/08	NORTH ISLAND C.U.	Primary Tenant	Low	3/22/11	2	Cleaning and Maintenance Required	Cleaned and Maintained	0
1126-13-1	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126 13TH ST	911.11 Tijuana	5/1/05	13th Street Market	Business Name	Low	3/15/11	2	Cleaning Required	Cleaned	0.5
1126-13-2	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126 13TH ST	911.11 Tijuana	5/1/05	13th Street Market	Business Name	Low	3/15/11	2	Cleaning Required	Cleaned	0.5
1126-13-3	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126 13TH ST	911.11 Tijuana	5/1/05	13th Street Market	Business Name	Low	3/15/11	2	Cleaning Required	Cleaned	0.5

ID	Type	LOCATION	HU and WATERSHED	Installation Date	Party Responsible	Affiliation	Priority	Maintenance Verification Date	# Inspections	Findings Summary	Corrective Actions Summary	Waste (lbs)
1126-13-4	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126 13TH ST	911.11 Tijuana	5/1/05	13th Street Market	Business Name	Low	3/15/11	2	Cleaning Required	Cleaned	0.5
								Totals	**44**			**88.08**

Table 2.4 Development Review and SUSMP Project Inventory FY 2010-11

Date	ID	File No.	SUSMP	Project Status	Address 1	Project Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMPs or LIDs	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Loamy soil to minimize runoff	Water Pollution Control Plan/SWPPP	Construction BMPs
No Date	1	-270, 09-050, 09-0	Yes	Plan Check	800 Seacost	Hotel	X	X	X	X	X	X	X	X	X	X	X
10/5/2010	2	MF1058	No	Plan Check	555 Florence	SFR	X	X			X				X	X	X
7/19/2010	3	MF1047	No	Plan Check	508 11th	Detached dwelling	X	X			X			X		X	X
7/22/2010	4	MF1044	No	Plan Check	825 Imperial Beach	Wireless Unit	X				X			X			
10/15/2010	5	10-299	No	Plan Check	979 Connecticut	remodel	X	X			X			X		X	X
10/15/2010	6	10-525	No	Plan Check	357 Elkwood	Remodel	X	X			X			X		X	X
10/15/2010	7	10-579	No	Plan Check	315 Ebony	Building addition	X	X			X			X		X	X
3/2/2011	8	BP#11-13	No	Plan Check	539 Calla	Building addition	X	X			X			X		X	X
3/2/2011	9	MF863	No	Plan Check	1120 and 1150 13th	Comemrcial remodel	X	X			X			X		X	X
3/2/2011	10	11-118	No	Plan Check	622 Ocean Lane	Remodel SFR	X	X			X			X		X	X
3/7/2011	11	MF 1064	No	Plan Check	829 Emory	Residental Care Facility	X	X			X			X		X	X
3/7/2011	12	11-119	No	Plan Check	880 Palm	Office Retail Remodel	X	X	X		X			X		X	X
4/3/2011	13	11-224	No	Plan Check	823 Corvina	SFR Remodel	X	X			X			X	X	X	X
5/12/2011	14	11-185	No	Plan Check	351 Elder	Building Addition	X	X			X			X	X	X	X
12/20/11	CIP 1	S10-201	No	Plan Check	13th and Ebony	Ped ADA Ramps										X	
4/26/11	CIP 2	S09-102	No	Plan Check	825 Imperial Beach	Civic Center Crosswalk (CDBG)										X	
6/6/11	CIP 3	S11-102	No	Plan Check	IB and Louden Lane	Crosswalk (CDBG)										X	
9/21/10	CIP 4	W06-101	No	Plan Check	504 Oneonta	PS 7 Wet Well Replacement										X	
1/21/11	CIP 5	S10-101	No	Plan Check	Mutiple	RTIP (Street Improvements)										X	
9/21/10	CIP 6	W05-401	No	Plan Check	Multiple	Sealing & Repair Sewer										X	
8/18/10	CIP 7	P07-101	No	Plan Check	Sports Park	Skate Park Element										X	

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Attachment 2A
Municipal Code Update for HMP

ORDINANCE NO. 2010-1112

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF IMPERIAL BEACH, CALIFORNIA, UPDATING CHAPTER 8.32 AMENDING THE CITY'S STANDARD URBAN STORMWATER MITIGATION PLAN (SUSMP) TO INCLUDE CRITERIA FOR HYDROMODIFICATION MANAGEMENT

WHEREAS, the City of Imperial Beach, pursuant to the Water Quality Permit issued on January 24, 2007, is required to develop and implement a program to address urban runoff pollution issues in development planning for public and private projects as mandated by the Regional Water Quality Control Board (San Diego Region).

WHEREAS, the requirement to implement a program for development planning is based on Federal and State Statutes including: Section 402 (p) of the Clean Water Act, Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 ("CZARA"), and the California Water Code. The Clean Water Act amendments of 1987 established a framework for regulating urban runoff discharges from municipal, industrial, and construction activities under the NPDES program. The municipal permit requires the implementation of a Jurisdictional Urban Runoff Management Program (JURMP), which has been adopted by the City of Imperial Beach pursuant to Resolution No. 2008-6602, and subsequently amended.

WHEREAS, pursuant to the mandates established under the Water Quality Permit, state and federal statutes that ensure discharges from municipal urban runoff conveyance systems do not cause or contribute to a violation of water quality standards; that effectively prohibit non-stormwater discharges in urban runoff; and reduce the discharge of pollutants from urban runoff conveyance systems to the Maximum Extent Practicable (MEP statutory standard).

WHEREAS, the adoption of this Ordinance shall implement policies that establish a hydromodification management criteria applicable to new development and redevelopment applications that fall under priority project categories to ensure that development does not increase urban runoff flow rates and velocities that would adversely impact downstream habitat or conditions.

WHEREAS, policies contained in this Ordinance amendment will incorporate into the Imperial Beach Municipal Code the *Hydromodification Management Plan located in Appendix B of the Countywide Model SUSMP (Standard Urban Stormwater Mitigation Plan Requirements for Development Applications)*, dated October 18, 2010, and any subsequent amendments as part of the required iterative process mandated under state and federal law.

NOW, THEREFORE, IT IS ORDAINED BY THE CITY COUNCIL OF THE CITY OF IMPERIAL BEACH AS FOLLOWS:

Section 1. Chapter 8.32 of the Imperial Beach Municipal Code is hereby amended to read as shown in Attachment "A".

EFFECTIVE DATE: This Ordinance shall be effective thirty (30) days after its adoption. Within fifteen (15) days after its adoption, the City Clerk of the City of Imperial Beach shall cause a summary of this Ordinance to be published pursuant to the provisions of Government Code section 36933.

INTRODUCED AND FIRST READ at a regular meeting of the City Council of the City of Imperial Beach, California, on the 17th day of November 2010; and **THEREAFTER ADOPTED** at a regular meeting of the City Council of the City of Imperial Beach, California, on the 1st day of December 2010, by the following vote:

AYES:	**COUNCILMEMBERS:**	**BRAGG, MCCOY, ROSE, KING, JANNEY**
NOES:	**COUNCILMEMBERS:**	**NONE**
ABSENT:	**COUNCILMEMBERS:**	**NONE**

James C. Janney
JAMES C. JANNEY, MAYOR

ATTEST:

Jacqueline M. Hald
JACQUELINE M. HALD, CMC
CITY CLERK

APPROVED AS TO FORM:

Jennifer M. Lyon
JENNIFER M. LYON
CITY ATTORNEY

Attachment 2B
Municipal Code Update for Building Code

ORDINANCE NO 2010-1113

AN ORDINANCE OF THE CITY OF IMPERIAL BEACH AMENDING TITLES 8 AND 15 OF THE IMPERIAL BEACH MUNICIPAL CODE BY AMENDING CHAPTERS 8.50, 15.06, 15.16, 15.28, AND 15.32, ADDING CHAPTERS 15.02, 15.04, 15.38, AND 15.40 AND REPEALING CHAPTERS 8.88, 15.18, AND 15.36, ALL BY ADOPTING THE CALIFORNIA BUILDING STANDARDS CODE, 2010 EDITION, WITH CERTAIN AMENDMENTS, ADDITIONS, AND DELETIONS, AND ADOPTING THE UNIFORM CODE FOR THE ABATEMENT OF DANGEROUS BUILDINGS, 1997 EDITION

WHEREAS, Health & Safety Code Section 17958 mandates that the City of Imperial Beach shall adopt ordinances or regulations imposing the same requirements as are contained in the regulations adopted by the State pursuant to Health & Safety Code Section 17922; and

WHEREAS, the State of California is mandated by Health & Safety Code Section 17922 to impose the same requirements as are contained in the 2010 California Building Standards Code, Title 24 of the California Code of Regulations; and

WHEREAS, the State of California is mandated by Health & Safety Code Section 17922 to impose the same requirements as are contained in the 2010 California Building Standards Code, together with the City of Imperial Beach amendments, which collectively shall be the City of Imperial Beach Building Code, for the purpose of prescribing regulations in the City of Imperial Beach; and

WHEREAS, local amendments adopted by the City of Imperial Beach shall take precedence over the 2010 California Building Standards Code; and

WHEREAS, Health & Safety Code Section 17958.5 permits the City of Imperial Beach to make such changes or modifications to the 2010 California Building Standards Code as are reasonably necessary because of local conditions; and

WHEREAS, Health & Safety Code Section 17958.7 requires that the City of Imperial Beach before making any changes or modifications to building standards pursuant to Section 17958.5 make express findings that such changes or modifications are needed due to climatic, geographic, or topographic conditions and files the same with the California Building Standards Commission; and

WHEREAS, the City Council of the City of Imperial Beach does herewith find that the city has certain climatic, geologic, and topographical features that can have a deleterious effect on the safety and fitness of property, buildings and structures; and

WHEREAS, the City of Imperial Beach finds that the modifications and changes to the 2010 California Building Standards Code are reasonably necessary because of the local climatic, geological, and topographical conditions as identified in each Attachment; and

WHEREAS, certain amendments to the 2010 California Building Standards Code serve to mitigate to the extent possible said deleterious effects; and

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WHEREAS, Sections 50022.1 through 50022.10, inclusive, of the Government Code provide authority for the adoption by reference of codes, or portion of such codes; and

WHEREAS, if a city does not make changes then the California Building Standards Code becomes effective in such city 180 days after publication of the California Building Standards Code by the California Building Standards Commission; and

WHEREAS, amendments to provisions relating to civil, administrative, or criminal procedures and remedies available for enforcing violations do not require findings pursuant to Health & Safety Code Section 17958.7.

NOW THEREFORE, the City Council of the City of Imperial Beach does ordain as follows:

SECTION 1

That a certain document, one (1) copy of which is on file in the office of the Building Official of the City of Imperial Beach, being marked and designated as the 2010 California Building Standards Code, including Appendix Chapters, as published by the International Code Council, be and is hereby adopted as the Building Code of the City of Imperial Beach, in the State of California regulating and governing the conditions and maintenance of all property, facilities, buildings and structures; by providing the standards for supplied utilities and facilities and other physical things and conditions essential to ensure that structures are safe, sanitary and fit for occupation and use; and the condemnation of buildings and structures unfit for human occupancy and use and the demolition of such structures as herein provided; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said Building Code on file in the office of the City of Imperial Beach are hereby referred to, adopted, and made a part hereof, as if fully set out in this ordinance, with the additions, insertions, deletions and changes, if any, prescribed in Sections 2-9 of this ordinance.

SECTION 2: Chapter 8.50 of the Imperial Beach Municipal Code is amended in its entirety to read as set forth in Attachment A.

SECTION 3: Chapter 15.02 is added to the Imperial Beach Municipal Code to read as set forth in Attachment B.

SECTION 4: Chapter 15.04 of the Imperial Beach Municipal Code is amended in its entirety to read as set forth in Attachment C.

SECTION 5: Chapter 15.06 of the Imperial Beach Municipal Code is amended in its entirety to read as set forth in Attachment D.

SECTION 6: Chapter 15.16 of the Imperial Beach Municipal Code is amended in its entirety to read as set forth in Attachment E.

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SECTION 7: Chapter 15.28 of the Imperial Beach Municipal Code is amended in its entirety to read as set forth in Attachment F.

SECTION 8: Chapter 15.32 of the Imperial Beach Municipal Code is amended in its entirety to read as set forth in Attachment G.

SECTION 9: Chapter 15.38 is added to the Imperial Beach Municipal Code to read as set forth in Attachment H.

SECTION 10: Chapter 15.40 is added to the Imperial Beach Municipal Code to read as set forth in Attachment I.

SECTION 11: Chapter 8.88 of the Imperial Beach Municipal Code is hereby repealed in its entirety.

SECTION 12: Chapter 15.18 of the Imperial Beach Municipal Code is hereby repealed in its entirety.

SECTION 13: Chapter 15.36 of the Imperial Beach Municipal Code is hereby repealed in its entirety.

SECTION 14

That if any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this ordinance. The City of Imperial Beach hereby declares that it would have passed this ordinance, and each section, subsection, clause, or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses, and phrases be declared unconstitutional.

SECTION 15

That nothing in this ordinance or in the Building Standards Code hereby adopted shall be construed to affect any suit or proceeding pending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinance hereby repealed as cited in Sections 11, 12 and 13 of this ordinance; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this ordinance.

SECTION 16

The City Clerk is directed to prepare and have published a summary of this ordinance no less than five days prior to the consideration of its adoption and again within 15 days following adoption indicating votes cast pursuant to the provisions of Government Code section 36933. Upon passage, the City Clerk shall transmit a copy of this Ordinance to the California Building Standards Commission pursuant to Health and Safety Code section 17958.7.

3

SECTION 17

That this ordinance and the rules, regulations, provisions, requirements, orders, and matters established and adopted hereby shall take effect and be in full force and effect **30 days** from and after the date of its final passage and adoption.

INTRODUCED AND FIRST READ at a regular meeting of the City Council of the City of Imperial Beach, California, on the 17th day of November 2010; and **THEREAFTER ADOPTED** at a regular meeting of the City Council of the City of Imperial Beach, California, on the 1st day of December 2010, by the following vote:

AYES: **COUNCILMEMBERS: BRAGG, MCCOY, ROSE, KING, JANNEY**
NOES: **COUNCILMEMBERS: NONE**
ABSENT: **COUNCILMEMBERS: NONE**

James C. Janney
JAMES C. JANNEY, MAYOR

ATTEST:

Jacqueline M. Hald
JACQUELINE M. HALD, CMC
CITY CLERK

APPROVED AS TO FORM:

Jennifer M. Lyon
JENNIFER M. LYON
CITY ATTORNEY

Attachment 2C
Storm Water Management Plan Form

City of Imperial Beach Approval
Approved: _____ Date: _____

City of Imperial Beach
Storm Water Management Plan

Section 1: Required Informaion

Location/Address of Proposed Project		Permit Type (Building, Grading, or Encroachment)	
		Property Owner Name	Phone Number
Projected Start Date:	Projected End Date:	Contractor	Phone Number

Overview of Storm Water Pollution Prevention requirements

The City reviews all proposed development and redevelopment projects, including Public Works Capital Improvement Projects, to ensure that construction activities are in compliance with the federal Clean Water Act, the State Water Code, and local storm water ordinances. Proposed projects must complete a Storm Water Management Plan prior to issuance of any Construction, Grading, or Encroachment Permit.

The purpose of the Storm Water Management Plan is to document the Best Management Practices (BMPs) that will be implemented in order to prevent pollutants (e.g., sediment and other wastes) caused by land disturbance and construction from entering storm water conveyances and receiving waters. It also certifies that the project proponent will maintain construction site BMPs to ensure their continued effectiveness. Upon City approval, the Storm Water Management Plan becomes an important part of the Construction, Grading, or Encroachment Permit, and is subject to enforcement by City of Imperial Beach inspectors and others.

Determine if the project meets the category of "Priority" or "Standard" Development Project

Most projects in the City that require a building, grading, or encroachment permit fall under the category of Standard Development Project. However, larger projects that meet the following criteria are considered Priority Development Projects and require the preparation of a Standard Urban Storm Water Mitigation Plan (SUSMP) as part of the project design submittals:

1. Redevelopment project that adds or replaces 5,000 ft² of impervious area
2. Housing development of 10 or more units
3. Commercial development greater than 5,000 ft²
4. Automotive repair shop
5. Restaurant
6. Parking lot greater than 5,000 ft²
7. Street, road, or highway that add or replace 5,000 ft²
8. Project discharging directly to or adjacent to an Environmentally Sensitive Area (ESA)

Select one box below that identifies the project category

☐ Priority Development Project	☐ Standard Development Project
(SUSMP and Storm Water Management Plan required)	*(Storm Water Management Plan required)*

Priority Development Projects over 1 acre in size

Priority Development Projects that disturb one or more acres of soil also need to have coverage under the State Water Resource Control Board General Construction Permit (Order No. 20009-009-DWQ), which requires the development of a Storm Water Pollution Prevention Plan (SWPPP) that is prepared by a qualified SWPPP developer (QSD). The SWPPP can substitute for the Storm Water Management Plan requirements in Section 2 of this application.

Projects equal to or greater than 1 acre must provide a WDID number from the SWRCB.
WDID (if applicable): _____

Identify construction storm water site inspection prioritization

Construction site inspections are conducted as necessary throughout the year to verify the proper implementation of storm water BMPs. Additional inspections during the rainy season (October 1 - April 30) are required for project sites that have an increased potential to cause or contribute to storm water pollution. Inspection frequencies are based on a prioritization ranking of High, Medium, or Low.

High priority sites will be subject to weekly construction-phase storm water BMP inspections during the rainy season, Medium priority sites will be subject to monthly construction-phase storm water BMP inspections during the rainy season, and Low priority sites will continue to receive inspections as needed and not subject to increased inspections during the rainy season.

Select one box from below that best identifies the inspection priority

☐ High Priority	☐ Medium Priority	☐ Low Priority
Project is greater than one acre and includes grading, excavation, or outside demolition.	Project is less than one acre and includes grading, excavation, or outside demolition.	No grading, excavation, or outside demolition will occur.

Determine if the project is exempt from completing Section 2

Projects that meet one of the criteria below may be exempt from complete a detailed Storm Water Management Plan outlined in Section 2 of this application. Please note that if your project is exempt from Section 2 you are still required to adhere to the Imperial Beach storm water ordinance in Municipal Code 8.30 and implement good housekeeping BMPs to prevent storm water pollution from your project site. Projects that meet one of the following categories can skip Section 2 of this Storm Water Management Plan:

1. The project has already prepared a SWPPP under the Construction General Permit.
2. The project is not a construction or redevelopment project.
3. Project involves the construction of underground or overhead linear utility lines less than one acre in total area.
4. Project does not disturb soil and involves construction inside an existing building.
5. The project qualifies as routine maintenance that replaces or renews existing materials because of failed or deteriorating condition:
   - Roof, deck, or fence replacement
   - Pavement spot repair, resurfacing asphalt, slurry seal, pedestrian ramps, or sidewalk

☐ **Project not required to complete Section 2 of Storm Water Management Plan document**

(Check box if applicable and sign the Certification Statement in Section 3)

Indicate which exemption applies: _____

Section 2: Addional Project Information and Best Management Practices

Estimated amount of disturbed project area:_____ acre(s)

Project Description:

(Include project site description information on location, watershed drainage, 303(d) listed pollutants, potential contaminates generated from project, and references to applicable drawings or plans.)*

*303(d) Listed Pollutants: **Pacific Shoreline**: PCBs, Bacteria; **Tijuana River and Estuary**: Bacteria, Nutrients, Metals, Pesticides, Trash, Sediment

Construction / Grading Plan BMP Checklist

The following information shall be shown on plans:

- ☐ The project boundaries
- ☐ The footprint of any existing structures and facilities
- ☐ The footprint of all structures and facilities to be constructed
- ☐ The limits of grading
- ☐ The existing and proposed grades of the site
- ☐ The location(s) where runoff from the site may enter storm drain(s), channel(s), and/or receiving waters
- ☐ Location of proposed storm water BMPs

Best Management Practices	CASQA Storm Water BMP Fact Sheet	✓ BMP Selected	Comments
Select each of the BMP fact sheets that apply. Include selected BMPs on Plans and/or provide sufficient explanation as comments.			
Erosion Control BMPs			
Geotextiles, Plastic Covers, or Erosion Control Blankets *This BMP consists of using plastic, visqueen, or other materials to cover disturbed soil and/or dirt stockpiles to reduce erosion from rainfall impact. The material used for cover must be firmly held in place with sandbags or otherwise keyed into the soil as described in BMP specifications.*	EC-7		
Mulch, Straw, Wood Chips, Soil Binders, Compost *This BMP consists of applying mulch or other binding material to temporarily protect exposed soils from erosion by rainfall impact or wind. These are temporary methods of protection that must be inspected and maintained.*	EC-3, EC-5, EC-6, EC-8, EC-14, EC-16		
Perimeter Control BMPs			
Silt Fence *Silt fences are made of filter fabric that has been entrenched, attached to supporting poles, and is sometimes backed by a plastic or wire mesh for support. The silt fence detains sediment-laden water, promoting sedimentation behind the fence. It is primarily used as a perimeter control and is not effective unless trenched and keyed into the soil.*	SE-1		
Fiber Roll / Straw Waddle *Fiber rolls consist of straw, flax, or other similar materials bound into a tight, tubular roll. They are often used on the face of slopes to intercept runoff. They may also be effective as perimeter controls for sites with little to no slope. Fiber rolls are not effective unless properly installed (trenched and staked into the soil per specifications).*	SE-5		
Gravel Bag / Sandbag Barrier *This BMP consists of placing a series of gravel- or sand-filled bags on a level contour to intercept sheet flows. Gravel bags pond sheet flow runoff, allowing sediment to settle out, and release runoff slowly as sheet flow. Sandbags also pond sheet flow runoff, but allow little if any runoff to be released. These BMPs are often used around stockpiles or as a perimeter control.*	SE-6, SE-8, SE-9		
Wind Erosion Control BMP			
Wind Erosion Control *This BMP consists of applying water or other dust palliatives as necessary to prevent or alleviate dust nuisance generated by construction activities. Care should be taken so that water used for dust control is not allowed to move off site.*	WE-1		
Storm Drain Inlet Protection			
Storm Drain Inlet Protection *Storm drain inlet protection consists of filter fabric covering the opening of the storm drain, drop inlet, or curb inlet. The fabric must be held in place securely with either sandbags or gravel bags. Frequent inspection and maintenance is required.*	SE-10		

Tracking Control BMPs			
Stabilized Construction Entrance *This BMP consists of a pad of aggregate underlain with filter cloth at the entrance of a construction site where traffic will be entering and leaving to or from a public right of way. The purpose is to reduce the tracking of sediment onto streets. A stabilized construction entrance is unlikely to be 100% effective, and must be used in conjunction with sweeping and good housekeeping practices to ensure that sediment tracked off-site does not enter the storm drain system.*	TC-1		
Entrance/Outlet Tire Wash *A tire wash is an area located at stabilized construction access points to remove sediment from tires and under carriages and to prevent sediment from being transported onto public roadways.*	TC-3		
Street Sweeping and Vacuuming *Street sweeping and vacuuming includes use of self-propelled and walk-behind equipment to remove sediment from streets and roadways, and to clean paved surfaces in preparation for final paving. Sweeping and vacuuming prevents sediment from the project site from entering storm drains or receiving waters.*	SC-7		

General Site Management BMPs			
Good Housekeeping *Good housekeeping ensures that the construction site is kept tidy and free of excessive debris. It also includes ensuring that any sediment or trash tracked from the site onto the public right of way (through whatever means) is swept up or otherwise collected at the end of the business day.*	-	✔	
Employee & Sub-contractor Training *All employees and sub-contractors working on site shall be trained with regard to applicable storm water management requirements. Training shall also be provided on proper techniques for installing and maintaining BMPs.*	-	✔	
Material Delivery, Storage, & Use *Minimize the storage and use of hazardous materials on site, and store materials in a designated area with secondary containment if appropriate.*	WM-1, WM-2		
Stockpile Management *Stockpiles of soil, asphalt, concrete rubble, "cold mix", and wood pressure-treated with metallic products should be covered with plastic or a comparable material at all times during the rainy season, and prior to the onset of precipitation during the dry season.*	WM-3		
Spill Prevention & Control *Reduce the chance for spills, cleanup leaks and spills immediately, and report spills to City personnel.*	WM-4, NS-6		
Waste Management *These are a series of BMPs that address the appropriate management of solid wastes, hazardous wastes, contaminated soils, concrete wastes, sanitary wastes, and liquid wastes as specified in the BMP specifications listed to the right.*	WM-5, WM-6, WM-7, WM-8, WM-9, WM-10		
Water Conservation *Avoid using water in a way that is likely to cause erosion and/or the transport of pollutants off site.*	NS-1	✔	
Vehicle & Equipment Cleaning, Fueling & Maintenance *On-site cleaning, fueling, and maintenance of vehicles is discouraged.*	NS-8, NS-9, NS-10		
Concrete Paving Activities *Prevent or reduce the discharge of pollutants from paving operations, using measures to prevent runon and runoff pollution, properly disposing of wastes, and training employees and subcontractors.*	NS-3		

Additional Storm Water BMPs (please describe):
1.
2.
3.
4.

(Attach storm water BMP fact sheets as an appendix to your Storm Water Management Plan)

Storm Water BMP Narrative:
(Identify the schedule for deployment of BMPs. BMPs must be implemented, modified, and maintained to reflect the phase of construction and weather conditions. Include a statement about BMP inspection and maintenance on site.)

Section 3: Certification Statement

The following certification must be signed before a Construction, Grading, or Encroachment Permit will be issued.

I have read and understand that the City of Imperial Beach has adopted minimum requirements for prohibiting non-storm water discharges of urban runoff and for managing storm water runoff from sites associated with construction and other land disturbance activities. I certify that the BMPs proposed in this Storm Water Management Plan will be implemented to effectively prevent off-site runoff as well as any of this project's potentially negative impacts on the environment. I further agree to install, monitor, maintain, or revise the selected BMPs to ensure their effectiveness throughout the life of the project.

I also understand that non-compliance with the City's Storm Water and Construction / Grading Ordinances may result in enforcement by the City, including fines, citations, stop-work orders, cease and desist orders, or other actions.

Property owner
Applicant _____ *Date* _____

Contractor _____ *Date* _____

Attachment 2D
Guidance for Meeting SUSMP Compliance for Priority Development Projects

Guidance For Meeting SUSMP Compliance for Priority Development Projects

City of Imperial Beach
825 Imperial Beach Blvd

Getting Started

Standard Urban Stormwater Mitigation Plan (SUSMP) requirements apply to new development and redevelopment projects that meet the criteria of a Priority Development project as defined by Municipal Code 8.32.040. These requirements for storm water runoff are mandates by the San Diego Regional Water Quality Control Board (RWQCB) and apply to the entire San Diego area through the Countywide Model SUSMP.

The purpose for the Imperial Beach SUSMP is to mitigate for the impact of urban runoff from new and redevelopment projects by integrating low impact development (LID) designs into the management of storm water runoff. Urban development can unintentionally introduce pollutants from every day activities into the environment. The increase of impervious areas also increases the volume and rate of runoff from storm events entering the storm drain conveyance system. The result is a negative impact on downstream habitat and water quality.

Suggested Steps For SUSMP Preparation

1. Assemble needed information for existing site conditions
2. Identify constraints and opportunities for treating storm water on site
3. Prepare and document LID design and storm water treatment facilities for project site
4. Specify source control BMPs
5. Prepare long term storm water facility O&M Plan
6. Assemble and complete SUSMP project submittal document

The goal of the SUSMP is to develop and implement countywide policies that ensure to the maximum extent possible (MEP) that development sites achieve a new design standard to infiltrate, filter, or treat runoff in a manner that captures urban pollutants and controls runoff flow rates, durations, and velocities on downstream habitat and conditions.

This guidance document provides a 'how to' guide for project applicants to achieve compliance with the SUSMP (I.B.M.C. Chapter 8.32) in the City of Imperial Beach.

Step 1: Assemble Needed Information

In order to select the appropriate types and locations for storm water treatment facilities, the applicant will need to assemble information on site characteristics that will contribute to the landscape and site design for the project. The applicant will need to identify the following site characteristics:

- Existing natural and hydrologic features for the project site location and for the downstream drainage area. These features may include contiguous natural areas, wetlands, receiving waters, watercourses, seeps, or springs.
- Priority pollutants for the downstream receiving water body (these are 303(d) listed or TMDL pollutants) and the pollutants potentially generated by the proposed development project (reference Table 2 in IBMC 8.32.130).
- Existing vegetation, impervious areas, and direction of surface drainage.
- Existing site topography that includes contours of any slopes greater than 4% and any significant geologic features.
- Existing site drainage. For undeveloped sites the applicant should inspect the site and examine topographic maps and survey data. Previous developed sites should also consider existing structures, connections to the municipal storm drain system, and plans for previous development.
- Regional design standards or other local codes that govern zoning or minimum setback requirements for open space, street widths, and sidewalk construction. Additional Public Works standards may apply to site drainage and allowable building materials.
- Soil types and depth to groundwater, which will help to determine the capacity for storm water infiltration and selection of LID treatment and flow control facilities.

Step 2: Identify Constraints and Opportunities



Review the information assembled in Step 1. Identify the principal constraints on site design and selection of treatment and flow control devices that best address the project's priority pollutants and pollutants of concern. Look for opportunities to reduce imperviousness and incorporate facilities into the site landscape and design. **Constraints** might include impermeable soils, high groundwater, contaminated soils, geotechnical instability, high intensity land use, heavy pedestrian or vehicle traffic, restricted right-of-way, or safety concerns. **Opportunities** might include existing natural areas, depressed topography, easements, open space buffers, and landscape amenities.

Prepare a brief narrative that describes the site opportunities and constraints. This narrative will help in the selection and design of appropriate storm water treatment facilities.

Step 3: Prepare and Document Storm Water Treatment Facilities

The following types of storm water treatment facilities are appropriate for treatment of runoff potentially containing most pollutants of concern.

Bioretention facilities (LID)	Infiltration facilities or practices	Higher-rate media filters
Settling basins (dry ponds)	Media filters	Trash racks and hydrodynamic devices
Wet ponds and constructed	Higher-rate biofilters	Vegetated swales

These storm water treatment facilities should be used independently or in combination to meet the water quality treatment and hydromodification flow control requirements of the NPDES Stormwater Permit with the preference on low impact development (LID) design strategies.

Applicants should use the Low Impact Development Design Guide in the Countywide Model SUSMP-Chapter 4, to analyze the project for applicable LIDs. The detailed instructions in Chapter 4 provide guidance for designing and documenting LIDs and integrated management practices that achieve both storm water treatment and flow control requirements. The LID Design Guide includes calculation procedures and formats for submitting LID sizing calculations. This guide has been developed to provide the applicant with step-by-step instructions that will achieve the flow and treatment control requirement.

Project submittals will need to include a drawing or multiple drawings showing:

1. The entire site divided into separate drainage management areas (DMAs), with each area identified as one of the following:
   - Self-treating area,
   - Self-retaining area,
   - Draining to a self-retaining area, or
   - Draining to an integrated management practice (IMP) area
2. For each drainage area, the types of impervious area proposed, and the area of each.
3. Proposed locations and sizes of treatment facilities. Each feature should be clearly marked so it can be easily identified.

Proprietary Devices
Many currently available proprietary media filters do not meet the NPDES Permit requirements when used alone for storm water treatment.

In addition to a site map, project submittals will need to include:

1. Tabulation of proposed self-treating areas, self-retaining areas, areas draining to self-retaining areas, areas draining to IMP areas, and corresponding IMPs indentified on the exhibit.
2. Calculations, in the format shown in the LID Design Guide (Countywide Model SUSMP, Chapter 4), showing the minimum square footage required and proposed square footage for each IMP.
3. Preliminary designs for each IMP. The design sheets and drawings in the LID Design Guide may be used or adapted for this purpose.
4. A narrative overview of the proposed LID designs and how they optimize the site layout, use pervious surfaces, disperse runoff from pervious surfaces, and drain impervious surfaces to engineered IMPs.
5. A narrative briefly describing each DMA, its drainage, and where the drainage will be directed.

Compliance
Design criteria in the Countywide Model SUSMP ensure the required volume of flow from all developed portions of the project, including landscaped areas, is infiltrated, filtered, or treated.
Provision D.1.d.(6)(a)

Step 4: Specify Source Control BMPs

Source control BMPs minimize the contact between pollutants and urban runoff. They are land use or site planning practices that can be structural or non-structural measures that prevent urban runoff pollution by reducing the potential for contamination at the source.

Project applicants must include permanent source control BMPs that are identified in the IBMC 8.32.250 through 8.32.310 into the design of the project. In addition, the project applicant must identify operational source control BMPs, such as regular sweeping and good housekeeping measures that must be implemented by the site's occupant or user.

Permanent source control BMPs must be identified on submittal drawings with a corresponding narrative that explains any special features, materials, or methods of construction that will be used to implement these permanent structural BMPs. In addition, project applicants must submit a table that identifies the potential sources of runoff pollution with the corresponding permanent source control or operation source control BMPs to prevent pollutants from entering run-off.

Applicants should strongly consider using the Pollutant Sources/Source Control Checklist (Appendix-A of the County-wide Model SUSMP) as a guide for meeting the source control BMP requirements of the NPDES Stormwater Permit.

Step 5: Storm Water Facility Long-Term Maintenance

The most important component of these SUSMP requirements is the continued long-term operation and maintenance of the project's storm water treatment facilities and source control measures. Prior to the issuance of any discretionary permits, the applicant will submit a project specific SUSMP that will identify the proposed storm water BMPs for the site and an Operation and Maintenance (O&M) Plan that will outline the long-term continued maintenance requirements for the proposed BMPs. In order to receive a notice of completion for the project the applicant must submit a signed maintenance agreement that is provided by the City to ensure that the BMPs will be maintained in perpetuity. The agreement will have the approved O&M Plan as an attachment and will include the following:

- A means to finance and implement facility maintenance in perpetuity.
- Acceptance of responsibility for maintenance from the time the facilities are constructed until responsibility for operation and maintenance is legally transferred.
- The identified responsible party to management the storm water BMPs.
- An outline of general maintenance requirements for the treatment and flow-control facilities on site.
- Schedule of routine service frequency and identification of specific maintenance activities.

Step 6: Finalize Project Submittal

The City does not provide a specific format for SUSMP project submittals. Applicants are expected to provide a clear, complete, and well organized project submittal that will make it possible for City staff to confirm the selected storm water treatment facilities and meet the minimum requirements of the NPDES Stormwater Permit, IBMC 8.32, and the Countywide Model SUSMP.

Frequently Asked Questions

Why do I have to use BMPs, LIDs, and hydromodification management practices for my project?

- In January 2007, the San Diego Region Water Quality Control Board reissued a municipal Stormwater NPDES Permit to the San Diego area storm water Copermittees. The reissued permit updates and expands storm water requirements for new development and redevelopment projects, including requirements for LIDs, source control BMPs, and HMP.

What are the different types of BMPs that might be required for my project?

- Site Design: A project design feature that reduces the amount of impervious surfaces or disconnects impervious surfaces from the municipal storm drain system.
- LID BMPs: An integrated site design methodology that uses small-scale detention and retention facilities to mimic pre-existing site hydrologic conditions. LID BMPs are often referred to as integrated management practices (IMPs).
- Source Control: Structural or non-structural measures that reduce the potential for pollution at the source, such as roof structures over trash or material storage areas and berms around fuel dispensing areas.
- Treatment Control BMP: Any engineered system designed and constructed to remove pollutants. These BMPs encompass most types of storm water treatment facilities required for priority development projects.

What is hydromodification management (HMP)?

- It is the management of post-project runoff flows and durations to the levels of the pre-project conditions.

How do I meet the HMP requirements?

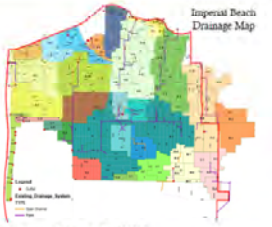
- By implementing properly sized LID facilities as outlined in the Countywide Model SUSMP, your project will automatically meet the HMP criteria of the NPDES Stormwater Permit.

Who can I contact with specific question regarding my project?

- The Community Development Department at 619-628-1356 can assist in SUSMP preparation and final submittal.

References and Resources

- Imperial Beach Municipal Code, Chapter 8.32 Standard Urban Runoff Mitigation Plan
- RWQCB Order R9-2007-0001
- Countywide Model SUSMP
- CASQWA Stormwater Handbooks or Web Portal



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3.0 CONSTRUCTION COMPONENT

3.1 Introduction

The City endeavors to reduce pollutants and runoff from construction sites to the MEP. This component is primarily applicable to the Community Development Department, the Capital Improvements Projects Division, the Environmental Division, and requirements that apply to the Building and Planning Division activities related to construction and construction permits, and compliance actions proposed by the City. This section of the Annual Report discusses program management, implementation, and changes made during FY 2010-11 to the JURMP Construction Component.

3.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Construction component is described in the *2008 JURMP Section 5.0*. The City updated its construction brochure that identifies and illustrates the use of construction site BMPs. The City also maintains an ongoing database of active construction projects and tracks inspections though the City's database software HTE.

3.3 Outcome Level 1b: Implementation of Management Program Activities

The City requires all construction projects to implement site control BMPs that reduce pollutants and runoff to the MEP. The designated minimum BMPs for construction projects are listed in the *2008 JURMP Section 5.0* and are required as project conditions prior to the approval and issuance of local construction and grading permits. All construction projects are formally inspected throughout the duration of the project to ensure adequate implementation and maintenance of BMPs. During the rainy season all priority projects were inspected at least biweekly, medium priority sites were inspected at least monthly, and low priority projects were inspected as needed. During the dry season, all construction sites were inspected as needed.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Construction program element:

- Table 3.1 provides an overview of the Construction element as it was implemented during FY 2010-11.
- Table 3.2 presents and describes targeted FY 2010-11 outcomes and results
- Table 3.3 FY 2010-11 active construction inventory and inspection frequency

3.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Staff and Contractors

Education is provided to contractors through face-to-face interaction with City staff in meetings, through inspections, and through several local ordinances, storm water forms, and brochures that outline the requirements for addressing urban runoff, BMP implementation, and water quality. The education effort for City staff is discussed in the *2008 JURMP Section 10.0.*

3.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Staff and Contractors

The City facilitates changes in behavior and implementation of BMPs at construction sites by working with developers to ensure that all projects meet the requirements of the Regional Permit. Prior to the issuance of construction and grading permits the City requires developers to submit design plans that reduce pollutants and runoff to the MEP, develop a Project Storm Water Management Plan, and obtain coverage if necessary under the General Construction Permit. The City also inspects projects and enforces storm water ordinances at all construction sites. The *2008 JURMP Section 5.0* provides more information on the procedural and administrative mechanisms in the City that promote behavioral changes. The *2008 JURMP Appendix D* defines minimum BMP requirements applicable to construction in the City.

3.6 Outcome Level 4: Source Load Reductions

The primary goal of BMP implementation is to reduce the loading of pollutants and runoff to storm water discharges. During the reporting period the City successfully implemented all program requirements for implementing and inspecting BMPs to control runoff sources related to construction activities. Source load reductions were achieved at construction sites by implementing erosion and sediment control, requiring minimum BMPs, and enforcing general site management requirements. The City required 94 active construction projects, 1 SUSMP project, and 8 Capital Improvement Projects to reduce pollutants and runoff to the MEP. Compliance with required minimum BMPs were then verified through 580 site inspections. Source load reductions may not be directly measured but can be implied by the proper implementation and maintenance of storm water BMPs.

Table 3.1 – Overview of Construction Inventory by Priority Classification

Category	Number	Description
A. Type of Active Construction		
Discretionary Projects	94	Most projects in the City are low priority discretionary projects. The City only had one active SUSMP project for the new Sea Coast Inn along the beach front. Capital improvement projects that were active during the year are also reported in this section.
Capital Improvement Projects (CIP)	8	
Priority Development (SUSMP) Projects	1	
B. Priority Classification		
High Priority Projects (SUSMP)	1	High priority projects are projects that are over 1 acre in size and require additional storm water controls for post construction.
Medium Priority Projects	1	The only medium priority project was the construction of a Skate Park.
Low Priority Projects	101	Most development projects in the City are categorized as low priority.
C. Totals		
Construction Projects	103	The City no active SUSMP projects during the reporting period. All active construction projects were discretionary in nature or capital improvements.
Priority Development (SUSMP) Projects	1	
JURMP Sections	Description of FY 2010-11 Changes	
5.0 and Appendix D	BMP requirements of the JURMP applicable to construction were modified in accordance with the requirements of the updated Permit in March 2008.	

Table 3.2 - Construction Component Targeted Outcomes and Results

Construction FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per new Permit requirements	No updates made during FY 2010-11	Complete	Applicable updates were included in *JURMP Section 5.0*.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update program documentation for consistency with program updates	Updates made to City SUSMP as identified in previous section	Complete	Updates to the Model SUSMP and Storm Water Management Plan form were made as identified in the previous section. The Environmental Division also purchased a new field computer that will be used to conduct inspections and issue violations. Forms and procedures will be updated as necessary to accommodate the use of field computers.
c) Year-End Program Review			
Complete annual year-end program review	Review program for effectiveness and efficiency	Complete	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
d) Inventory of Construction Projects and Inspections			
Update inventory for construction projects and track inspections	Updates made to the inventory throughout the reporting period and inspections tracked	Complete	An inventory of construction projects and inspections is maintained on the City's database software HTE. Constructions site inspection records are also maintained on HTE. The Environmental Division also maintains an inventory of construction projects that require conditions from Public Works. An inventory of Capital Improvement Projects (CIP) is also maintained by the Environmental Division.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Project Approval			

Construction FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Require construction projects to implement BMPs	BMPs are required as conditions for development projects	Complete	All development and redevelopment projects are required to implement measures to reduce pollutants and runoff to the MEP. Designated minimum BMPs for construction projects are listed in the *2008 JURMP Section 5.0*. Construction BMPs are verified through the Project Review process and during site inspections.
b) Confirmation of Urban Runoff Approval Process			
Require construction projects to have adequate project review for storm water and pollution control	All construction projects received the necessary project review before being issued City permits	Complete	Information on the City's project review and approval process is provided in the previous section of this annual report, in the *2008 JURMP Section 4.0,* and information on construction activities is provided in the *2008 JURMP Section 5.0*. Information on construction projects and inspections is tracked in the City's HTE database and in excel spread sheets.
c) Confirmation of Designated BMPs			
Verify that designated BMPs were implemented, or required to be implemented	Construction projects undergo project review before being issued City permits. Construction projects are inspected for BMP compliance.	Complete	Designated minimum BMPs are required as project conditions during the urban runoff approval process. Projects then receive inspections during the construction phase to verify the proper implementation of BMPs. Projects are inspected for adequate storm water construction BMPs and project design, and source control BMPs.
d) Confirmation of Maximum Disturbed Area			
Verify that maximum disturbed area for grading was applied to applicable construction sites	Apply conditions for maximum disturbed area during project review and verify through inspections	Complete	Project applicants are made aware of storm water requirements during the grading and construction permit application process. The grading permit specifies conditions to control the erosion of sediment off the property.

Construction FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
e) Municipal Staff Training			
Ensure that municipal staff are knowledgeable on storm water BMPs related to construction activities, SUSMP, and HMP	Staff educated through meetings, workshops, and training s	Complete	Community Development and Public Works Departments meet weekly to review critical issues including storm water project development requirements. Monthly meetings are also held to discuss code enforcement related issues. Planning Division, Building Division, Code Compliance Division, Redevelopment Division, and Environmental Division all received training outside the City on multiple storm water issues. Training topics include SUSMP, HMP, TMDLs, General Construction Permit, and code enforcement. Daily interaction with City staff ensures that storm water pollution prevention remains a high priory.
f) Construction Contractor Education			
Provide education for contractors	Counter hours held, meetings conducted throughout reporting period and provided construction brochure	Complete	The Community Development Department held counter hours, face-to-face meetings, project review meetings, and performed inspections throughout the reporting period. Public Works Department oversaw storm water compliance for the Capital Improvement Projects and provided education to contractors during meetings and inspections. A new construction brochure was also created to provide additional information on proper BMP implementation.
g) Confirmation of Construction Inspections			
Inspect construction activities	The Building Inspector, Public Works Inspector, and Environmental Division conducted inspections for BMP compliance	Complete	All construction projects get formally inspected throughout the duration of the project. During the rainy season, all high priority sites are inspected at least biweekly, medium priority sites are inspected at least monthly, and low priority sites are inspected as needed. During the dry season, all construction sites are inspected as needed. The Public Works Department inspects all active CIP projects sites daily. The Community Development Department Building Inspector inspects discretionary projects that are not CIPs. The Environmental Division follows up an complaints and violations at construction sites.
h) Special Investigations			
---	---	---	Special investigations were not conducted during the reporting period.

Construction FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND DEVELOPERS)			
Maintain high level of staff knowledge regarding storm water program	Conducted annual municipal training, held weekly department meetings, and attended outside training events.	See Education Component Section 8.0.	See Education Component Section 8.0.
Increase contractor knowledge regarding storm water program	Community Development and Public Works Departments provide education opportunities for contractors	See Education Component Section 8.0.	See Education Component Section 8.0.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND CONTRACTORS)			
a) Procedural and Administrative Behaviors			
Confirm active construction projects required conditions to protect water quality	All constructions projects (103 projects) were reviewed for conditions of approval.	Complete	The City reviews and conditions all proposed projects to ensure all necessary conditions and BMPs are met before any construction permits are issued. Projects over $50,000 also get routed through Public Works for additional storm water BMP review. After a City permit is issued the project is in active construction phase and receives the necessary frequency of inspections for BMP compliance. Inspection frequency is based on high, medium, or low priority ranking. Storm water compliance is a component of every site inspection for a given project.
b) BMP Implementation			

Construction FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Inspect projects and verify BMPs	The Building Division conducted 452 BMP site inspections. The Public Works Inspector provided daily oversight at all CIP construction sites and performed 128 BMP inspections.	Complete	The City inspects and verifies BMPs at all projects to ensure compliance with storm water program. The Building Inspector, Public Works Inspector, Code Enforcement Officer, and Environmental Division share the responsibility of inspecting development projects and verifying BMP compliance.
Verify construction sites with advance treatment	No construction sites required advance treatment	Complete	No construction sites during the reporting period required the implementation of advanced treatment for sediment control. The City requires all construction sites to implement BMPs to contain sediment on the property during all stages of development. Advance treatment is required for high threat to water quality projects.
c) Inspections for Wet and Dry Weather			
Identify active construction and inspection frequencies for wet and dry season	The City conducted 580 BMP site inspections and exceeded the required minimum inspection frequency	Complete	During the rainy season, all high priority sites are inspected at least biweekly, medium priority sites are inspected at least monthly, and low priority sites are inspected as needed. During the dry season, all construction sites are inspected as needed. Most development projects are redevelopment and are less than one acre in size. The City generally inspects construction sites more frequently than the minimum requirement. See Table 3.3 for inspection frequency per project.
d) Inspection Results			
Provide general inspection results	Conducted the necessary minimum BMP inspections at construction sites	Complete	Most contractors are aware of the storm water BMP requirements and properly implement BMPs. Problems arise during the wet season when heavy rain or wind results in the blowout of poorly implemented BMPs. The highest numbers of storm water violations are reported by observant City staffs who observe inadequate BMPs or illegal discharges.

Construction FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
e) Violations and Enforcement Actions			
Number of violations and enforcement actions to achieve compliance.	The City responded to 8 construction related storm water violations	Complete	Typical violations include improper washing of equipment, power washing, stock piles of sediment, and trash. Each enforcement case is different but generally involves a verbal or written warning, a notice of violation for a repeat offender or blatant illegal discharger, and a follow up investigation. The City issued 3 verbal warnings, 3 stop works, and 1 NOV.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM ACTIVE CONSTRUCTION PROJECTS)			
a) Erosion and Sediment Control			
Require erosion and sediment control when soil is disturbed	103 projects required installation of erosion and sediment control BMPs	Complete	The City requires installation of erosion and sediment control BMPs for all construction sites with a grading or building permit. Load reductions from construction sites can be implied through the proper implementation of BMPs.
b) Designated Minimum BMPs			
Require minimum BMPs for construction sites	103 projects required to implement BMPs.	Complete	The City requires all construction sites to reduce discharges of pollutants to the MEP, and to prevent discharges from causing or contributing to a violation of water quality standards. Source load reductions from construction sites can be implied through the proper implementation of BMPs.
c) Addition Controls for CWA 303(d) Waters			
Additional BMPs for projects discharging directly to 303(d) waters	No projects required to implement additional controls for CWA Section 303(d) waters	Complete	The City requires additional controls to be implemented for Clean Water Act (CWA) Section 303(d) waters. Load reductions are not tracked but can be implied.

Table 3.3 FY 2010-11 Active Construction Inventory and Inspection Frequency

ID	Application	Address	Priority	Weeks Active During Wet Season	Total Wet Season Inspections	Total Dry Season Inspections	Total Inspections	General Results	Enforcement Action Type	Resolved
46	10-595	622 OCEAN LN	Low	7	2	0	2	Approved		
47	10-605	822 CAROLINA ST	Low	1	1	1	2	Approved		
48	10-613	1488 SEACOAST DR	Low	1	1	0	1	Approved		
49	10-626	940 EMORY ST	Low	1	2	0	2	Approved		
50	10-640	1590 SEACOAST DR	Low	10	2	0	2	Approved		
51	10-641	1590 SEACOAST DR	Low	10	2	0	2	Approved		
52	10-646	1210 CALIFORNIA ST	Low	8	9	6	15	Approved		
53	10-660	795 DELAWARE ST	Low	0	0	1	1	Approved		
54	10-661	1250 5TH ST	Low	3	3	0	3	Approved		
55	10-688	951 13TH ST	Low	7	3	8	11	Approved		
56	10-690	1227 5TH ST	Low	1	1	0	1	Approved		
57	10-697	864 DELAWARE ST	Low	9	3	7	10	Approved		
58	10-701	152 DAHLIA AVE	Low	2	0	6	6	Approved		
59	10-702	552 DELAWARE ST	Low	6	3	0	3	Approved		
60	10-78	1410 10TH ST	Low	1	3	7	10	Approved		
61	10-82	527 BONITO AVE	Low	11	3	7	10	Approved		
62	10-97	1304 GROVE AVE	Low	18	5	0	5	Approved		
63	11-121	1007 CALLA AVE	Low	1	3	0	3	Approved		
64	11-127	1560 SEACOAST DR	Low	1	1	0	1	Approved		
65	11-131	177 ELM AVE	Low	2	2	0	2	Approved		
66	11-139	1146 13TH ST	Low	0	0	4	4	Approved		
67	11-140	823 CORVINA ST	Low	1	0	2	2	Approved		
68	11-144	1210 CALIFORNIA ST	Low	3	2	3	5	Approved		
69	11-18	622 OCEAN LN	Low	1	0	4	4	Approved		
70	11-218	1079 SEACOAST DR	Low	1	0	2	2	Approved		
71	11-225	325 ELKWOOD AVE	Low	1	0	3	3	Approved		
72	11-274	910 ARRIBA AVENIDA	Low	0	0	4	4	Approved		
73	11-280	1180 FLORIDA ST	Low	0	0	1	1	Approved		
74	11-297	955 11TH ST	Low	0	0	1	1	Approved		
75	11-298	816 5TH ST	Low	0	0	1	1	Approved		
76	11-322	154 CALLA AVE	Low	0	0	2	2	Approved		
77	11-329	830 IRIS AVE	Low	0	0	3	3	Approved		
78	11-382	753 12TH ST	Low	0	0	1	1	Approved		
79	11-49	219 DAISY AVE	Low	1	2	0	2	Approved		
80	11-58	985 IMPERIAL BEACH BLVD	Low	1	1	0	1	Approved		
81	11-80	1275 GRANGER ST	Low	2	2	1	3	Approved		
82	11-92	437 SEA VILLAGE DR	Low	4	3	5	8	No Permits, Insufficient BMPs	Stop Work	Yes
83	11-93	1330 LOUDEN LN	Low	3	1	4	5	Approved		
84	11-98	782 DELAWARE ST	Low	0	1	0	1	Approved		
85	6-246	1022 ELM AVE	Low	20	11	13	24	Insufficient BMPs	NOV	Yes
86	7-394	754 HICKORY CT	Low	5	1	5	6	Approved		
87	8-42	1218 GRANGER ST	Low	0	1	0	1	Approved		
88	9-363	813 EMORY ST	Low	1	1	0	1	Approved		
89	9-393	930 2ND ST	Low	1	1	0	1	Approved		
90	9-402	1293 FLORENCE ST	Low	1	1	3	4	Approved		
91	9-411	1468 HOLLY AVE	Low	0	0	4	4	Approved		
92	9-477	1266 IMPERIAL BEACH BLVD	Low	10	10	1	11	Approved		
93	9-478	1409 9TH ST	Low	19	5	3	8	Approved		
94	9-530	946 FLORENCE ST	Low	0	0	4	4	Approved		

Table 3.3 FY 2010-11 Active Construction Inventory and Inspection Frequency

ID	Application	Address	Priority	Weeks Active During Wet Season	Total Wet Season Inspections	Total Dry Season Inspections	Total Inspections	General Results	Enforcement Action Type	Resolved
95	9-543	311 EVERGREEN AVE	Low	21	4	3	7	Approved		
96	CIP S10-201	13th Street & Ebony Ave Ped ADA Ramps	Low	4	16		16	Approved		
97	CIP S09-102	Civic Center Crosswalk (CDBG)	Low			16	16	Approved		
98	CIP S11-102	Imperial Beach/Louden Crosswalk (CDBG)	Low			8	8	Approved		
99	CIP W06-101	PS 7 Wet Well Replacement	Low	2	8		8	Approved		
100	CIP S10-101	RTIP FY 09-10 (Street Improvements)	Low	4	16		16	Approved		
101	CIP W05-401	Sealing & Repair Wet Wells & Manholes	Low	4	16	4	20	Approved		
102	CIP F05-50A	Marina Vista Center Xeriscape Project	Low			4	4	Approved		
103	CIP P07-101	Skate Park Element	Med	6	24	16	40	Approved		
	Total				**298**	**282**	**580**			

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4.0 MUNICIPAL COMPONENT

4.1 Introduction

The City endeavors to reduce or eliminate pollutants and runoff from municipal discharges to the MEP. This component is primarily applicable to the Department of Public Works and its efforts to prevent municipal discharges from causing or contributing to a violation of water quality standards. This section of the Annual Report discusses program management, implementation, and changes made during FY 2010-11 to the JURMP Municipal Component.

4.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the municipal component is described in the 2008 JURMP Section 6.0. During the reporting period the City continued implementation of its municipal training program which provides education opportunities for storm water to all staff throughout the year. Continual updates were also maintained on the municipal facilities and activities inventory to match the regional reporting standard in development by the Copermittee Municipal Workgroup. Updates were made to the storm water GIS database files as a result of the Storm Water Master Plan Update 2010 (Attachment 4A Storm Water GIS Map). Lastly, the Environmental Division also purchased a field notebook computer and made updates were made to municipal inspection and MS4 maintenance forms (Attachment 4B) to improve efficiency and effectiveness analysis in reporting.

4.3 Outcome Level 1b: Implementation of Management Program Activities

The City makes storm water pollution prevention and response a high priority for all Public Works employees. Each Public Works vehicle contains a binder of municipal storm water BMPs and contains a map of the entire MS4 system. The Environmental Division conducts annual training for all Public Works employees and daily interactions with staff ensures that storm water pollution prevention remains a high priory throughout the City. The Public Works Department provides the eyes and ears on the street and therefore the first line of defense for pollution prevention, response, and cleanup. The *2008 JURMP Section 6.0* provides a complete description of the management programs for the municipal component.

Routine maintenance, cleaning, and implementation of BMPs for municipal facilities and activities keep accumulated debris and other potential pollutants from entering the MS4. At a minimum the City conducts annual formal inspections of high priority municipal facilities and actives. The City also maintains a number of storm drain inlet filters that are cleaned and maintained quarterly by Downstream Services, Inc. Cleaning records are maintained on file and logged in a database on the Environmental Division server.

During the reporting period the City completed an update to its Storm Drain Master Plan. Updates to the Master Plan include a review of previous storm drain studies (i.e. 1960 and 1991), GIS and mapping updates, hydrologic and hydraulic modeling of the MS4, identification of system deficiencies, and recommendations.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Municipal program element:

- Table 4.1 Provides an overview of the Municipal inventory by facility type and priority classification
- Table 4.2 presents and describes targeted FY 2010-11 outcomes and results
- Figure 4.1 Street sweeping removal totals
- Figure 4.2 MS4 cleaning totals
- Table 4.3 Municipal storm drain filter inventory and maintenance records
- Table 4.4 Municipal facility and activity inventory and inspection records
- Attachment 4A Updated Storm Water GIS Map
- Attachment 4B Annual Storm Drain Maintenance Form update

4.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Staff

The City conducts annual training for all municipal employees. Training for the Municipal Component is specifically targeted at the Public Works Department because City Streets, Maintenance Workers, and Sewer crews are typically the first line of defense for storm water pollution. The training program focuses on the use of Best Management Practices in daily operations, and is designed to create an overall sensitivity to pollution prevention concerns. Open discussions are encouraged to further the importance and enhance the program. This education effort for City staff is discussed in the *JURMP Section 10.0.*

4.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Staff

The *JURMP Appendix E* defines minimum BMP requirements applicable to streets, roads, highways, municipal areas, municipal activities, and parking facilities in the City. Major targeted outcomes for the JURMP municipal component included streets and parking lot sweeping, MS4 cleaning, sewer system preventative maintenance, municipal storm drain BMP maintenance, integrated pest management at parks, and implementation of BMPs at municipal facilities. All BMPs are inspected and enforced for compliance.

4.6 Outcome Level 4: Source Load Reductions

The City continues to make impressive source load reductions from municipal facilities and activities. The City maintained approximately 125 miles of curbed streets and uncurbed roads located throughout the City. Approximately 174.95 tons of trash and debris were collected through street sweeping operations. The City also collected 293 loads of large bulky items illegally dumped in City alleys through its franchise waste hauler EDCO.

The Sewer Division maintains the City's storm drain lines and catch basins. During this reporting period the Sewer Division inspected 100% of the catch basins and open grates and cleaned approximately 80%

of the entire MS4 system, which includes five miles of underground piping, 92 catch basins, 143 open grates, and 7 open drainage facilities. A total of 6,586 pounds of trash, sediment, and organic matter was collected out of the MS4 system during the reporting period. Storm drain cleaning occurs between the months of May through September.

Lastly, over 30 acres of park facilities, athletic fields, beach accesses, landscapes at various facilities, and five community parks located throughout the City were maintained in a manner that best prevents storm water pollution. The City has a dedicated Tidelands crew that picks up trash and debris and conducts landscaping duties 7 days a week on the beach and one block inland of the beach. In addition, the City contrast with Donovan Prison for a weekly crew to pick up trash and conducts landscape duties at City parks and unmaintained areas. The City tracks source loads whenever possible.

Table 4.1 – Overview of Municipal Inventory by Facility Type and Priority Classification

Category	Miles	Number	Description of Changes
A. Type of Facility			
Paved Roads	127.9	---	The City updated its Storm Drain Master Plan. The update changed the total number of catch basins and open grates. The City maintains 127.9 miles of paved roads, 4 municipal parking lots, 5 miles of storm drain pipes, 92 catch basins, 143 open grates, 7 open drainage culverts, 2 storm drain diverters, 1 Vortex trash separator, and 13 municipal storm drain filters.
Municipal Parking Facilities	---	4	
Underground storm drain piping	5	---	
Catch basins	---	92	
Open Grates	---	143	
Open Drainage Facilities	---	7	
Storm Drain Diverters	---	2	
Cortex Storm Drain CDS	---	1	
Municipal Storm Drain Filters	---	13	
B. Priority Classification			
<u>Streets, Roads, and Highways</u>	(127.9	Miles)	The City also contains 13.3 miles of paves alleys and 2.5 miles of unpaved alleys that are not on the municipal inventory. The alleys are not owned by the City and are maintained by the property owners. The City conducts monthly street sweeping on the paved alleys and provides pick up of large bulky items illegally dumped in the alleys.
High (Commercial areas)	19.2	---	
Medium (Beachfront residential areas)	9.6	---	
Low (Other residential areas and paved alleys)	99.1	---	
<u>Municipal Parking Facilities</u>			
High (Commercial)	---	4	

Table 4.1 – Overview of Municipal Inventory by Facility Type and Priority Classification

Category	Miles	Number	Description of Changes
Medium (N/A)	---	---	
Low (N/A)	---	---	
Sanitary Sewer System			
Pump stations	---	12	
Underground piping	39.5	---	

JURMP Sections	Description of FY 2010-11 Changes
6.0 and Appendix E	BMP requirements of the JURMP applicable to streets, roads, highways, and municipal parking facilities were modified in accordance with the requirements of the updated Permit in March 2008. Updates also made to the City's Storm Drain Master Plan and storm water GIS inventory, hired an in house GIS position, and updated the annual MS4 cleaning form (Attachment 4A).

Table 4.2 - Municipal Component Targeted Outcomes and Results

Municipal FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per Permit requirements	Updated Storm Drain Master Plan	Complete	Applicable updates were included in *JURMP Section 6.0*. Updates made to GIS that include greater accuracy for delineated sub-basins and storm drain facilities.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update program documentation for consistency with program updates	So significant updates	Complete	The City made updates as necessary to Municipal Inspection Forms and MS4 maintenance forms to improve efficiency in reporting. Every City vehicle contains a binder with a storm drain map and information on proper BMPs for municipal facilities and activities.
c) Year-End Program Review			
Complete annual year-end program review	End of year program review on MS4 annual maintenance	Complete	Over the past 3 reporting periods the City cleaned 100% of storm drain lines and 100% of catch basins even if they were not in need of maintenance. The year-end program review focused on prioritizing MS4 maintenance to achieve operational efficiencies. Catch basins will still be cleaned annually but the jetting of storm drain lines will only be conducted as needed. Cleaning records will be used to identify and priorities storm drain lines to clean. This year approximately 80% if the storm drain lines were jetted with 100% of the catch basins maintained.
d) Updates to Training Program			
Update training materials for municipal staff	No significant updates	Complete	The City makes annual updates to the municipal training content and materials so that each education activity provides appropriate information for the target audience.
e) Updates to Municipal Inventor or Prioritization			

Municipal FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Update municipal inventory	No significant updates.	Complete	During last reporting period the City made updates to the municipal facilities and activities inventory to match the regional reporting standard developed by the Copermittee Municipal Workgroup.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Municipal Facilities and Activities			
Require municipal areas and activities to implement minimum BMPs	Implemented BMPs and verified through inspections and reinforced through annual training	Complete	Specific minimum BMP requirements for municipal facilities and activities, including pollution prevention methods, are described in the *2008 JURMP Appendix E*. Municipal BMPs are reviewed with staff regularly and updated as necessary. In addition, each City vehicle contains a binder of Best Management Practices for Municipal Facilities and Activities that were updated in 2009.
b) Confirmation of Designated Minimum BMPs			
Verify the implementation of minimum BMPs for municipal areas and activities	Implemented BMPs and verified through inspections and reinforced through annual training	Complete	Specific minimum BMP requirements for municipal facilities and activities, including pollution prevention methods, are described in the *2008 JURMP Appendix E*. Municipal BMPs are reviewed regularly and updated as necessary
c) Confirmation of Municipal Inspections			
Verify that municipal inspections achieve BMP compliance	BMPs are verified through inspections and reinforced through annual training	Complete	Municipal inspections are used as means to verify the implementation of BMPs at municipal facilities and activities. Inspections also serve to educate staff, reinforce storm water concepts, and improve communication across City Divisions. Table 4.4 provides the annual Municipal Facility and Activity Inventory and Inspection Records results.
d) Municipal Staff Training			

Municipal FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Provide training opportunities for municipal staff	Conducted annual municipal training, weekly department meetings, outside training events, and provided education materials.	Complete	Community Development and Public Works Departments meet weekly to review critical issues including storm water project development requirements. Monthly meetings are also held to discuss code enforcement related issues. Municipal inspections also serve as one-on-one training for Division supervisors. Annual training is provided to Public Works staff and was conducted on 11/3/10. Regional workshops on SUSMP, HMP, GCP, TMDLs, and code enforcement made available to staff. Daily interaction with City staff and abundant education material on storm water ensures that storm water pollution prevention remains a high priory throughout the City.
e) Confirmation of Pesticide, Herbicide, and Fertilizer Management			
Verify designated BMPs for pesticides, herbicides, and fertilizer	IPM and BMPs implemented	Complete	The City limits the application of pesticides and herbicides applied to park and landscaping facilities in accordance with Integrated Pest Management Program policy.
f) Confirmation of Maintain for Municipal BMPs			
Verify maintenance of municipal storm water BMPs	Maintained operation and maintenance of existing storm water BMPs	Complete	The City maintains a number of storm water BMPs along the storm water conveyance system including two urban low flow and first flush storm drain diverters, 13 storm drain filters, 1 CDS unit, and multiple vegetated ditches, and infiltration areas.
g) Special Investigations			
No targeted	2010 update to the Storm Drain Master Plan	Partially Complete	The update of the Storm Drain Master Plan was completed in August 2010. Updates include review of precious storm drain studies (i.e. 1960 and 1991), GIS and mapping, hydrologic and hydraulic modeling, identification of system deficiencies, and recommendations.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF)			

Municipal FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Maintain high level of staff knowledge regarding storm water program	Conducted annual municipal training, weekly department meetings, outside training events, and provided education materials.	See Education Component Section 8.0.	See Education Component Section 8.0.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF)			
a) BMP Implementation for Streets, Roads, Highway, and Parking Facilities			
Sweep all High trash areas at least twice per month	28.7 curb-miles swept at least twice per month and 4 municipal parking facilities swept weekly	Complete	Commercial areas (19.2 miles of curbed roads and 4 parking lots) are swept weekly. Beachfront residential areas (9.5 miles of curbed roads) are swept bi-weekly (high trash and debris).
Sweep all Moderate trash areas at least monthly	99.1 curb-miles swept at least monthly	Complete	All other areas (99.1 curb miles) are considered moderate priority and are swept on a monthly basis.
Sweep paved streets, roads, and highways	127.9 curb-miles swept (2,392 total miles) swept)	Complete	The City has a dedicated Tidelands Maintenance Division, funded by the Port of San Diego, whose mission is to keep the beach and one block inland from the beach free of trash, sand, and other debris. The City also maintains a contract with Donavan Correctional Facility to provide supervised labor for various needs including landscaping and trash pickup. The Streets and Parks Divisions play a crucial role in keeping the City free of trash. EDCO also conducts alley sweeps for large bulky items upon request from the City (293 loads for FY 2010-11). Finally, the City provides a Home Front Cleanup event for residents to dispose of accumulated waste.
Collect trash and debris from non-sweeping activities	Collected trash and debris from parks, alleys, and tideland area	Complete	
b) BMP Implementation for Municipal Separate Storm Sewer System (MS4)			

Municipal FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Clean accumulations of trash and debris greater than 33% of design capacity	92 catch basins and 143 open grates inspected (100%)	Complete	Storm drain cleaning generally occurs between the months of May and September It is important to note that the City inspects all of its catch basins and cleans them if necessary on an annual basis.
Inspect and clean MS4 line	100% of the MS4 inspected and 29,435 feet of storm drain cleaned	Complete	The City cleans and inspects 100% of the catch basins and endeavors to clean 100% of the 5 miles of storm drain lines annually. This year approximately 80% of the storm drain lines were jetted. The Sever Division uses the vactor truck to jet and clean accumulated debris out of the MS4. Cleaning for the 2011 season will be finished in September.
Prioritization of MS4 system maintenance	Review underway	Complete	Following two years of inspections, any MS4 facility that requires inspection and cleaning less than annually may be inspected as needed, but not less than every other year The Environmental Division is performing a review of past storm drain line cleaning records to identify areas of high trash and debris accumulation. Sections of the MS4 that are identified as low trash and debris accumulation areas may be cleaned and inspected less than annually.
Prevent and eliminate infiltration from the sanitary sewer to the MS4	Implementation of the 2008 Sewer System Maintenance Plan	Complete	The City has conducted a sewer capacity study and identified areas needing improvement. These will be undertaken through the Capital Improvement Projects program. A Sewer System Management Plan was also completed in accordance with Waste Discharge Requirements. The City is in the 4th year of a 5-year CIP to CCTV the entire sewer system.
Conduct routine maintenance on sanitary sewer system	36 miles of sanitary sewer system maintained	Complete	Most sanitary sewer pipelines are cleaned at least annually, and known problem areas are cleaned more frequently. Twelve alarmed sewage pump stations are monitored daily.
Respond to all sewer spills received and log in appropriate data bases	8 sewer spills reported with 6 being from private laterals	Completed	In the event of a sewer spill, City staff follows procedures laid out in its Sanitary Sewer Overflow Response Plan. The City experienced 8 sewer spills during FY 2010-11 and 6 of those were from private laterals.
c) BMP Implementation for Municipal Facilities and Activities			

Municipal FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Implement BMPs and maintain municipal treatment control BMPs	Maintained 13 storm drain or catch basin filters, 2 storm drain diverters, 1 CDS unit, vegetated swales, and infiltration areas	Complete	The City enforces compliance of minimum BMPs at all municipal facilities and maintenance activities. In addition, the City maintains 13 storm drain filters that are maintained quarterly by contract. The City also operates 2 storm drain diverters, one CDS unit, and a number of vegetated swales and infiltration areas.
d) Municipal Facilities and Activities Inspection Results			
Provide general inspection results for municipal areas and activities	Inspected 100% of municipal facilities and provided training on BMPs for municipal activities	Complete	General inspection results include the following: quarterly maintenance of municipal storm drain filters, proper implementation of minimum BMPs by staff, internal review and training on BMPs for municipal areas and activities.
e) Violations and Enforcement Actions			
Number of violations and enforcement actions to achieve compliance.	No enforcement actions necessary to achieve compliance	Complete	Minor violations were noted during municipal inspects and corrected without enforcement actions. For example a new storage shed for street paint was purchased as the result of municipal inspections identifying an old and worn-out storage area that lacked secondary containment. Municipal storm water violations are extremely rare as a result of continued education.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM MUNICIAPL FACILITIES AND ACTIVITIES)			
a) Street Sweeping			
Track debris collected from street sweeping activities	Trash: 17.5 tons Debris: 139.95 tons Organics: 17.5 tons	Complete	The City collected a total of 174.95 tons of material from street sweeping activities. The City sweeps 19.2 miles of commercial area and 4 municipal parking lots weekly (high priority), 9.6 miles of beach front biweekly (medium priority), and 99.1 miles of residential area monthly (low priority).
b) Cleanup Activities			

Municipal FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Track EDCO alley sweeps and Home Front Clean Up totals	EDCO Alley Sweeps: 293 large bulky items Home Front Clean Up: 178.83 tons	Complete	EDCO conducts alley sweeps for large bulky items upon request from the City. The City made 293 requests this year which was up from 132 from the previous year. In addition, the City provides a Home Front Cleanup event for residents to dispose of accumulated waste. The City also conducts a number of other cleanup activities to collect trash and debris from municipal areas using the Street, Tidelands, and Donavan Prison crews; however, this waste is not tracked at this time.
c) MS4 Cleaning			
Track debris collected through MS4 cleaning	Trash: 522 lbs Debris: 5,517 lbs Organics: 547 lbs	Complete	There are approximately 93 catch basins, 143 open grates, and approximately 5 miles of storm drain pipe that is maintained and cleaned annually. The Sewer Division inspected and cleaned 100% of the catch basins, open grates, and open channels in addition to jetting 80% of the MS4 lines during the reporting period. MS4 cleaning starts in May and continues through September. During the reporting period the Sewer Division cleaned a total of 6,586 lbs of material out of the MS4.
d) **Municipal Storm Drain Filters**			
Track debris collected from 13 municipal storm drain filters	Trash: 65 lbs Debris: 168.5 lbs Organic: 160.5 lbs	Complete	Downstream Services maintains 13 municipal storm drain filters quarterly. During the reporting period 394 pounds of debris was captured through municipal storm drain filters.
e) Storm Water Diverters			
Monitor storm water diversion from Palm Ave Diverter	Palm Ave Diverter: 459,650 gallons diverted into the sanitary sewer	Complete	The City operates two storm drain diverters (Palm Ave and Date Ave). Only the diverted flow from Palm Ave is monitored and tracked.
f) Vortex Separator at 10th and Imperial Beach Blvd			
Track debris collected from vortex separator	Trash: 25 lbs Sedi: 750 lbs Organic: 25 lbs	Complete	The City operates a CDS Vortex storm water separator at 10th and Imperial Beach Blvd to capture debris from all the commercial areas that drain into the Tijuana River watershed. The unit is inspected quarterly and cleaned as needed.

Figure 4.1-Street Sweeping Totals

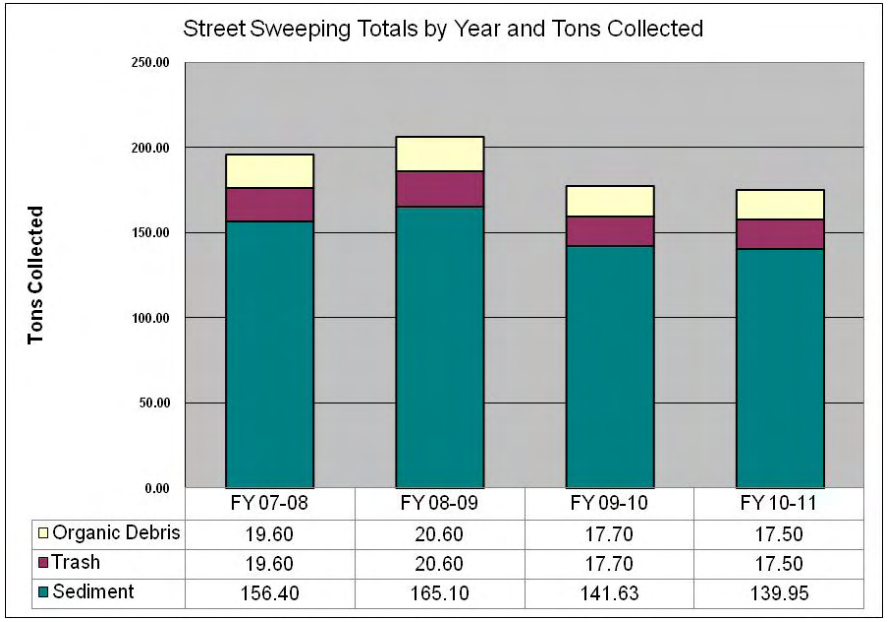

Figure 4.1- The street sweeping totals above are presented by fiscal year. Street sweeping is contracted through Clean Streets and EDCO. The City maintains approximately 127.9 miles of curbed streets and uncurbed roads located throughout the City. Sweeping activities collected 174.95 tons of materials during the reporting period.

Figure 4.2-MS4 Cleaning Totals

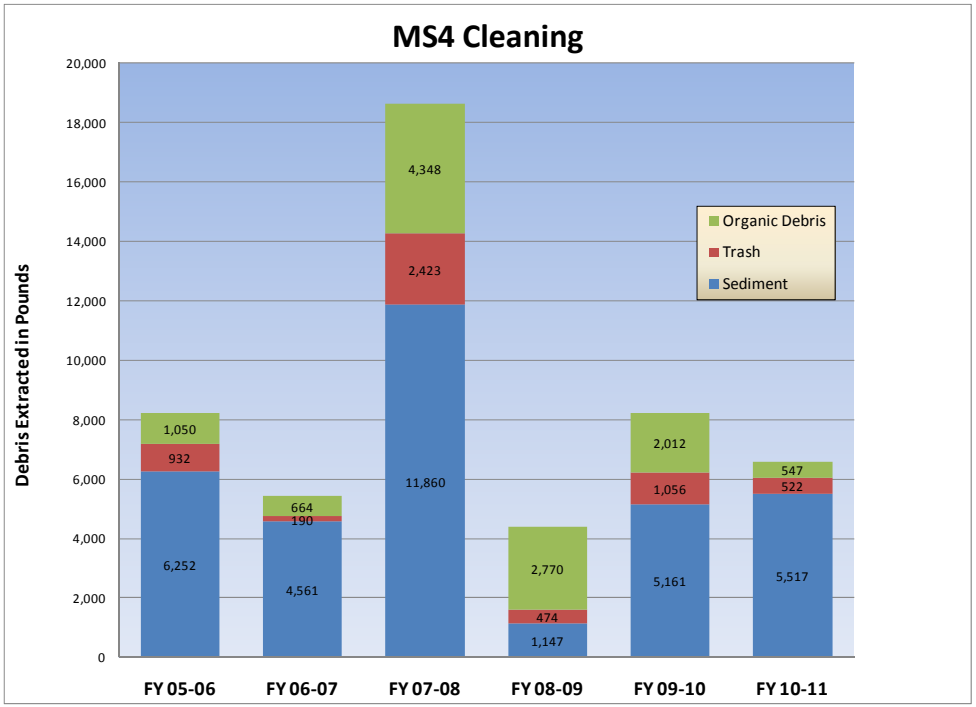

Figure 4.2- The MS4 cleaning totals above are presented by fiscal year. The City endeavors to clean 100% of the MS4 between the months of May through September. The MS4 system includes 117 catch basins, 7 open drain facilities, and approximately 5 miles of underground pipe. The Sewer Division cleaned 6,585 pounds of materials out of the MS4 system during FY 2010-11.

Table 4.3 Municipal Storm Drain Filter Inventory and Maintenance Records

ID	Filter Type	Address	Location	Watershed	Date of Installation	Date of Service	Service Conducted			Weight of Debris	Materials Collected (lbs.)				Volume Used
							Inspected	Cleaned	Boom(s) Replaced	Removed (lbs.)	Sediment	Trash	Organics	Other	% of Total
SDF1	Grate Inlet Skimmer Box	495 Tenth St.	Public Works Yard	910.20	10/13/2003	9/20/2010	X	X		5.0	2.5		2.5		0%
	18" X 18"		(Rear of Yard)			1/4/2011	X	X		5.0	2.5		2.5		5%
	Bio-sorb oil absorbing polymers for hydrocarbon removal					3/25/2011	X			0.0	0.0	0.0	0.0		0%
						6/1/2011	X	X		3.0	0.3	0.3	0.3		0%
SDF2	Grate Inlet Skimmer Box - Round	495 Tenth St.	Public Works Yard	910.20	10/13/2003	9/20/2010	X	X		1.0	0.5		0.5		0%
	24" X 24"		(Front Parking Lot)			1/4/2011	X	X		3.0	1.5		1.5		3%
	Bio-sorb oil absorbing polymers for hydrocarbon removal					3/24/2011	X	X	X	5.0	2.5		2.5		0%
SDF3	Grate Inlet Skimmer Box	Seacoast Dr. / Palm Ave.	City Parking Lot	910.10	1/13/2003	9/20/2010	X	X		3.0	1.5		1.5		0%
	24" X 36"					1/4/2011	X	X		1.0			1.0		1%
	Bio-sorb oil absorbing polymers for					3/25/2011	X	X	X	5.0	2.5		2.5		0%
						6/1/2011	X	X		5.0	2.5		2.5		0%
SDF4	Grate Inlet Skimmer Box	825 Imperial Beach Blvd.	City Hall	911.11	10/13/2003	9/20/2010	X	X		3.0	1.5		1.5		0%
	24" X 36"					1/4/2011	X	X		30.0	15.0		15.0		25%
	Bio-sorb oil absorbing polymers for hydrocarbon removal					3/25/2011	X	X	X	6.0	3.0		3.0		0%
						6/1/2011	X	X		10.0	5.0		5.0		0%
SDF5	Grate Inlet Skimmer Box	865 Imperial Beach Blvd.	Fire Station	911.11	10/13/2003	9/20/2010	X	X		5.0	1.7	1.7	1.7		0%
	12" X 12"					1/4/2011	X	X		2.0	0.7	0.7	0.7		2%
	Bio-sorb oil absorbing polymers for hydrocarbon removal					3/25/2011	X	X	X	3.0	1.5		1.5		0%
						6/1/2011	X	X		5.0	2.5		2.5		0%
SDF6	Grate Inlet Skimmer Box	1075 8th St.	Marina Vista Center	911.11	1/13/2003	9/20/2010	X	X		5.0	1.7	1.7	1.7		0%
	24" X 30"					1/4/2011	X	X	X	10.0	3.3	3.3	3.3		10%
	Bio-sorb oil absorbing polymers for hydrocarbon removal					3/25/2011	X	X	X	8.0	4.0		4.0		0%
SDF7	Pipe Skimmer	1459 Hemlock	Behind Apartment	911.11	1/12/2005	9/20/2010	X			0.0					0%
	24" X 24"		City Easement			1/4/2011	X	X		3.0	1.5		1.5		3%
	Bio-sorb oil absorbing polymers for hydrocarbon removal					3/25/2011	X	X		10.0	10.0				0%
						6/1/2011	X	X		1.0			1.0		0%
SDF8	KriStar, Flo Guard Plus Catch Basin Insert	839 10 St. Alley east of 10th St. between Elm & Donax	City Alley	910.20	11/3/2005	9/20/2010	X	X		3.0	1.5		1.5		0%
	18" X 36"					1/4/2011	X	X		2.0	0.7	0.7	0.7		2%
	Hydrocarbon absorption boom					3/25/2011	X	X	X	10.0	5.0		5.0		0%
						6/1/2011	X	X		10.0	5.0		5.0		0%
SDF9	2 Grate Inlet Skimmer Boxes	Alley abutting 8th St 100 yd. south of Palm	City Alley	910.20	2/22/2007	9/20/2010	X	X		5.0	2.5		2.5		0%
	24" X 36"					1/4/2011	X	X		10.0	3.3	3.3	3.3		10%
	Hydrocarbon absorption boom					3/25/2011	X	X	X	10.0	5.0		5.0		0%
						6/1/2011	X	X		12.0	6.0		6.0		0%
SDF10	Grate Inlet Skimmer Box	Alley b/w 8th St. & Delawater St	City Alley	910.20	2/5/2007	9/20/2010	X	X	X	5.0	2.5		2.5		0%
	32" X 40"					1/4/2011	X	X		10.0	3.3	3.3	3.3		10%
	Hydrocarbon absorption boom					3/25/2011	X	X	X	10.0	5.0		5.0		0%
						6/1/2011	X	X		12.0	6.0		6.0		0%
SDF11	Grate-Inlet Box	Curb inlet at SW Corner 9th St. / Palm Ave.	Curb Inlet	910.20	2/22/2007	9/20/2010	X	X	X	10.0	3.3	3.3	3.3		0%
	24" X 36"					1/4/2011	X	X		5.0	1.7	1.7	1.7		0%
	Hydrocarbon absorption boom					3/25/2011	X	X	X	10.0	3.3	3.3	3.3		0%
						6/1/2011	X	X		15.0	5.0	5.0	5.0		0%
SDF12	KriStar, Flo Guard Plus Catch Basin Insert	740-798 Florida Street alley behind apartment	City Alley	910.20	5/17/2007	9/20/2010	X	X		5.0	2.5	0.0	2.5		0%
						1/4/2011	X	X		40.0	13.3	13.3	13.3		40%
						3/25/2011	X	X	X	15.0	5.0	5.0	5.0		0%
						6/1/2011	X	X		0.0	0.0		0.0		0%
SDF13	24" Diameter Grate and 22" Diameter Inlet	4th Street at Sports Park	South end of parking lot at Sports Park	911.11	6/29/2009	9/20/2010	X	X	X	5.0	2.5		2.5		15%
						1/4/2011	X	X		20.0	6.7	6.7	6.7		25%
	Round Hydro Flow Guard Plus and hydrocarbon booms					3/25/2011	X	X	X	20.0	6.7	6.7	6.7		80%
						6/1/2011	X	X		15.0	5.0	5.0	5.0		50%
									Totals	396.0	168.5	65.0	160.5		

Table 4.4 Municipal Facility and Activity Inventory and Inspection Record

Agency	Facility Name	Address Number	Suite	Street Name	City	State	Zip	Hydrologic Area	SIC	NAICS	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	Threat to water quality	APN	Latitude	Longitude	Inspected	Comments
IB	Pump Station #10 (Above ground)	814		Cypress Ave.	Imperial Beach	CA	91932	910.20	4952	221300	SS	x	x		x	x	x	x	x		NO	High	6260905500	32.587228	-117.115014	2/24/2011	None
IB	Pump Station #1A (Underground)	862		Seacoast Dr.	Imperial Beach	CA	91932	910.10	4952	221300	SS	x	x		x	x	x	x	x		NO	High		32.580551	-117.131772	6/23/2011	None
IB	Pump Station #1B (Underground)	1098		Seacoast Dr.	Imperial Beach	CA	91932	911.11	4952	221300	SS	x	x		x	x	x	x	x		YES	High		32.576639	-117.131879	3/24/2011	None
IB	Pump Station #2 (Above ground)	1306		Seacoast Dr.	Imperial Beach	CA	91932	911.11	4952	221300	SS	x	x		x	x	x	x	x		YES	High		32.57303	-117.131766	7/22/2010	None
IB	Pump Station #3 (Underground)	501		Elm Ave.	Imperial Beach	CA	91932	911.11	4952	221300	SS	x	x		x	x	x	x	x		YES	High		32.580104	-117.122348	4/28/2011	None
IB	Pump Station #4 (Underground)	755		Delaware Ave.	Imperial Beach	CA	91932	911.11	4952	221300	SS	x	x		x	x	x	x	x		YES	High		32.583055	-117.116603	12/16/2010	None
IB	Pump Station #5 (Underground)	133		Dahlia Ave.	Imperial Beach	CA	91932	910.10	4952	221300	SS	x	x		x	x	x	x	x		NO	High		32.583113	-117.130964	5/26/2011	None
IB	Pump Station #6 (Underground)	498		Rainbow St.	Imperial Beach	CA	91932	910.10	4952	221300	SS	x	x		x	x	x	x	x		NO	High		32.586156	-117.12068	12/9/2010	None
IB	Pump Station #7 (Underground)	504		Oneonta Ave.	Imperial Beach	CA	91932	911.11	4952	221300	SS	x	x		x	x	x	x	x		YES	High		32.570987	-117.122064	10/28/2010	None
IB	Pump Station #8 (Underground)	895		Imperial Beach Bl	Imperial Beach	CA	91932	911.11	4952	221300	SS	x	x		x	x	x	x	x		YES	High		32.576374	-117.114931	1/27/2011	None
IB	Pump Station #9 (Underground)	1025		9th St.	Imperial Beach	CA	91932	911.11	4952	221300	SS	x	x		x	x	x	x	x		YES	High		32.578243	-117.114069	8/20/2010	None
IB	Underground Sewer	n/a		Citywide	Imperial Beach	CA	91932	All	4952	221300	SS	x	x		x	x	x	x	x		NO	High				Annually	None
IB	Graffiti Removal	n/a		Citywide	Imperial Beach	CA	91932	All	7349	561790	MA										N/A	High				5/16/2011	Inspection done during cost recovery event. All runoff collected.
IB	Pump Station #11 (Storm Drain)	Int.		Palm Ave. and Ocean Ln.	Imperial Beach	CA	91932	910.10	4952	221300	MS4	x	x		x	x	x	x	x		NO	High		32.583963	-117.132611	5/11/2011	None
IB	Special Event Venues	n/a		Citywide	Imperial Beach	CA	91932	All		921190	MU										N/A	High				Per Event	Sand Castle event in 2010 resulted in one NOV for illegal dumping.
IB	Underground MS4	n/a		Citywide	Imperial Beach	CA	91932	All	4952	221300	MS4	x	x	x	x	x	x	x	x	x	N/A	High				Annually	None
IB	Fire Station	865		Imperial Beach Bl	Imperial Beach	CA	91932	911.11		922160	PS	x	x	x	x	x	x	x	x	x	YES	High	6321112700	32.576135	-117.115677	5/12/2011	None
IB	Beachfront	n/a		Int. Border to Camp Surf	Imperial Beach	CA	91932	911.11	7999	713990	BF									x	YES	High				5/11/2011	None
IB	Imperial Beach Pier	Int.		Evergreen Ave. and Seacoast Dr.	Imperial Beach	CA	91932	911.11	7999	713990	PK									x	YES	High		32.579578	-117.137124	5/11/2011	None
IB	Pier Plaza	Int.		Evergreen Ave. and Seacoast Dr.	Imperial Beach	CA	91932	911.11	7999	713990	PK	x	x		x			x	x	x	YES	High	6253402000	32.579209	-117.13213	5/11/2011	None
IB	Seacoast & Palm Parking Lot	105		Palm Ave.	Imperial Beach	CA	91932	910.10	7521	812930	PL	x	x	x	x	x	x		x	x	NO	High	6251910100	32.58378	-117.131418	5/11/2011	None
IB	I.B. Boys & Girls Club	847		Encina Avenue	Imperial Beach	CA	91932	911.11	7999	713990	PK	x			x			x	x	x	YES	Low	6264007100	32.577109	-117.116187	5/12/2011	Trash container left open and green waste in the trash: Requested regular closure of the container and use of of green waste bins.
IB	Sports Park & Recreation Center	425		Imperial Beach Bl	Imperial Beach	CA	91932	911.11	7999	713990	PK	x			x			x	x	x	YES	High	6324003500	32.576314	-117.123641	5/12/2011	Recycling cover open: Requested regular closure. Debris in trash enclosure: requested cleanup. Greenwaste in trash: requested use of greenwaste bin.
IB	Marina Vista Center	1075		8th Street	Imperial Beach	CA	91932	911.11	8322	624120	AD	x			x			x	x	x	YES	High	6264007100	32.577109	-117.116187	5/12/2011	Grate on 8th St. needs stencil: will include this in our educational stenciling.
IB	Alleys	n/a		Citywide	Imperial Beach	CA	91932	All		926120	RD		x	x	x	x	x		x	x	N/A	High				Annually	Trash illegally dumped in alleys: EDCO removes weekly

Agency	Facility Name	Address Number	Suite	Street Name	City	State	Zip	Hydrologic Area	SIC	NAICS	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	Threat to water quality	APN	Latitude	Longitude	Inspected	Comments
IB	Streets	n/a		Citywide	Imperial Beach	CA	91932	All		926120	RD		x	x	x	x	x		x	x	N/A	High				Annually	None
IB	Traffic Islands	n/a		Citywide	Imperial Beach	CA	91932	All		926120	RD		x	x	x	x	x		x	x	N/A	Low				Annually	None
IB	City Hall	825		Imperial Beach Bl	Imperial Beach	CA	91932	911.11		921190	AD	x			x			x	x	x	YES	High	6321112700	32.576135	-117.11568	5/12/2011	Stencil needed on inlet grate in parking lot: will include this in our educational stenciling.
IB	Public Works Yard	495		10th Street	Imperial Beach	CA	91932	910.20		921190	CY			x		x	x			x	NO	High	6260600500	32.589236	-117.111108	5/12/2011	None
IB	Dempsey Holder Safety Center	950		Ocean Ln	Imperial Beach	CA	91932	911.11		922120	PS	x	x	x	x	x	x	x	x	x	YES	High	6253401800	32.578694	-117.132217	5/12/2011	None
IB	Dunes Park	750		Seacoast Dr.	Imperial Beach	CA	91932	910.10	7999	713990	PK	x			x			x	x	x	NO	High	6251821100	32.582283	-117.132179	5/12/2011	Bags of garbage left on grounds:Tidelands removed.
IB	Elkwood Parking Lot	102		Elkwood Ave.	Imperial Beach	CA	91932	911.11	7521	812930	PL	x	x	x	x	x	x		x	x	YES	High	6253532200	32.578392	-117.131412	5/11/2011	Irrigation results in excessive runoff: Irrigation adjustment requested.
IB	Reama Park	201		Elder Avenue	Imperial Beach	CA	91932	911.11	7999	713990	PK	x			x			x	x	x	YES	High	6254012600	32.578683	-117.129327	5/12/2011	None
IB	Serenity Garden	270		Palm Ave.	Imperial Beach	CA	91932	910.10	7999	713990	PK	x			x			x	x	x	NO	Low		32.58422	-117.127879	5/11/2011	None
IB	Teeple Park	600		Florida St.	Imperial Beach	CA	91932	910.20	7999	713990	PK	x			x			x	x	x	NO	High	6261702400	32.585276	-117.109699	5/12/2011	None
IB	Triangle Park	Int.		Hwy 75 at 7th St.	Imperial Beach	CA	91932	910.20	7999	713990	PK	x			x			x	x	x	NO	High		32.584057	-117.117621	5/9/2011	None
IB	Veteran's Park	1075		8th Street	Imperial Beach	CA	91932	911.11	7999	713990	PK	x			x			x	x	x	YES	High	6264007100	32.577109	-117.116187	5/12/2011	None

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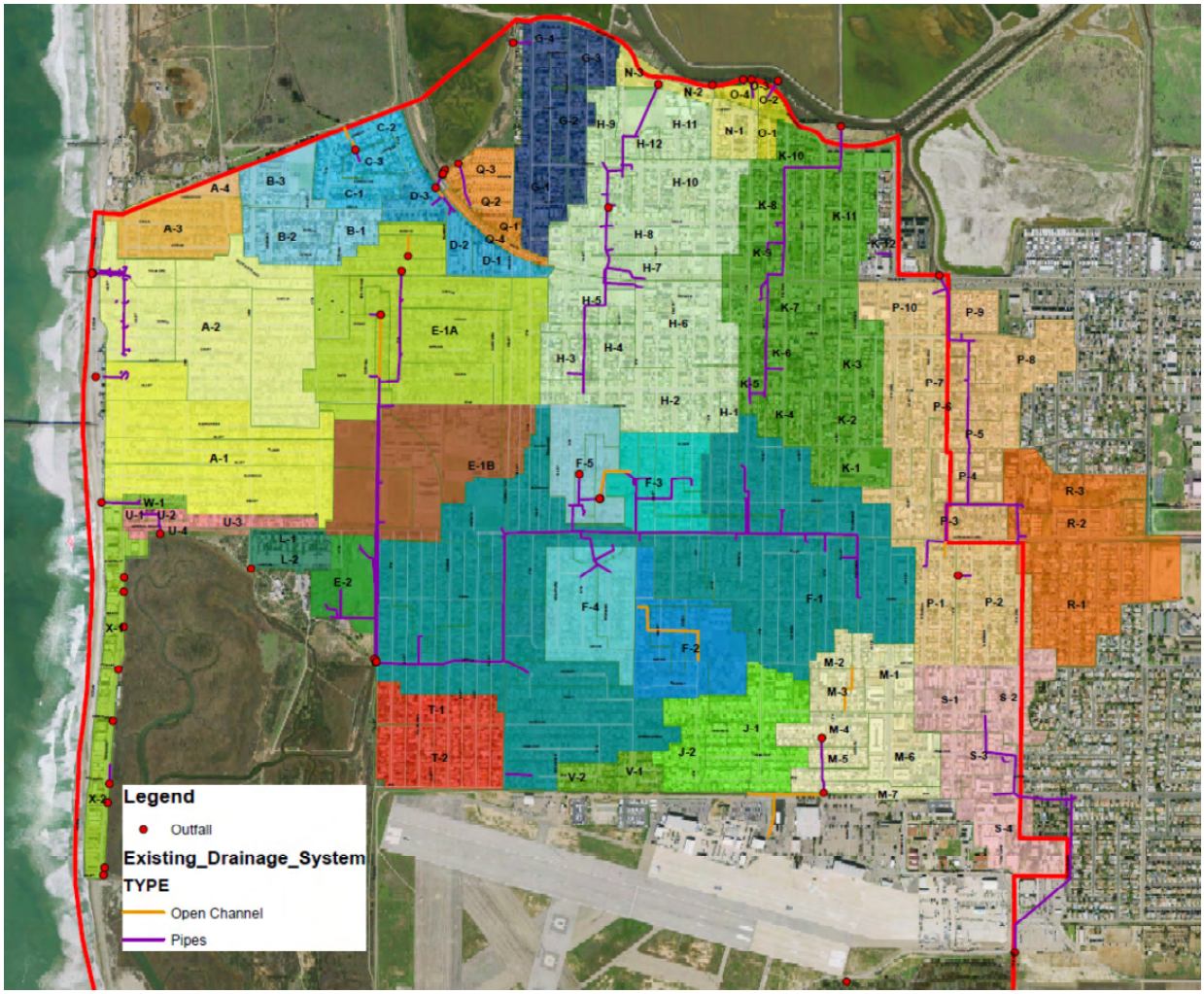
Attachment 4A Storm Water GIS Map



Attachment 4B Storm Drain Maintenance Form Example

Annual Catch Basin and MS4 Storm Drain Maintenance Form — **Drainage Area: A**

Date:

Drainage Basin Information

Receiving Water: Tijuana Estuary and Pacific Ocean
Number of catch basins: 8
Underground storm drain MS4 system: #### feet
Aboveground storm drain channels: #### feet
Other MS4 features: Storm drain diverters at Palm Ave and Date Ave prevent low flow runoff from discharging onto the beach. Trash grates also cover the inlets on lower Seacoast Dr that drain into the Tijuana Estuary.

Catch Basins (all catch basins with debris and sediment need to be cleaned):

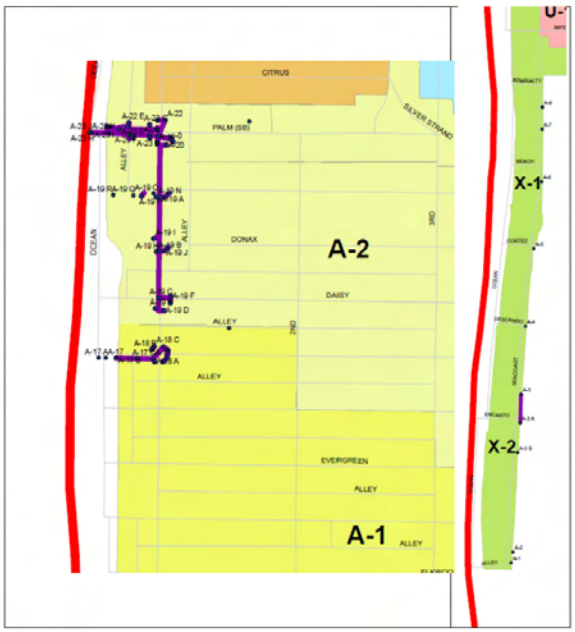
Inspected	Cleaned	Catch Basin Node
		A-22 (MH 139)
		A-21 (MH 32)
		A-20 (MH 33)
		A-15 (MH 49)
		A-14 (MH 50)
		A-10a (MH 53)
		A-9 (MH 149)
		A-3 (MH 137)

Percent of storm drain line cleaned through jetting: _____ %

Amount of Material Removed		
Trash	Sediment	Organic
lbs.	lbs.	lbs.

Comments:

Annual Catch Basin and MS4 Storm Drain Maintenance Form — **Drainage Area: A**



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5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 Introduction

The City endeavors to prevent or eliminate the discharge of pollutants and runoff from industrial and commercial sources. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and its efforts to oversee compliance with urban runoff regulations at businesses within the City and reduce the discharge of pollutants to the MS4 to the maximum extent practicable (MEP). The City is tasked with educating businesses about urban runoff management and overseeing their compliance with applicable Municipal Storm Water Permit requirements.

5.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Industrial and Commercial Component is described in the *2008 JURMP Section 7.0*. During the reporting period the City made routine updates to the Commercial and Industrial business inventory which follows the Copermittee's inventory template. The inventory is maintained on the Environmental Division server and identifies all industrial and commercial facilities that could contribute pollutant loads to the MS4. The City currently does not have any industrial facilities on that inventory. Records are also maintained on each specific business for inspections, corrective actions, and illegal discharges. During the reporting period the City continued to incorporate fats, oils, and grease (FOG) management into the commercial business inspection program for restaurants.

5.3 Outcome Level 1b: Implementation of Management Program Activities

The Environmental Division provides notification and verification of minimum BMPs for commercial businesses, in addition to performing inspections at all high priority commercial businesses in the City. The City also inspects non-high priority business and mobile businesses during the year as necessary. Inspections are conducted and documented as outlined in the *2008 JURMP Section 7.0*.

In addition to City staff reporting illegal discharges, the Environmental Division also responds to calls to the storm water hotline and from online complaints. However, the vast majority of storm water violation reports are made from City staff. The low number of commercial businesses and relatively contained commercial zoning allows City staff to be the predominant eyes on the street for identifying storm water violations.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Commercial Industrial program element:

- Table 5.1 Provides an overview of the Industrial and Commercial inventory by facility type and priority classification
- Table 5.2 presents and describes targeted FY 2010-11 outcomes and results
- Table 5.3 Commercial Business Inspections FY 2010-11
- Table 5.4 and Figure 5.1 Interactive Effectiveness Assessment of Commercial Businesses

- Table 5.5Complete Commercial Business Inventory FY 2010-11

5.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Businesses

Commercial businesses receive education on storm water BMPs through a number of different methods including direct mail, face-to-face interaction with City staff during inspections, through dissemination of education material, and through follow up inspections to ensure compliance. The City also provides education to businesses during ICID investigations.

The Environmental Division also incorporates an interactive effectiveness assessment of commercial businesses during the annual storm water inspection at randomly selected businesses to gauge level of knowledge and awareness. The goal of the assessment is to get beyond BMP verification and assess the level of BMP effectiveness at commercial businesses in the City. General results showed a moderate level of knowledge among the businesses. The results are outlined in Table 5.4 and Figure 5.1.

5.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Businesses

The City facilitates changes in behavior and implementation of BMPs at commercial businesses by providing continuous education efforts through face-to-face interactions, routine inspections, dissemination of brochures, mailing of post inspection letters, and responding to illegal storm water discharges. The *2008 JURMP Appendix F* defines minimum BMP requirements applicable to industrial and commercial projects in the City. The *2008 JURMP Section 7.0* provides more information on the procedural and administrative mechanisms in the City that promote behavioral changes for commercial, industrial, and mobile businesses.

5.6 Outcome Level 4: Source Load Reductions

The two step approach of education on storm water pollution and enforcement of BMPs have unquestionably resulted in the source load reductions from commercial businesses. Although the City does not currently track source load reductions from commercial sites, the increased level of knowledge on storm water BMPs and cooperation among the local business community have successfully prevented the illegal discharge of pollutants from commercial businesses. Source load reductions can be implied from commercial businesses through the proper implementation of BMPs.

Table 5.1 – Overview of Industrial and Commercial Component by Facility Type and Priority Classification

Category	Number	Description
A. Type of Facility		
Industrial	0	Industrial activity is extremely limited. Only one business in operation that can reasonably be classified as "industrial" is a surfboard manufacturing company that performs all of its operations indoors, and is very similar to a commercial facility. The term "commercial" is therefore used for the activities within the City. As such, there is no need in this jurisdiction to identify non-filers under the General Industrial Permit.
Commercial	328	
B. Priority Classification Totals		
High	63	Imperial Beach Municipal Code 8.30.090 defines commercial businesses as either high or non-high (low) priority. High priority businesses include all food service and auto service related businesses.
Low	258	
Mobile	51	Mobile business database is tracked and maintained on the new copermittee online Regional Mobile Business Inventory.
C. Inspection Totals		
Commercial Business Inspections	65	The Environmental Division conducts all commercial inspections. All high priority businesses receive inspections annually for storm water compliance. Commercial businesses that have a significant storm water violation receive a follow up investigation.
Follow Up Inspections	45	
Mobile	0	Mobile businesses do not currently receive annual inspections. The Environmental Division inspects mobile businesses while responding to illegal discharge or public service requests.
D. Enforcement Actions		
Notice of Violations (NOVs)	11	Businesses with multiple BMP violations generally receive a NOV and 2 follow up investigations.
Minor Violations (Follow Up)	22	Minor violations generally receive a follow up investigation and written warning.

JURMP Sections	Description of FY 2010-11 Changes
7.0 and Appendix F	BMP requirements of the JURMP applicable to industrial and commercial facilities were modified with the requirements of the updated Permit in March 2008. During this reporting period the City purchased a filed computer in order to more effectively conduct inspections, education, and enforcement operations.

Table 5.2 - Industrial and Commercial Component Targeted Outcomes and Results

Industrial and Commercial FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per Permit requirements	No updates were made during reporting period	Complete	Applicable updates were included in *JURMP Section 6.0*. No significant updates are expected to be necessary during this permit cycle.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update program documentation for consistency with program updates	No updates were made during reporting period	Complete	No significant updates made to this program component.
c) Year-End Program Review			
Complete annual year-end program review	Review program for effectiveness and efficiency	Complete	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
d) Updates to Training Program			
Update training materials for businesses	No updates to education materials and staff	Complete	The City makes updates to commercial inspection training content as necessary. Education activities include brochures, hand outs, informative letters, and inspections.
e) Updates to Commercial Inventor or Prioritization			
Update commercial inventory and prioritization	Annual updates made to the commercial inventory	Complete	Regular updates were made to the commercial and industrial business inventory. Starting this reporting period the City updated its commercial inventory to match the regional copermittee standard template. Currently all food or automotive related businesses get categorized as high priority and receive annual inspections. The regional online mobile business database was also maintained online.

Industrial and Commercial FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Commercial Businesses			
Require commercial and industrial businesses to implement BMPs and verify through inspections	Notified businesses through mail, conducted inspections, responded to ICIDs, and provided education materials	Complete	The City requires all commercial and industrial sites/sources to implement designated minimum BMPs and other measures to prevent the discharge of pollutants to the MEP. The City's Urban Runoff Management and Discharge Control Ordinance (Chapters: 8.30.070, 8.30.090, and 8.30.100) mandate the implementation of designated BMPs and control measures. The commercial inspection program and ICID program are the mechanisms used to educate businesses on BMPs. All high priority businesses receive annual inspections for storm water.
b) Confirmation of Designated Minimum BMPs			
Verify the implementation of minimum BMPs for commercial businesses	Conducted commercial inspections and follow up inspections to verify BMPs	Complete	The City verifies the implementation of minimum BMPs at commercial businesses through the implementation of the commercial inspection program. The environmental division conducts annual inspections of all high priority businesses, which include all food and automotive facilities in the City.
c) Confirmation of Commercial Inspections			
Verify that commercial inspections achieve BMP compliance	Inspected all high priority commercial businesses	Complete	The Environmental Division incorporates an interactive effectiveness assessment at a random selection of commercial businesses during the annual storm water inspection to assess program effectiveness. The goal of the assessment is to get beyond BMP verification and assess the level of BMP knowledge.
d) Justification for Commercial Inspection Prioritization			
Provide rationale for the businesses that were inspected	IBMC 8.30.090 defines commercial businesses as either high or non-high (low) priority	Complete	High priority businesses include at a minimum all food service and auto service related businesses in the City. Businesses that have a treatment control BMPs also receive inspections as well as businesses that cause an ICID.

Industrial and Commercial FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
e) Efforts Made to Notify Businesses of BMPs			
Describe efforts made to notify businesses of BMPs	Notification made through education material, inspections, follow up inspection, and follow up letters	Complete	High priority businesses receive storm water inspections and follow up inspections in the case of a violation. A post inspection letter is also mailed to the business outlining the results of the visit. Education material is provided at the time of inspection and in some cases mailed with the post inspection letter.
f) Third Party Inspections			
Describe third party inspection results	None	---	The City conducts all commercial inspections through the Environmental Division
g) General Industrial Permit Non-Filers			
Describe steps taken to identify industrial non-filers	None	Complete	The City did not have any industrial businesses during the reporting period.
h) Mobile Businesses			
Describe efforts made to address mobile businesses	Inspected mobile businesses as necessary	Complete	The City contacted each mobile business through mail with a letter and brochure that outlines the minimum BMP requirements during the last reporting period. The Environmental Division informally inspects mobile businesses while responding to illegal discharge reports and public service requests.
i) Special Investigations			
Not targeted	Interactive assessment	Complete	The Environmental Division incorporates an interactive effectiveness assessment of commercial businesses and rates businesses on a scale of 1 out of 5. The results of the assessment are presented in Table 5.4 and Figure 5.1.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY COMMERCIAL BUSINESSES)			

Industrial and Commercial FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Assess storm water program implementation knowledge from commercial businesses	Conducted interactive assessment of commercial businesses during annual inspections	Assessment results provided in Table 5.4 and figure 5.1	The goal of the assessment is to get beyond BMP verification and assess the level of BMP knowledge among a random selection of commercial businesses in the City.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY COMMERCIAL BUSINESSES)			
a) Commercial Business BMP Implementation			
Inspect businesses for compliance	65 sites inspected and 45 follow up inspections	Complete	The City inspections 100% of high priority commercial businesses, non-high priority businesses, and mobile businesses as needed. Inspections consist of observing business operations, reviewing minimum BMPs, and enforcing pollution prevention practices.
Notify mobile and fixed commercial businesses of BMP requirements	65 fixed commercial and 0 Mobile Businesses contacted through mail	Complete	The City notifies business owners and operators, both fixed and mobile, of BMP requirements through a combination of methods including site inspections, follow-up inspection reports, direct mailings, inclusion of BMP information with business license and special event vendor packets, online resources such as the Project Clean Water website, and City's website. During last reporting period all mobile businesses were notified of BMPs through the mail.
b) Violations and Enforcement Actions			
Number of violations and enforcement actions to achieve compliance.	Follow up inspections required at 33 businesses. City also issued 11 NOVs	Complete	The City enforces compliance at all businesses, including mobile sources, using an escalating series of enforcement actions. Verbal or written warnings are used when violation in question is minor. Notices of Violations (NOVs) may be issued for any observed violation. And escalating administrative penalties, fines, and civil penalties may be enforced for non compliance
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM MUNICIAPL FACILITIES AND ACTIVITIES)			
a) BMP Implementation			

Industrial and Commercial FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Load reductions from proper BMP implementation	All high priority businesses were educated on BMPs	---	Source load reductions are not easily tracked from commercial businesses but can be implied through proper implementation of BMPs.

Table 5.3 Commercial Business Inspections FY 2010-11

ID	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip	Establishment Class	Date Inspected	Result	Cleared
1	7-ELEVEN STORE # 24344B-2131	1311	0	PALM AVE	Imperial Beach	CA	91932	HIGH	4/4/2011	Follow Up	4/27/2011
2	7-ELEVEN STORE #23982A-2131	1303	0	IMPERIAL BEACH BL	Imperial Beach	CA	91932	HIGH	2/16/2011	NOV	3/4/2011
3	ALBERTO'S TACO SHOP	1183	0	13TH ST	Imperial Beach	CA	91932	HIGH	4/28/2011	NOV	5/3/2011
4	ALL AMERICAN CAR WASH IB	1158	0	PALM AVE	Imperial Beach	CA	91932	LOW	2/24/2011	Cleared	2/24/2011
5	AROMA THAI RESTAURANT	757	0	SEACOAST DR	Imperial Beach	CA	91932	HIGH	10/14/2010	Follow Up	11/8/2010
6	BEACH SIDE STATION	681	0	HIGHWAY 75	Imperial Beach	CA	91932	HIGH	10/27/2010	Cleared	10/27/2010
7	BERNARDO SHORES	500	0	HIGHWAY 75	Imperial Beach	CA	91932	HIGH	10/27/2010	Cleared	10/27/2010
8	BEACH CLUB GRILLE	710	0	SEACOAST DR	IMPERIAL BEACH	CA	91932	HIGH	2/2/2011	Cleared	2/2/2010
9	BIG KAHUNA'S PIZZA N STUFFS	600	0	PALM AVE	Imperial Beach	CA	91932	HIGH	10/14/2010	Cleared	10/14/2010
10	BURGER KING #806	1180	0	PALM AVE	Imperial Beach	CA	91932	HIGH	2/24/2011	Cleared	2/24/2011
11	C.H. DONUTS	1070	0	13TH ST	Imperial Beach	CA	91932	HIGH	3/10/2011	NOV	4/4/2011
12	CARL'S JR. #585	700	0	13TH ST	Imperial Beach	CA	91932	HIGH	2/24/2011	Cleared	2/24/2011
13	COW-A-BUNGA CA GLACIER FNAM	10	0	EVERGREEN AVE	Imperial Beach	CA	91932	HIGH	10/7/2010	Cleared	10/7/2010
14	CROSSROAD PETROLEUM INC.	1185	0	PALM AVE	Imperial Beach	CA	91932	HIGH	3/4/2011	NOV	6/9/2011
15	DEPENDABLE CARBURETOR EXCHANGE	660	0	EMORY ST	Imperial Beach	CA	91932	HIGH	2/1/2011	Cleared	2/1/2011
16	DON PANCHO'S MEXICAN FOOD	690	0	HIGHWAY 75	Imperial Beach	CA	91932	HIGH	3/17/2011	NOV	5/3/2011
17	ECONO LUBE N' TUBE	772	0	13TH ST	Imperial Beach	CA	91932	HIGH	11/12/2010	NOV	12/9/2010
18	EL CILANTRO MEXICAN FOOD	764	0	13TH ST	Imperial Beach	CA	91932	HIGH	11/12/2010	Follow Up	12/9/2010
19	EL TAPATIO CATERING	667	0	SILVER STRAND BL	Imperial Beach	CA	91932	HIGH	2/9/2011	Follow Up	4/27/2011
20	EL TAPATIO RESTAURANT INC	260	0	PALM AVE	Imperial Beach	CA	91932	HIGH	2/9/2011	Follow Up	4/27/2011
21	G & M OIL #177	907	0	PALM AVE	Imperial Beach	CA	91932	HIGH	3/2/2011	Follow Up	4/13/2011
22	GENES' AUTOMOTIVE	1085	0	PALM AVE	Imperial Beach	CA	91932	HIGH	2/16/2011	NOV	4/27/2011
23	GIANT PIZZA KING #4	1070	0	13TH ST	Imperial Beach	CA	91932	HIGH	3/10/2011	NOV	4/4/2011
24	GIANT PIZZA KING #5	600	0	PALM AVE	Imperial Beach	CA	91932	HIGH	10/14/2010	Cleared	10/14/2010
25	GUISEPPES PIZZA	1293	0	IMPERIAL BEACH BL	Imperial Beach	CA	91932	HIGH	3/10/2011	NOV	4/4/2011
26	IB FORUM	1079	0	SEACOAST DR	Imperial Beach	CA	91932	HIGH	10/14/2010	Follow Up	11/8/2010
27	IMPERIAL BEACH ULTRAMAR	1300	0	IMPERIAL BEACH BL	Imperial Beach	CA	91932	HIGH	2/16/2011	Cleared	2/16/2011
28	IMPERIAL DONUTS +	1002	0	PALM AVE	Imperial Beach	CA	91932	HIGH	2/1/2011	Cleared	2/1/2010
29	KATY'S CAFE	704	0	SEACOAST DR	Imperial Beach	CA	91932	HIGH	2/2/2011	Cleared	2/2/2011
30	K-C'S CHINESE FOOD	1299	0	IMPERIAL BEACH BL	Imperial Beach	CA	91932	HIGH	3/10/2011	NOV	4/4/2011
31	KFC CORP #Y450025	1056	0	13TH ST	Imperial Beach	CA	91932	HIGH	11/18/2010	Citation	12/9/2010
32	L & M TIRE CO./ EXPRESS TIRE	950	0	PALM AVE	Imperial Beach	CA	91932	HIGH	2/1/2011	Cleared	2/1/2011
33	LA POSTA MARKET #2	1266	0	IMPERIAL BEACH BL	Imperial Beach	CA	91932	HIGH	11/18/2010	Follow Up	12/9/2010
34	MARCO'S & RED HAWK	1205	0	PALM AVE	Imperial Beach	CA	91932	HIGH	4/27/2011	NOV	5/11/2011
35	MARISA'S MEXICAN SEAFOOD GRILL	285	0	PALM AVE	Imperial Beach	CA	91932	HIGH	2/9/2011	Follow Up	4/27/2011
36	MASON'S ALIGNMENT-BRAKE-MUFFLE	975	0	PALM AVE	Imperial Beach	CA	91932	HIGH	3/30/2011	Follow Up	3/30/2011
37	MCDONALDS/SCAROB INC.	1135	0	PALM AVE	Imperial Beach	CA	91932	HIGH	3/2/2011	Follow Up	4/27/2011
38	MEIJO SUSHI, INC.	600	0	PALM AVE	Imperial Beach	CA	91932	HIGH	10/27/2010	Cleared	10/27/2010
39	MICKIES BAR AND GRILL	220	0	PALM AVE	Imperial Beach	CA	91932	HIGH	2/9/2011	Cleared	2/9/2011
40	NFAROOQI ENT. LLC/JACK IN BOX	890	0	PALM AVE	Imperial Beach	CA	91932	HIGH	12/9/2010	Cleared	12/9/2010
41	Olive Oil Café	600	109	PALM AVE	Imperial Beach	CA	91932	HIGH	10/15/2010	Follow Up	10/25/2010
42	PIZZA INDUSTRY/DOMINO'S PIZZA	1307	0	IMPERIAL BEACH BL	Imperial Beach	CA	91932	HIGH	2/16/2011	NOV	3/4/2011
43	PRECISION AUTO BODY & COLLISIO	989	0	PALM AVE	Imperial Beach	CA	91932	HIGH	3/30/2011	Follow Up	4/28/2011
44	PRECISION FOREIGN	1240	0	PALM AVE	Imperial Beach	CA	91932	HIGH	4/4/2011	Follow Up	4/4/2011
45	PRETZLES AND MUCH MORE	10	0	EVERGREEN AVE	Imperial Beach	CA	91932	HIGH	10/7/2010	Cleared	10/7/2010
46	RODRIGO'S MEXICAN FOOD	600	0	PALM AVE	Imperial Beach	CA	91932	HIGH	10/27/2010	Cleared	10/27/2010
47	ROLANDO'S TACO SHOP #5	805	0	SEACOAST DR	Imperial Beach	CA	91932	HIGH	2/2/2011	Cleared	2/2/2011
48	SANTANA MEXICAN FOOD	1337	0	PALM AVE	Imperial Beach	CA	91932	HIGH	11/18/2010	Follow Up	12/9/2010
49	SEACOAST PIZZA	807	0	SEACOAST DR	Imperial Beach	CA	91932	HIGH	2/2/2011	Cleared	2/2/2011
50	SIESTA RV PARK, INC.	409	0	PALM AVE	Imperial Beach	CA	91932	HIGH	4/7/2011	Follow Up	4/7/2011
51	SOMBRERO MEXICAN FOOD	189	0	PALM AVE	Imperial Beach	CA	91932	HIGH	2/1/2011	Cleared	2/1/2011
52	SOPHISTICATED AUTO	987	0	PALM AVE	Imperial Beach	CA	91932	HIGH	3/30/2011	Follow Up	4/28/2011
53	STARDUST DONUT SHOP	698	0	HIGHWAY 75	Imperial Beach	CA	91932	HIGH	2/9/2011	Cleared	2/9/2011
54	SUBSMART DELI-FRESH	1231	0	PALM AVE	Imperial Beach	CA	91932	HIGH	2/24/2011	Cleared	2/24/2011
55	SUBWAY 20578	876	0	SEACOAST DR	Imperial Beach	CA	91932	HIGH	10/7/2010	Cleared	10/7/2010
56	THE BRIDGE	874	0	SEACOAST DR	Imperial Beach	CA	91932	LOW	10/7/2010	Cleared	10/7/2010
57	THE SCOREBOARD	951		PALM AVE	Imperial Beach	CA	91932	HIGH	3/2/2011	Follow Up	4/27/2011
58	THE TINFISH RESTAURANT	910	0	SEACOAST DR	Imperial Beach	CA	91932	HIGH	3/17/2011	Cleared	3/17/2011
59	THE WAVE CAFE	809	0	SEACOAST DR	Imperial Beach	CA	91932	HIGH	3/17/2011	Follow Up	4/4/2011
60	The Wright Way	1051	Suite D	13TH ST	Imperial Beach	CA	91932	HIGH	11/3/2010	Cleared	11/3/2010
61	TITO AUTO SERVICE	1335	0	PALM AVE	Imperial Beach	CA	91932	HIGH	11/18/2010	Cleared	11/18/2010
62	TNT SURFBOARDS	536	0	13TH ST	Imperial Beach	CA	91932	HIGH	11/29/2010	Follow Up	1/6/2011
63	WALLY'S IGA	836	0	PALM AVE	Imperial Beach	CA	91932	HIGH	12/9/2010	Cleared	12/9/2010
64	WIENERSCHNITZEL #358	1253	0	PALM AVE	Imperial Beach	CA	91932	HIGH	4/4/2011	Cleared	4/4/2011
65	WOODYS AUTO CARE	200	0	PALM AVE	Imperial Beach	CA	91932	HIGH	2/9/2011	Follow Up	2/24/2011

Table 5.4 and Figure 5.1 Interactive Effectiveness Assessments of Commercial Businesses

Facility	HAVE YOU HEARD OF OUR PROGRAM	IS RUNOFF TREATED	FINAL DESTINATION OF STORM WATER
Mexican Restaurant	2	3	5
Automobile Service	5	5	4
Mexican Deli	5	5	5
Fried Chicken Restaurant	3	3	3
Surfboard Manufacturer	3	2	3
Mexican Restuarant	1	1	1
Automobile Service	5	5	5
Seafood Restaurant	2	3	1
Catering Company	3	3	5
Automobile Service	5	5	5
Average	3.4	3.5	3.7
	Employee awareness of our programs	**Employee awareness that runoff is not treated**	**Employees awareness of the final destination of storm water**
Average	**3.4**	**3.5**	**3.7**

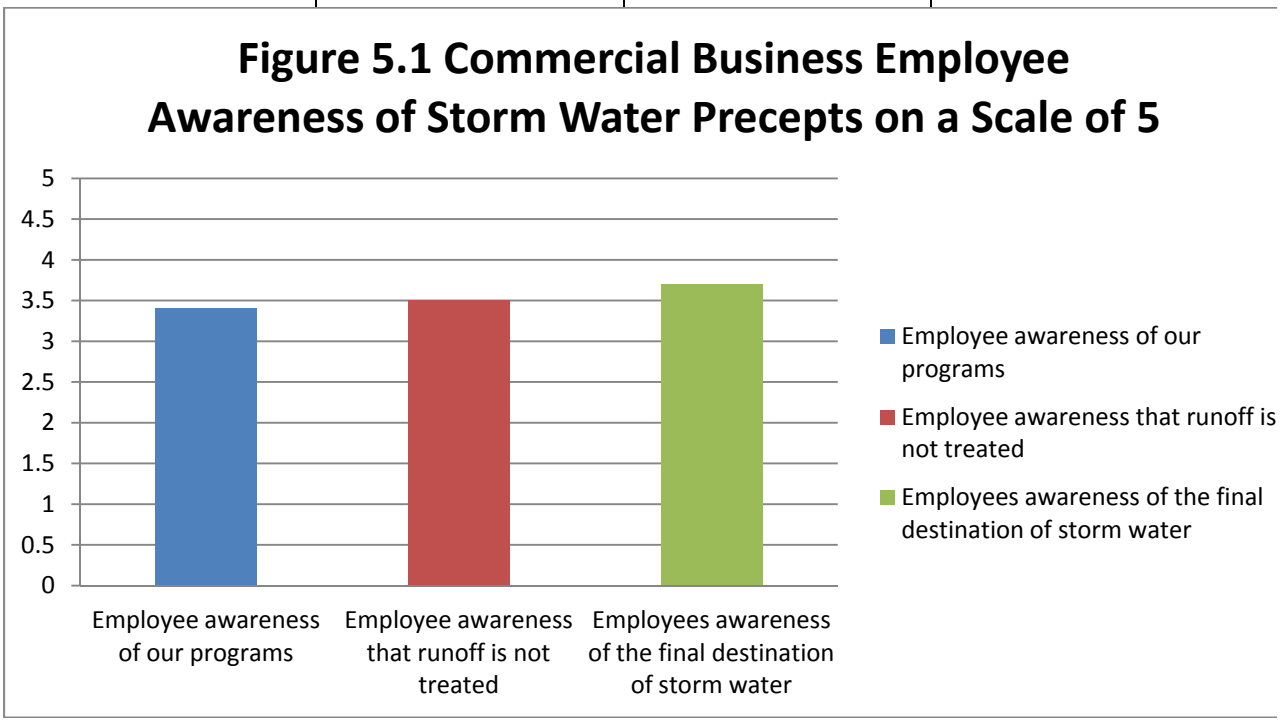

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Table 5.5 - Commercial Business Inventory FY 2010-11

ID	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip	Hydrologic Area	SIC Code Numeric	NAICS Code Numeric	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	Latitude	Longitude
1	13TH ST MARKET	1126		13TH ST	Imperial Beach	CA	91932	911.11	5921	445310	LIQU	x	x		x	x	x	x	x		Yes	Yes	6330221900	32.575943	-117.105862
2	7 ELEVEN 18322/RNJ ENTERPRISES	657		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6252541100	32.58376	-117.118931
3	7-ELEVEN #13563G-2131	197		PALM AVE	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6251912500	32.583807	-117.129828
4	7-ELEVEN STORE # 24344B-2131	1311		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL	x	x	x		x	x		x	x	No	No	6270111800	32.58364	-117.105344
5	7-ELEVEN STORE #23982A-2131	1303		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	5999	453998	RETL	x	x	x		x	x		x	x	Yes	No	6330310100	32.576412	-117.105527
6	AB BRITE CLEANERS & LAUNDRY	674		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6251401700	32.58408	-117.118594
7	ADEPT PROCESS SERVICES LLC	706		SEACOAST DR	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6251811307	32.583429	-117.131854
8	ALBERTO'S TACO SHOP	1183		13TH ST	Imperial Beach	CA	91932	911.11	5812	722110	EATING	x	x			x	x			x	Yes	No	6330313000	32.575108	-117.105547
9	ALL AMERICAN CAR WASH IB	1158		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE		x	x		x	x		x	x	No	No	6262300500	32.58413	-117.109042
10	ALL PHASE DRYWALL	1187		13TH ST	Imperial Beach	CA	91932	911.11	1742	238310	GENCONT										Yes	No	6330311500	32.575049	-117.105547
11	ALLSTATE INSURANCE	1228		PALM AVE	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6262411900	32.58412	-117.10735
12	AMANDA'S HAIRSTYLING	637		9TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262121400	32.584887	-117.114135
13	AMERICAN LEGION POST NO 820	1268		PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING										No	No	6262420900	32.58412	-117.106402
14	AMERICAN OMBUDSMAN ENTERPRISES	150		PALM AVE	Imperial Beach	CA	91932	910.10	7389	561499	PROF										No	No	6250140700	32.58408	-117.130638
15	AMERICA'S FINEST DRIVINGSCHOOL	936		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262123200	32.584118	-117.113439
16	AMOR FLOWERS & TUX	181		PALM AVE	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6251911700	32.583808	-117.130104
17	ANCHOR MOTORS	740		PALM AVE	Imperial Beach	CA	91932	910.20	5521	441120	AUTO		x	x		x			x		No	No	6262021900	32.5841	-117.117599
18	ANTJE GERSTUNG	704		SEACOAST DR	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6251811305	32.583555	-117.131854
19	AROMA THAI RESTAURANT	757		SEACOAST DR	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6251920400	32.58251	-117.131642
20	ARTCO PICTURE FRAMES	716		BASSWOOD AVE	Imperial Beach	CA	91932	910.20	5023	423220	WHOL										No	No	6260212300	32.590411	-117.117504
21	AUNT ELLEN'S WATER	600	101	PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6251401400	32.584072	-117.120629
22	BEACH CLUB GRILLE	710	F	SEACOAST DR	IMPERIAL BEACH	CA	91932	910.10	5812	722110	EATING	x	x			x	x			x	No	No	6251821000	32.583076	-117.1318
23	BEACH SHOP	710		SEACOAST DR	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6251821046	32.583076	-117.1318
24	BEACH SIDE STATION	681		HIGHWAY 75	Imperial Beach	CA	91932	910.20	5541	447190	GAS		x	x		x	x		x	x	No	No	6262501200	32.584501	-117.118603
25	BEAN THERE BREWED THAT	600	112	PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x			x	x			x	No	No	6251401900	32.584072	-117.120629
26	BERNARDO SHORES	500		HIGHWAY 75	Imperial Beach	CA	91932	910.20	7033	721211	RVMOBIL		x								No	No	6251402000	32.586034	-117.120221
27	BEST 99 CENT	821		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262500600	32.583755	-117.115196
28	BIBBEY'S GIFT SHOP	903		SEACOAST DR	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6253510100	32.580109	-117.131601
29	BIBBEY'S SHELLS AND ROCKS	903		SEACOAST DR	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6253510100	32.580109	-117.131601
30	BIG KAHUNA'S PIZZA N STUFFS	600	117	PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6251401900	32.584072	-117.120629
31	BILBRAY TAX SERVICE	970		SEACOAST DR	Imperial Beach	CA	91932	911.11	7389	561499	PROF										Yes	No	6253400700	32.578645	-117.131891
32	BILLIE JEANS HAIRSTYLING	1144		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6261700500	32.58413	-117.109567
33	BILL'S HAPPY HAIR	839		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262500600	32.583749	-117.115025
34	BOWMAN'S MARKET	1008		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262221100	32.584072	-117.111372
35	BOYS & GIRLS CLUB OF IB	847		ENCINA AVE	Imperial Beach	CA	91932	910.20	7999	713290	BINGO										No	No	6264001200	32.580074	-117.115705
36	BOYS & GIRLS CLUB OF IB	847		ENCINA AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6264001200	32.580074	-117.115705
37	BRENT JACKMAN CONSTRUCTION	708		BASSWOOD AVE	Imperial Beach	CA	91932	910.20	1799	238990	GENCONT										No	No	6260211400	32.590412	-117.11766
38	BRYANTS AUTO REGISTRATION SVS	1235		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6263111400	32.58364	-117.107297
39	BULL PEN	706		HIGHWAY 75	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6262011100	32.584607	-117.117769
40	BURGER KING #806	1180		PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6262302000	32.58413	-117.108598
41	C.H. DONUTS	1070		13TH ST	Imperial Beach	CA	91932	911.11	5812	722110	EATING	x	x		x	x	x	x	x		Yes	Yes	6265421100	32.577073	-117.105853
42	CA ALUMINUM&VINYL WINDOWS INC	754		10TH ST	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262821500	32.58299	-117.111994
43	CAFE DI ROMA	633		9TH ST	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x			x	x			x	No	No	6262121400	32.584935	-117.114134
44	CALIFORNIA-AMERICAN WATER COMP	1019		CHERRY	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6261021000	32.588539	-117.111495
45	CARL'S JR. #585	700		13TH ST	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6263121300	32.583631	-117.105846
46	CHAT COMM	1223		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6263111400	32.58364	-117.107528
47	CHOCO'S HAIRCUTTING	1256		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6265420900	32.576671	-117.106592
48	CHRISTINA SCHUBERT	704		SEACOAST DR	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6251811305	32.583555	-117.131854
49	CHURCH OF CHRIST OF IB	640		10TH ST	Imperial Beach	CA	91932	910.20	8661	813110	NONPROF										No	No	6262212800	32.584827	-117.111994
50	CIRCLE H LIQUOR	600	113	PALM AVE	Imperial Beach	CA	91932	910.20	5921	445310	RETL										No	No	6251401400	32.584072	-117.120629
51	CITY NAILS	750		13TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
52	COCO AND GABOON	152		PALM AVE	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6250140700	32.584079	-117.130604

Table 5.5 - Commercial Business Inventory FY 2010-11

ID	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip	Hydrologic Area	SIC Code Numeric	NAICS Code Numeric	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	Latitude	Longitude
53	COLWELL REALTY	134		PALM AVE	Imperial Beach	CA	91932	910.10	7389	561499	PROF										No	No	6250140500	32.584081	-117.130909
54	COMPREHENSIVE TRAINING SYSTEMS	497		11TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6260600600	32.587617	-117.110422
55	COMPUTERVILLE	740		10TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262822500	32.58316	-117.111993
56	CORONADO BAY URGENT CARE	600	108	PALM AVE	Imperial Beach	CA	91932	910.20	8011	621111	HEALTH										No	No	6251401900	32.584072	-117.120629
57	COW-A-BUNGA CA GLACIER FNAM	10		EVERGREEN AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x			x	x			x	No	No	7602420903	32.579651	-117.132455
58	COX BAIT & TACKLE	996		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262211100	32.584093	-117.112008
59	CRAZY LADY'S	600	105	PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6251401900	32.584072	-117.120629
60	CRISS CROSS SALON	1115		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6263012300	32.58365	-117.110177
61	CROSSROAD PETROLEUM INC.	1185		PALM AVE	Imperial Beach	CA	91932	910.20	5541	447190	GAS	x	x		x	x	x	x	x		No	No	6263021600	32.583675	-117.10857
62	CRYSTAL COVE COCKTAILS	995		PALM AVE	Imperial Beach	CA	91932	910.20	5813	722400	BAR										No	No	6262822200	32.583793	-117.111898
63	CVS/PHARMACY #9120	800		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262110600	32.584154	-117.115976
64	CYNTHIA SEPULVEDA	637		9TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262121400	32.584887	-117.114135
65	D & L LOCKSMITH	1148		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6261700500	32.584078	-117.109484
66	D'AMES FITNESS	704		SEACOAST DR	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6251811305	32.583555	-117.131854
67	DAWN SWANSON- POINDEXTER	704		SEACOAST DR	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6251811305	32.583555	-117.131854
68	DEPENDABLE CARBURETOR EXCHANGE	660		EMORY ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE		x	x		x	x		x	x	No	No	6262122400	32.584593	-117.113213
69	DESPHY'S CLEANERS	600	104	PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
70	DON PANCHO'S MEXICAN FOOD	690		HIGHWAY 75	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x			x	x			x	No	No	6260705800	32.584833	-117.118321
71	DOS MUNDOS TACO SHOP	1004		PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x			x	x			x	No	No	6262221100	32.584048	-117.111402
72	E & S PRODUCE	1177		13TH ST	Imperial Beach	CA	91932	911.11	5999	453998	RETL										Yes	No	6330313000	32.575198	-117.105546
73	E.N.S. COIN LAUNDRY	1167		13TH ST	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330313000	32.575346	-117.105546
74	EAZY TAN	206		PALM AVE	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6250230300	32.584073	-117.129323
75	ECONO LUBE N' TUBE	772		13TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE		x	x		x	x		x		No	No	6263121100	32.582738	-117.105835
76	ED'S SHOE REPAIR	635		9TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262121400	32.584911	-117.114135
77	EL CILANTRO CAFÉ	764		13TH ST	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x			x	x			x	No	No	6263121100	32.582838	-117.105836
78	EL TAPATIO CATERING	667		SILVER STRAND BL	Imperial Beach	CA	91932	910.10	5812	722110	EATING										No	No	6250241200	32.584428	-117.12804
79	EL TAPATIO RESTAURANT INC	260		PALM AVE	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x			x	x			x	No	No	6250250100	32.584068	-117.128037
80	ELM ADULT DAY HEALTH CARE CTR	1220		ELM AVE	Imperial Beach	CA	91932	910.20	8351	624410	DAYCARE										No	No	6263412000	32.580809	-117.1076
81	EPISCOPAL COMMUNITY SERVICES	485		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	8351	624410	DAYCARE										Yes	No	6320841100	32.576485	-117.122693
82	EPISCOPAL COMMUNITY SERVICES	1340		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	8011	621111	HEALTH										Yes	No	6272201400	32.576657	-117.104813
83	EVERYDAY FURNITURE	986		PALM AVE	Imperial Beach	CA	91932	910.20	5712	442110	RETL										No	No	6262211200	32.584108	-117.112203
84	EVERYDAY FURNITURE	1003		PALM AVE	Imperial Beach	CA	91932	910.20	5712	442110	RETL										No	No	6262910100	32.583741	-117.111743
85	FACTORY 2 U- #631	880		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262110700	32.584153	-117.114678
86	FAMILY BARBER SHOP	934		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262123200	32.584118	-117.113479
87	FAMILY HAIRCUTTERS	770		13TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6263121100	32.582763	-117.105835
88	FARMERS INSURANCE	932		PALM AVE	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6262123200	32.584118	-117.11352
89	FIRST ASSEMBLY OF GOD	588		9TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6261412200	32.585916	-117.114414
90	FITNESS WORLD	750		13TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
91	FLEET RESERVE CLUB	659		SILVER STRAND BL	Imperial Beach	CA	91932	910.10	5812	722110	EATING										No	No	6250241000	32.584744	-117.128104
92	FLESH SKIN GRAPHICS	1155		PALM AVE	Imperial Beach	CA	91932	910.20	7299	812199	TATOO										No	No	6263022000	32.58365	-117.109153
93	FURNITURE 2000	817		PALM AVE	Imperial Beach	CA	91932	910.20	5712	442110	RETL										No	No	6262500600	32.583756	-117.115235
94	G & M OIL #177	907		PALM AVE	Imperial Beach	CA	91932	910.20	5541	447190	GAS		x	x		x	x		x	x	No	No	6262810100	32.583717	-117.114056
95	G.E. BROWN SERVICE	497		11TH ST	Imperial Beach	CA	91932	910.20	1799	238990	SUBCONT										No	No	6260600600	32.587617	-117.110422
96	GENES' AUTOMOTIVE	1085		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE		x	x		x	x		x	x	No	No	6262911400	32.583743	-117.111075
97	GENE'S TOWING SERVICE	753		10TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262910500	32.583013	-117.111675
98	GENE'S U'HAUL	1085		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262911400	32.583743	-117.111075
99	GIANT PIZZA KING #4	1070		13TH ST	Imperial Beach	CA	91932	911.11	5812	722110	EATING	x	x		x	x	x	x	x		Yes	Yes	6265421100	32.577073	-117.105853
100	GIANT PIZZA KING #5	600	100	PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6251401400	32.584072	-117.120629
101	GJAG CORP DBA PACIFIC POINT	657		10TH ST	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6262221200	32.584637	-117.111674
102	GLORIA BARRIOS	770		13TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6263121100	32.582763	-117.105835
103	GOODWILL INDUSTRIES OF SD	849		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262500600	32.583746	-117.11493
104	GREG MIXON	280		PALM AVE	Imperial Beach	CA	91932	910.10	7389	561499	PROF										No	No	6250241300	32.584071	-117.127768

Table 5.5 - Commercial Business Inventory FY 2010-11

ID	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip	Hydrologic Area	SIC Code Numeric	NAICS Code Numeric	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	Latitude	Longitude
105	GUISEPPE'S PIZZA	1293		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	5812	722110	EATING	x	x		x	x	x	x	x		Yes	Yes	6330222300	32.576394	-117.105869
106	H & R BLOCK	1313		PALM AVE	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6270111800	32.583665	-117.10531
107	HAWKINS AUTO BODY	519		FLORIDA ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE		x	x		x	x		x	x	No	No	6261221300	32.587323	-117.109195
108	HEALING WAVE HOLISTIC H.C.	667		PALM AVE	Imperial Beach	CA	91932	910.20	8049	621399	MASSTEC										No	No	6262500900	32.58376	-117.118744
109	HELFON HANONO, OPTOMETRIST	894		PALM AVE	Imperial Beach	CA	91932	910.20	8042	621320	HEALTH										No	No	6262110700	32.584139	-117.114504
110	HOLLYWOOD VIDEO #005-580	720		13TH ST	Imperial Beach	CA	91932	910.20	7841	532230	SECHAND										No	No	6263121500	32.583383	-117.105843
111	HONG DIEP THI LE	750		13TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
112	HS CARS COMPANY INC	1333		PALM AVE	Imperial Beach	CA	91932	910.20	5521	441120	AUTO		x	x		x			x		No	No	6270111900	32.583656	-117.104908
113	HUTCHINS REALTY	1138		PALM AVE	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6261700600	32.58413	-117.109691
114	I B GROOMIN	600	114	PALM AVE	Imperial Beach	CA	91932	910.20	752	812910	RETL										No	No	6251401400	32.584072	-117.120629
115	I B LIQUOR	801		SEACOAST DR	Imperial Beach	CA	91932	910.10	5921	445310	RETL										No	No	6252720100	32.581626	-117.131662
116	I.B. FLOWERS BY DESIGN	668		10TH ST	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262211000	32.584491	-117.111992
117	I.B. UNITED METHODIST CHURCH	455		PALM AVE	Imperial Beach	CA	91932	910.20	8661	813110	NONPROF										No	No	6252302300	32.58377	-117.123135
118	IB BEAUTIFUL INC	600	222	PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
119	IB BY THE SEA GIFTS	862		SEACOAST DR	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6253302100	32.580768	-117.131864
120	IB CHAMBER OF COMMERCE	702		SEACOAST DR	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6251811303	32.583681	-117.131854
121	IB COIN LAUNDERLAND NO. 3	1010		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262221100	32.584084	-117.111357
122	IB COIN LAUNDRY #5	760		13TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6263121100	32.582887	-117.105837
123	IB DIVERS	641		9TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262121400	32.584839	-117.114136
124	IB FITNESS	600	121	PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
125	IB FORUM	1079		SEACOAST DR	Imperial Beach	CA	91932	911.11	5812	722110	EATING		x	x		x			x		Yes	Yes	6253922300	32.576938	-117.131594
126	IB GIFTS & BEACH GEAR	700		SEACOAST DR	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6251811302	32.583808	-117.131833
127	IB MORTGAGE & REALTY	1258		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	7389	561499	PROF										Yes	No	6265420900	32.57669	-117.106558
128	IB NUTRITION STORE	888		PALM AVE	Imperial Beach	CA	91932	910.20	5122	446191	RETL										No	No	6262110700	32.584145	-117.114578
129	IB PET	600	127	PALM AVE	Imperial Beach	CA	91932	910.20	5999	453910	RETL										No	No	6251401400	32.584072	-117.120629
130	IB SUPER WASH N DRY	1220		PALM AVE	Imperial Beach	CA	91932	910.20	7215	812310	RETL										No	No	6262412700	32.58412	-117.107485
131	IDEAL CHOICE INSURANCE AGENCY	1233		PALM AVE	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6263111400	32.58364	-117.107336
132	IMPERIAL BEACH DENTALGROUP	1340		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	8021	621210	HEALTH										Yes	No	6272201400	32.576657	-117.104813
133	IMPERIAL BEACH EAGLE & TIMES	664		10TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262211000	32.584539	-117.111992
134	IMPERIAL BEACH HAIR DESIGNS	235		PALM AVE	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6252010500	32.583798	-117.128753
135	IMPERIAL BEACH HEALTH CENTER	949		PALM AVE	Imperial Beach	CA	91932	910.20	8011	621111	HEALTH										No	No	6262811700	32.583725	-117.113201
136	IMPERIAL BEACH MANAGEMENT CO	120		ELDER AVE	Imperial Beach	CA	91932	911.11	7389	561499	PROF										Yes	No	6253522600	32.578962	-117.131147
137	IMPERIAL BEACH PET HOSPITAL	538		12TH ST	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6261810800	32.587145	-117.108206
138	IMPERIAL BEACH PRESCHOOL NORTH	608		10TH ST	Imperial Beach	CA	91932	910.20	8351	624410	DAYCARE										No	No	6262212700	32.585211	-117.111997
139	IMPERIAL BEACH PRESCHOOL SOUTH	1179		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	8351	624410	DAYCARE										Yes	No	6330122400	32.57638	-117.108431
140	IMPERIAL BEACH ULTRAMAR	1300		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	5541	447190	GAS	x	x		x	x	x	x	x		Yes	Yes	6272201100	32.57662	-117.105562
141	IMPERIAL DONUTS +	1002		PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6262221100	32.584049	-117.111598
142	IMPERIAL GUEST HOME	1245		FLORIDA ST	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330820500	32.573843	-117.108804
143	IMPERIAL NAILS	600	107	PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
144	IMPERIAL TRAILER PARK	674		PALM AVE	Imperial Beach	CA	91932	910.20	7033	721211	RVMOBIL										No	No	6251401700	32.58408	-117.118594
145	INNER VISIONS	803		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262500600	32.583796	-117.115366
146	J & T NAILS	635		9TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262121400	32.584911	-117.114135
147	JAMES ROWLES STUDIO	497		11TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6260600600	32.587617	-117.110422
148	JESSOP & SON LANDSCAPE	425		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6324002100	32.576475	-117.124108
149	JORDYNHORDICHOK CHRISTMASTREE	0		*UNASSIGNED	Imperial Beach	CA	91932	N/A	5999	453998	RETL										No	No	6261700900	32.57912	-117.116912
150	JORGE AGUILA	277		EVERGREEN AVE	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6253621400	32.579403	-117.128026
151	JP MORGAN CHASE BANK, N.A.	1100		PALM AVE	Imperial Beach	CA	91932	910.20	6021	52211	BANK										No	No	6261621700	32.583991	-117.110573
152	KATY'S CAFE	704		SEACOAST DR	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x			x	x			x	No	No	6251811306	32.583555	-117.131854
153	K-C'S CHINESE FOOD	1299		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	5812	722110	EATING	x	x		x	x	x	x	x		Yes	Yes	6330222300	32.576476	-117.105767
154	KEYSTONE ESCROW INC	129		PALM AVE	Imperial Beach	CA	91932	910.10	7389	561499	PROF										No	No	6251912601	32.583812	-117.131003
155	KFC CORP #Y450025	1056		13TH ST	Imperial Beach	CA	91932	911.11	5812	722110	EATING	x	x			x	x			x	Yes	Yes	6265421000	32.577288	-117.105851
156	K-PASTA	775		13TH ST	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x			x	x			x	No	No	6270112100	32.582442	-117.105302

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157	L & M TIRE CO./ EXPRESS TIRE	950		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE		x	x		x	x		x		No	No	6262212000	32.584074	-117.112906
158	LA POSTA MARKET #2	1266		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	5999	453998	RETL	x	x			x	x			x	Yes	Yes	6265420900	32.57669	-117.10642
159	LEADINGHAM REALTY	1062		PALM AVE	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6262222500	32.58413	-117.110966
160	LENS WIRELESS	639		7TH ST	Imperial Beach	CA	91932	910.20	4812	517310	RETL										No	No	6262011200	32.585107	-117.117833
161	LEON DISCOUNT TOBACCO FOOD MAR	185		PALM AVE	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6251911700	32.583808	-117.130035
162	LINDA WHEELOCK WILLIS	204		PALM AVE	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6250230300	32.584064	-117.129371
163	LITTLE BONANZA	940		PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING										No	No	6262123500	32.584117	-117.113357
164	LOIS FUSCO	204		PALM AVE	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6250230300	32.584064	-117.129371
165	LUIS A CONTRERAS, DDS	1340		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	8021	621210	HEALTH										Yes	No	6272201400	32.576657	-117.104813
166	LUIS FLORES	1325		IRIS AVE	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	0000000000	32.568958	-117.1049
167	LUNA'S BEAUTY DESIGNERS	204		PALM AVE	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6250230300	32.584064	-117.129371
168	LUXURIOUS NAILS & SPA	710		HIGHWAY 75	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262011100	32.584596	-117.117714
169	MAI BUTON SEWING	1175		13TH ST	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330313000	32.575227	-117.105546
170	MAR VISTA BAPTIST CHURCH	888		5TH ST	Imperial Beach	CA	91932	910.20	8661	813110	NONPROF										No	No	6253111500	32.580544	-117.122547
171	MARCO'S & RED HAWK	1205		PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6263110100	32.583672	-117.107867
172	MARIA E SALAS	235		PALM AVE	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6252010500	32.583798	-117.128753
173	MARISA'S MEXICAN SEAFOOD GRILL	285		PALM AVE	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6252011100	32.583802	-117.127733
174	MARJO'S HAIR DESIGN	742		10TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262822500	32.583136	-117.111993
175	MARRERO'S CAR WASH	1257		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330222700	32.576389	-117.106592
176	MARY ANN V. SANVICTORES, DDS	600	116	PALM AVE	Imperial Beach	CA	91932	910.20	8021	621210	HEALTH										No	No	6251401900	32.584072	-117.120629
177	MASON'S ALIGNMENT-BRAKE-MUFFLE	975		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE		x	x		x	x		x	x	No	No	6262820300	32.58368	-117.112424
178	MCDONALDS/SCAROB INC.	1135		PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6263011800	32.58365	-117.109781
179	MEIJO SUSHI, INC.	600	300	PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x			x	x			x	No	No	6251401900	32.584072	-117.120629
180	MERCADO SHORES	639		7TH ST	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262011200	32.585107	-117.117833
181	MICHAEL GUTHRIE	1256		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6265420900	32.576671	-117.106592
182	MICHAEL ROGERS DDS	1340		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	8021	621210	HEALTH										Yes	No	6272201400	32.576657	-117.104813
183	MICKIES BAR AND GRILL	220		PALM AVE	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x			x	x			x	No	No	6250230500	32.58407	-117.128987
184	MIKE'S CAR WASH	1117		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6263012300	32.58365	-117.110138
185	MIKE'S UPHOLSTERY	1152		13TH ST	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330221600	32.575556	-117.105864
186	MISTY DAWN'S SALON	710		SEACOAST DR	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6251821050	32.583076	-117.1318
187	MODERN TEE	1059		3RD ST	Imperial Beach	CA	91932	911.11	5999	453998	RETL										Yes	No	6254212200	32.577118	-117.127263
188	MONEYTREE INC.	1070		13TH ST	Imperial Beach	CA	91932	911.11	6099	522390	CKCASH										Yes	No	6265421100	32.577073	-117.105853
189	MORENO DENTAL LAB	1258		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6265420900	32.57669	-117.106558
190	MUNI TEMPS/MUNICIPAL STAFFING	600	115	PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6251401400	32.584072	-117.120629
191	MYA'S FLOWER DESIGN	245		PALM AVE	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6252010600	32.583841	-117.128554
192	MZM SEACOAST BISTRO, LP	875		SEACOAST DR	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6252730100	32.58063	-117.131594
193	NAIL TECH	938		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262123200	32.584117	-117.113398
194	NAKAWATASE & CO, CPA	923		SEACOAST DR	Imperial Beach	CA	91932	910.10	7389	561499	PROF										No	No	6253522700	32.57943	-117.131641
195	NEIGHBOR MARKET	1497		13TH ST	Imperial Beach	CA	91932	911.11	5999	453998	RETL										Yes	No	6332234700	32.569207	-117.10548
196	NESTOR WATCH REPAIR CENTER	635		9TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262121400	32.584911	-117.114135
197	NFAROOQI ENT. LLC/JACK IN BOX	890		PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x			x	x			x	No	No	6262110800	32.584143	-117.114553
198	NGOC THAO DANG NGUYEN	750		13TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
199	NICK PHAM	750		13TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
200	NINI'S SALON	668		10TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262211000	32.584491	-117.111992
201	NORTH ISLAND C.U.	1101		PALM AVE	Imperial Beach	CA	91932	910.20	6061	522130	CRED										No	No	6262500300	32.583611	-117.117071
202	NOVAK SURFBOARD DESIGNS	536		13TH ST	Imperial Beach	CA	91932	910.20	3599	333999	MANUF										No	No	6261920400	32.586426	-117.105794
203	OCHOA ELECTRIC	731		EMORY ST	Imperial Beach	CA	91932	910.20	1731	238210	SUBCONT										No	No	6262820600	32.583288	-117.112914
204	OFFICE LOUNGE	1133		13TH ST	Imperial Beach	CA	91932	911.11	5813	722400	BAR										Yes	No	6330312000	32.575852	-117.105543
205	OLIVE OIL	600	109	PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x			x	x			x	No	No	6251401900	32.584072	-117.120629
206	OLLIE ANGEL SKATE SHOP	743		8TH ST	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262500600	32.583085	-117.115374
207	ORCA MARITIME INC	497		11TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6260600600	32.587617	-117.110422
208	OTAY MESA REALTY	970		SEACOAST DR	Imperial Beach	CA	91932	911.11	7389	561499	PROF										Yes	No	6253400700	32.578645	-117.131891

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209	PACIFIC BELL	1288		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262421000	32.58412	-117.106008
210	PACIFIC LEGACY PROPERTIES	702		SEACOAST DR	Imperial Beach	CA	91932	910.10	7389	561499	PROF										No	No	6251811303	32.583681	-117.131854
211	PACIFIC REALTY	992		PALM AVE	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6262211100	32.584107	-117.112086
212	PACIFIC REALTY SALES & MGT INC	280		PALM AVE	Imperial Beach	CA	91932	910.10	7389	561499	PROF										No	No	6250241300	32.584071	-117.127768
213	PALM AVENUE BOOKS DBA ROMANTIX	1177		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6263020200	32.58365	-117.108721
214	PALM AVENUE LIQUOR & MARKET	1200		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262412700	32.584013	-117.108023
215	PALM COIN LAUNDRY	187		PALM AVE	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6251912500	32.583807	-117.130001
216	PALM GLASS INC	754		10TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262821500	32.58299	-117.111994
217	PAN AM TAE KWON DO	730		HIGHWAY 75	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6262010600	32.584507	-117.117457
218	PARTY MART	1070		13TH ST	Imperial Beach	CA	91932	911.11	5999	453998	RETL										Yes	No	6265421100	32.577073	-117.105853
219	PAT'S LAWN CARE	448		DONAX AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6252300500	32.582584	-117.123757
220	PAUL MCNALLY REALTY	280		PALM AVE	Imperial Beach	CA	91932	910.10	7389	561499	PROF										No	No	6250241300	32.584071	-117.127768
221	PAULINA RIDDLE	704		SEACOAST DR	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6251811305	32.583555	-117.131854
222	PENTECOSTAL CHURCH OF GOD	1402		HEMLOCK AVE	Imperial Beach	CA	91932	911.11	8661	813110	NONPROF										Yes	No	6332311500	32.570446	-117.103273
223	PHIL'S BARBERSHOP	1305		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330310100	32.576394	-117.10549
224	PHIL'S DANCE STUDIO	1305		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330310100	32.576394	-117.10549
225	PHOEBE'S 99 C & PLUS	766		13TH ST	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6263121100	32.582813	-117.105836
226	PIZZA INDUSTRY/DOMINO'S PIZZA	1307		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	5812	722110	EATING	x	x		x	x	x	x	x		Yes	Yes	6330310100	32.576393	-117.105453
227	POUR'S LIQUOR	1141		13TH ST	Imperial Beach	CA	91932	911.11	5921	445310	RETL										Yes	No	6330312000	32.575733	-117.105544
228	PRECISION AUTO BODY & COLLISIO	989		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE		x	x		x	x		x		No	No	6262822100	32.583677	-117.112136
229	PRECISION FOREIGN	1240		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE		x	x		x	x		x	x	No	No	6262412800	32.58412	-117.107148
230	PRETZLES AND MUCH MORE	10		EVERGREEN AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x			x	x			x	No	No	7602420902	32.579651	-117.132455
231	PRICED RITE PETS	775		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453910	RETL										No	No	6262500500	32.583738	-117.116147
232	PRO HAIRCUT BY LISA	600	102	PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6251401400	32.584072	-117.120629
233	R J CAR WASH	730		10TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262822600	32.583282	-117.111992
234	R&C SCHAUMBURG/COLDWELL BANKER	862		SEACOAST DR	Imperial Beach	CA	91932	910.10	7389	561499	PROF										No	No	6253302100	32.580768	-117.131864
235	REGENERATIONVILLE	740		10TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262822500	32.58316	-117.111993
236	RODRIGO'S MEXICAN FOOD	600	106	PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6251401400	32.584072	-117.120629
237	ROLANDO'S TACO SHOP #5	805		SEACOAST DR	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6252720100	32.58158	-117.131625
238	ROYAL CLEANER'S	1181		13TH ST	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330313000	32.575138	-117.105547
239	SAGE TRADITIONS ACUPUNCTURE	667		PALM AVE	Imperial Beach	CA	91932	910.20	8049	621399	HEALTH										No	No	6262500900	32.58376	-117.118744
240	SALTWATER MAGIC	226		PALM AVE	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6250230600	32.584068	-117.128843
241	SAN DIEGO GYMNASTICS ACADEMY	600	127	PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6251401400	32.584072	-117.120629
242	SAN DIEGO MANUFACTURED HOUSING	206		PALM AVE	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6250230300	32.584073	-117.129323
243	SANDCASTLE INN	785		SEACOAST DR	Imperial Beach	CA	91932	910.10	7011	72111	HOTEL										No	No	6252710100	32.581984	-117.131594
244	SANDCASTLE REALTY	672		10TH ST	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6262211100	32.584443	-117.111992
245	SANTANA MEXICAN FOOD	1337		PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING		x	x		x			x		No	No	6270120900	32.583657	-117.104829
246	SAVE A LOT #916	805		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262500600	32.583782	-117.115348
247	SAWHNEY, PARMELA MD	705		PALM AVE	Imperial Beach	CA	91932	910.20	8011	621111	HEALTH										No	No	6262500200	32.58377	-117.117773
248	SEA BREEZE COMMUNITY CHURCH	1220		ELM AVE	Imperial Beach	CA	91932	910.20	8661	813110	NONPROF										No	No	6263412000	32.580809	-117.1076
249	SEACOAST INN	800		SEACOAST DR	Imperial Beach	CA	91932	910.10	7011	72111	HOTEL										No	No	6252620100	32.581626	-117.131796
250	SEACOAST PET CLINIC	600	103	PALM AVE	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6251401900	32.584072	-117.120629
251	SEACOAST PIZZA	807		SEACOAST DR	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6252720100	32.581557	-117.131607
252	SEACOAST VITAMINS & HERBS	600	109	PALM AVE	Imperial Beach	CA	91932	910.20	5122	446191	RETL										No	No	6251401900	32.584072	-117.120629
253	SEASIDE BARBER & BEAUTY SHOP	702		SEACOAST DR	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6251811304	32.583681	-117.131854
254	SHARON GRACE DALBERISTE	235		PALM AVE	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6252010500	32.583798	-117.128753
255	SIESTA RV PARK, INC.	409		PALM AVE	Imperial Beach	CA	91932	910.10	7033	721211	RVMOBIL		x								No	No	6252302400	32.583846	-117.124483
256	SILVER STRAND FAMILY MEDICINE	707		PALM AVE	Imperial Beach	CA	91932	910.20	8011	621111	HEALTH										No	No	6262500200	32.583768	-117.117727
257	SILVER STRAND SEA SPORTS	188		DATE AVE	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6252722409	32.58115	-117.129959
258	SJ TRANSPORT INC	535		FLORENCE ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6261920300	32.587203	-117.106757
259	SKINNART	1221		PALM AVE	Imperial Beach	CA	91932	910.20	7299	812199	TATOO										No	No	6263111400	32.583666	-117.107576
260	SMILES OF IMPERIAL BEACH	743		EMORY ST	Imperial Beach	CA	91932	910.20	8021	621210	HEALTH										No	No	6262820700	32.583141	-117.112914

Table 5.5 - Commercial Business Inventory FY 2010-11

ID	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip	Hydrologic Area	SIC Code Numeric	NAICS Code Numeric	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	Latitude	Longitude
261	SOLARA MEDICAL SUPPLIES, INC	639		7TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262011200	32.585107	-117.117833
262	SOLARA MEDICAL/IB PHARMACY	720		HIGHWAY 75	Imperial Beach	CA	91932	910.20	8011	621111	HEALTH										No	No	6262010600	32.584552	-117.117585
263	SOMBRERO MEXICAN FOOD	189		PALM AVE	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x			x	x			x	No	No	6251912500	32.583807	-117.129966
264	SOPHISTICATED AUTO	987		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE		x	x		x	x		x	x	No	No	6262822100	32.583678	-117.112177
265	SOUND OF BEACH	10		EVERGREEN AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	7602420901	32.579651	-117.132455
266	SOUTH COAST ENVIRONMENTAL SERV	1258		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	7389	561499	CONS										Yes	No	6265420900	32.57669	-117.106558
267	SOUTH COAST TILE CO.	1258		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	1799	238990	SUBCONT										Yes	No	6265420900	32.57669	-117.106558
268	SOUTHBAY REXALL DRUGS	779		PALM AVE	Imperial Beach	CA	91932	910.20	5122	446110	HEALTH										No	No	6262500500	32.583737	-117.116083
269	SOUTHWEST WETLANDS INTERPRETIV	708		SEACOAST DR	Imperial Beach	CA	91932	910.10	99	99	NONPROF										No	No	6251811308	32.583302	-117.131833
270	SPIRIT REAL ESTATE	700		SEACOAST DR	Imperial Beach	CA	91932	910.10	7389	561499	PROF										No	No	6251811301	32.583808	-117.131833
271	ST. JAMES LUTHERAN CHURCH	866		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	8661	813110	NONPROF										Yes	No	6264006900	32.576692	-117.115129
272	ST. JAMES LUTHERAN PRESCHOOL	866		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	8351	624410	DAYCARE										Yes	No	6264006900	32.576692	-117.115129
273	ST. MARY'S/ SANTA MARIA LA VIR	485		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	8661	813110	NONPROF										Yes	No	6320841100	32.576485	-117.122693
274	STARDUST DONUT SHOP	698		HIGHWAY 75	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6260705900	32.584795	-117.118228
275	STATE FARM INSURANCE	1144		13TH ST	Imperial Beach	CA	91932	911.11	7389	561499	PROF										Yes	No	6330221800	32.575675	-117.105863
276	STATE FARM INSURANCE	1239		PALM AVE	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6263111500	32.58364	-117.10722
277	STEVEN Y. LUO, DDS APC	629		9TH ST	Imperial Beach	CA	91932	910.20	8021	621210	HEALTH										No	No	6262121400	32.584982	-117.114133
278	STL TECH DETALING, INC.	600	224	PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
279	STRONG TOWER COMMUNITY CHURCH	1439		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330412800	32.576427	-117.102576
280	SUBSMART DELI-FRESH	1231		PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6263111400	32.58364	-117.107374
281	SUBWAY 20578	876		SEACOAST DR	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x			x	x			x	No	No	6253302200	32.580607	-117.131864
282	SUN & SEA MANOR	740		7TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262501000	32.583219	-117.118156
283	T WIRELESS	1295		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	4812	517310	RETL										Yes	No	6330222300	32.576421	-117.105835
284	TAKING CARE OF BUSINESS	1146		13TH ST	Imperial Beach	CA	91932	911.11	6099	522390	CKCASH										Yes	No	6330221700	32.575645	-117.105863
285	TAX PLUS	662		10TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262211000	32.584563	-117.111993
286	TERRA NOVA REALTY	600	225	PALM AVE	Imperial Beach	CA	91932	910.20	7389	561499	PROF										No	No	6251401900	32.584072	-117.120629
287	THAT'S A WRAP	1146		13TH ST	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330221700	32.575645	-117.105863
288	THE B.D. BARR COMPANY	1144		13TH ST	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330221800	32.575675	-117.105863
289	THE BOSN'S LOCKER	238		PALM AVE	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6250230700	32.584024	-117.128556
290	THE BOXING ZONE, LLC	1351		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6270121000	32.583698	-117.104554
291	THE BRIDGE	874		SEACOAST DR	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x			x	x			x	No	No	6253302200	32.58063	-117.131864
292	THE CHECK CASHING PLACE, INC.	894		PALM AVE	Imperial Beach	CA	91932	910.20	6099	522390	CKCASH										No	No	6262110700	32.584139	-117.114504
293	THE FINE AUTO STORE	942		PALM AVE	Imperial Beach	CA	91932	910.20	5521	441120	AUTO		x	x		x			x		No	No	6262123500	32.584117	-117.113317
294	THE MAIL ROOM	757		EMORY ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262820800	32.582969	-117.112914
295	THE PAPER SHACK	1237		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6263111500	32.58364	-117.107259
296	THE SALTY FROG	992		PALM AVE	Imperial Beach	CA	91932	910.20	5813	722400	BAR										No	No	6262211100	32.584107	-117.112086
297	THE SCOREBOARD	951		PALM AVE	Imperial Beach	CA	91932	910.20	5813	722400	BAR										No	No	6262820100	32.583729	-117.112917
298	THE SURF HUT	710		SEACOAST DR	Imperial Beach	CA	91932	910.10	5999	453998	RETL										No	No	6251821049	32.583076	-117.1318
299	THE TINFISH RESTAURANT	910		SEACOAST DR	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x		x	x	x				No	No	7600820500	32.580008	-117.131864
300	THE VIP CLEANERS	1070		13TH ST	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6265421100	32.577073	-117.105853
301	THE WAVE CAFE	809		SEACOAST DR	Imperial Beach	CA	91932	910.10	5812	722110	EATING	x	x			x	x			x	No	No	6252720100	32.581534	-117.131594
302	THE WRIGHT WAY	1051	D	13TH ST	Imperial Beach	CA	91932	910.20	5812	722110	EATING										No	No	6272200200	32.577378	-117.105584
303	THOMAS LINDLEY PARKING LOT	915		OCEAN LN	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE										No	No	6253301100	32.58006	-117.132435
304	TITO AUTO SERVICE	1335		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE		x	x		x	x		x	x	No	No	6270111900	32.583657	-117.104868
305	TNT SURFBOARDS	536		13TH ST	Imperial Beach	CA	91932	910.20	3599	333999	MANUF										No	No	6261920400	32.586426	-117.105794
306	TO MARKET TO MARKET	921		SEACOAST DR	Imperial Beach	CA	91932	910.10	5921	445310	LIQU										No	No	6253522700	32.579456	-117.131662
307	TOLMOSOFF, JOHN M., D.C.	667		PALM AVE	Imperial Beach	CA	91932	910.20	8011	621111	HEALTH										No	No	6262500900	32.58376	-117.118744
308	TOMMY'S TOBACCO	1297		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	5494	424940	RETL										Yes	No	6330222300	32.576448	-117.105801
309	TONY'S HOTEL & APT LIQUIDATORS	536		13TH ST	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6261920400	32.586426	-117.105794
310	TRINITY FINANCIAL SERVICES	1025		GEORGIA ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6272404400	32.578274	-117.104294
311	TUNES LUBES ETC.	741		PALM AVE	Imperial Beach	CA	91932	910.20	7538	811111	RETL		x	x		x	x		x	x	No	No	6262500400	32.583785	-117.116929
312	U.S. SANDCASTLE COMMITTEE, INC	970		SEACOAST DR	Imperial Beach	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6253400700	32.578645	-117.131891

Table 5.5 - Commercial Business Inventory FY 2010-11

ID	Facility Name	Address Number	Suite Number	Street Name	City	State	Zip	Hydrologic Area	SIC Code Numeric	NAICS Code Numeric	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	Latitude	Longitude
313	UNION BANK OF CALIFORNIA	900		PALM AVE	Imperial Beach	CA	91932	910.20	6021	56145	BANK										No	No	6262123600	32.584088	-117.114171
314	UNITED PENTECOASTAL CHURCH	631		12TH ST	Imperial Beach	CA	91932	910.20	8661	813110	NONPROF										No	No	6262414100	32.58494	-117.107942
315	VERNON AU D.D.S.	1340		IMPERIAL BEACH BL	Imperial Beach	CA	91932	911.11	8021	621210	HEALTH										Yes	No	6272201400	32.576657	-117.104813
316	VICKY HAIR & ACCESORIES	986		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262211200	32.584108	-117.112203
317	VIC'S BARBERSHOP	986		PALM AVE	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6262211200	32.584108	-117.112203
318	VIDEO 4 YOU	1051		13TH ST	Imperial Beach	CA	91932	910.20	7299	561990	SERVICE										No	No	6272200200	32.577378	-117.105584
319	WALLY'S IGA	836		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL	x	x	x		x	x		x	x	No	No	6262110700	32.58419	-117.11523
320	WEST COAST KITCHEN	208		PALM AVE	Imperial Beach	CA	91932	910.10	5812	722110	EATING										No	No	6250230300	32.584072	-117.129275
321	WIENERSCHNITZEL #358	1253		PALM AVE	Imperial Beach	CA	91932	910.20	5812	722110	EATING	x	x		x	x	x	x	x		No	No	6263120100	32.583658	-117.106711
322	WILDCOAST	925		SEACOAST DR	Imperial Beach	CA	91932	910.10	99	99	NONPROF										No	No	6253522700	32.579404	-117.131621
323	WOODYS AUTO CARE	200		PALM AVE	Imperial Beach	CA	91932	910.10	7299	561990	SERVICE		x	x		x	x		x		No	No	6250230200	32.584076	-117.129791
324	WORLD CHOICE NUTRITION	600	221	PALM AVE	Imperial Beach	CA	91932	910.20	5149	425120	WHOL										No	No	6251401900	32.584072	-117.120629
325	WYLDE SYDES BOUTIQUE	771		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6262500500	32.583738	-117.11621
326	YAROSLAV KUSHNIR, M.D., INC.	184		PALM AVE	Imperial Beach	CA	91932	910.10	8011	621111	HEALTH										No	No	6250141000	32.584077	-117.130062
327	YE OLDE PLANK INN	24		PALM AVE	Imperial Beach	CA	91932	910.10	5813	722400	BAR	x	x			x	x			x	No	No	6250111800	32.583973	-117.132151
328	YOUR T-SHIRT STORE	1181		PALM AVE	Imperial Beach	CA	91932	910.20	5999	453998	RETL										No	No	6263020200	32.58365	-117.108642

6.0 RESIDENTIAL COMPONENT

6.1 Introduction

The City endeavors to prevent or eliminate the discharge of pollutants and runoff from residential sources. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and the City's Code Enforcement Division. Efforts are made to educate the public and oversee compliance with local urban runoff regulations to reduce the release of pollutants to the MEP.

6.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Residential Component is described in the *2008 JURMP Section 8.0*. During the reporting period no updates were made to the high priority residential area inventory. All other program planning and administration elements remain unchanged from the *2008 JURMP Section 8.0*.

6.3 Outcome Level 1b: Implementation of Management Program Activities

The City enforces its storm water ordinances for all residential areas and activities to maintain compliance with the Municipal Storm Water Permit. Public outreach and education as outlined in the *2008 JURMP Section 10.0* encourages residents to comply with the minimum set of BMPs listed in Imperial Beach Municipal Code 8.30.080. The City encourages the use of pollution prevention methods for all residents and provides convenient and cheap house hold hazardous waste disposal. The City also participated as Co-Chair in the Education and Residential Sources Workgroup and Chair of the Underserved Target Audience sub-workgroup.

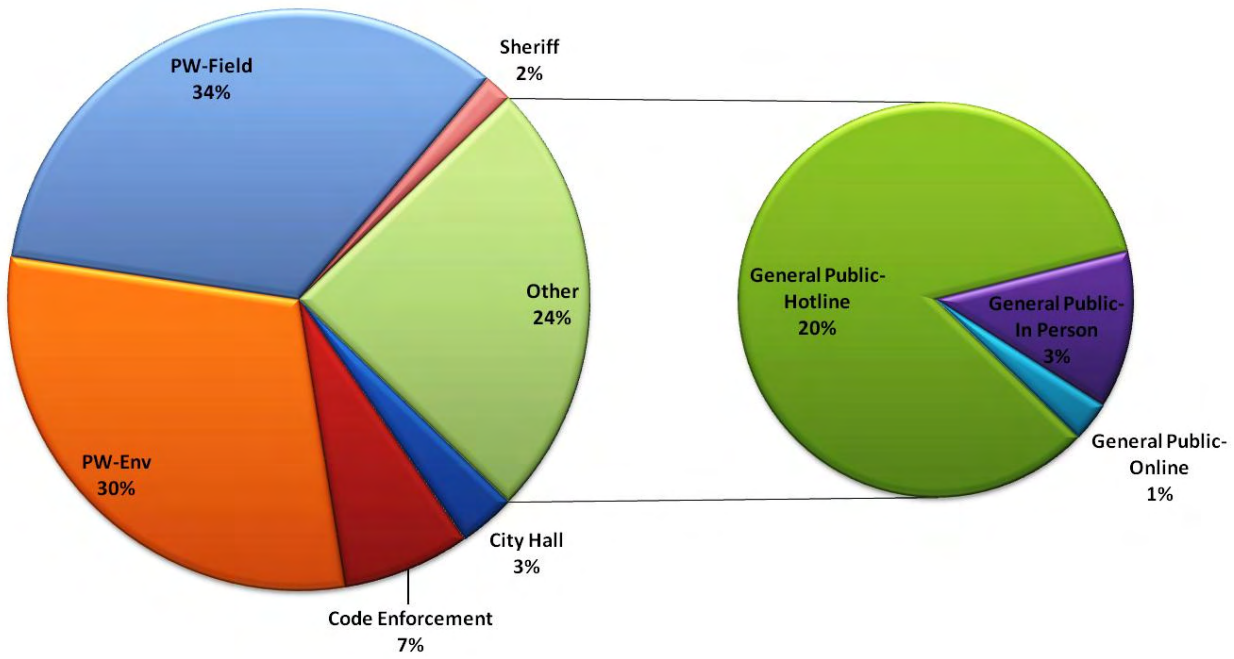
The following tables and figures presented in this section provide additional information on the implementation and assessment of the Municipal program element:

- Table 6.1 Provides an overview of the residential component as it was implemented
- Table 6.2 presents and describes targeted FY 2010-11 outcomes and results
- Figure 6.1 Show the referral source for ICIDs investigations

6.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Residents

Knowledge and awareness of the storm water program by residents is best assessed through the City's response to illegal connections and illicit discharge (ICID) investigations. Figure 6.1 below shows that 24% of the City's ICID cases come from the public. This is a slight increase from the previous year. This shows that the City is effective in making different stakeholders aware of the importance of reporting storm water violations and more importantly aware of how their own actions effect water quality. Continued commitment to preventing storm water pollution is also seen from City staff. Forty-six percent of all cases came from non environmental City staff. We continue to encourage City staff to report violations to the Environmental Division.

Figure 6.1 Referral Source for ICID Investigations



6.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Residents

The City facilitates changes in behavior and implementation of BMPs for high threat to water quality activities and residential areas by providing education through face-to-face interactions, disseminating education materials through various media, and responding to illegal discharges. The *2008 JURMP Appendix G* defines minimum BMP requirements applicable to residential areas and activities in the City.

6.6 Outcome Level 4: Source Load Reductions

The City continues to quantify load reductions whenever feasible for disposal of household hazardous waste, used oil, and special clean up events. Pest waste collected by the Ocean Blue foundation is also estimated. The City does not normally track individual source load reductions to receiving waters from residential areas or activities but load reductions can be implied by proper implementation of BMPs.

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Table 6.1 – Overview of Residential Component

Category	Pounds	Number	Description
A. Residential Threat to Water Quality Prioritization			
High	---	6	All residential areas in the City are considered high priority.
Medium	---	---	
Low	---	---	
B. House Hold Hazardous, Electronic, and Universal Waste Disposal			
Flammable and Poison	6,121	---	Imperial Beach residents have a variety of options for the collection and disposal of house hold hazardous waste. Most residents utilize the South Bay HHW Collection center at the City of Chula Vista. Residents can also drop off used oil at the Auto Zone located at 13th and Palm. The City coordinates used oil disposal that is part of CalRecycle Used Oil Block Grant with the City of Chula Vista. The amount of waste dropped off by Imperial Beach residents is provided in the table to the left. The City also offers curbside pickup of HHW, used oil, and a number of regional collection events for electronic and universal waste. The disposal totals for these additional activities are not provided in this report.
Acid, Base, Oxidizer, and PCB-containing	368	---	
Reclaimable (Antifreeze, Car batteries, Latex Paint, Used Oil and filters)	4,329	---	
Other HHW	1,508		
Universal and Electronic Waste	4,371		
Total Waste Disposed	16,697		

JURMP Sections	Description of FY 2010-11 Changes
8.0 and Appendix G	BMP requirements of the JURMP applicable to residential areas and activities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 6.2 - Residential Component Targeted Outcomes and Results

Residential FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per Permit requirements	No updates made during reporting period	Complete	Applicable updates were included in *JURMP Section 6.0*. No significant updates are expected to be necessary during this permit cycle.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update program documentation for consistency with program updates	No updates made	Complete	No updates made this reporting period.
c) Year-End Program Review			
Complete annual year-end program review	Review program for effectiveness and efficiency	Complete	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Residential Areas			
Identify high threat to water quality areas	Update not needed	Complete	The City has previously identified the high threat to water quality residential areas and activities. All residential areas in the City are considered high threat to water quality areas. The *2008 JURMP Section 8.0* provides a list of high threat to water quality activities.
b) Confirmation of Designated Minimum BMPs			

Residential FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Require residents to implement BMPs	Requirements implemented	Complete	The City requires all residential areas to implement designated minimum BMPs and other measures to prevent the discharge of pollutants to the MEP. The City enforces its *Urban Runoff Management and Discharge Control Ordinance* and provides education and outreach to local residents.
c) Facilitate Proper Disposal of Household Hazardous Waste and Used Oil			
Facilitate proper management and disposal of used oil and household hazardous waste (HHW)	Provided a variety of disposal options for used oil, toxic materials, and other hazardous waste	Complete	The City provides a variety of options for the proper management and disposal of used oil, toxic materials, and other HHW. Residents are generally directed to drop off hazardous materials at the South Bay HHW center at the City of Chula Vista. The City also provides curb side pickups and a number of regional collection events for HHW, used oil, electronic waste, and universal waste.
d) Enforcement of Residential Areas and Activities			
Enforce minimum BMPs in residential areas	Responded to storm water violations reported by staff and public	Complete	The City enforces its storm water ordinance and the Municipal Permit for all residential areas and activities through the use of verbal warnings with distribution of BMP literature, Notices of Violation, Notices of Abatement, and additional penalties or fines and civil and/or criminal court actions. The Environmental Division responds to storm water violations, which are reported by City staff and public.
e) Evaluate Methods of Oversight for Residential Areas and Activities			
Evaluate methods of oversight and enforcement for residential areas and activities	Operate storm water hotline and utilizes monthly sewer and street inspections to identify BMP or storm water violations	Complete	Operated a Storm Water Hotline (619-424-4095) during the reporting period. The City received 26 reports on the Storm Water Hotline (619-424-4095), 4 in-person reports, and 1 online report for storm water violations in residential areas. The Environmental Division responded to another 96 residential violations reported by City staff.
f) Regional Residential Education Program			

Residential FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Participate in Regional Residential Education Program	Held co-chair position of the Education and Residential Sources Workgroup and chair position of the Underserved Target Audience Sub-workgroup	On going	During this reporting period, the City participated in the Education and Residential Sources Workgroup with the San Diego Copermittees and held the responsibility of co-chair for the group. Significant progress continues to be made in the areas of media and public relations, materials development, outreach to underserved target audiences, partnership development, regional website development, regional brand, regional events, and program assessment through a county-wide telephone survey. During the next reporting period the County will assume lead responsibility for the workgroup and a consultant will provide as needed support for the group.
g) Special Investigations			
---	---	---	Special investigations were not conducted and are not routinely conducted as part of the implementation strategy for this program element.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY RESIDENETS			
Establish a baseline for knowledge of BMPs implementation by residents	No additional assessments were targeted at residents outside of education activities	Assessment results provided in Section 8.0 for residential and general public outreach	Knowledge and awareness of storm water issues by residents is assessed through the education program. The City uses brochures, special events, presentations, and ICID investigations as tools to educate local residents on storm water.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY RESIDENTS)			
a) BMP Implementation			
Facilitate pet waste program with the Ocean Blue Foundation	10 pet waste bag dispensers are maintained by the Ocean Blue Foundation	Complete	The pet waste bag dispenser program is maintained and operated by the Ocean Blue Foundation, a local not for profit group. The City works with the Ocean Blue Foundation to ensure that the pet waste bag dispensers are maintained and the program has adequate funding. The City Council supports the foundation through an annual community grant.

Residential FY 2010-11 Results				
Targeted Outcome	Implementation Result	Assessment Result		Explanation
Cleanup activities in residential areas	Implemented cleanup activities as part of the Municipal Component	Complete		Under the Municipal Component of the JURMP the City conducts street sweeping, alley sweeps, and cleanup activities in residential neighborhoods.
b) Violations and Enforcement Actions				
Number of violations and enforcement actions to achieve compliance	Responded to a total of 127 ICID cases	Complete		The City operates a Storm Water Hotline (619-424-4095). The City received 26 reports on the Storm Water Hotline (619-424-4095), 4 in-person reports, and 1 online report for storm water violations in residential areas. The Environmental Division responded to another 96 residential violations reported by City staff. In total the Environmental Division responded to 127 ICID cases.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM RESIDENTIAL AREAS AND ACTIVITIES)				
a) BMP Implementation				
Household hazardous waste (HHW) collection	16,697 pounds of HHW collected	**Year**	**Pounds**	The City's HHW disposal program is available to all residents, and the City partners with other jurisdictions in the South Bay to offer convenient, low-cost HHW disposal options.
		2008	6,000	
		2009	10,367	
		2010	10,377	
		2011	16,697	
Used oil collection	4,329 pounds of Reclaimable (Antifreeze, Car batteries, Latex Paint, Used Oil and filters) collected	**Year**	**Pounds**	The City is required to facilitate the proper management and disposal of used oil, toxic materials, and other HHW through educational and public information activities, and establishment of collection sites operated by the City or a private entity.
		2008	2,110	
		2009	2,173	
		2010	3,763	
		2011	4,329	

Residential FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Universal and electronic waste collection	4,371 pounds of electronic and universal waste collected	**Year** / **Pounds** 2009 / 2,433 2010 / 3,025 2011 / 4,371	The City facilitates the proper management and disposal of universal and electronic wastes.
Pet waste collection	10 pet waste bag dispensers; 72,800 bags replaced, and an estimate of 18,200 lbs of pet waste collected	Complete	The pet waste bag dispenser program is maintained and operated by the Ocean Blue Foundation, a local not for profit group. The City works with the Ocean Blue Foundation to ensure that the pet waste bag dispensers are maintained and the program has adequate funding. If the average pet waste weighs 4 ounces then an estimate of 18,200 lbs of waste was collected. The City Council supports the foundation through an annual community grant.
Special event recycling and waste management	Home Front Cleanup event had 753 participants and collected 178.8 tons of materials	**Year** / **No.** / **Tons** 2009 / 732 / 154.3 2010 / 822 / 175.6 2011 / 753 / 178.8	The City holds an annual Home Front Cleanup event. The Home Front Clean Up had 753 participants and disposed a total of 178.8 tons of materials. That includes 20.72 tons of green waste, 23.31 tons of metal, and 43.72 tons of concrete that was recycled.

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7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

7.1 Introduction

The City endeavors to prevent municipal discharges from the Municipal Separate Storm Sewer System (MS4) from causing or contributing to a violation of water quality standards. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and its efforts to reduce municipal discharges of pollutants to the MS4 to the maximum extent practicable (MEP).

All components of the JURMP are represented in this report with the exception of this component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), extending the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

The City's implementation and assessment strategy for the illicit discharge detection and elimination component is described in the *JURMP Section 9.0*.

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8.0 RESIDENTIAL COMPONENT

8.1 Introduction

The City endeavors to implement a diverse education program in the community to reduce the impacts of urbanization on water quality. Education activities are targeted at the following groups: 1) municipal departments and personnel, 2) construction site owners and developers, 3) commercial business owners and operators, 4) industrial business owners and operators (none exist in the City of Imperial Beach), 5) residents, general public, and school children, and 6) underserved community. This component is applicable to all City departments, in particular the Environmental Program Division of the Department of Public Works, which spearheads the City's education efforts and is responsible for the annual training for municipal employees on the components and goals of the JURMP. Note that each section of this JURMP Annual Report already includes a description of education activities for each element. The City recognizes the importance education plays in facilitating the necessary behavioral changes to successfully reduce and eliminate pollutants from urban runoff.

8.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Education Component is described in the *2008 JURMP Section 10.0*. During the reporting period the City made no significant updates to the education program. The City continues to focus education efforts at the five targeted community groups. The City tailors each individual education activity to best suit the message and content for the target community; however, the overall message is consistent with the *2008 JURMP Section 10.0*. Minor changes to the program include changes to materials such as handouts, surveys, and educational guidance documents, which are continuously updated throughout the year. The City also continues to seek for ways to expand and improve the effectiveness of the education program.

8.3 Outcome Level 1b: Implementation of Management Program Activities

The Environmental Division oversees the implementation and assessment of the Education Component for the five targeted communities. The following tables and figures presented in this section provide additional information on the implementation and assessment of the Education program element:

- Table 8.1 Provides an overview of the Education program
- Table 8.2 presents and describes targeted FY 2010-11 outcomes and results
- Table 8.3 provides the education activity inventory by target community for FY 2010-11

8.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Target Community

The City implements an education program for each target community using all media as appropriate to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban

runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment. During the reporting period the Environmental Division implemented a variety of techniques to capture changes in knowledge and awareness among the targeted communities. These techniques include the use of surveys, pre and post test, interactive assessments and evaluations during inspections, and regional assessment programs through the Education and Residential Sources (ERS) Workgroup.

8.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Target Community

The City facilitates changes in behavior and implementation of BMPs by providing continuous education for each target audience using a variety of educational tools and media. The continual saturation of education for each target audience is gradually leading to a greater awareness about storm water pollution and the implementation of pollution prevention BMPs. Gauging the level of effectiveness of the education program from one year to the next is a challenging task because of the gradual nature of behavior change, but the City strives to measure this level of effectiveness and behavior change for each target audience whenever possible. Table 8.3 provides a description of how outcome level 3 is assessed for each targeted community.

8.6 Outcome Level 4: Source Load Reductions

Education is a key component of getting to source load reductions through the implementation of BMPs. Source load reductions are not easily tracked from education activities but can be implied through the proper implementation of BMPs.

Table 8.1 – Overview of Education

Category	Number	Description
A. Educational Efforts		
Municipal Departments and Personnel Events	10	Employees are trained annually on the use of BMPs in their daily operations. Face-to-face meetings are held on a regular basis with employees to discuss the JURMP and its application in their operations. Construction Site Owners, Contractors and Developers are trained through face-to-face meetings with the Community Development Department and the Publics Works Department during the permitting process, in inspections, and in investigations of illegal discharges. Commercial Site Owners and Operators are trained through scheduled inspections by the Public Works Department Environmental Division, and through investigations of illegal discharges. All residents receive educational information in the City's newsletter, a newsletter sent out by the City's waste franchisee, website updates, materials provided at City Hall and the Public Works Department, through community presentations, etc. The City held an information booth at Fiesta del Rio. The City also participated with other Co-Permittees in regional outreach events that target the underserved community.
Construction Site Owners, Contractors and Developer Training Events	2	
Public Participation	9	
Commercial Site Owners and Operators Training Events	3	
Residential Community and General Public Outreach Events	11	
Underserved Community	3	
School Children Outreach Events	3	

JURMP Sections	Description of FY 2010-11 Changes
10.0 and Appendix I	BMP requirements of the JURMP applicable to educational areas and activities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 8.2 - Education Component Targeted Outcomes and Results

Education FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)			
a) Modifications to JURMP			
Update applicable JURMP sections per Permit requirements	No updates made during the reporting period	Complete	Applicable updates were included in *JURMP Section 6.0*. No significant updates are expected to be necessary during this permit cycle.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)			
Update program documentation for consistency with program updates	No updates made during the reporting period	Complete	The City implements surveys when feasible at education events to establish a baseline level of knowledge. Minor program updates were made throughout the year to program content to more effectively present education materials.
c) Updates to Training Program			
Update training materials for consistency with *2008 JURMP Section 10.0*	New content added as necessary to training program	Complete	The City makes annual updates to training content and materials so that each education activity provides appropriate information for the target audience. For example a new topic for this year included the SUSMP and HMP requirements. The Environmental Division coordinates training program for all targeted audiences.
d) Year-End Program Review			
Complete annual year-end program review	Review program for effectiveness and efficiency	Complete	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)			
a) Jurisdictional Requirements for Education Component			

Education FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Provide education to construction site owners and developers	Provided education to construction site owners and developers	Complete	Construction Site Owners, Contractors and Developers are trained through face-to-face meetings with the Community Development Department and the Publics Works Department during the permitting process. Community Development holds counter hours for project applicant. Education is reinforced through inspections and in investigations of illegal discharges. The City also developed a new construction BMP brochure.
Provide education for municipal staff	Provided annual training and additional education opportunities to municipal staff	Complete	The Environmental Division provided 10 municipal training activities including the annual storm water training for Public Works on 1/3/10. Each division also received refresher training by the Env Specialist during the year. All new employees receive one-on-one training for storm water at the beginning of employment. City staffs are encouraged to attend training activities for storm water program outside the City for example HMP, SUSMP, and GCP. Face-to-face meetings are held on a regular basis with employees to discuss the JURMP and its application in their operations. Every City vehicle also contains a binder of Municipal Facility and Activity BMPs and MS4 map.
Provide education to industrial and commercial owners and operators	Provided education to commercial businesses and owners	Complete	Commercial businesses receive education on storm water BMPs through a number of different methods inspections, face-to-face interaction with City staff during commercial inspections, through dissemination of education material, and through a follow up inspection letter that summarizes the results of the commercial inspection. The City also provides education to businesses during ICID investigations and educational materials to street vendors for special events.
Provide education to underserved community	Provided education to underserved community	Complete	Education materials are provided in both English and Spanish. The environmental division incorporates the underserved community in most education activities, which is particularly important to IB due to the large Spanish speaking community. The City also Co-chairs the ERS Workgroup and Chairs the Underserved Target Audience Sub-Workgroup.

Education FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Provide education to residential community, general public, and school children	Provided education to residential community, general public, and school children	Complete	The Environmental Division provided 14 education activities targeted to residential community, general public, and school children. Some of the activities included presentation to schools, after school activities at IB Sports Park, media education, Recycling All-Star award, and City Council proclamations. The Tijuana Estuary, State Park, FWS, YMCA Camp Surf, Surfrider, and Wildcoast also conduct environmental education and community outreach that is not currently tracked by the City but represents a significant effort to promote clean water in the region.
Provide opportunity for public participation	Provided opportunities for public education	Complete	Public participation is encouraged in the development and implementation of the JURMP. The annual JURMP Report is presented at City Council during an open public hearing process. The Environmental Division also facilitates and participates in public cleanup activities that serve as mechanism for public participation in watershed activities.
b) Special Investigations			
Not targeted	Mayor Proclamation for April as Environmental Awareness Month and Oct as TJ River Action Month	Complete	Imperial Beach proclaimed the month of April as "Environmental Awareness Month". Environmental Division scheduled a number of education activities for the month with the afterschool youth at IB Sports Park and selected a weekly recipient for the Recycling All-Star award for the month. These activities were in addition to the normal Earth Day celebrations in the region. The month of October was also proclaimed as Tijuana River Action Month.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION)			
a) Construction Site Owners and Developers			
Assess knowledge and awareness for construction site owners and operators	Assessed knowledge whenever possible	Complete	Most construction activity in the City is from small discretionary projects and CIPs. Knowledge and awareness is achieved through proper submittal of storm water documents and proper implementation of BMPs. All projects are required to submit the necessary storm water documents and implement BMPs. Prior to commencement of construction; developers are made aware of all storm water requirements at pre construction meetings. Deficient projects receive proper education from staff. General outcomes reveal a high level of knowledge from larger contractors and a lesser understanding of BMPs from smaller general contractors.

Education FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
b) Municipal Departments and Personnel			
Assess knowledge and awareness for municipal staff	Assessed knowledge though surveys and regular meetings	Public Works survey score of 93% correct answers	Surveys are administered during annual storm water training events. The surveys are generally challenging in nature because personnel staff are expected to have a high level of understanding of storm water program. Surveys are administered at the begging of the training session and used as a tool to highlight specific topics during the training session.
c) Industrial and Commercial Site Owners and Operators			
Assess knowledge and awareness for commercial businesses	Assessed through interactive assessment process	Assessment results provided in Table 5.5 and figure 5.1 in the Commercial Section	The Environmental Division incorporates an interactive effectiveness assessment of commercial businesses and rates businesses on a scale of 1 out of 5. The results of the assessment are presented in Table 5.4 and Figure 5.1 in Section 5 for Industrial and Commercial Component.
d) Underserved Community			
Assess knowledge and awareness for underserved community	Assessed though Regional Copermittee group	Complete	The Education and Residential Sources Workgroup provides targeted assessment of the underserved community through event surveys and a countywide phone survey. The second countywide phone survey was completed this reporting period.
e) Residential Community, General Public, and School Children			
Assess knowledge and awareness for residential community, general public, and school children	Assessed through surveys during presentations and at events	Complete	The City hired ILACSD to conduct targeted education and assessment for high school children. The City also provided event surveys at the Fiesta del Rio special event. Results of pre and post test indicate only a minor change in knowledge with the high school audience (3% points).
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION FROM EDUCATION ACTIVITIES)			
a) Construction Site Owners and Developers			

Education FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Number of construction projects that were not in compliance with BMPs	8 of 103 construction projects were out of compliance with BMPs	92% of active construction projects in compliance with site BMPs	Most construction projects (92%) implemented the necessary BMPs to contain potential contaminates on site. Non-compliant projects received additional education and a follow up investigation to ensure the proper BMPs were implemented and maintained.
b) Municipal Departments and Personnel			
Number of ICIDs identified and reported by municipal staff	Municipal Staff identified 96 out of 127 ICID during the reporting period	Total ICID: 127 Public Works: 81	One component of the annual municipal training is the proper identification of ICIDs. During FY 2010-11 City Staff identified 76% of the reported ICIDs with Public Works staff identifying 64% of the over incidents. General pubic reporting either through online complaint form or hotline made up only 24% of the overall cases.
c) Industrial and Commercial Site Owners and Operators			
Number of commercial businesses not in compliance with minimum BMPs	34 out of 65 commercial businesses were out of minimum BMP compliance	48% of high priority businesses in complete compliance with minimum BMPs	The City inspects 100% of high priority commercial businesses annually for proper implementation of BMPs. During the reporting period the city inspected 65 commercial businesses with the result of 13 businesses receiving an NOV for non compliance with minimum BMPs and 21 additional businesses having minor violations that required a follow up inspection. In total 34/65 businesses required some type of enforcement action and reinsertion for minimum BMPs.
d) Underserved Community			
Not targeted	Included in existing targeted audiences and regional program	Regional program conducted the second countywide phone survey reported in RURMP	The underserved community is not specifically targeted but rather included in all existing education programs. The city does work with Wildcaost to target Spanish speaking and underserved residents as well as underserved youth through after school programs at the IB Sports Park. Behaviors and BMP implementation are more effectively addressed through the Regional Copermittee group.
e) Residential Community, General Public, and School Children			

Education FY 2010-11 Results			
Targeted Outcome	Implementation Result	Assessment Result	Explanation
Number of education activities that target behavior change	14 education activities during the reporting period	Complete	Assessing changes in behavior and BMP implementation across the whole community is best addressed through regional programs. Imperial Beach focuses on targeting education through a variety of media and interactive programs that target the most people possible. Anecdotal observations from City staff reveal a continuous improvement in BMP implementation across all targeted audiences as the persistent storm water education message gradually changes public behavior.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM EDUCATION ACTIVITIES)			
a) BMP Implementation			
Source load reduction	Provided education to targeted audiences	Total number of education activities:41	Source load reductions are not easily tracked from education activities but can be implied through proper implementation of BMPs. Source load reductions from cleanup activities are tracked and reported separately.

Table 8.3 Education Activity Inventory by Targeted Community

Education Activity	Date	Activity or Event Description	Topics	Participants	Effectiveness Assessment	Comments
Municipal Departments and Personnel						
FYI to City Staff and Council	Weekly	Provided updates on the storm water program and Environmental Division through a weekly email newsletter sent to City staff and Council	Storm Water Program	City Staff and Council		
Code Enforcement Meeting	Monthly	Monthly meeting with Code Enforcement, Fire Inspector, Building Inspector, Community Development, and Environmental Division	Code enforcement issues many of which pertain to storm water	Env, Code, Fire, and Building Divisions		
Community Development Meeting	Weekly	Weekly staff meeting with community development related to interdepartmental issues including storm water	new buildings, BMPs, storm water program	PW and CD		
Emergency Reponses Plan Training	7/27/2010	Review City's emergency response plan	Emergency shut off for fuel, equipment operations, spill response	16		
EPA Code Enforcement Workshop	9/13-16/10	Detailed workshop on code compliance hosted by the Regional Commercial and Industrial group	Code enforcement, documentation, methods of compliance and reporting	1		
Public Works Hazardous Communication and Emergency Response Training	9/22/2010	Review of communications and response during emergencies	Spill containment, equipment operation, communication	15		
Public Works Annual JURMP Training	11/3/2010	Annual Storm Water JURMP training for Public Works	Annual training on PW facility and activities BMPs, LIDs, and Tijuana River update	20	Survey and post assessment	
QSP/QSD Certification GCP	multiple	QSP and QSD General Construction Permit training (JS Storm water, URS, and RBF)	QSP/QSD certification	4		
BMP Inspection and Maintenance of LID Workshop	4/6/2011	City of San Diego all day workshop on LID maintenance and inspection workshop (attended by both PW and Community Development)	LID, BMPs, inspections, maintenance	3		
Fire Department Inspection and Training	5/12/2011	Inspected fire station with Chief, and fire inspector and storm water training	storm water program and pollution prevention	2		Chief will pass information onto staff
Construction Site Owners and Developers						
Copy of storm water/grading/erosion control requirements attached to Imperial Beach issued permits. Developed new construction BMP brochure.	On going	Community Development Department disseminates BMP and storm water information with permits	BMP, pollution prevention, City storm water requirements	---		
Community Development counter hours	On going	Counter hour for education relating to construction and development in the City	BMPs, pollution prevention, City storm water regulations	---		
Commercial Owners and Operators						
Sand Castle vender packed and inspections	8/6-9/2010	Education to Vendors and inspections during the event	Storm water pollution prevention, ICIDs	40	no violations	
Commercial Inspection	On going	Commercial business inspections	Pollution prevention, BMPs, storm water regulations	65		
Follow up inspection report and letter	On going	Each commercial inspection is followed up with summary report and BMP brochures by mail	Commercial BMPs, recycling and pollution prevention	63		
Residents and General Public						
Imperial Beach Classic Car Show	7/24/2010	Staffed a booth at the car show with Chula Vista HHW	Used oil, storm water	---		
FY 2009-10 JURMP AR Public Hearing	9/22/2009	Public hearing at City Council meeting	Overview of the FY 2009-10 JURMP AR components	---		
City Semi-Annual E-news letter	Summer/ Winter	Included articles on storm water, FOG, HHW, and street sweeping	Pollution prevention; storm water BMPs; Recycling HHW; Fats, oil, and grease; Special Events; Street sweeping	Citywide		
EDCO Environmental Times	Quarterly	Published a variety of environmental articles in the Summer , Fall, Winter, and Spring EDCO news letters sent to all residents	Pollution prevention, special events, HHW, recycling, and storm water regulations	Citywide		
Eagle and Times newspaper	On going	Articles on variety of topics advising the community on storm water related issues	Storm water pollution, reusable bag day, pollution prevention, City pollution prevention efforts, JURMP	Citywide newspaper		
Beach Closure Workshop	12/7/2010	Public workshop on beach closures in Imperial Beach. Presentation by Scripps SCCOOS, County DEH, Coastkeeper, IB Lifeguard and Environmental, and Q&A session.	Plum tracker, bacteria testing, available information, storm water, and public safety	60		
City Council Presentation on TMDL Reference Condition Study	12/15/2010	Presentation to City Council	TMDLs, Watersheds, storm water program	---		
Street Banners	2/1/2011	installed new environmentally themed street banners on HW75, Palm Ave, and Seacoast	Environmental awareness of Imperial Beach	Citywide		

Citywide Garage Sale	4/30/2011	Annual citywide garage sale to promote reuse of items	Recycle and reuse	118	All received training material from Env Division	
Home Front Cleanup	5/7/2011	Citywide annual home front cleanup event	trash, recycling, HHW	753	Trash: 91 tons; Green waste: 20.7 tons; metal: 23.3 tons; con-demo: 43.7 tons	
Update to City Council on Storm Water Program	5/18/2011	Presentation to City Council	Storm water permit, ROWD, TMDLs, and Tijuana River	---		
Underserved Community						
Underserved Target Audience Sub workgroup	On going	Co-chair of Education Residential Sources Workgroup, Chair of Underserved Target Audience sub-workgroup	Representation of the underserved community in all aspects of the regional education program	---		
Spanish Calendars	1/1/2011	Developed storm water Spanish calendars and distributed 2000 through Wildcaost as part of regional Education program	Multiple storm water themes	2000		
Storm Drain Stenciling	5/28 6/10 2011	Wildcoast storm drain stenciling in Imperial Beach	Pollution prevention	30		2 weekend events
School Children						
ILACSD Mar Vista High School Presentations	1/27-28/11	Mar Vista HS 9th and 12th grade presentations	Storm water, watersheds, Tijuana River estuary, San Diego Bay	91	Pre test: 50%, Post-test: 53%	
Watershed Presentation IB Elementary	3/30/2011	Watershed model presentation to 3rd grade class	Storm water, watersheds, Tijuana River estuary, San Diego Bay	48		
IB Sports Park for April as environmental awareness month	5/4/2011	games and activities with education staff from the Tijuana Estuary	watershed, storm water, environmental	25		
Public Participation						
Mayor proclamation (Oct Tijuana River Action Month)	10/1/2010	Proclamation by mayor to support and recognize the efforts to cleanup and restore the TJ River Valley	Tijuana River Valley	---		
JURMP Annual Report Public Hearing	9/22/2010	Presentation of JURMP annual report at City Council meeting	JURMP components and program effectiveness	---		
Coastal Cleanup Day	9/25/2010	Cleanup activity and education along SD Bay	Salt Pond restoration, trash, storm water pollution	48	56 pounds of trash	
Fiesta Del Rio Event	10/10/2010	Staffed education booth at fiesta del Rio	storm water and multiple others related to environmental themes	---		
Tijuana River Cleanups for Tijuana River Action Month	10/18/2010	Multiple cleanups with Wildcoast, coastkeep, and JobCorps part of Tijuana River Action Month	Trash, Tijuana River Valley	50	2,300 tires and 56 tons of trash	
Mayor proclamation (Day without a Bag)	12/16/2010	Proclamation by the Mayor to support reusable bags	Trash, recycling, plastic bag use	---		
Fish and Wildlife volunteer cleanup bikeway	1/8/2011	Cleanup event with FWS along SD Bay	Trash, recycling, watersheds	25		
San Diego Bay and Tijuana WURMP Public Hearing	1/26/2011	Public hearing at City Council meeting	Overview of the FY 2009-10 WURMP for San Diego Bay and Tijuana River	---		
Mayor proclamation (April as Environmental awareness month)	4/22/2011	Proclamation by mayor to support and recognize the environment	Multiple storm water education programs for the month	---		

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9.0 Public Participation

9.1 Introduction

The City is required to incorporate a mechanism for Public Participation in the updating, development, and implementation of the JURMP. Public involvement in the JURMP leads to a greater understanding of public perception and attitudes towards the problem of storm water pollution and helps the City implement a more effective storm water program. The Environmental Division regularly interacts with residents, commercial businesses, municipal staff, and developers while conducting inspections, education activities, BMP enforcement, and other JURMP implementation components. The City also makes additional efforts to include public participation in the implementation and development of the JURMP by providing opportunities throughout the year to provide comments and feedback.

9.2 Public Participation Efforts

The City holds a public hearing and solicits public comments prior to the adoption and submittal of the JURMP and its Annual Reports. The public was notified on this Annual Report in the Imperial Beach *Eagle & Times* newspaper and through public hearing notices that were posted at City Hall and the Imperial Beach Public Library. A draft of this JURMP Annual Report was made available for public viewing at the Imperial Beach City Hall, posted on the City's website, and presented at a public hearing to City Council on September 7, 2011.

Other public participation mechanisms the City uses include the operation of a storm water hotline and online reporting tool to report violations, coordination of cleanup activities such as the pet waste bag program and trash clean ups with local organizations, involvement with local environmental groups to spread awareness of urban runoff pollution, the City's storm water education program, participation with civic organizations, and City special events.

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10.0 Fiscal Analysis Component

10.1 Introduction

The Environmental Program Division of the Department of Public Works is responsible for the fiscal analysis of the storm water program. Implementation costs for the JURMP are approximately $831,000. Revenue sources used by the City to fund the requirements of the Municipal Permit include City general fund, sewer enterprise fund, building permit fees, redevelopment agency funds and State grant funds.

10.2 General Budget Information

The costs of implementing the JURMP are spread across the whole City. Each Department and associated Division has an established role in implementing the components of the JURMP. However, the primary responsibility of implementing the storm water program is split between the Department of Public Works and Community Development Department.

10.3 Fiscal Analysis Methods

The Standardized Fiscal Analysis Methods and Format (Fiscal Analysis Methods) were collaboratively developed and adopted by the Copermittees in January 2009 in accordance with sections G, J.1.a(3)(k), and J.1.c(1)(d) of NPDES Order No. R9-2007-0001. This section of the JURMP report follows the standardized Regional Fiscal Analysis Methods adopted by all Copermittees.

10.4 Fiscal Analysis Results

10.4.1 Expenditures

The expenditures for FY 2010-11 are provided in the tables below. The standardized fiscal analysis method does not exactly correspond to the line item budget maintained by the City. The values presented in Table 10.1 are therefore an extrapolation of the expenditures made that correspond best to the itemized categories. Table 10.2 is also provided for the expenditures related to the Prop 50 Clean Beach Initiative grants for the Tijuana River Bacteria Source Identification Study.

The implementation of all JURMP Components involves every City Department and Division and the actual implementation costs for the program may exceed the amount posted below. The costs being reported only cover the expenditures by the City of Imperial Beach Environmental Division budget.

Table 10.1 Expenditures on JURMP for FY 2010-11

Administration	$253,044
Development Planning	$79,900
Construction	$287,980
Municipal	$8,133
Industrial Commercial	
Residential	$42,855
IDDE	$8,945
Education	
Public Participation	$2,228
Special Investigations	$102,384
Non-Emergency Firefighting	$45,871
Regional Costs	$253,044
Total	**$831,399**

Table 10.2 Clean Beach Initiative Grant Tijuana River Bacteria Source Identification Study FY 2010-11

Tijuana River Bacteria Study	$437,356.07

10.4.2 Funding Source

Revenue sources used by the City to fund the requirements of the Municipal Stormwater Permit include the City general fund, sewer enterprise fund, building permit fees, redevelopment agency funds, and State grant funds. The City's general fund provides the primary funding source for implementation of the JURMP components.

11.0 Program Effectiveness Assessment

11.1 Introduction

The Environmental Program Division is responsible for the effectiveness assessment of JURMP activities and implementation of BMPs for each major component of the storm water program. Effectiveness assessments are incorporated into the storm water program when ever feasible to gauge whether the processes and procedures put into place are working toward protecting the quality of receiving waters.

The structure of this Annual Report evaluates the level of effectiveness for each JURMP component in the context of program planning, management, and implementation. The City uses the structural hierarchy of levels that were established in the *2003 Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*. Each section of this Annual Report incorporates program effectiveness on Outcome Level 1through Outcome Level 4. In general, Outcome Levels 1, 2, and 3 are best addressed on a Jurisdictional scale. Outcome Level 4 measurements of load reductions are provided whenever possible, but for the most part, assessment of changes to water quality (Levels 4, 5, and 6) are best addressed at the watershed or regional scale.

11.2 Outcome Level 1a: Administration of Management Program Activities

The administration of management program activities addresses modifications to the *2008 JURMP*, updates to program documentation or procedures, end of the year program review, and updates to inventories for next fiscal year.

The City's implementation and assessment strategy for the program effectiveness is described in the *JURMP Section 13.0*.

11.3 Outcome Level 1b: Implementation of Management Program Activities

The implementation of management program activities addresses BMP confirmation requirements, proper documentation, training, inspections, public awareness and response, and special investigations for each component of the *2008 JURMP*. The tables in each section of the Annual Report present and describe targeted outcomes and results based on program implementation for the reporting period.

11.4 Outcome Level 2: Knowledge and Awareness of Program Implementation

Knowledge and awareness are targeted and assessed as necessary within each element of this Annual Report independently.

11.5 Outcome Level 3: Behaviors and Best Management Practice (BMP)

Behaviors and BMP implementation are assessed within the tables located in each section of this Annual Report.

11.6 Outcome Level 4 – Source Load Reductions

Source load reductions are targeted and assessed as necessary within each element of this Annual Report independently.

12.0 Special Investigations

12.1 Introduction

This section describes special investigations that were conducted above and beyond Permit requirements, but with the ultimate goal of better understanding and controlling urban runoff and storm water pollution. Special investigations relevant to each JURMP component are assessed in the tables of each section of this Annual Report. The discussion presented in this section provides additional details on the special investigation for the Imperial Beach Storm Drain Master Plan 2010 Update and the Tijuana River Bacterial Source Identification Study.

12.2 2010 Storm Drain Master Plan

During the reporting period the City finalized its update of the Storm Drain Master Plan and presented it to City Council on September, 1 2010. The first citywide storm drain study was prepared in 1960 by Curie Engineering Company and Merrill B. Wittman Engineers. The study was subsequently updated in 1991 by Bement-Dainwood-Sturgen (BDS) Civil Engineers. The purpose of the storm drain study is to evaluate the effectiveness of the existing storm drain system, identify problem areas, and recommend improvements that will reduce flooding or damage to the city during peak storm flows.

The 2010 Storm Drain Study is an update to the 1991 BDS report and utilizes the most resent hydrologic and geospatial data for the region to update drainage basin maps, storm drain capacity limitations, and preliminary recommendations for improvements to the storm drain system. Work on the update started in August 2009. The scope of work for the study includes the following:

- Review of existing data
- Field verification and GIS mapping of system
- Hydraulic and hydrologic modeling for the 2-year, 5-year, and 10-year model storm flow
- Identification of system deficiencies and recommendations for improvements

This Storm Drain Study is a useful planning tool that identifies system deficiencies and limitations that are important to consider when evaluating future redevelopment projects whether it is from new developments, capital improvement projects, or collection system improvements. The report provides hydraulic, hydrologic, and capacity analysis for 7 large drainage areas and 15 smaller drainage areas in the City and provides preliminary recommendations on how to increase the capacity for the system where feasible. Geospatial data relating to drainage basins and storm drain infrastructure was also updated into the City's GIS database.

12.3 Tijuana River Bacteria Source Identification Study

In April 2008, the City of Imperial Beach (City) was awarded a Clean Beach Initiative (CBI) Grant to assess the potential sources of bacterial impacts on the United States (US) side of the Tijuana River Watershed (TRW) under the Grant Program Agreement No. 07-584-550-0. The resultant study was named the *Tijuana River Bacterial Source Identification Study*. In January 2008, the City contracted Weston

Solutions, Inc. (WESTON®) to undertake the study. In December 2008, the project was placed on hold due to budgetary constraints in the State of California. The project was reinstated in February 2010 and is now operating under the new Grant Program Agreement No. 07-584-550-1 and is on track to finish by March 2012.

The goals of this study are as follows:

- Identify anthropogenic sources of bacteria;
- Identify non-anthropogenic sources of bacteria;
- Assess annual bacteria loads into the Tijuana River;
- Identify point sources (PSs) and non-point sources (NPSs) of bacterial pollutants; and
- Better understand mitigation strategies aimed at the reduction of bacteria loads.

The project uses standard culturing of fecal indicator bacteria and molecular tests (including the presence of Bacteroides as an indicator of recent human fecal pollution) to assess the presence of fecal indicator bacteria within the watershed during both dry weather and wet weather to identify PSs and NPSs of elevated bacteria concentrations, which may lead to beach postings at adjacent recreational beaches. Specific assessments focus on areas such as residential, commercial, agricultural and ranches, and groundwater transport as well as sewage flows from Mexico. The study includes detailed analysis of flows and loads of bacteria, nutrients, and general chemistry parameters. The final report is scheduled to be complete in March 2012 and will include BMP recommendations for the Tijuana River Watershed.

13.0 Non-Emergency Fire Fighting

13.1 Introduction

The City requires pollution prevention measures and BMPs to reduce or eliminate non-emergency fire fighting flows. The Environmental Division assists the Fire Department in implementing control measures to prevent or control pollutants from both emergency and non-emergency fire fighting activities. The 2008 JURMP Section 2.2 identifies the BMPs that are implemented as part of fire fighting activities.

Non-emergency fire fighting activities, such as training activities that simulate emergency responses, are performed in a manner that eliminates discharges to the storm water system whenever practicable, and minimizes discharges to the storm water conveyance system when elimination of discharges is unavoidable. The following best management practices are implemented as part of these activities:

- Water flows are directed to landscaped areas whenever possible
- When flowing water to an area where landscaping does not prevent runoff, the area selected shall be surveyed by the Officer in charge prior to training activities to ensure that debris will not enter into the storm water system as a result of the drill
- Areas that have debris, which could potentially enter the storm water system as a result of the drill activities, will not be used for training until debris has been removed. Referrals to the Department responsible for the debris removal will be made as needed
- Live fire training activities will be pre-planned to allow integration of barriers to off-site runoff, which could contribute to storm water discharges
- Discharges from maintenance of equipment and restoration of hoses, vehicles, tools, ladders and other emergency response equipment are directed to the sewage, and dry methods are used whenever practical
- Staff is trained on good housekeeping practices to be used during standard facility maintenance procedures
- The fire fighting personnel and inspectors receive annual pollution prevention training from Environmental Specialist
- Vehicle washing or equipment cleaning is conducted over a wash bay that drains to the sewer
- The fire inspector participates in monthly code enforcement meetings

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14.0 JURMP Revisions

14.1 Introduction

The Environmental Program Division of the Department of Public Works is responsible to maximize program effectiveness by identifying and describing any JURMP modifications that are made during the reporting period, or that are proposed or planed for the next reporting period. Under the reporting format of this Annual Report, any modification or proposed changes made to the *2008 JURMP* are identified in the Program Planning and Administration subsection within each preceding Section of this report.

14.2 JURMP Updates

The Table 14.1 below provides a summary of the modifications made to the JURMP over the reporting period. Changes to the JURMP were all considered minor.

Table 14.1 – Overview JURMP Modification

Development Planning Component
• Updated municipal code with final Hydromodiciation criteria (Attachment 2A) • Updated City building code to provide greater authority to require BMPs (Attachment 2B) • Updated the City's Storm Water Management Plan form for development projects (Attachment 2C) • Developed a guidance document for SUSMP projects (Attachment 2D)
Municipal Component
• Hired on a GIS Analyst position that will enhance the City's capabilities to use geographic information for storm water management • Purchased a field computer for the Environmental Division to use while conducting inspection and enforcement activities • Updated Storm Drain Mater Plan 2010 • Updated MS4 GIS database and Map (Attachment 4A) • Updated annual storm drain maintenance form (Attachment 4B)

14.3 Updates to FY 2009-10 Annual Report

The City of Imperial Beach received a letter on August 11, 2011 from Coastkeeer requesting a modification to the Industrial and Commercial inventory from last reporting period. They requested that the City make the following corrections:

1. Clarify whether the business is tributary to a 303(d) listed water body and if that businesses generates a 303(d) pollutant.

2. Increase the size of the font in the inventory so that it is readable when printed and not just in electronic form.

The City has addressed these issues by adding an additional column to clarify whether a business generates a 303(d) listed pollutant. The revised commercial inventory from FY 09-10 is provided below in a printable format (Table14.2 Industrial and commercial Inventory for FY 2009-10). These changes were also incorporated into this year's industrial and commercial Inventory which is proved in Section 5 Table 5.5. A copy of the FY 2009-10 commercial and industrial inventory was also mailed to Coastkeeper to satisfy their request.

Table 14.2 - FY 2009-10 Updated Commercial Inventory

No.	Facility Name	Address	Hydrologic Area	SIC Code	NAICS Code	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	Latitude	Longitude
IB 1	13TH ST MARKET	1126 13TH ST	911.11	5921	445310	LIQU	x	x		x	x	x	x	x		Yes	Yes	6330221900	32.575943	-117.105862
IB 2	7 ELEVEN 18322/RNJ ENTERPRISES	657 PALM AVE	910.20	5999	453998	RETL										No	No	6252541100	32.58376	-117.118931
IB 3	7-ELEVEN #13563G-2131	197 PALM AVE	910.10	5999	453998	RETL										No	No	6251912500	32.583807	-117.129828
IB 4	7-ELEVEN STORE # 24344B-2131	1311 PALM AVE	910.20	5999	453998	RETL	x	x	x		x	x		x	x	No	No	6270111800	32.58364	-117.105344
IB 5	7-ELEVEN STORE #23982A-2131	1303 IMPERIAL BEACH BL	911.11	5999	453998	RETL	x	x	x		x	x		x	x	Yes	Yes	6330310100	32.576412	-117.105527
IB 6	AB BRITE CLEANERS & LAUNDRY	674 PALM AVE	910.20	7299	56199	SERVICE										No	No	6251401700	32.58408	-117.118594
IB 7	ADEPT PROCESS SERVICES LLC	706 SEACOAST DR	910.10	5999	453998	RETL										No	No	6251811307	32.583429	-117.131854
IB 8	ALBERTO'S TACO SHOP	1183 13TH ST	911.11	5812	72211	EATING	x	x			x	x			x	Yes	Yes	6330313000	32.575108	-117.105547
IB 9	ALL AMERICAN CAR WASH IB	1158 PALM AVE	910.20	7299	56199	SERVICE		x	x		x	x		x	x	No	No	6262300500	32.58413	-117.109042
IB 10	ALL PHASE DRYWALL	1187 13TH ST	911.11	1742	238310	GENCONT										Yes	No	6330311500	32.575049	-117.105547
IB 11	ALLSTATE INSURANCE	1228 PALM AVE	910.20	7389	561499	PROF										No	No	6262411900	32.58412	-117.10735
IB 12	AMANDA'S HAIRSTYLING	637 9TH ST	910.20	7299	56199	SERVICE										No	No	6262121400	32.584887	-117.114135
IB 13	AMERICAN LEGION POST NO 820	1268 PALM AVE	910.20	5812	72211	EATING										No	No	6262420900	32.58412	-117.106402
IB 14	AMERICAN OMBUDSMAN ENTERPRISES	150 PALM AVE	910.10	7389	561499	PROF										No	No	6250140700	32.58408	-117.130638
IB 15	AMERICA'S FINEST DRIVINGSCHOOL	936 PALM AVE	910.20	7299	56199	SERVICE										No	No	6262123200	32.584118	-117.113439
IB 16	AMOR FLOWERS & TUX	181 PALM AVE	910.10	5999	453998	RETL										No	No	6251911700	32.583808	-117.130104
IB 17	ANCHOR MOTORS	740 PALM AVE	910.20	5521	441120	AUTO		x	x		x			x		No	No	6262021900	32.5841	-117.117599
IB 18	ANTJE GERSTUNG	704 SEACOAST DR	910.10	7299	56199	SERVICE										No	No	6251811305	32.583555	-117.131854
IB 19	AROMA THAI RESTAURANT	757 SEACOAST DR	910.10	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6251920400	32.58251	-117.131642
IB 20	ARTCO PICTURE FRAMES	716 BASSWOOD AVE	910.20	5023	423220	WHOL										No	No	6260212300	32.590411	-117.117504
IB 21	AUNT ELLEN'S WATER	600 PALM AVE	910.20	5999	453998	RETL										No	No	6251401400	32.584072	-117.120629
IB 22	BEACH SHOP	710 SEACOAST DR	910.10	5999	453998	RETL										No	No	6251821046	32.583076	-117.1318
IB 23	BEACH SIDE STATION	681 HIGHWAY 75	910.20	5541	44719	GAS		x	x		x	x		x	x	No	No	6262501200	32.584501	-117.118603
IB 24	BERNARDO SHORES	500 HIGHWAY 75	910.20	7033	721211	RVMOBIL		x								No	No	6251402000	32.586034	-117.120221
IB 25	BEST 99 CENT	821 PALM AVE	910.20	5999	453998	RETL										No	No	6262500600	32.583755	-117.115196
IB 26	BIBBEY'S GIFT SHOP	903 SEACOAST DR	910.10	5999	453998	RETL										No	No	6253510100	32.580109	-117.131601
IB 27	BIBBEY'S SHELLS AND ROCKS	903 SEACOAST DR	910.10	5999	453998	RETL										No	No	6253510100	32.580109	-117.131601
IB 28	BEACH CLUB GRILLE	710 SEACOAST DR	910.10	5812	722110	EATING	x	x			x	x			x	No	No	6251821000	32.583076	-117.1318
IB 29	BIG KAHUNA'S PIZZA N STUFFS	600 PALM AVE	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6251401900	32.584072	-117.120629
IB 30	BILBRAY TAX SERVICE	970 SEACOAST DR	911.11	7389	561499	PROF										Yes	No	6253400700	32.578645	-117.131891
IB 31	BILLIE JEANS HAIRSTYLING	1144 PALM AVE	910.20	7299	56199	SERVICE										No	No	6261700500	32.58413	-117.109567
IB 32	BILL'S HAPPY HAIR	839 PALM AVE	910.20	7299	56199	SERVICE										No	No	6262500600	32.583749	-117.115025
IB 33	BOWMAN'S MARKET	1008 PALM AVE	910.20	5999	453998	RETL										No	No	6262221100	32.584072	-117.111372
IB 34	BOYS & GIRLS CLUB OF IB	847 ENCINA AVE	910.20	7999	713290	BINGO										No	No	6264001200	32.580074	-117.115705
IB 35	BOYS & GIRLS CLUB OF IB	847 ENCINA AVE	910.20	7299	56199	SERVICE										No	No	6264001200	32.580074	-117.115705
IB 36	BRENT JACKMAN CONSTRUCTION	708 BASSWOOD AVE	910.20	1799	238990	GENCONT										No	No	6260211400	32.590412	-117.11766
IB 37	BRYANTS AUTO REGISTRATION SVS	1235 PALM AVE	910.20	7299	56199	SERVICE										No	No	6263111400	32.58364	-117.107297
IB 38	BULL PEN	706 HIGHWAY 75	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6262011100	32.584607	-117.117769
IB 39	BURGER KING #806	1180 PALM AVE	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6262302000	32.58413	-117.108598
IB 40	C.H. DONUTS	1070 13TH ST	911.11	5812	72211	EATING	x	x		x	x	x	x	x		Yes	Yes	6265421100	32.577073	-117.105853
IB 41	CA ALUMINUM&VINYL WINDOWS INC	754 10TH ST	910.20	5999	453998	RETL										No	No	6262821500	32.58299	-117.111994
IB 42	CALIFORNIA-AMERICAN WATER COMP	1019 CHERRY	910.20	7299	56199	SERVICE										No	No	6261021000	32.588539	-117.111495
IB 43	CARL'S JR. #585	700 13TH ST	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6263121300	32.583631	-117.105846
IB 44	CHAT COMM	1223 PALM AVE	910.20	5999	453998	RETL										No	No	6263111400	32.58364	-117.107528
IB 45	CHOCO'S HAIRCUTTING	1256 IMPERIAL BEACH BL	911.11	7299	56199	SERVICE										Yes	No	6265420900	32.576671	-117.106592
IB 46	CHRISTINA SCHUBERT	704 SEACOAST DR	910.10	7299	56199	SERVICE										No	No	6251811305	32.583555	-117.131854
IB 47	CHURCH OF CHRIST OF IB	640 10TH ST	910.20	8661	813110	NONPROF										No	No	6262212800	32.584827	-117.111994
IB 48	CIRCLE H LIQUOR	600 PALM AVE	910.20	5921	445310	RETL										No	No	6251401400	32.584072	-117.120629
IB 49	CITY NAILS	750 13TH ST	910.20	7299	56199	SERVICE										No	No	6263121400	32.583011	-117.105839
IB 50	COCO AND GABOON	152 PALM AVE	910.10	5999	453998	RETL										No	No	6250140700	32.584079	-117.130604
IB 51	COLWELL REALTY	134 PALM AVE	910.10	7389	561499	PROF										No	No	6250140500	32.584081	-117.130909
IB 52	COMPREHENSIVE TRAINING SYSTEMS	497 11TH ST	910.20	7299	56199	SERVICE										No	No	6260600600	32.587617	-117.110422
IB 53	COMPUTERVILLE	740 10TH ST	910.20	7299	56199	SERVICE										No	No	6262822500	32.58316	-117.111993

Table 14.2 - FY 2009-10 Updated Commercial Inventory

No.	Facility Name	Address	Hydrologic Area	SIC Code	NAICS Code	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	Latitude	Longitude
IB 54	CORONADO BAY URGENT CARE	600 PALM AVE	910.20	8011	621111	HEALTH										No	No	6251401900	32.584072	-117.120629
IB 55	COW-A-BUNGA CA GLACIER FNAM	10 EVERGREEN AVE	910.20	5812	72211	EATING	x	x			x	x			x	No	No	7602420903	32.579651	-117.132455
IB 56	COX BAIT & TACKLE	996 PALM AVE	910.20	5999	453998	RETL										No	No	6262211100	32.584093	-117.112008
IB 57	CRAZY LADY'S	600 PALM AVE	910.20	5999	453998	RETL										No	No	6251401900	32.584072	-117.120629
IB 58	CRISS CROSS SALON	1115 PALM AVE	910.20	7299	56199	SERVICE										No	No	6263012300	32.58365	-117.110177
IB 59	CROSSROAD PETROLEUM INC.	1185 PALM AVE	910.20	5541	44719	GAS	x	x		x	x	x	x	x		No	No	6263021600	32.583675	-117.10857
IB 60	CRYSTAL COVE COCKTAILS	995 PALM AVE	910.20	5813	722400	BAR										No	No	6262822200	32.583793	-117.111898
IB 61	CVS/PHARMACY #9120	800 PALM AVE	910.20	5999	453998	RETL										No	No	6262110600	32.584154	-117.115976
IB 62	CYNTHIA SEPULVEDA	637 9TH ST	910.20	7299	56199	SERVICE										No	No	6262121400	32.584887	-117.114135
IB 63	D & L LOCKSMITH	1148 PALM AVE	910.20	7299	56199	SERVICE										No	No	6261700500	32.584078	-117.109484
IB 64	D'AMES FITNESS	704 SEACOAST DR	910.10	7299	56199	SERVICE										No	No	6251811305	32.583555	-117.131854
IB 65	DAWN SWANSON- POINDEXTER	704 SEACOAST DR	910.10	7299	56199	SERVICE										No	No	6251811305	32.583555	-117.131854
IB 66	DEPENDABLE CARBURETOR EXCHANGE	660 EMORY ST	910.20	7299	56199	SERVICE		x	x		x	x		x	x	No	No	6262122400	32.584593	-117.113213
IB 67	DESPHY'S CLEANERS	600 PALM AVE	910.20	7299	56199	SERVICE										No	No	6251401900	32.584072	-117.120629
IB 68	DON PANCHO'S MEXICAN FOOD	690 HIGHWAY 75	910.20	5812	72211	EATING	x	x			x	x			x	No	No	6260705800	32.584833	-117.118321
IB 69	DOS MUNDOS TACO SHOP	1004 PALM AVE	910.20	5812	72211	EATING	x	x			x	x			x	No	No	6262221100	32.584048	-117.111402
IB 70	E & S PRODUCE	1177 13TH ST	911.11	5999	453998	RETL										Yes	No	6330313000	32.575198	-117.105546
IB 71	E.N.S. COIN LAUNDRY	1167 13TH ST	911.11	7299	56199	SERVICE										Yes	No	6330313000	32.575346	-117.105546
IB 72	EAZY TAN	206 PALM AVE	910.10	7299	56199	SERVICE										No	No	6250230300	32.584073	-117.129323
IB 73	ECONO LUBE N' TUBE	772 13TH ST	910.20	7299	56199	SERVICE		x	x		x	x		x		No	No	6263121100	32.582738	-117.105835
IB 74	ED'S SHOE REPAIR	635 9TH ST	910.20	7299	56199	SERVICE										No	No	6262121400	32.584911	-117.114135
IB 75	EL CILANTRO MEXICAN FOOD	764 13TH ST	910.20	5812	72211	EATING	x	x			x	x			x	No	No	6263121100	32.582838	-117.105836
IB 76	EL TAPATIO CATERING	667 SILVER STRAND BL	910.10	5812	72211	EATING										No	No	6250241200	32.584428	-117.12804
IB 77	EL TAPATIO RESTAURANT INC	260 PALM AVE	910.10	5812	72211	EATING	x	x			x	x			x	No	No	6250250100	32.584068	-117.128037
IB 78	EL ZASON	633 9TH ST	910.20	5812	72211	EATING	x	x			x	x			x	No	No	6262121400	32.584935	-117.114134
IB 79	ELM ADULT DAY HEALTH CARE CTR	1220 ELM AVE	910.20	8351	624410	DAYCARE										No	No	6263412000	32.580809	-117.1076
IB 80	EPISCOPAL COMMUNITY SERVICES	485 IMPERIAL BEACH BL	911.11	8351	624410	DAYCARE										Yes	No	6320841100	32.576485	-117.122693
IB 81	EPISCOPAL COMMUNITY SERVICES	1340 IMPERIAL BEACH BL	911.11	8011	621111	HEALTH										Yes	No	6272201400	32.576657	-117.104813
IB 82	EVERYDAY FURNITURE	986 PALM AVE	910.20	5712	442110	RETL										No	No	6262211200	32.584108	-117.112203
IB 83	EVERYDAY FURNITURE	1003 PALM AVE	910.20	5712	442110	RETL										No	No	6262910100	32.583741	-117.111743
IB 84	FACTORY 2 U- #631	880 PALM AVE	910.20	5999	453998	RETL										No	No	6262110700	32.584153	-117.114678
IB 85	FAMILY BARBER SHOP	934 PALM AVE	910.20	7299	56199	SERVICE										No	No	6262123200	32.584118	-117.113479
IB 86	FAMILY HAIRCUTTERS	770 13TH ST	910.20	7299	56199	SERVICE										No	No	6263121100	32.582763	-117.105835
IB 87	FARMERS INSURANCE	932 PALM AVE	910.20	7389	561499	PROF										No	No	6262123200	32.584118	-117.11352
IB 88	FIRST ASSEMBLY OF GOD	588 9TH ST	910.20	7299	56199	SERVICE										No	No	6261412200	32.585916	-117.114414
IB 89	FITNESS WORLD	750 13TH ST	910.20	7299	56199	SERVICE										No	No	6263121400	32.583011	-117.105839
IB 90	FLEET RESERVE CLUB	659 SILVER STRAND BL	910.10	5812	72211	EATING										No	No	6250241000	32.584744	-117.128104
IB 91	FLESH SKIN GRAPHICS	1155 PALM AVE	910.20	7299	812199	TATOO										No	No	6263022000	32.58365	-117.109153
IB 92	FURNITURE 2000	817 PALM AVE	910.20	5712	442110	RETL										No	No	6262500600	32.583756	-117.115235
IB 93	G & M OIL #177	907 PALM AVE	910.20	5541	44719	GAS		x	x		x	x		x	x	No	No	6262810100	32.583717	-117.114056
IB 94	G.E. BROWN SERVICE	497 11TH ST	910.20	1799	238990	SUBCONT										No	No	6260600600	32.587617	-117.110422
IB 95	GENES' AUTOMOTIVE	1085 PALM AVE	910.20	7299	56199	SERVICE		x	x		x	x		x	x	No	No	6262911400	32.583743	-117.111075
IB 96	GENE'S TOWING SERVICE	753 10TH ST	910.20	7299	56199	SERVICE										No	No	6262910500	32.583013	-117.111675
IB 97	GENE'S U'HAUL	1085 PALM AVE	910.20	7299	56199	SERVICE										No	No	6262911400	32.583743	-117.111075
IB 98	GIANT PIZZA KING #4	1070 13TH ST	911.11	5812	72211	EATING	x	x		x	x	x	x	x		Yes	Yes	6265421100	32.577073	-117.105853
IB 99	GIANT PIZZA KING #5	600 PALM AVE	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6251401400	32.584072	-117.120629
IB 100	GJAG CORP DBA PACIFIC POINT	657 10TH ST	910.20	7389	561499	PROF										No	No	6262221200	32.584637	-117.111674
IB 101	GLORIA BARRIOS	770 13TH ST	910.20	7299	56199	SERVICE										No	No	6263121100	32.582763	-117.105835
IB 102	GOODWILL INDUSTRIES OF SD	849 PALM AVE	910.20	5999	453998	RETL										No	No	6262500600	32.583746	-117.11493
IB 103	GREG MIXON	280 PALM AVE	910.10	7389	561499	PROF										No	No	6250241300	32.584071	-117.127768
IB 104	H & R BLOCK	1313 PALM AVE	910.20	7389	561499	PROF										No	No	6270111800	32.583665	-117.10531
IB 105	HAWKINS AUTO BODY	519 FLORIDA ST	910.20	7299	56199	SERVICE		x	x		x	x		x	x	No	No	6261221300	32.587323	-117.109195
IB 106	HEALING WAVE HOLISTIC H.C.	667 PALM AVE	910.20	8049	621399	MASSTEC										No	No	6262500900	32.58376	-117.118744

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IB 107	HELFON HANONO, OPTOMETRIST	894 PALM AVE	910.20	8042	621320	HEALTH										No	No	6262110700	32.584139	-117.114504
IB 108	HERRERA & ASSOCIATES-MUNICIPAL	600 PALM AVE	910.20	7389	561499	PROF										No	No	6251401900	32.584072	-117.120629
IB 109	HOLLYWOOD VIDEO #005-580	720 13TH ST	910.20	7841	532230	SECHAND										No	No	6263121500	32.583383	-117.105843
IB 110	HONG DIEP THI LE	750 13TH ST	910.20	7299	56199	SERVICE										No	No	6263121400	32.583011	-117.105839
IB 111	HS CARS COMPANY INC	1333 PALM AVE	910.20	5521	441120	AUTO		x	x		x			x		No	No	6270111900	32.583656	-117.104908
IB 112	HUTCHINS REALTY	1138 PALM AVE	910.20	7389	561499	PROF										No	No	6261700600	32.58413	-117.109691
IB 113	I B GROOMIN	600 PALM AVE	910.20	752	812910	RETL										No	No	6251401400	32.584072	-117.120629
IB 114	I B LIQUOR	801 SEACOAST DR	910.10	5921	445310	RETL										No	No	6252720100	32.581626	-117.131662
IB 115	I.B. FLOWERS BY DESIGN	668 10TH ST	910.20	5999	453998	RETL										No	No	6262211000	32.584491	-117.111992
IB 116	I.B. PIZZA	1293 IMPERIAL BEACH BL	911.11	5812	72211	EATING	x	x		x	x	x	x	x		Yes	Yes	6330222300	32.576394	-117.105869
IB 117	I.B. UNITED METHODIST CHURCH	455 PALM AVE	910.20	8661	813110	NONPROF										No	No	6252302300	32.58377	-117.123135
IB 118	IB BEAUTIFUL INC	600 PALM AVE	910.20	7299	56199	SERVICE										No	No	6251401900	32.584072	-117.120629
IB 119	IB BY THE SEA GIFTS	862 SEACOAST DR	910.10	5999	453998	RETL										No	No	6253302100	32.580768	-117.131864
IB 120	IB CHAMBER OF COMMERCE	702 SEACOAST DR	910.10	7299	56199	SERVICE										No	No	6251811303	32.583681	-117.131854
IB 121	IB COIN LAUNDERLAND NO. 3	1010 PALM AVE	910.20	7299	56199	SERVICE										No	No	6262221100	32.584084	-117.111357
IB 122	IB COIN LAUNDRY #5	760 13TH ST	910.20	7299	56199	SERVICE										No	No	6263121100	32.582887	-117.105837
IB 123	IB DIVERS	641 9TH ST	910.20	7299	56199	SERVICE										No	No	6262121400	32.584839	-117.114136
IB 124	IB FITNESS	600 PALM AVE	910.20	7299	56199	SERVICE										No	No	6251401900	32.584072	-117.120629
IB 125	IB FORUM	1079 SEACOAST DR	911.11	5812	72211	EATING		x	x		x			x		Yes	No	6253922300	32.576938	-117.131594
IB 126	IB GIFTS & BEACH GEAR	700 SEACOAST DR	910.10	5999	453998	RETL										No	No	6251811302	32.583808	-117.131833
IB 127	IB MORTGAGE & REALTY	1258 IMPERIAL BEACH BL	911.11	7389	561499	PROF										Yes	No	6265420900	32.57669	-117.106558
IB 128	IB NUTRITION STORE	888 PALM AVE	910.20	5122	446191	RETL										No	No	6262110700	32.584145	-117.114578
IB 129	IB PET	600 PALM AVE	910.20	5999	453910	RETL										No	No	6251401400	32.584072	-117.120629
IB 130	IB SUPER WASH N DRY	1220 PALM AVE	910.20	7215	812310	RETL										No	No	6262412700	32.58412	-117.107485
IB 131	IDEAL CHOICE INSURANCE AGENCY	1233 PALM AVE	910.20	7389	561499	PROF										No	No	6263111400	32.58364	-117.107336
IB 132	IMPERIAL BEACH DENTALGROUP	1340 IMPERIAL BEACH BL	911.11	8021	621210	HEALTH										Yes	No	6272201400	32.576657	-117.104813
IB 133	IMPERIAL BEACH EAGLE & TIMES	664 10TH ST	910.20	7299	56199	SERVICE										No	No	6262211000	32.584539	-117.111992
IB 134	IMPERIAL BEACH HAIR DESIGNS	235 PALM AVE	910.10	7299	56199	SERVICE										No	No	6252010500	32.583798	-117.128753
IB 135	IMPERIAL BEACH HEALTH CENTER	949 PALM AVE	910.20	8011	621111	HEALTH										No	No	6262811700	32.583725	-117.113201
IB 136	IMPERIAL BEACH MANAGEMENT CO	120 ELDER AVE	911.11	7389	561499	PROF										Yes	No	6253522600	32.578962	-117.131147
IB 137	IMPERIAL BEACH PET HOSPITAL	538 12TH ST	910.20	7389	561499	PROF										No	No	6261810800	32.587145	-117.108206
IB 138	IMPERIAL BEACH PRESCHOOL NORTH	608 10TH ST	910.20	8351	624410	DAYCARE										No	No	6262212700	32.585211	-117.111997
IB 139	IMPERIAL BEACH PRESCHOOL SOUTH	1179 IMPERIAL BEACH BL	911.11	8351	624410	DAYCARE										Yes	No	6330122400	32.57638	-117.108431
IB 140	IMPERIAL BEACH ULTRAMAR	1300 IMPERIAL BEACH BL	911.11	5541	44719	GAS	x	x		x	x	x	x	x		Yes	Yes	6272201100	32.57662	-117.105562
IB 141	IMPERIAL DONUTS +	1002 PALM AVE	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6262221100	32.584049	-117.111598
IB 142	IMPERIAL GUEST HOME	1245 FLORIDA ST	911.11	7299	56199	SERVICE										Yes	No	6330820500	32.573843	-117.108804
IB 143	IMPERIAL NAILS	600 PALM AVE	910.20	7299	56199	SERVICE										No	No	6251401900	32.584072	-117.120629
IB 144	IMPERIAL TRAILER PARK	674 PALM AVE	910.20	7033	721211	RVMOBIL										No	No	6251401700	32.58408	-117.118594
IB 145	INNER VISIONS	803 PALM AVE	910.20	5999	453998	RETL										No	No	6262500600	32.583796	-117.115366
IB 146	INTERNATIONAL BLENDS	208 PALM AVE	910.10	5812	72211	EATING										No	No	6250230300	32.584072	-117.129275
IB 147	J & T NAILS	635 9TH ST	910.20	7299	56199	SERVICE										No	No	6262121400	32.584911	-117.114135
IB 148	JAMES ROWLES STUDIO	497 11TH ST	910.20	7299	56199	SERVICE										No	No	6260600600	32.587617	-117.110422
IB 149	JESSOP & SON LANDSCAPE	425 IMPERIAL BEACH BL	911.11	7299	56199	SERVICE										Yes	No	6324002100	32.576475	-117.124108
IB 150	JORDYNHORDICHOK CHRISTMASTREE	1441 5th St.	911.11	5999	453998	RETL										Yes	No	6261700900	32.57912	-117.116912
IB 151	JORGE AGUILA	277 EVERGREEN AVE	911.11	7299	56199	SERVICE										Yes	No	6253621400	32.579403	-117.128026
IB 152	JP MORGAN CHASE BANK, N.A.	1100 PALM AVE	910.20	6021	52211	BANK										No	No	6261621700	32.583991	-117.110573
IB 153	KATY'S CAFE	704 SEACOAST DR	910.10	5812	72211	EATING	x	x			x	x			x	No	No	6251811306	32.583555	-117.131854
IB 154	K-C'S CHINESE FOOD	1299 IMPERIAL BEACH BL	911.11	5812	72211	EATING	x	x		x	x	x	x	x		Yes	Yes	6330222300	32.576476	-117.105767
IB 155	KEYSTONE ESCROW INC	129 PALM AVE	910.10	7389	561499	PROF										No	No	6251912601	32.583812	-117.131003
IB 156	KFC CORP #Y450025	1056 13TH ST	911.11	5812	72211	EATING	x	x			x	x			x	Yes	Yes	6265421000	32.577288	-117.105851
IB 157	L & M TIRE CO./ EXPRESS TIRE	950 PALM AVE	910.20	7299	56199	SERVICE		x	x		x	x		x		No	No	6262212000	32.584074	-117.112906
IB 158	LA POSTA MARKET #2	1266 IMPERIAL BEACH BL	911.11	5999	453998	RETL	x	x			x	x			x	Yes	Yes	6265420900	32.57669	-117.10642
IB 159	LEADINGHAM REALTY	1062 PALM AVE	910.20	7389	561499	PROF										No	No	6262222500	32.58413	-117.110966

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IB 160	LENS WIRELESS	639 7TH ST	910.20	4812	517310	RETL										No	No	6262011200	32.585107	-117.117833
IB 161	LEON DISCOUNT TOBACCO FOOD MAR	185 PALM AVE	910.10	5999	453998	RETL										No	No	6251911700	32.583808	-117.130035
IB 162	LINDA WHEELOCK WILLIS	204 PALM AVE	910.10	7299	56199	SERVICE										No	No	6250230300	32.584064	-117.129371
IB 163	LITTLE BONANZA	940 PALM AVE	910.20	5812	72211	EATING										No	No	6262123500	32.584117	-117.113357
IB 164	LOIS FUSCO	204 PALM AVE	910.10	7299	56199	SERVICE										No	No	6250230300	32.584064	-117.129371
IB 165	LUIS A CONTRERAS, DDS	1340 IMPERIAL BEACH BL	911.11	8021	621210	HEALTH										Yes	No	6272201400	32.576657	-117.104813
IB 166	LUIS FLORES	1325 IRIS AVE	911.11	7299	56199	SERVICE										Yes	No	0000000000	32.568958	-117.1049
IB 167	LUNA'S BEAUTY DESIGNERS	204 PALM AVE	910.10	7299	56199	SERVICE										No	No	6250230300	32.584064	-117.129371
IB 168	LUXURIOUS NAILS & SPA	710 HIGHWAY 75	910.20	7299	56199	SERVICE										No	No	6262011100	32.584596	-117.117714
IB 169	LUXURY LAUNDRY	1146 13TH ST	911.11	7299	56199	SERVICE										Yes	No	6330221700	32.575645	-117.105863
IB 170	MAI BUTON SEWING	1175 13TH ST	911.11	7299	56199	SERVICE										Yes	No	6330313000	32.575227	-117.105546
IB 171	MAR VISTA BAPTIST CHURCH	888 5TH ST	910.20	8661	813110	NONPROF										No	No	6253111500	32.580544	-117.122547
IB 172	MARCO'S & RED HAWK	1205 PALM AVE	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6263110100	32.583672	-117.107867
IB 173	MARIA E SALAS	235 PALM AVE	910.10	7299	56199	SERVICE										No	No	6252010500	32.583798	-117.128753
IB 174	MARISA'S MEXICAN SEAFOOD GRILL	285 PALM AVE	910.10	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6252011100	32.583802	-117.127733
IB 175	MARJO'S HAIR DESIGN	742 10TH ST	910.20	7299	56199	SERVICE										No	No	6262822500	32.583136	-117.111993
IB 176	MARRERO'S CAR WASH	1257 IMPERIAL BEACH BL	911.11	7299	56199	SERVICE										Yes	No	6330222700	32.576389	-117.106592
IB 177	MARY ANN V. SANVICTORES, DDS	600 PALM AVE	910.20	8021	621210	HEALTH										No	No	6251401900	32.584072	-117.120629
IB 178	MASON'S ALIGNMENT-BRAKE-MUFFLE	975 PALM AVE	910.20	7299	56199	SERVICE		x	x		x	x		x	x	No	No	6262820300	32.58368	-117.112424
IB 179	MCDONALDS/SCAROB INC.	1135 PALM AVE	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6263011800	32.58365	-117.109781
IB 180	MEIJO SUSHI, INC.	600 PALM AVE	910.20	5812	72211	EATING	x	x			x	x			x	No	No	6251401900	32.584072	-117.120629
IB 181	MERCADO SHORES	639 7TH ST	910.20	5999	453998	RETL										No	No	6262011200	32.585107	-117.117833
IB 182	MICHAEL GUTHRIE	1256 IMPERIAL BEACH BL	911.11	7299	56199	SERVICE										Yes	No	6265420900	32.576671	-117.106592
IB 183	MICHAEL ROGERS DDS	1340 IMPERIAL BEACH BL	911.11	8021	621210	HEALTH										Yes	No	6272201400	32.576657	-117.104813
IB 184	MICKIES BAR AND GRILL	220 PALM AVE	910.10	5812	72211	EATING	x	x			x	x			x	No	No	6250230500	32.58407	-117.128987
IB 185	MIKE'S CAR WASH	1117 PALM AVE	910.20	7299	56199	SERVICE										No	No	6263012300	32.58365	-117.110138
IB 186	MIKE'S UPHOLSTERY	1152 13TH ST	911.11	7299	56199	SERVICE										Yes	No	6330221600	32.575556	-117.105864
IB 187	MISTY DAWN'S SALON	710 SEACOAST DR	910.10	7299	56199	SERVICE										No	No	6251821050	32.583076	-117.1318
IB 188	MODERN TEE	1059 3RD ST	911.11	5999	453998	RETL										Yes	No	6254212200	32.577118	-117.127263
IB 189	MONEYTREE INC.	1070 13TH ST	911.11	6099	522390	CKCASH										Yes	No	6265421100	32.577073	-117.105853
IB 190	MORENO DENTAL LAB	1258 IMPERIAL BEACH BL	911.11	7299	56199	SERVICE										Yes	No	6265420900	32.57669	-117.106558
IB 191	MUNI TEMPS/MUNICIPAL STAFFING	600 PALM AVE	910.20	7299	56199	SERVICE										No	No	6251401400	32.584072	-117.120629
IB 192	MYA'S FLOWER DESIGN	245 PALM AVE	910.10	5999	453998	RETL										No	No	6252010600	32.583841	-117.128554
IB 193	MZM SEACOAST BISTRO, LP	875 SEACOAST DR	910.10	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6252730100	32.58063	-117.131594
IB 194	NAIL TECH	938 PALM AVE	910.20	7299	56199	SERVICE										No	No	6262123200	32.584117	-117.113398
IB 195	NAKAWATASE & CO, CPA	923 SEACOAST DR	910.10	7389	561499	PROF										No	No	6253522700	32.57943	-117.131641
IB 196	NEIGHBOR MARKET	1497 13TH ST	911.11	5999	453998	RETL										Yes	No	6332234700	32.569207	-117.10548
IB 197	NESTOR WATCH REPAIR CENTER	635 9TH ST	910.20	7299	56199	SERVICE										No	No	6262121400	32.584911	-117.114135
IB 198	NFAROOQI ENT. LLC/JACK IN BOX	890 PALM AVE	910.20	5812	72211	EATING	x	x			x	x			x	No	No	6262110800	32.584143	-117.114553
IB 199	NGOC THAO DANG NGUYEN	750 13TH ST	910.20	7299	56199	SERVICE										No	No	6263121400	32.583011	-117.105839
IB 200	NICK PHAM	750 13TH ST	910.20	7299	56199	SERVICE										No	No	6263121400	32.583011	-117.105839
IB 201	NINI'S SALON	668 10TH ST	910.20	7299	56199	SERVICE										No	No	6262211000	32.584491	-117.111992
IB 202	NORTH ISLAND C.U.	1101 PALM AVE	910.20	6061	522130	CRED										No	No	6262500300	32.583611	-117.117071
IB 203	NOVAK SURFBOARD DESIGNS	536 13TH ST	910.20	3599	333999	MANUF										No	No	6261920400	32.586426	-117.105794
IB 204	OCHOA ELECTRIC	731 EMORY ST	910.20	1731	238210	SUBCONT										No	No	6262820600	32.583288	-117.112914
IB 205	OFFICE LOUNGE	1133 13TH ST	911.11	5813	722400	BAR										Yes	No	6330312000	32.575852	-117.105543
IB 206	OLLIE ANGEL SKATE SHOP	743 8TH ST	910.20	5999	453998	RETL										No	No	6262500600	32.583085	-117.115374
IB 207	ORCA MARITIME INC	497 11TH ST	910.20	7299	56199	SERVICE										No	No	6260600600	32.587617	-117.110422
IB 208	OTAY MESA REALTY	970 SEACOAST DR	911.11	7389	561499	PROF										Yes	No	6253400700	32.578645	-117.131891
IB 209	PACIFIC BELL	1288 PALM AVE	910.20	7299	56199	SERVICE										No	No	6262421000	32.58412	-117.106008
IB 210	PACIFIC LEGACY PROPERTIES	702 SEACOAST DR	910.10	7389	561499	PROF										No	No	6251811303	32.583681	-117.131854
IB 211	PACIFIC REALTY	992 PALM AVE	910.20	7389	561499	PROF										No	No	6262211100	32.584107	-117.112086
IB 212	PACIFIC REALTY SALES & MGT INC	280 PALM AVE	910.10	7389	561499	PROF										No	No	6250241300	32.584071	-117.127768

Table 14.2 - FY 2009-10 Updated Commercial Inventory

No.	Facility Name	Address	Hydrologic Area	SIC Code	NAICS Code	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	Latitude	Longitude
IB 213	PALM AVENUE BOOKS DBA ROMANTIX	1177 PALM AVE	910.20	5999	453998	RETL										No	No	6263020200	32.58365	-117.108721
IB 214	PALM AVENUE LIQUOR & MARKET	1200 PALM AVE	910.20	5999	453998	RETL										No	No	6262412700	32.584013	-117.108023
IB 215	PALM COIN LAUNDRY	187 PALM AVE	910.10	7299	56199	SERVICE										No	No	6251912500	32.583807	-117.130001
IB 216	PALM GLASS INC	754 10TH ST	910.20	7299	56199	SERVICE										No	No	6262821500	32.58299	-117.111994
IB 217	PAN AM TAE KWON DO	730 HIGHWAY 75	910.20	7389	561499	PROF										No	No	6262010600	32.584507	-117.117457
IB 218	PARTY MART	1070 13TH ST	911.11	5999	453998	RETL										Yes	No	6265421100	32.577073	-117.105853
IB 219	PAT'S LAWN CARE	448 DONAX AVE	910.20	7299	56199	SERVICE										No	No	6252300500	32.582584	-117.123757
IB 220	PAUL MCNALLY REALTY	280 PALM AVE	910.10	7389	561499	PROF										No	No	6250241300	32.584071	-117.127768
IB 221	PAULINA RIDDLE	704 SEACOAST DR	910.10	7299	56199	SERVICE										No	No	6251811305	32.583555	-117.131854
IB 222	PENTECOSTAL CHURCH OF GOD	1402 HEMLOCK AVE	911.11	8661	813110	NONPROF										Yes	No	6332311500	32.570446	-117.103273
IB 223	PHIL'S BARBERSHOP	1305 IMPERIAL BEACH BL	911.11	7299	56199	SERVICE										Yes	No	6330310100	32.576394	-117.10549
IB 224	PHIL'S DANCE STUDIO	1305 IMPERIAL BEACH BL	911.11	7299	56199	SERVICE										Yes	No	6330310100	32.576394	-117.10549
IB 225	PHOEBE'S 99 C & PLUS	766 13TH ST	910.20	5999	453998	RETL										No	No	6263121100	32.582813	-117.105836
IB 226	PIZZA INDUSTRY/DOMINO'S PIZZA	1307 IMPERIAL BEACH BL	911.11	5812	72211	EATING	x	x		x	x	x	x	x		Yes	Yes	6330310100	32.576393	-117.105453
IB 227	POUR'S LIQUOR	1141 13TH ST	911.11	5921	445310	RETL										Yes	No	6330312000	32.575733	-117.105544
IB 228	PRECISION AUTO BODY & COLLISIO	989 PALM AVE	910.20	7299	56199	SERVICE		x	x		x	x		x		No	No	6262822100	32.583677	-117.112136
IB 229	PRECISION FOREIGN	1240 PALM AVE	910.20	7299	56199	SERVICE		x	x		x	x		x	x	No	No	6262412800	32.58412	-117.107148
IB 230	PRETZLES AND MUCH MORE	10 EVERGREEN AVE	910.20	5812	72211	EATING	x	x			x	x			x	No	No	7602420902	32.579651	-117.132455
IB 231	PRICED RITE PETS	775 PALM AVE	910.20	5999	453910	RETL										No	No	6262500500	32.583738	-117.116147
IB 232	PRO HAIRCUT BY LISA	600 PALM AVE	910.20	7299	56199	SERVICE										No	No	6251401400	32.584072	-117.120629
IB 233	R J CAR WASH	730 10TH ST	910.20	7299	56199	SERVICE										No	No	6262822600	32.583282	-117.111992
IB 234	R&C SCHAUMBURG/COLDWELL BANKER	862 SEACOAST DR	910.10	7389	561499	PROF										No	No	6253302100	32.580768	-117.131864
IB 235	REGENERATIONVILLE	740 10TH ST	910.20	7299	56199	SERVICE										No	No	6262822500	32.58316	-117.111993
IB 236	RODRIGO'S MEXICAN FOOD	600 PALM AVE	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6251401400	32.584072	-117.120629
IB 237	ROLANDO'S TACO SHOP #5	805 SEACOAST DR	910.10	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6252720100	32.58158	-117.131625
IB 238	ROYAL CLEANER'S	1181 13TH ST	911.11	7299	56199	SERVICE										Yes	No	6330313000	32.575138	-117.105547
IB 239	SAGE TRADITIONS ACUPUNCTURE	667 PALM AVE	910.20	8049	621399	HEALTH										No	No	6262500900	32.58376	-117.118744
IB 240	SALTWATER MAGIC	226 PALM AVE	910.10	5999	453998	RETL										No	No	6250230600	32.584068	-117.128843
IB 241	SAN DIEGO GYMNASTICS ACADEMY	600 PALM AVE	910.20	7299	56199	SERVICE										No	No	6251401400	32.584072	-117.120629
IB 242	SAN DIEGO MANUFACTURED HOUSING	206 PALM AVE	910.10	7299	56199	SERVICE										No	No	6250230300	32.584073	-117.129323
IB 243	SANDCASTLE INN	785 SEACOAST DR	910.10	7011	72111	HOTEL										No	No	6252710100	32.581984	-117.131594
IB 244	SANDCASTLE REALTY	672 10TH ST	910.20	7389	561499	PROF										No	No	6262211100	32.584443	-117.111992
IB 245	SANTANA MEXICAN FOOD	1337 PALM AVE	910.20	5812	72211	EATING		x	x		x			x		No	No	6270120900	32.583657	-117.104829
IB 246	SAVE A LOT #916	805 PALM AVE	910.20	5999	453998	RETL										No	No	6262500600	32.583782	-117.115348
IB 247	SAWHNEY, PARMELA MD	705 PALM AVE	910.20	8011	621111	HEALTH										No	No	6262500200	32.58377	-117.117773
IB 248	SEA BREEZE COMMUNITY CHURCH	1220 ELM AVE	910.20	8661	813110	NONPROF										No	No	6263412000	32.580809	-117.1076
IB 249	SEACOAST INN	800 SEACOAST DR	910.10	7011	72111	HOTEL										No	No	6252620100	32.581626	-117.131796
IB 250	SEACOAST PET CLINIC	600 PALM AVE	910.20	7389	561499	PROF										No	No	6251401900	32.584072	-117.120629
IB 251	SEACOAST PIZZA	807 SEACOAST DR	910.10	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6252720100	32.581557	-117.131607
IB 252	SEACOAST VITAMINS & HERBS	600 PALM AVE	910.20	5122	446191	RETL										No	No	6251401900	32.584072	-117.120629
IB 253	SEASIDE BARBER & BEAUTY SHOP	702 SEACOAST DR	910.10	7299	56199	SERVICE										No	No	6251811304	32.583681	-117.131854
IB 254	SHAKETA PETERSON "CHE STYLES"	600 PALM AVE	910.20	7299	56199	SERVICE										No	No	6251401400	32.584072	-117.120629
IB 255	SHARON GRACE DALBERISTE	235 PALM AVE	910.10	7299	56199	SERVICE										No	No	6252010500	32.583798	-117.128753
IB 256	SIESTA RV PARK, INC.	409 PALM AVE	910.10	7033	721211	RVMOBIL		x								No	No	6252302400	32.583846	-117.124483
IB 257	SILVER STRAND FAMILY MEDICINE	707 PALM AVE	910.20	8011	621111	HEALTH										No	No	6262500200	32.583768	-117.117727
IB 258	SILVER STRAND SEA SPORTS	188 DATE AVE	910.10	7299	56199	SERVICE										No	No	6252722409	32.58115	-117.129959
IB 259	SJ TRANSPORT INC	535 FLORENCE ST	910.20	7299	56199	SERVICE										No	No	6261920300	32.587203	-117.106757
IB 260	SKINNART	1221 PALM AVE	910.20	7299	812199	TATOO										No	No	6263111400	32.583666	-117.107576
IB 261	SMILES OF IMPERIAL BEACH	743 EMORY ST	910.20	8021	621210	HEALTH										No	No	6262820700	32.583141	-117.112914
IB 262	SOLARA MEDICAL SUPPLIES, INC	639 7TH ST	910.20	7299	56199	SERVICE										No	No	6262011200	32.585107	-117.117833
IB 263	SOLARA MEDICAL/IB PHARMACY	720 HIGHWAY 75	910.20	8011	621111	HEALTH										No	No	6262010600	32.584552	-117.117585
IB 264	SOMBRERO MEXICAN FOOD	189 PALM AVE	910.10	5812	72211	EATING	x	x			x	x			x	No	No	6251912500	32.583807	-117.129966
IB 265	SOPHISTICATED AUTO	987 PALM AVE	910.20	7299	56199	SERVICE		x	x		x	x		x	x	No	No	6262822100	32.583678	-117.112177

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No.	Facility Name	Address	Hydrologic Area	SIC Code	NAICS Code	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	Latitude	Longitude
IB 266	SOUND OF BEACH	10 EVERGREEN AVE	910.20	5999	453998	RETL										No	No	7602420901	32.579651	-117.132455
IB 267	SOUTH COAST ENVIRONMENTAL SERV	1258 IMPERIAL BEACH BL	911.11	7389	561499	CONS										Yes	No	6265420900	32.57669	-117.106558
IB 268	SOUTH COAST TILE CO.	1258 IMPERIAL BEACH BL	911.11	1799	238990	SUBCONT										Yes	No	6265420900	32.57669	-117.106558
IB 269	SOUTHBAY REXALL DRUGS	779 PALM AVE	910.20	5122	446110	HEALTH										No	No	6262500500	32.583737	-117.116083
IB 270	SOUTHWEST WETLANDS INTERPRETIV	708 SEACOAST DR	910.10	99	99	NONPROF										No	No	6251811308	32.583302	-117.131833
IB 271	SPIRIT REAL ESTATE	700 SEACOAST DR	910.10	7389	561499	PROF										No	No	6251811301	32.583808	-117.131833
IB 272	ST. JAMES LUTHERAN CHURCH	866 IMPERIAL BEACH BL	911.11	8661	813110	NONPROF										Yes	No	6264006900	32.576692	-117.115129
IB 273	ST. JAMES LUTHERAN PRESCHOOL	866 IMPERIAL BEACH BL	911.11	8351	624410	DAYCARE										Yes	No	6264006900	32.576692	-117.115129
IB 274	ST. MARY'S/ SANTA MARIA LA VIR	485 IMPERIAL BEACH BL	911.11	8661	813110	NONPROF										Yes	No	6320841100	32.576485	-117.122693
IB 275	STARDUST DONUT SHOP	698 HIGHWAY 75	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6260705900	32.584795	-117.118228
IB 276	STATE FARM INSURANCE	1144 13TH ST	911.11	7389	561499	PROF										Yes	No	6330221800	32.575675	-117.105863
IB 277	STATE FARM INSURANCE	1239 PALM AVE	910.20	7389	561499	PROF										No	No	6263111500	32.58364	-117.10722
IB 278	STEVEN Y. LUO, DDS APC	629 9TH ST	910.20	8021	621210	HEALTH										No	No	6262121400	32.584982	-117.114133
IB 279	STL TECH DETALING, INC.	600 PALM AVE	910.20	7299	56199	SERVICE										No	No	6251401900	32.584072	-117.120629
IB 280	STRONG TOWER COMMUNITY CHURCH	1439 IMPERIAL BEACH BL	911.11	7299	56199	SERVICE										Yes	No	6330412800	32.576427	-117.102576
IB 281	SUBSMART DELI-FRESH	1231 PALM AVE	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6263111400	32.58364	-117.107374
IB 282	SUBWAY 20578	876 SEACOAST DR	910.10	5812	72211	EATING	x	x			x	x			x	No	No	6253302200	32.580607	-117.131864
IB 283	SUN & SEA MANOR	740 7TH ST	910.20	7299	56199	SERVICE										No	No	6262501000	32.583219	-117.118156
IB 284	T WIRELESS	1295 IMPERIAL BEACH BL	911.11	4812	517310	RETL										Yes	No	6330222300	32.576421	-117.105835
IB 285	TAKING CARE OF BUSINESS	1146 13TH ST	911.11	6099	522390	CKCASH										Yes	No	6330221700	32.575645	-117.105863
IB 286	TAX PLUS	662 10TH ST	910.20	7299	56199	SERVICE										No	No	6262211000	32.584563	-117.111993
IB 287	TERRA NOVA REALTY	600 PALM AVE	910.20	7389	561499	PROF										No	No	6251401900	32.584072	-117.120629
IB 288	THE B.D. BARR COMPANY	1144 13TH ST	911.11	7299	56199	SERVICE										Yes	No	6330221800	32.575675	-117.105863
IB 289	THE BOSN'S LOCKER	238 PALM AVE	910.10	5999	453998	RETL										No	No	6250230700	32.584024	-117.128556
IB 290	THE BOXING ZONE, LLC	1351 PALM AVE	910.20	7299	56199	SERVICE										No	No	6270121000	32.583698	-117.104554
IB 291	THE BRIDGE	874 SEACOAST DR	910.10	5812	72211	EATING	x	x			x	x			x	No	No	6253302200	32.58063	-117.131864
IB 292	THE CHECK CASHING PLACE, INC.	894 PALM AVE	910.20	6099	522390	CKCASH										No	No	6262110700	32.584139	-117.114504
IB 293	THE FINE AUTO STORE	942 PALM AVE	910.20	5521	441120	AUTO		x	x		x			x		No	No	6262123500	32.584117	-117.113317
IB 294	THE MAIL ROOM	757 EMORY ST	910.20	7299	56199	SERVICE										No	No	6262820800	32.582969	-117.112914
IB 295	THE PAPER SHACK	1237 PALM AVE	910.20	5999	453998	RETL										No	No	6263111500	32.58364	-117.107259
IB 296	THE SALTY FROG	992 PALM AVE	910.20	5813	722400	BAR										No	No	6262211100	32.584107	-117.112086
IB 297	THE SCOREBOARD	951 PALM AVE	910.20	5813	722400	BAR										No	No	6262820100	32.583729	-117.112917
IB 298	THE SURF HUT	710 SEACOAST DR	910.10	5999	453998	RETL										No	No	6251821049	32.583076	-117.1318
IB 299	THE TINFISH RESTAURANT	910 SEACOAST DR	910.10	5812	72211	EATING	x	x		x	x	x				No	No	7600820500	32.580008	-117.131864
IB 300	THE VIP CLEANERS	1070 13TH ST	911.11	7299	56199	SERVICE										Yes	No	6265421100	32.577073	-117.105853
IB 301	THE WAVE CAFE	809 SEACOAST DR	910.10	5812	72211	EATING	x	x			x	x			x	No	No	6252720100	32.581534	-117.131594
IB 302	THE WRIGHT WAY	1051 13TH ST	910.20	5812	72211	EATING										No	No	6272200200	32.577378	-117.105584
IB 303	THOMAS LINDLEY PARKING LOT	915 OCEAN LN	910.10	7299	56199	SERVICE										No	No	6253301100	32.58006	-117.132435
IB 304	TITO AUTO SERVICE	1335 PALM AVE	910.20	7299	56199	SERVICE		x	x		x	x		x	x	No	No	6270111900	32.583657	-117.104868
IB 305	TNT SURFBOARDS	536 13TH ST	910.20	3599	333999	MANUF										No	No	6261920400	32.586426	-117.105794
IB 306	TO MARKET TO MARKET	921 SEACOAST DR	910.10	5921	445310	LIQU										No	No	6253522700	32.579456	-117.131662
IB 307	TOLMOSOFF, JOHN M., D.C.	667 PALM AVE	910.20	8011	621111	HEALTH										No	No	6262500900	32.58376	-117.118744
IB 308	TOMMY'S TOBACCO	1297 IMPERIAL BEACH BL	911.11	5494	424940	RETL										Yes	No	6330222300	32.576448	-117.105801
IB 309	TONY'S HOTEL & APT LIQUIDATORS	536 13TH ST	910.20	5999	453998	RETL										No	No	6261920400	32.586426	-117.105794
IB 310	TRINITY FINANCIAL SERVICES	1025 GEORGIA ST	910.20	7299	56199	SERVICE										No	No	6272404400	32.578274	-117.104294
IB 311	TUNES LUBES ETC.	741 PALM AVE	910.20	7538	811111	RETL		x	x		x	x		x	x	No	No	6262500400	32.583785	-117.116929
IB 312	U.S. SANDCASTLE COMMITTEE, INC	970 SEACOAST DR	911.11	7299	56199	SERVICE										Yes	No	6253400700	32.578645	-117.131891
IB 313	UNION BANK OF CALIFORNIA	900 PALM AVE	910.20	6021	56145	BANK										No	No	6262123600	32.584088	-117.114171
IB 314	UNITED PENTECOASTAL CHURCH	631 12TH ST	910.20	8661	813110	NONPROF										No	No	6262414100	32.58494	-117.107942
IB 315	VERNON AU D.D.S.	1340 IMPERIAL BEACH BL	911.11	8021	621210	HEALTH										Yes	No	6272201400	32.576657	-117.104813
IB 316	VICKY HAIR & ACCESORIES	986 PALM AVE	910.20	7299	56199	SERVICE										No	No	6262211200	32.584108	-117.112203
IB 317	VIC'S BARBERSHOP	986 PALM AVE	910.20	7299	56199	SERVICE										No	No	6262211200	32.584108	-117.112203
IB 318	VIDEO 4 YOU	1051 13TH ST	910.20	7299	56199	SERVICE										No	No	6272200200	32.577378	-117.105584

Table 14.2 - FY 2009-10 Updated Commercial Inventory

No.	Facility Name	Address	Hydrologic Area	SIC Code	NAICS Code	Principal Products/Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	Latitude	Longitude
IB 319	WALLY'S IGA	836 PALM AVE	910.20	5999	453998	RETL	x	x	x		x	x		x	x	No	No	6262110700	32.58419	-117.11523
IB 320	WIENERSCHNITZEL #358	1253 PALM AVE	910.20	5812	72211	EATING	x	x		x	x	x	x	x		No	No	6263120100	32.583658	-117.106711
IB 321	WILDCOAST	925 SEACOAST DR	910.10	99	99	NONPROF										No	No	6253522700	32.579404	-117.131621
IB 322	WOODYS AUTO CARE	200 PALM AVE	910.10	7299	56199	SERVICE		x	x		x	x		x		No	No	6250230200	32.584076	-117.129791
IB 323	WORLD CHOICE NUTRITION	600 PALM AVE	910.20	5149	425120	WHOL										No	No	6251401900	32.584072	-117.120629
IB 324	WYLDE SYDES BOUTIQUE	771 PALM AVE	910.20	5999	453998	RETL										No	No	6262500500	32.583738	-117.11621
IB 325	YAROSLAV KUSHNIR, M.D., INC.	184 PALM AVE	910.10	8011	621111	HEALTH										No	No	6250141000	32.584077	-117.130062
IB 326	YE OLDE PLANK INN	24 PALM AVE	910.10	5813	722400	BAR	x	x			x	x			x	No	No	6250111800	32.583973	-117.132151
IB 327	YOUR T-SHIRT STORE	1181 PALM AVE	910.20	5999	453998	RETL										No	No	6263020200	32.58365	-117.108642

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15.0 Conclusions and Recommendations

15.1 Introduction

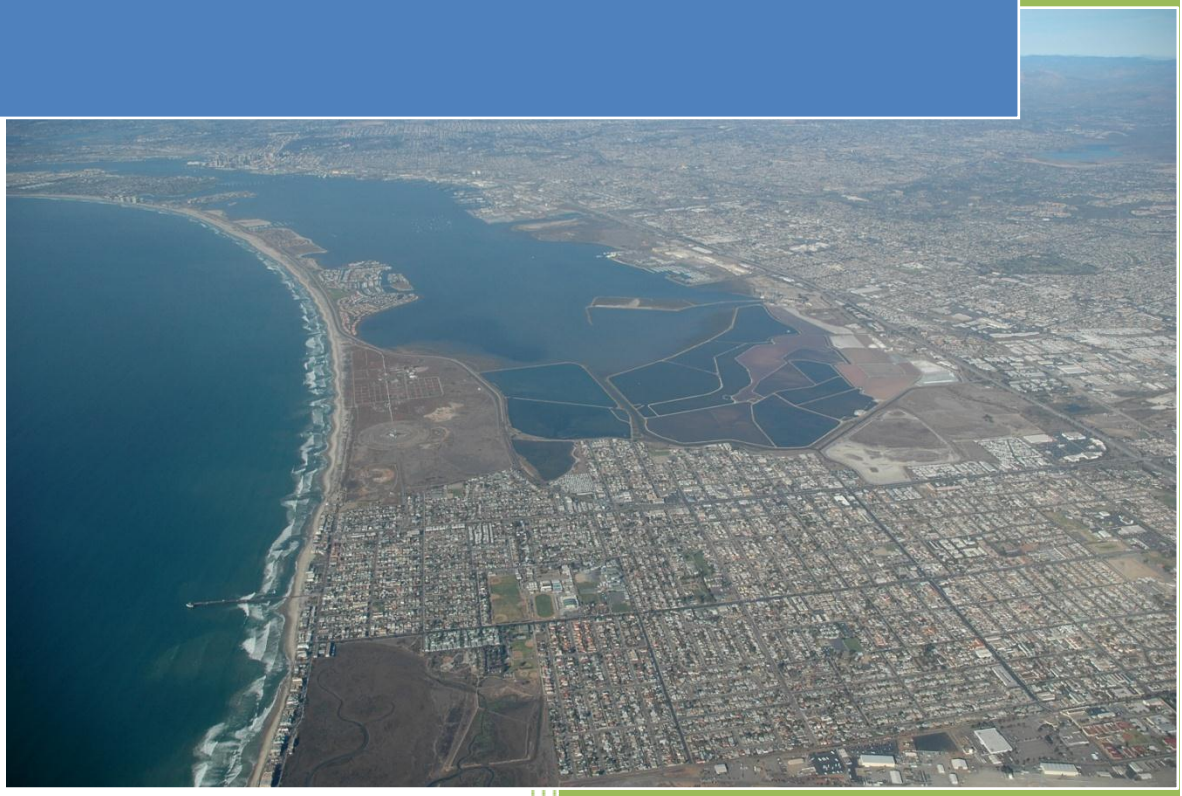
The City continues to made progress in further developing and refining its urban runoff and management program. The City believes that the management programs and activities implemented by municipal staff demonstrate a high level of compliance with the regulatory mandates of the Municipal Storm Water Permit, and underscore the City's commitment to reducing and eliminating pollutants related to urban runoff. The City's urban runoff management program outlined in this Annual Report successfully meets these regulatory requirements and in some cases exceeds the minimum Permit requirements.

Significant enhancements to the urban runoff and management program during the year include the purchase of a field computer, the hiring of an in house GIS Analyst position, and an update to the City's Storm Drain Master Plan. Minor updates were also made to City forms and documentation processes in order to improve the efficiency and effectiveness of program implementation.

The JURMP and all the Annual Reports are a living document that evolve over time and build upon the success and sometimes failure of management program activities. The City endeavors to implement the most effective storm water program possible, building upon the existing program, and given the resources that are available to the City. Looking forward to FY 2011-12 and beyond, the City is committed to continuing with many of the programs and management activities implemented in this report. The City is also looking ahead to the next reissued storm water permit for 2012. The City is committed to working with the Copermittees, Regional Board, and local stakeholders on the next permit to implement a sustainable storm water management program that balances environmental, economic, and social needs.

City of Imperial Beach

2011-2012 JURMP ANNUAL REPORT



City of Imperial Beach

825 Imperial Beach Blvd

Imperial Beach, CA 91932

City of Imperial Beach

9/30/2012

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authorized Signatory(s)	Title	Phone No.	Date
H. A. Levien	Public Works Director	(619) 628-1369	9/24/12

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Executive Summary

This Annual Report summarizes the activities implemented by the City of Imperial Beach (City) in fulfillment of the Jurisdictional Urban Runoff Management Program (JURMP) requirements of Order R9-2007-0001 – the San Diego Municipal Storm Water Permit. With limited exception, the report covers activities conducted between July 1, 2011 and June 30, 2012 (FY2011-12).

The purpose of the JURMP Annual Report is threefold: 1) to document the City's compliance with Municipal Storm Water Permit requirements, 2) to assess the effectiveness of program implementation, and 3) to serve as a program planning tool for directing future activities. The report reflects the organization of the Municipal Storm Water Permit, and is divided into several components corresponding to major sources of pollutants or areas of activity. The following presents the highlights and major accomplishments for each JURMP component during this fiscal year.

Development Planning Component Section 2.0

The Development Planning Component involves incorporating storm water and urban runoff management into the development review process. This includes reviewing priority and non-priority development projects for necessary best management practices (BMPs) to manage storm water runoff prior to the issuance of grading or construction permits. Major accomplishments during this fiscal year included the following:

- Provided storm water conditions on 19 discretionary projects, 2 CIP projects and 4 SUSMP projects through the Public Works Department. Discretionary projects greater than $50,000 in improvements require additional public improvements for storm water such as source control best management practices (BMPs) and low impact development (LID). The Community Development Department also performed an additional 123 plan checks for smaller discretionary projects that required a Storm Water Management Plan. In total 144 projects were reviewed during the plan check process for storm water compliance. This compares to 20 projects for FY2010-11, 24 projects for FY 2009-10, 24 projects during FY2008-09, 48 projects during FY 2007-08, and 51 projects during FY 2006-07.

- Verified operation and maintenance of all high priority post construction treatment control BMPs and received compliance at 19 out of 22 permanent post construction BMPs. Post construction BMPs captured 120 pounds of debris that were prevented from entering the storm drain system.

- Provided storm water education to developers and contractors through face-to-face interactions with City staff in meetings, during counter hours held at the Community Development Department, through updates on the City's web page, and through informative brochures provided during the application process.

Construction Component Section 3.0

The Municipal Storm Water Permit requires the City to oversee compliance with construction-phase BMPs at all construction projects in the City. All construction projects are required to have a City approved Storm Water Management Plan prior to the start of the project. Projects over 1 acre in size are also required to obtain coverage under the State General Construction Permit and be in compliance with the City's SUSMP. Major accomplishments during FY2011-12 included the following:

- Inspected a total of 71 active construction projects including 13 Capital Improvement Projects (CIP) and 2 high priority SUSMP project during the reporting period.
- Conducted 746 inspections to verify the proper installation and maintenance of construction phase BMPs.
- Issued 7 enforcement actions for storm water at construction sites which resulted in 3 notices of violation (NOV), 1 stop work notices, and 3 verbal warnings.
- Discussed urban runoff management requirements with all applicants during the plan check process and verified BMP requirements during follow-up inspections.

Municipal Component Section 4.0

City employees continued to implement best management practices (BMPs) to prevent the discharge of water and pollutants from municipal facilities and activities. Examples of BMPs implemented during the reporting period include:

- Vehicle washing in wash bays that drain to the sanitary sewer.
- Preventive maintenance of City vehicles to prevent fluid leakage.
- Use of high-power vacuum to capture runoff from graffiti abatement, sidewalk grinding, and spill cleanup.
- Strict limitations on the use of fertilizers and pesticides in parks and landscape areas.
- Monitoring of sprinkler systems to prevent over-topping onto roadways.
- Alarming of all sewage pump stations, thereby reducing the likelihood of a sewage spill to the storm drain system.
- Purchase and use of spill barriers, gravel bags, and absorbent rags for spill containment and cleanup.
- Annual storm water training for the Public Works Department on the use of BMPs in daily operations.

- Annual department training on storm water.

Other notable accomplishments during FY2011-12 include:

- On track to complete inspection and cleaning of 100% of catch basins and open grates and jet nearly 100% of MS4 storm drain lines. As of September 1st the sewer division has inspected and cleaned 31% of catch basins and open grates and jetted 9,125 feet of storm drain line.

- Removed an additional 143.69 tons of material through frequent street sweeping of 127.9 curb miles of road. This compares to 174 tons last reporting period and 177 tons in FY 2009-10.

- Removed 220 lbs of material from of the Vortech storm water interceptor on Imperial Beach Blvd. The vortex separator removes sediment, floating hydrocarbons, and debris from all levels of flow.

- Quarterly maintenance of 13 municipal storm drain filter inserts that prevented 346 pounds of material from getting into the storm drain system. This compares to 398 pounds from the previous reporting period.

- Continued operation of the Date Avenue urban runoff diversion system, which diverts nuisance runoff to the sanitary sewer during low-flow conditions.

- Continued operation of the Palm Avenue urban runoff diversion system at Seacoast Drive and diverted 1,042,416 gallons of urban runoff and first flush rain water into the sanitary sewer.

- Performed daily cleanup of trash, litter, and debris along the beach and tidelands area on Seacoast Drive.

Industrial and Commercial Component Section 5.0

The City is tasked with educating businesses about urban runoff management and overseeing their compliance with applicable Municipal Storm Water Permit requirements. Significant progress continues to be made on increasing knowledge on urban runoff management among local businesses. The following are the major accomplishments achieved during this reporting period:

- Conducted 71 inspections and 40 follow up inspections (111 total) at high priority businesses, which include automotive repair shops, restaurants, bars, gas stations, car washes, grocery stores, and mobile home parks. Following each inspection the City mails the business owner a copy of the inspection form, an inspection report, and educational material for BMPs.

- Conducted 44 enforcement actions at businesses and issued 13 notices of violation as part of the enforcement and case resolution process. The City also conducted 40 follow up inspections as part of the annual storm water inspection program

Residential Component Section 6.0

The Residential Component involves 1) educating Imperial Beach residents about urban runoff management, 2) overseeing residential compliance with BMP requirements and discharge prohibitions, and 3) facilitating proper disposal and recycling of household hazardous waste and used motor oil. Major accomplishments during this reporting period included the following:

- Identified and mitigated 137 residential violations compared to 127 from last reporting period. The most commonly observed violations involved construction debris, automotive fluids, wash water, detergents or chemicals, chlorinated swimming pool water, and green waste.

- Distributed educational brochures to residents throughout the year. Brochures target the following high priority activities: 1) pollution prevention around the home, 2) disposal of pet waste, 3) car washing, 4) proper disposal of motor oil, and 5) lawn and garden care.

- Participated in the Regional Education and Residential Sources workgroup as co-chair of the group and chair of the Underserved Target Audience sub-workgroup.

- Properly disposed 23,912 pounds of household hazardous waste, universal and e-waste, and used oil and other fluids were properly disposed of at the South Bay Household Hazardous Waste facility in Chula Vista. This compares to 16,697 from last reporting period and 10,377 from FY 2009-10.

- The City held its annual Home Front Clean Up, which had 714 participants and resulted in the proper disposal of 148.95 tons of trash, construction, metal, and green waste.

Illicit Discharge Detection and Elimination Component Section 7.0

The City endeavors to prevent discharges from the Municipal Separate Storm Sewer System (MS4) from causing or contributing to a violation of water quality standards. The Illicit Discharge Detection and Elimination Component involves 1) water quality monitoring during the dry weather season (May through September) to detect illicit discharges to the storm drain system, and 2) year-round response to illicit discharges of urban runoff. This section of the report is due by December 15th per San Diego RWQCB Addendum No. 2 to Order No. R9-2007-0001 and therefore will be reported at that time.

Education Component Section 8.0

The City endeavors to implement a diverse education program that promulgates the storm water management requirements of the Municipal Permit. Education activities target the following groups: 1) municipal departments and personnel, 2) construction site owners and developers, 3) commercial and industrial business owners and operators (no industrial businesses in the City), 4) residents, general public, and school children, and 5) underserved community. The City facilitates changes in behavior and implementation of BMPs by providing continuous education for each target audience using a variety of educational tools and media. The continual saturation of education for each target audience is gradually

leading to a greater awareness about storm water pollution and the implementation of pollution prevention BMPs.

Public Participation Component Section 9.0

Public involvement is an important component of implementing an effective JURMP program. Each year the JURMP annual reports are presented to City council through a public hearing process. The FY 2011-12 JURMP annual report was presented at a public hearing at the September 19th council meeting.

Fiscal Analysis Component Section 10.0

The approximate cost for implementing the components of the FY 2011-12 JURMP was $773,075.

Program Effectiveness Assessment Component Section 11.0

The Environmental Program Division is responsible for the effectiveness assessment of JURMP activities and implementation of BMPs for each major component of the storm water program. Effectiveness assessments are incorporated into the storm water program whenever feasible to gauge whether the processes and procedures put into place are working toward protecting the quality of receiving waters. Each section of this Annual Report incorporates a discussion on program effectiveness when applicable.

Special Investigation Component Section 12.0

This section provides additional details on special investigations during the reporting period that go above and beyond the JURMP requirements. The report contains information on special investigations for the Tijuana River Bacteria Source Identification Study and the Los Laureles Trash Tracking Study.

Non-Emergency Fire Fighting Component Section 13.0

Pollution prevention activities related to non-emergency fire fighting are reported in this section.

JURMP Revisions Section 14.0

Revisions made to any of the components of the JURMP are reported in this section.

JURMP Conclusions and Recommendations Section 15.0

The City's urban runoff management program outlined in this Annual Report successfully meets these regulatory requirements and in some cases exceeds the minimum Permit requirements.

1.0 Introduction

1.1 Introduction

The City of Imperial Beach is required to submit its Jurisdictional Urban Runoff Management Program (JURMP) Annual Report each year by September 30th in compliance with the San Diego Regional Board Order Number R9-2007-0001 (Municipal Permit). The Annual Report contains a comprehensive description of all activities conducted by the City to meet all requirements of section D of the Municipal Permit. The annual reporting process is used to evaluate the overall effectiveness and efficiency of program elements. The reporting period for the Annual Report is the previous fiscal year July 1st to June 30th.

The following chapters in this Annual Report discuss the measures taken by the City to meet the regulatory requirements of the Municipal Permit and demonstrates that the City has achieved substantial compliance towards reducing sources of pollutants and urban runoff to the maximum extent practicable (MEP). All components of the JURMP are represented in this report with the exception of Section 7.0, Illicit Discharge Detection and Elimination Component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), which extended the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

The structure of this Annual Report evaluates each JURMP component in the context of program planning, management, and implementation. Each section of this Annual Report provides a narrative and when appropriate, tabular tables that summarize program implementation, assessment, and effectiveness using the structural hierarchy of outcome levels established in the *2003 Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*.

2.0 DEVELOPMENT PLANNING COMPONENT

2.1 Introduction

The City endeavors to reduce pollutants and infiltrate runoff from development and redevelopment projects to the maximum extent practicable (MEP). This component is primarily applicable to the Community Development Department, the Capital Improvements Projects Division, the Environmental Program Division, and the City's contracted engineering consultant. This section of the Annual Report discusses program management, implementation, and changes made during FY 2011-12 to the JURMP Development Planning Component.

2.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Development Planning component is described in the *2008 JURMP Section 4.0*. All discretionary development projects and priority SUSMP projects received the appropriate plan check for storm water, existing treatment control BMPs were verified and inventories maintained, and each development project was tracked using the City's database system HTE.

2.3 Outcome Level 1b: Implementation of Management Program Activities

The City requires all development and redevelopment projects to implement measures to reduce pollutants and runoff to the MEP. Minimum BMPs and LID requirements for standard development projects were established in the *2008 JURMP Section 4.0.* Priority development projects received additional LIDs and flow control requirements when the City updated its municipal ordinance through resolution 2010-1094 and 2010-1112 to include the San Diego County Copermittees' Standard Urban Stormwater Mitigation (SUSMP) and Hydromodification Plan (HMP) regional standards.

During the reporting period all development projects were required to meet the appropriate storm water conditions during the development review process. Discretionary projects valued over $50,000 get channeled through Public Works for enhanced pubic improvement conditions related to storm water. Priority development projects also get special consideration under the SUSMP. Each development or redevelopment project, regardless of its prioritization, is formally inspected for applicable BMPs throughout the duration of the project. Continued maintenance of post construction treatment control BMPs are also verified annually.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Development Planning program element:

- Table 2.1 provides an overview of the development and planning projects as it was implemented during FY 2011-12.
- Table 2.2 presents and describes targeted FY 2011-12 outcomes and results
- Table 2.3 provides the updated treatment control BMP inventory.
- Table 2.4 provides an inventory of FY 2011-12 Development Review and SUSMP projects.

2.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Staff and Developers

Education is provided to the public through face-to-face interaction with City staff at the Community Development office counter hours, during predevelopment meetings, through site inspections, and through several local ordinances and brochures that outline the requirements for addressing urban runoff and water quality. The efforts by the City to educate the public on development planning are discussed in the *2008 JURMP Section 4.0.* The education effort for City staff is discussed in the *2008 JURMP Section 10.0.*

2.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Staff and Developers

City staff works with developers to ensure that all development projects and redevelopment project reduce pollutants and runoff to the MEP. The *2008 JURMP Section 4.0* defines minimum BMP and LID requirements applicable to development and redevelopment in the City. The City's adopted SUSMP and HMP also require specific storm water controls for priority development projects.

During the reporting period the City continued to facilitate changes in behavior for development and redevelopment projects by reviewing and requiring conditions on projects to ensure program compliance. All BMPs are verified for proper implementation, operation, and maintenance throughout the duration of construction. City ordinances include appropriate sanctions to achieve compliance including non-monetary penalties, fines, bonding requirements, and/or permit or occupancy denials for non-compliance. Post construction maintenance and operation of treatment control BMPs are also verified and inspected annual by the Environmental Division.

2.6 Outcome Level 4: Source Load Reductions

Source load reductions from development and redevelopment projects are achieved through the implementation of BMPs and LID strategies. The City requires specific project conditions for treatment control BMPs, LIDs, and site design BMPs to reduce pollutants and runoff to the MEP. Source load reductions may not be directly measured in every case but can be implied by the proper implementation and maintenance of storm water BMPs.

Table 2.1 – Overview of Development Planning Inventory by Development Type and Priority Classification

Category/Project Type	Number	Description
A. Discretionary Development		
Discretionary projects reviewed for public enhancements for storm water	142	All development projects are required to undergo the City's urban runoff approval process and meet applicable requirements. Administrative procedures for development project review is discussed in *2008 JURMP Section 4.0.*
Capital Improvement Projects (CIP)	2	All CIP projects are required to complete a Storm Water Management Plan. Projects include street repairs, ADA ramps, sewer maintenance, and park improvements.
B. Priority Development (SUSMP)		
New Church MF 1003; American Legion MF 1072; Shopping Center MF 1062; and Retail Commercial MF 1034	4	The City had 4 SUSMP projects under review during the reporting period. The City requires all priority development projects to meet the LID and treatment control BMPs under the storm water permit. For example the new church MF 1003 required retention and linear bio swales along the perimeter of the property to treat storm water.
C. Totals		
Discretionary Projects	142	These totals include development and redevelopment projects > $50,000 that were channeled through Public Works for review and smaller discretionary projects (less than $50,000) that reviewed by Community Development. All projects require a storm water management plan at a minimum. Complete list of development and SUSMP projects that received an environmental review for storm water during the reporting period is provided in Table 2.4.
Priority Development (SUSMP) Projects	4	
JURMP Sections	Description of FY 2011-12 Changes	
4.0 and Appendix C	No changes made during the reporting period.	

Table 2.2 - Development Planning Component Targeted Outcomes and Results

Development Planning FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)		
a) Modifications to JURMP		
Update applicable JURMP sections per Permit requirements	No significant updates needed	No significant updates during reporting period
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)		
Update Storm Water program for consistency with program updates	No significant updates	No significant updates during reporting period
c) Year-End Program Review		
Complete annual year-end program review	Reviewed program for effectiveness and efficiency	The City continues to improve the implementation of the JURMP by conducting an annual review of each component. Interdepartmental storm water coordination continues to improve as City staff become familiar with SUSMP, HMP, construction general permit, and source control BMPs.
d) Inventory of Development and Redevelopment Projects		
Update development and redevelopment inventory	Updates made to the inventory throughout the reporting period	The City maintains a database of active development projects and development review status on the City's database software HTE. Annual inventories are also maintained in excel with the Environmental Division.
e) Inventory of Treatment Control BMPs and Maintenance		
Update inventory for treatment control BMPs	Updates made to inventory and maintenance verified at all but one location	The Environmental Division maintains an inventory of treatment control BMPs and ensures annual maintenance compliance through notification through annual letters, inspections, and contact with property owners.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)		
a) Jurisdictional Requirements for Project Approval		

Development Planning FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Require development projects to implement applicable project requirements, BMPs, and track information	Plan check for storm water is required for all development projects (discretionary, CIP, and priority projects)	All development and redevelopment projects are required to implement measures to reduce pollutants and runoff to the MEP. The City's project review process further requires that any new construction or modification with a valuation more than $50,000 be subject to public improvements. Projects that meet the $50,000 criterion are routed from the Community Development Department to the Public Works Department for a review in regard to storm water quality public improvements. SUSMP projects are also required to implement additional storm water management controls and BMPs. SUSMP projects are reviewed by Community Development, Public Works, and contract Engineer BDS for compliance with all storm water regulations. All project applications are tracked through the permit approval process and recorded in HTE, excel databases, and Master File system.
b) Confirmation of SUSMP and HMP BMPs		
Verify that all applicable SUSMP and HMP BMPs are applied to priority projects and that the BMPs are inspects prior to occupancy	All SUSMP eligible projects were held to full SUSMP requirements and verified through inspections during construction and prior to occupancy. No projects required HMP interim criterion.	Four SUSMP high priority project (MF 1003, 1072, 1062, and 1034) received a final plan check and was approved for a building permit during the reporting period. Storm water BMPs for priority projects receives review from Public Works, Community Development, and City contract Engineer for SUSMP compliance. BMPs are then verified during construction through field inspections. The final sign off on the project is not complete until the City receives a signed maintenance agreement for continuous maintenance of the BMPs from the property owner.
c) Example of a Priority Development Project and SUSMP BMPs		
List one example of a priority development project that was conditioned to meet SUSMP requirements	New Church Development (MF 1003)	Construction of a new church at 853 Emory St commenced this reporting period. The SUSMP component of the project received multiple reviews and comments from Community Development, Public Works, and contracted engineering firm BDS prior to the issuance of construction permits. The project is required to implement LIDs and source control BMPs and provide a post construction BMP maintenance agreement. The project site treats storm water runoff through a system of bio swales and retention areas. Weekly inspections will ensure that the site is built according to approved plans.
d) Priority Development Projects implementing BMPs with low removal efficiency rankings		

Development Planning FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Listing and feasibility analysis of SUSMP projects using BMPs with low removal efficiency rankings	No projects implemented BMPs with low removal efficiency rankings	Development projects are required to implement BMPs that target priority pollutants. The selection of BMPs is verified during the plan check process. The City only allows less efficient BMPs after a feasibility analysis proves there is no better alternative.
e) HMP and SUSMP Collaboration		
Description of HMP and SUSMP development and collaboration	Collaborated through the Land Development Workgroup	The City participates in the Copermittees' Land Development Workgroup on technical discussions related to the regional implementation of the SUSMP and HMP. Collaboration was made on the implementation of the HMP monitoring requirements.
f) Municipal Staff Training		
Ensure that municipal staff are knowledgeable on storm water BMPs, SUSMP, and HMP requirements	Staff educated through meetings, workshops, and training	Community Development and Public Works Departments meet weekly to review critical issues including storm water project development requirements. In addition the Planning Division, Building Division, Code Compliance Division, Redevelopment Division, and Environmental Division all received training outside the City on multiple storm water issues. Training topics include SUSMP, HMP, TMDLs, General Construction Permit, and code enforcement. Daily interaction with City staff ensures that storm water pollution prevention remains a high priory throughout the City.
g) Developer Education		
Provide education for developers	Counters hours held and meetings conducted during project review and throughout project	The Community Development Department held counter hours, face-to-face meetings, project review meetings, and performed inspections throughout the reporting period. Educational material is also available online, at City Hall, Public Works, and provided during building application process.
h) Special Investigations		
Implementation of special investigations	No special jurisdictional investigations performed	Special investigations are not routinely conducted as part of the implementation strategy for jurisdictional development planning. Special investigations are generally performed under the context of the Regional Program in order to achieve maximum benefit.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND DEVELOPERS)		

Development Planning FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Increase staff and developer knowledge regarding applicable program content	Provided opportunities for education	See Education Component Section 8.0.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND DEVELOPERS)		
a) Procedural and Administrative Behaviors		
Review projects and prescribe necessary conditions and BMPs for approval	142 discretionary projects, 2 CIPs, and 4 SUSMP project reviewed for conditions of approval	The City reviews all proposed projects and ensures that all necessary conditions and BMPs are met for CIP, discretionary projects, and priority projects. The City inspects and verifies that all BMPs and project conditions are implemented during construction. Successful completion of development projects will improve storm water quality through the implementation of site BMPs, which also contributes to the incremental change in community behavior towards reducing storm water pollution.
b) BMP Implementation, Operation and Maintenance		
Inspect projects for BMP compliance and verify BMP implementation	142 discretionary projects, 2 CIPs, and 4 SUSMP Project reviewed and received project conditions All active projects inspected for BMPs	The Building Division, Code Enforcement, Environmental Division, and Public Works Inspector conduct inspections at active development projects for compliance of minimum BMPs. The Public Works Inspector conducts inspections at all CIP projects daily. The Building Inspector conducts inspections of all Discretionary permit projects and ensures the implementation of BMPs for SUSMP projects. Code Enforcement and Environmental Division also respond to reports of storm water violations from development projects. Construction inspections of Discretionary Projects are covered in the next Section of this Annual Report.
Verify operation and maintenance of treatment control BMPs	100% of all high priority BMPs verified and19 out of 22 BMPs verified.	The City annually verifies operation and maintenance of treatment control BMPs to ensure compliance with program. Verification is made through written contact with property owner or manager and often followed up with an inspection. At a minimum all high priority treatment control BMPs are inspected for operation and maintenance annually but the City usually tries to verify operation at every site. The three BMPs not confirmed during this reporting period were from a non-responsive property owner at one site.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM NEW DEVELOPMENT AND REDEVELOPMENT PROJECTS)		
a) Treatment Control BMPs		

Development Planning FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Maintenance of treatment control BMPs	120 pounds of material removed from treatment control BMPs	The City verifies maintenance of treatment control BMPs and when possible tracks the amount of material collected during maintenance activities.
b) Low Impact Development (LID) and Site Design BMPs		
Implement LIDs, site design BMPs, and treatment control BMPs	High priority projects are required to implement BMPs	During the project review the City requires LIDs, treatment control BMPs, and site design BMPs for high priority projects. No high priority projects completed construction during the reporting period and therefore no additional BMPs were added to the treatment control BMP inventory.

Table 2.3 Treatment Control BMP Inventory and Maintenance Tracking

No.	Type	ID	Location	Hydrologic Area	Date Installed	Responsible Party	Priority	Date Verified	Comments	Est. Lbs. Removed
1	KriStar, Catch Basin with insert	1101-PA-1	1101 PALM AVE	910.20	9/1/2008	NORTH ISLAND C.U.	Low	10/5/2011	Cleaned	Weight not recorded
2	KriStar, Catch Basin with insert	1101-PA-2	1101 PALM AVE	910.20	9/1/2008	NORTH ISLAND C.U.	Low	10/5/2011	Cleaned	Weight not recorded
3	KriStar FGP-0002	1101-PA-3	1101 PALM AVE	910.20	9/1/2008	NORTH ISLAND C.U.	Low	10/5/2011	Cleaned	Weight not recorded
4	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126-13-1	1126 13TH ST	910.11	5/1/2005	13th Street Market	Low	12/12/2011	Cleaned	0.375
5	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126-13-2	1126 13TH ST	910.11	5/1/2005	13th Street Market	Low	12/12/2011	Cleaned	0.375
6	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126-13-3	1126 13TH ST	910.11	5/1/2005	13th Street Market	Low	12/12/2011	Cleaned	0.375
7	Drop Inlet Catch Basin Insert w/ boom (Ocean Protection Technology)	1126-13-4	1126 13TH ST	910.11	5/1/2005	13th Street Market	Low	12/12/2011	Cleaned	0.375
8	Drain Guard, sediment and hydrocarbon filters	1372-13-1	1372 13TH ST	911.11	10/1/2008	CASA DE ORO APTS	High	2/9/2012	Expected replacement on 06/12	4
9	Sump Pump and Screen Mesh	1450-IR-1	1450 IRIS AVE	911.11	6/27/2005	IMPERIAL CREST APTS LLC	High	12/8/2011	Cleaned	3.5
10	Sump Pump and Screen Mesh	1450-IR-1	1450 IRIS AVE	911.11	6/27/2005	IMPERIAL CREST APTS LLC	High	5/2/2012		21
11	Drain Guard in back	481-PA-1	481 PALM AVE	910.20	11/1/2008	IB PALM PROPERTIES LLC	Low	5/17/2012	No cleaning or maintenance conducted.	

No.	Type	ID	Location	Hydrologic Area	Date Installed	Responsible Party	Priority	Date Verified	Comments	Est. Lbs. Removed
12	sediment trap	481-PA-2	481 PALM AVE	910.20	11/1/2008	IB PALM PROPERTIES LLC	Low	5/17/2012	No cleaning or maintenance conducted.	
13	hydrocarbon filter in front parking area	481-PA-3	481 PALM AVE	910.20	11/1/2008	IB PALM PROPERTIES LLC	Low	5/17/2012	No cleaning or Maintenance Conducted	
14	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836-PA-1	836 PALM AVE	910.20	5/1/2002	Imperial Beach Promenade LCC	High	10/3/2011	Cleaned	20
15	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836-PA-2	836 PALM AVE	910.20	5/1/2002	Imperial Beach Promenade LCC	High	10/3/2011	Cleaned	30
16	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836-PA-3	836 PALM AVE	910.20	5/1/2002	Imperial Beach Promenade LCC	High	10/3/2011	Cleaned	15
17	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836-PA-4	836 PALM AVE	910.20	5/1/2002	Imperial Beach Promenade LCC	High	10/3/2011	Cleaned	15
18	KriStar, Flo Gard Plus Catch Basin Insert w/ boom.	836-PA-5	888 PALM AVE	910.20	5/1/2002	Imperial Beach Promenade LCC	Low	10/3/2011	Cleaned	10
19	KriStar, Flo Gard Plus Catch Basin Insert w/ boom	836-PA-6	888 PALM AVE	910.20	5/1/2002	Imperial Beach Promenade LCC	Low	12/3/2011	Not serviced	
20	KriStar, Flo Gard Plus Catch Basin Insert	861-11-1	861 11TH ST	910.20	6/1/2007	Property Owners	Low	--	Non-responsive	
21	KriStar, Flo Gard Plus Catch Basin Insert	861-11-2	861 11TH ST	910.20	6/1/2007	Property Owners	Low	--	Non-responsive	
22	KriStar, Flo Gard Plus Catch Basin Insert	861-11-3	861 11TH ST	910.20	6/1/2007	Property Owners	Low	--	Non-responsive	

Table 2.4 Development Review and SUSMP Project Inventory FY 2011-12

Date	ID	File No.	SUSMP	Project Status	Address 1	Project Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMPs or LIDs	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Loamy soil to minimize runoff	Storm Water Management Plan/SWPPP	Construction BMPs
7/18/2012	PW 1	MF 1003	Yes	Plan Check	853 Emory St	Demolition and construction of Church	X	X	X		X			X	X	X	X
7/20/2012	PW 2	MF 1072	Yes	Plan Check	Plan Check 1252, 1268, and 655 Florence	American Legion redevelopment	X	X	X		X			X	X	X	X
12/5/2011	PW 3	MF 1062	Yes	Plan Check	9th and Palm Breakwater	Redevelopment Shopping Center	X	x	X	X	X	X	X	X	X	X	X
12/12/2011	PW 4	MF 1034	Yes	Plan Check	535 Florence	New retail and commercial area	X	X	X		X			X	X	X	X
7/18/2011	PW 5	MF 1068	No	Plan Check	600 Palm Ave	Roof antennas					X					X	X
8/8/2011	PW 6	MF 1073	No	Plan Check	380 Date Ave	Remodel SFR	X	X			X			X	X	X	X
8/8/2011	PW 7	11-416	No	Plan Check	720 13th St	Interior commercial remodel		X	X					X		X	X
8/8/2011	PW 8	MF 1066	No	Plan Check	260 Palm Ave	Commercial remodel	X	X			X	X		X	X	X	X
8/8/2011	PW 9	11-396	No	Plan Check	1221 East Lane	2-Story SFR	X	X			X			X	X	X	X
8/8/2011	PW 10	MF 999	No	Plan Check	808 13th St	Church use in existing building	X	X							X	X	X
12/12/2011	PW 11	MF 1080	No	Plan Check	1174-80 Florida	4 new detached dwellings	X	X	X		X			X	X	X	X
1/4/2011	PW 12	MF 1082	No	Plan Check	730 Basswood	Redevelopment of 2 dwelling units	X	X	X		X			X	X	X	X
2/1/2012	PW 13	MF 1077	No	Plan Check	1105 Donax	2 new dwelling units	X	X			X			X	X	X	X
2/1/2012	PW 14	12-099	No	Plan Check	754 Oneonta Ave	Remodel SFR	X	X			X			X	X	X	X
2/1/2012	PW 15	12-156	No	Plan Check	364 Calla	SFR addition	X	X			X			X	X	X	X
6/5/2012	PW 16	MF 1094	No	Plan Check	1225 East Lane	New SFR	X	X			X			X	X	X	X

Date	ID	File No.	SUSMP	Project Status	Address 1	Project Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMPs or LIDs	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Loamy soil to minimize runoff	Storm Water Management Plan/SWPPP	Construction BMPs
6/18/2012	PW 17	12-161	No	Plan Check	434 Calla	Remodel SFR	X	X			X			X	X	X	X
6/19/2012	PW 18	12-205	No	Plan Check	486 Carnation	Remodel SFR	X	X			X			X	X	X	X
6/19/2012	PW 19	12-180	No	Plan Check	358 Elder	SFR addition	X	X			X			X	X	X	X
12/22/2011	CIP1	S04-108	No	Plan Check	Street 3B incl Ph 3A	Street Repair										X	X
11/14/2011	CIP2	S12-103	No	Plan Check	13th and Ebony	Ped Access Ramp			X							X	X
7/5/2011	CD 1	11-397	No	Plan Check	1143 IMPERIAL BEACH BLVD	demolition of garage improvements										X	
7/18/2011	CD 3	11-417	No	Plan Check	1230 SEACOAST DR	Stucco repair and vents										X	
7/21/2011	CD 4	11-427	No	Plan Check	532 DONAX AVE	Replace conduit and add fireplace										X	
7/22/2011	CD 5	11-431	No	Plan Check	1176 GEORGIA ST	replace toilet										X	
7/22/2011	CD 6	11-430	No	Plan Check	212 CALLA AVE	Drywall, framing and plumbing										X	
7/22/2011	CD 7	11-432	No	Plan Check	373 ELM AVE	Room addition										X	
7/25/2011	CD 8	11-435	No	Plan Check	578 FLORENCE ST	bathroom addition										X	
7/26/2011	CD 9	11-438	No	Plan Check	829 EMORY ST	accessibility upgrades										X	
7/27/2011	CD 10	11-440	No	Plan Check	1401 9TH ST	stucco repair										X	
7/28/2011	CD 11	11-441	No	Plan Check	1182 HOLLY AVE	guardrail and decking replacement										X	
8/1/2011	CD 12	11-445	No	Plan Check	882 CYPRESS AVE	Remove bathroom in garage										X	
8/4/2011	CD 13	11-454	No	Plan Check	1248 GRANGER ST	Bathroom remodel										X	
8/5/2011	CD 14	11-458	No	Plan Check	965 HOLLY AVE	windows and roof										X	
8/9/2011	CD 15	11-464	No	Plan Check	1274 FLORENCE ST	gas leak repair										X	
8/9/2011	CD 16	11-465	No	Plan Check	935 FLORENCE ST	new roof and windows.										X	

Date	ID	File No.	SUSMP	Project Status	Address 1	Project Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMPs or LIDs	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Loamy soil to minimize runoff	Storm Water Management Plan/SWPPP	Construction BMPs
8/10/2011	CD 17	11-468	No	Plan Check	748 HICKORY CT	new patio cover										X	
8/10/2011	CD 18	11-467	No	Plan Check	704 SEACOAST DR A	Remove hood and repair wall										X	
8/15/2011	CD 19	11-471	No	Plan Check	1029 HEMLOCK AVE	enclose carport to make garage										X	
8/16/2011	CD 20	11-474	No	Plan Check	898 5TH ST	FAU, water heater, and insulation										X	
8/16/2011	CD 21	11-472	No	Plan Check	1156 EAST LN	Demo patio and rebuild										X	
8/17/2011	CD 22	11-481	No	Plan Check	246 DONAX AVE	reroof and new exterior siding										X	
8/18/2011	CD 23	11-482	No	Plan Check	559 DAHLIA AVE	new home office addition 360 sq. ft.										X	
8/22/2011	CD 24	11-485	No	Plan Check	1370 CONNECTICUT ST	new drywall and bathroom repairs.										X	
8/23/2011	CD 25	11-488	No	Plan Check	1312 CALIFORNIA ST	add patio cover										X	
8/29/2011	CD 26	11-494	No	Plan Check	474 CHERRY AVE	new deck and stairs.										X	
9/1/2011	CD 27	11-498	No	Plan Check	24 PALM AVE	new overhang with lights										X	
9/2/2011	CD 28	11-502	No	Plan Check	196 CALLA AVE	Convert portion of garage to bathroom										X	
9/7/2011	CD 29	11-505	No	Plan Check	1018 EMORY ST	Convert to back to garage										X	
9/8/2011	CD 30	11-508	No	Plan Check	1319 FERN AVE	repair garage roof and restore carport.										X	
9/12/2011	CD 31	11-511	No	Plan Check	532 7TH ST	gas line repair										X	
9/14/2011	CD 32	11-513	No	Plan Check	1690 SEACOAST DR A	Replace framing and deck system										X	
9/14/2011	CD 33	11-515	No	Plan Check	1047 SEACOAST DR	Replace windows in all units										X	
9/14/2011	CD 34	11-514	No	Plan Check	1126 GRANGER ST	new deck and stairs										X	

Date	ID	File No.	SUSMP	Project Status	Address 1	Project Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMPs or LIDs	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Loamy soil to minimize runoff	Storm Water Management Plan/SWPPP	Construction BMPs
9/15/2011	CD 35	11-516	No	Plan Check	1292 15TH ST	replace 2nd story siding										X	
9/19/2011	CD 36	11-522	No	Plan Check	1026 HEMLOCK AVE	electrical and drywall										X	
9/20/2011	CD 37	11-525	No	Plan Check	1327 HEMLOCK AVE	repair roof sheeting and reroof house										X	
9/30/2011	CD 38	11-539	No	Plan Check	725 GROVE AVE	gas leak repair										X	
10/4/2011	CD 39	11-543	No	Plan Check	1003 13TH ST	add new patio										X	
10/5/2011	CD 40	11-545	No	Plan Check	10 EBONY AVE	Exterior gas line repair										X	
10/5/2011	CD 41	11-544	No	Plan Check	551 BONITO AVE	new room addition										X	
10/11/2011	CD 42	11-552	No	Plan Check	729 CYPRESS AVE	gas leak repair										X	
10/13/2011	CD 43	11-558	No	Plan Check	1266 IMPERIAL BEACH BLVD	patio addition										X	
10/17/2011	CD 44	11-565	No	Plan Check	220 DAISY AVE	main sewer repair at rear of property										X	
10/17/2011	CD 45	11-567	No	Plan Check	662 DAHLIA AVE	new sewer clean outs at rear of house										X	
10/28/2011	CD 46	11-589	No	Plan Check	172 CITRUS AVE	addition of habitable space and porch										X	
10/31/2011	CD 47	11-593	No	Plan Check	284 ELDER AVE	replace roof rafters and reroof										X	
10/31/2011	CD 48	11-592	No	Plan Check	351 IMPERIAL BEACH BLVD	Termite repairs										X	
11/2/2011	CD 49	11-600	No	Plan Check	167 CITRUS AVE	Reroute gas line										X	
11/2/2011	CD 50	11-599	No	Plan Check	576 11TH ST	gas leak repair										X	
11/2/2011	CD 51	11-598	No	Plan Check	748 HICKORY CT	patio enclosure and windows										X	
11/2/2011	CD 52	11-601	No	Plan Check	856 12TH ST	Gas leak repair										X	
11/3/2011	CD 53	11-602	No	Plan Check	1303 IMPERIAL BEACH BLVD	new hazardous waste containment pad										X	

Date	ID	File No.	SUSMP	Project Status	Address 1	Project Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMPs or LIDs	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Loamy soil to minimize runoff	Storm Water Management Plan/SWPPP	Construction BMPs
11/7/2011	CD 54	11-603	No	Plan Check	963 GEORGIA ST	reroof: shingles										X	
11/10/2011	CD 55	11-609	No	Plan Check	1254 ESSEX ST	Convert Illegal Dining area back to a garage.										X	
11/14/2011	CD 56	11-612	No	Plan Check	1220 ELM AVE	Remove two doorways and add one										X	
11/14/2011	CD 57	11-614	No	Plan Check	370 ELM AVE	convert garage to garage and water heater										X	
11/14/2011	CD 58	11-611	No	Plan Check	846 HICKORY CT	construct new block wall										X	
11/15/2011	CD 59	11-617	No	Plan Check	603 DELAWARE ST	gas leak repair										X	
11/16/2011	CD 60	11-622	No	Plan Check	1257 EAST LN	balcony post, vent w/h, final expired permit										X	
11/16/2011	CD 61	11-618	No	Plan Check	866 IMPERIAL BEACH BLVD	gas leak repair										X	
11/23/2011	CD 62	11-628	No	Plan Check	309 DAHLIA AVE	New covered patio 10 X 18 at rear of structure										X	
11/28/2011	CD 63	11-633	No	Plan Check	501 CALLA AVE	Remodel and enclose unpermitted patio										X	
12/1/2011	CD 64	11-640	No	Plan Check	1690 SEACOAST DR C	add new windows, and laundry room.										X	
12/5/2011	CD 65	11-648	No	Plan Check	1219 GRANGER ST	Replace underground gas line										X	
12/5/2011	CD 66	11-650	No	Plan Check	817 DELAWARE ST	gas leak repair										X	
12/13/2011	CD 67	11-660	No	Plan Check	532 THORN ST	create new opening and add header										X	
12/19/2011	CD 68	11-666	No	Plan Check	1174 FLORIDA ST	construct new SFD										X	
12/19/2011	CD 69	11-667	No	Plan Check	1176 FLORIDA ST	construct new SFD										X	

Date	ID	File No.	SUSMP	Project Status	Address 1	Project Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMPs or LIDs	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Loamy soil to minimize runoff	Storm Water Management Plan/SWPPP	Construction BMPs
12/19/2011	CD 70	11-668	No	Plan Check	1178 FLORIDA ST	construct new SFD										X	
12/19/2011	CD 71	11-669	No	Plan Check	1180 FLORIDA ST	construct new SFD										X	
1/10/2012	CD 72	12-13	No	Plan Check	1451 5TH ST	new concrete pad and elect for spa										X	
1/11/2012	CD 73	12-15	No	Plan Check	908 DELAWARE ST	reroute gas line over roof.										X	
1/12/2012	CD 74	12-18	No	Plan Check	1345 11TH ST	gas line repair										X	
1/17/2012	CD 75	12-23	No	Plan Check	1011 CALLA AVE	gas leak repair										X	
1/17/2012	CD 76	12-22	No	Plan Check	520 7TH ST	repair gas leak										X	
1/18/2012	CD 77	12-24	No	Plan Check	218 DAISY AVE	Reroute water lines to kitchen										X	
1/23/2012	CD 78	12-31	No	Plan Check	352 BONITO AVE	Install kitchen skylight										X	
1/24/2012	CD 79	12-34	No	Plan Check	251 EBONY AVE	repipe of water system for three units										X	
1/30/2012	CD 80	12-40	No	Plan Check	1386 HEMLOCK AVE	Legalize carport and reframe roof/wall										X	
2/3/2012	CD 81	12-53	No	Plan Check	721 12TH ST	new trash enclosure and new electric gate										X	
2/3/2012	CD 82	12-52	No	Plan Check	345 DELAWARE ST	Removing temp walls/restore garage										X	
2/7/2012	CD 83	12-57	No	Plan Check	391 ELM AVE	remove unpermitted wall at front of carport										X	
2/8/2012	CD 84	12-60	No	Plan Check	1020 9TH ST	repair garage wing wall										X	
2/8/2012	CD 85	12-58	No	Plan Check	1110 IVY LN	Repair stairs stringer, guardrail and handrail										X	

Date	ID	File No.	SUSMP	Project Status	Address 1	Project Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMPs or LIDs	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Loamy soil to minimize runoff	Storm Water Management Plan/SWPPP	Construction BMPs
2/9/2012	CD 86	12-62	No	Plan Check	1157 13TH ST	replace windows and wall board										X	
2/14/2012	CD 87	12-64	No	Plan Check	730 ONEONTA AVE	Enclose Carport to garage front / side										X	
2/14/2012	CD 88	12-65	No	Plan Check	873 CAROLINA ST	Install sewer clean out										X	
2/17/2012	CD 89	12-72	No	Plan Check	529 9TH ST	remove 3 unpermitted patio covers										X	
2/22/2012	CD 90	12-74	No	Plan Check	748 4TH ST	Enlarge existing kitchen										X	
2/23/2012	CD 91	12-76	No	Plan Check	557 FLORENCE ST	Add cleanout to sewer lateral										X	
2/27/2012	CD 92	12-79	No	Plan Check	392 BONITO AVE	reroof and sewer line										X	
3/12/2012	CD 93	12-99	No	Plan Check	754 ONEONTA AVE	Addition: Master suite / bath over 2car garage										X	
3/19/2012	CD 94	12-108	No	Plan Check	1091 DELAWARE ST	Replace gas line										X	
3/21/2012	CD 95	12-110	No	Plan Check	1164 13TH ST	Gas meter release and board up windows.										X	
3/22/2012	CD 96	12-112	No	Plan Check	345 DELAWARE ST	install stairway										X	
3/26/2012	CD 97	12-114	No	Plan Check	1215 CONNECTICUT ST	Repair gas line										X	
3/26/2012	CD 98	12-115	No	Plan Check	854 11TH ST	gas leak repair										X	
4/3/2012	CD 99	12-134	No	Plan Check	939 13TH ST	windows, gas line, rebuild wall, header/post.										X	
4/4/2012	CD 100	12-137	No	Plan Check	1266 IMPERIAL BEACH BLVD	Replace overhead light poles										X	
4/5/2012	CD 101	12-139	No	Plan Check	1120 11TH ST	new lattice patio cover										X	
4/5/2012	CD 102	12-138	No	Plan Check	526 9TH ST	addition on north of house										X	

Date	ID	File No.	SUSMP	Project Status	Address 1	Project Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMPs or LIDs	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Loamy soil to minimize runoff	Storm Water Management Plan/SWPPP	Construction BMPs
4/12/2012	CD 103	12-148	No	Plan Check	1180 HOLLY AVE	replace windows, restucco, and termite repairs										X	
4/23/2012	CD 104	12-167	No	Plan Check	823 CORVINA ST	remodel bath, kitchen and elect service										X	
4/23/2012	CD 105	12-165	No	Plan Check	1112 12TH ST	Repair corner of house from vehicle damage										X	
5/1/2012	CD 106	12-176	No	Plan Check	620 13TH ST A	Repair studs, stucco and drywall.										X	
5/3/2012	CD 107	12-181	No	Plan Check	749 GROVE AVE	remove existing window										X	
5/7/2012	CD 108	12-184	No	Plan Check	1026 10TH ST	sewer line, reroof, and new water heater										X	
5/7/2012	CD 109	12-185	No	Plan Check	1175 11TH ST	Install new sewer line										X	
5/10/2012	CD 110	12-193	No	Plan Check	1266 PALM AVE	demo existing motel										X	
5/10/2012	CD 111	12-195	No	Plan Check	655 FLORENCE ST	demo existing mixed use building										X	
5/10/2012	CD 112	12-192	No	Plan Check	1252 PALM AVE	demo of existing structure										X	
5/15/2012	CD 113	12-204	No	Plan Check	375 DELAWARE ST	final permit #03-166 for garage conversion.										X	
5/21/2012	CD 114	12-212	No	Plan Check	1361 EAST LN	gas line and tankless W/H										X	
5/23/2012	CD 115	12-217	No	Plan Check	1174 SEACOAST DR	Demo 490 sq. ft. building										X	
5/23/2012	CD 116	12-218	No	Plan Check	751 ELM AVE	Remodel bathroom										X	
5/29/2012	CD 117	12-231	No	Plan Check	725 SEACOAST DR	install new window at corner										X	
5/31/2012	CD 118	12-237	No	Plan Check	1187 DONAX AVE	new roofing for mansard										X	

Date	ID	File No.	SUSMP	Project Status	Address 1	Project Description	Divert Hot Water/Roof Runoff to Landscape or Pervious	Relocate Features to Drain Runoff Into Landscaped Area	Permanent Post-Construction BMPs or LIDs	Storm Drain Improvements (Treatment Device)	Minimize/Maintain Existing Amount of Impervious Area	Remove Under Sidewalk Drain	Install Grease Trap / Interceptor	Post-construction BMP Maintenance Assurance	Loamy soil to minimize runoff	Storm Water Management Plan/SWPPP	Construction BMPs
6/4/2012	CD 119	12-242	No	Plan Check	1368 14TH ST	restucco whole house										X	
6/4/2012	CD 120	12-239	No	Plan Check	823 CORVINA ST	Lattice patio cover										X	
6/4/2012	CD 121	12-240	No	Plan Check	1319 FERN AVE	restucco and replace door and window.										X	
6/4/2012	CD 122	12-243	No	Plan Check	1326 SEACOAST DR	stucco repair										X	
6/5/2012	CD 123	12-244	No	Plan Check	1116 ELM AVE (N)	repair joist and new bathroom fixtures										X	

3.0 CONSTRUCTION COMPONENT

3.1 Introduction

The City endeavors to reduce pollutants and runoff from construction sites to the MEP. This component is primarily applicable to the Community Development Department, the Capital Improvements Projects Division, the Environmental Division, and requirements that apply to the Building and Planning Division activities related to construction and construction permits, and compliance actions proposed by the City. This section of the Annual Report discusses program management, implementation, and changes made during FY 2011-12 to the JURMP Construction Component.

3.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Construction component is described in the *2008 JURMP Section 5.0*. The City maintains an ongoing database of active construction projects and tracks inspections though the City's database software HTE. During the reporting period the only notable change in the administration of active construction projects was the implementation of the new Construction General Permit, which required education of staff and new procedures for the management of capital improvement projects.

3.3 Outcome Level 1b: Implementation of Management Program Activities

The City requires all construction projects to implement site control BMPs that reduce pollutants and runoff to the MEP. The designated minimum BMPs for construction projects are listed in the *2008 JURMP Section 5.0* and are required as project conditions prior to the approval and issuance of local construction and grading permits. All construction projects are formally inspected throughout the duration of the project to ensure adequate implementation and maintenance of BMPs. During the rainy season all priority projects were inspected at least biweekly, medium priority sites were inspected at least monthly, and low priority projects were inspected as needed. During the dry season, all construction sites were inspected as needed.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Construction program element:

- Table 3.1 provides an overview of the Construction element as it was implemented during FY 2011-12.
- Table 3.2 presents and describes targeted FY 2011-12 outcomes and results
- Table 3.3 FY 2011-12 active construction inventory and inspection frequency

3.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Staff and Contractors

Education is provided to contractors through face-to-face interaction with City staff in meetings, through inspections, and through several local ordinances, storm water forms, and brochures that outline the requirements for addressing urban runoff, BMP implementation, and water quality. Additional training was provided to staff during this reporting period on the implementation of the new Construction General Permit. The education effort for City staff is discussed in the *2008 JURMP Section 10.0.*

3.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Staff and Contractors

The City facilitates changes in behavior and implementation of BMPs at construction sites by working with developers and private residents to ensure that all projects meet the requirements of the Regional Permit. Prior to the issuance of construction and grading permits the City requires applicants to submit design plans that reduce pollutants and runoff to the MEP, develop a Project Storm Water Management Plan, and obtain coverage if necessary under the General Construction Permit. The City also inspects projects and enforces storm water ordinances at all construction sites. Project applicants are made aware of the storm water requirements multiple times in the development planning process and then follows up with inspection and enforcement of storm water BMPs during the construction phase. The *2008 JURMP Section 5.0* provides more information on the procedural and administrative mechanisms in the City that promote behavioral changes. The *2008 JURMP Appendix D* defines minimum BMP requirements applicable to construction in the City.

3.6 Outcome Level 4: Source Load Reductions

The primary goal of BMP implementation is to reduce the loading of pollutants and runoff to storm water discharges. During the reporting period the City successfully implemented all program requirements for implementing and inspecting BMPs to control runoff sources related to construction activities. Source load reductions were achieved at construction sites by implementing erosion and sediment control, requiring minimum BMPs, and enforcing general site management requirements. The City required 71 active construction projects, 2 SUSMP project, and 9 Capital Improvement Projects to reduce pollutants and runoff to the MEP. Compliance with required minimum BMPs were then verified through 746 site inspections. Source load reductions may not be directly measured but can be implied by the proper implementation and maintenance of storm water BMPs on construction sites.

Table 3.1 – Overview of Construction Inventory by Priority Classification

Category	Number	Description
A. Type of Active Construction		
Discretionary Projects	71	Most projects in the City are low priority discretionary projects. The City only had two active SUSMP projects that included the new Sea Coast Inn along the beach front and new church building over an acre. Capital improvement projects that were active during the year are also reported in this section.
Capital Improvement Projects (CIP)	13	
SUSMP Development Projects	2	
B. Priority Classification		
High Priority Projects	1	High priority projects are projects that are over 1 acre in size and tributary to 303(d). Medium priority projects include CIP projects during the wet season and discretionary projects over one acre in size. Most development projects in the City are categorized as low priority.
Medium Priority Projects	9	
Low Priority Projects	61	
C. Totals		
Construction Projects	71	The City had two active SUSMP projects in construction during the reporting period. All other active construction projects were discretionary in nature or capital improvements.
Priority Development (SUSMP) Projects	2	
JURMP Sections	Description of FY 2011-12 Changes	
5.0 and Appendix D	No substantive changes were made to the Construction component of the JURMP during the reporting period. Internal management and administrative changes were made in order to adapt to the new regulations in the General Construction Permit.	

Table 3.2 - Construction Component Targeted Outcomes and Results

Construction FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)		
a) Modifications to JURMP		
Update applicable JURMP sections per new Permit requirements	No updates made during FY 2011-12	No updates made to the JURMP this reporting period. Internal procedural updates were made to the management of capital improvement projects with the implementation of the new General Construction Permit.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)		
Update program documentation for consistency with program updates	No updates made during FY 2011-12	No programmatic changes during the reporting period.
c) Year-End Program Review		
Complete annual year-end program review	Review program for effectiveness and efficiency	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period. The use of the Environmental Division's new field computer allowed for improvements in efficiency while performing inspections and ICID response.
d) Inventory of Construction Projects and Inspections		
Update inventory for construction projects and track inspections	Updates made to the inventory throughout the reporting period and inspections tracked	An inventory of construction projects and inspections is maintained on the City's database software HTE. Constructions site inspection records are also maintained on HTE. The Environmental Division also maintains an inventory of construction projects that require conditions from Public Works. An inventory of Capital Improvement Projects (CIP) is also maintained by the Environmental Division.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)		
a) Jurisdictional Requirements for Project Approval		

Construction FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Require construction projects to implement construction site BMPs	Completion of Storm Water Management Plans or verify SWPPPs as required conditions for all projects	All development and redevelopment projects are required to implement measures to reduce pollutants and runoff to the MEP. Development projects that received storm water review as part of the plan check process were presented in the previous section. Designated minimum BMPs for construction projects are listed in the *2008 JURMP Section 5.0*. Construction BMPs are verified through the Project Review process and during site inspections while construction is underway.
b) Confirmation of Urban Runoff Approval Process		
Require construction projects to have adequate project review for storm water and pollution control	All construction projects received the necessary project review before being issued City permits	Information on the City's project review and approval process is provided in the previous section of this annual report, in the *2008 JURMP Section 4.0,* and information on construction activities is provided in the *2008 JURMP Section 5.0*. Information on construction projects and inspections is tracked in the City's HTE database and by excel spread sheets. The summary of active construction projects and inspections during the reporting period in provided in Table 3.3.
c) Confirmation of Designated BMPs		
Verify that designated BMPs were implemented, or required to be implemented	Construction projects undergo project review before being issued City permits. Construction projects are inspected for BMP compliance.	Designated minimum BMPs are required as project conditions during the urban runoff approval process. Projects then receive inspections during the construction phase to verify the proper implementation of BMPs. Projects are inspected for adequate storm water construction BMPs and project design, and source control BMPs.
d) Confirmation of Maximum Disturbed Area		
Verify that maximum disturbed area for grading was applied to applicable construction sites	Apply conditions for maximum disturbed area during project review and verify through inspections	Project applicants are made aware of storm water requirements during the grading and construction permit application process. The grading permit specifies conditions to control the erosion of sediment off the property. Most projects in the City are under an acre in size and consist of redevelopment of existing structures.
e) Municipal Staff Training		

Construction FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Ensure that municipal staff are knowledgeable on storm water BMPs related to construction activities, SUSMP, and HMP	Staff educated through meetings, workshops, and trainings	Community Development and Public Works Departments meet weekly to review critical issues including storm water project development requirements. Monthly meetings are also held to discuss code enforcement related issues. Planning Division, Building Division, Code Compliance Division, Redevelopment Division, and Environmental Division all received regional training outside the City on multiple storm water issues. Daily interaction with City staff ensures that storm water pollution prevention remains a high priory.
f) Construction Contractor Education		
Provide education for contractors	Counter hours held, face-to-face meetings, education materials, contract documents, and inspections	The Community Development Department held counter hours, face-to-face meetings, project review meetings, and performed inspections throughout the reporting period. Public Works Department oversaw storm water compliance for the Capital Improvement Projects and provided education to contractors during meetings and inspections. Brochures and City website also provide additional information on proper BMP implementation.
g) Confirmation of Construction Inspections		
Inspect construction activities	The Building Inspector, Public Works Inspector, and Environmental Division conducted inspections for BMP compliance	All construction projects get formally inspected throughout the duration of the project. During the rainy season, all high priority sites are inspected at least biweekly, medium priority sites are inspected at least monthly, and low priority sites are inspected as needed. During the dry season, all construction sites are inspected as needed. The Public Works Department inspects all active CIP projects sites daily. The Community Development Department Building Inspector inspects discretionary projects that are not CIPs. The Environmental Division follows up on complaints and violations at construction sites.
h) Special Investigations		
Implementation of special investigations	No special jurisdictional investigations performed	Special investigations are not routinely conducted as part of the implementation strategy for the JURMP. Special investigations are generally performed under the context of the Regional Program in order to achieve maximum benefit.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF AND DEVELOPERS)		

Construction FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Maintain high level of staff knowledge regarding storm water program	Conducted annual municipal training, held weekly department meetings, and attended outside training events.	See Education Component Section 8.0.
Increase contractor knowledge regarding storm water program	Community Development and Public Works Departments provide education information to contractors	See Education Component Section 8.0.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF AND CONTRACTORS)		
a) Procedural and Administrative Behaviors		
Confirm active construction projects required conditions to protect water quality	All constructions projects (71) were reviewed for conditions of approval.	The City reviews and conditions all proposed projects to ensure all necessary conditions and BMPs are met before any construction permits are issued. Projects over $50,000 also get routed through Public Works for additional storm water BMP review. After a City permit is issued the project is in active construction phase and receives the necessary frequency of inspections for BMP compliance. Inspection frequency is based on high, medium, or low priority ranking. Storm water compliance is a component of every site inspection for both Community Development and Public Works.
b) BMP Implementation		
Inspect projects and verify BMPs	The Building Division conducted 170 BMP site inspections. The Public Works Inspector provided daily oversight at all CIP construction sites and performed 576 BMP inspections.	The City inspects and verifies BMPs at all projects to ensure compliance with storm water program. The Building Inspector, Public Works Inspector, Code Enforcement Officer, and Environmental Division share the responsibility of inspecting development projects and verifying BMP compliance.

Construction FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Verify construction sites with advance treatment	No construction sites required advance treatment	No construction sites during the reporting period required the implementation of advanced treatment for sediment control. The City requires all construction sites to implement BMPs to contain sediment on the property during all stages of development. Advance treatment is required for high threat to water quality projects.
c) Inspections for Wet and Dry Weather		
Identify active construction and inspection frequencies for wet and dry season	The City conducted 746 BMP site inspections and exceeded the required minimum inspection frequency	During the rainy season, all high priority sites are inspected at least biweekly, medium priority sites are inspected at least monthly, and low priority sites are inspected as needed. During the dry season, all construction sites are inspected as needed. Most development projects are redevelopment and are less than one acre in size. The City generally inspects construction sites more frequently than the minimum requirement. See Table 3.3 for inspection frequency per project.
d) Inspection Results		
Provide general inspection results	Conducted the necessary minimum BMP inspections at construction sites	Most contractors are aware of the storm water BMP requirements and properly implement BMPs. Problems arise during the wet season when heavy rain or wind results in the blowout of poorly implemented BMPs. The highest numbers of storm water violations are reported by observant City staffs who observe inadequate BMPs or illegal discharges.
e) Violations and Enforcement Actions		
Number of violations and enforcement actions to achieve compliance.	The City responded to 7 construction related storm water violations	Typical violations include improper washing of equipment, power washing, stock piles of sediment, and trash. Each enforcement case is different but generally involves a verbal or written warning, a notice of violation for a repeat offender or blatant illegal discharger, and a follow up investigation. The City issued 3 verbal warnings, 1 stop works, and 3 NOV. One example of enforcement was the redesign of the final site stabilization plan for the 9th and Palm demolition project after the existing BMPs failed during a storm event.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM NEW DEVELOPMENT AND REDEVELOPMENT PROJECTS)		
a) Erosion and Sediment Control		

Construction FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Require erosion and sediment control BMPs	71 projects required installation of erosion and sediment control BMPs as required in their Storm Water Management Plan	The City requires installation of erosion and sediment control BMPs for all construction sites with a grading or building permit. Load reductions from construction sites can be implied through the proper implementation of BMPs.
b) Designated Minimum BMPs		
Require minimum BMPs for construction sites	71 projects required to implement BMPs. All permitted construction sites are required to implement minimum BMPs as required by IBMC	The City requires all construction sites to reduce discharges of pollutants to the MEP, and to prevent discharges from causing or contributing to a violation of water quality standards. Source load reductions from construction sites can be implied through the proper implementation of BMPs.
c) Addition Controls for CWA 303(d) Waters		
Additional BMPs for projects discharging directly to 303(d) waters	No projects required to implement additional controls for CWA Section 303(d) waters	The City requires additional controls to be implemented for Clean Water Act (CWA) Section 303(d) waters. Load reductions are not tracked but can be implied.

Table 3.3 FY 2011-12 Active Construction Inventory and Inspection Frequency

Project	Address	Total Insp.	Dry Weather Insp.	Wet Weather Insp.	Weeks Active During Wet Season	Priority	General Results	Enforcement Action Type	Resolved
4-79	1227 CONNECTICUT ST	1	1	0	**0**	Low	Approved		
6-246	1022 ELM AVE	8	5	3	**8**	Low	Insufficient BMPs	NOV	Yes
7-394	754 HICKORY CT	4	2	2	**30**	Low	Approved		
8-186	1461 5TH ST	6	1	5	**30**	Low	Approved		
8-377	755 GROVE AVE	4	2	1	**30**	Low	Approved		
9-270	800 SEACOAST DR	52	14	38	**30**	High	Approved		
9-477	1266 IMPERIAL BEACH BLVD	4	0	4	**30**	Low	Insufficient BMPs	Stop Work/Citation	Yes
9-478	1409 9TH ST	2	0	2	**4**	Low	Approved		
10-78	1410 10TH ST	1	1	0	**30**	Low	Approved		
10-82	527 BONITO AVE	2	0	2	**30**	Low	Approved		
10-149	523 SPRUCE ST	6	0	6	**30**	Low	Approved		
10-328	1001 CALLA AVE	1	1	0	**0**	Low	Discharge	NOV	Yes
10-336	944 FLORENCE ST	2	2	0	**0**	Low	Approved		
10-378	710 SEACOAST DR F	1	0	1	**14**	Low	Approved		
10-499	1497 13TH ST	1	0	1	**17**	Low	Approved		
10-521	1079 SEACOAST DR	1	1	0	**30**	Low	Approved		
10-529	357 ELKWOOD AVE	2	0	2	**30**	Low	Approved		
10-608	508 11TH ST	6	0	6	**30**	Low	Insufficient BMPs	Inspection Correction	Yes
10-647	975 HEMLOCK AVE	1	0	1	**8**	Low	Approved		
10-651	1120 13TH ST	9	0	9	**30**	Low	Approved		
10-652	1150 13TH ST	3	0	3	**30**	Low	Approved		
10-658	951 13TH ST	1	0	1	**7**	Low	Approved		
10-688	951 13TH ST	1	0	1	**7**	Low	Approved		
10-701	152 DAHLIA AVE	2	1	1	**30**	Low	Approved		
11-13	539 CALLA AVE	1	0	1	**30**	Low	Approved		
11-18	622 OCEAN LN	2	1	1	**30**	Low	Approved		
11-64	717 SEACOAST DR	2	0	2	**30**	Low	Insufficient BMPs	Inspection Correction	Yes

Project	Address	Total Insp.	Dry Weather Insp.	Wet Weather Insp.	Weeks Active During Wet Season	Priority	General Results	Enforcement Action Type	Resolved
11-140	823 CORVINA ST	2	0	2	**30**	Low	Approved		
11-185	351 ELDER AVE	6	2	4	**30**	Low	Approved		
11-236	508 11TH ST	1	0	1	**21**	Low	Approved		
11-247	204 PALM AVE	1	1	0	**3**	Low	Approved		
11-274	910 ARRIBA AVENIDA	1	1	0	**0**	Low	Approved		
11-312	1417 GROVE AVE	1	1	0	**0**	Low	Approved		
11-362	211 CITRUS AVE	1	1	0	**2**	Low	Approved		
11-382	753 12TH ST	1	1	0	**0**	Low	Approved		
11-384	853 EMORY ST	3	0	3	**30**	Med	Approved		
11-387	1111 CALIFORNIA ST	1	1	0	**24**	Low	Approved		
11-395	1247 ESSEX ST	3	0	3	**30**	Low	Approved		
11-396	1221 EAST LN	2	0	2	**24**	Low	Approved		
11-432	373 ELM AVE	1	0	1	**30**	Low	Insufficient BMPs	Inspection Correction	Yes
11-438	829 EMORY ST	2	0	2	**2**	Low	Approved		
11-439	903 HOLLY AVE	1	1	0	**0**	Low	Approved		
11-465	935 FLORENCE ST	1	0	1	**10**	Low	Approved		
11-482	559 DAHLIA AVE	1	1	0	**11**	Low	Approved		
11-514	1126 GRANGER ST	1	0	1	**7**	Low	Approved		
11-568	1245 FLORIDA ST	1	0	1	**27**	Low	Approved		
11-590	391 ELM AVE	1	0	1	**1**	Low	Approved		
11-595	1252 PALM AVE	1	0	1	**25**	Low	Approved		
11-602	1303 IMPERIAL BEACH BLVD	1	0	1	**0**	Low	Approved		
11-603	963 GEORGIA ST	3	0	3	**25**	Low	Approved		
11-633	501 CALLA AVE	1	0	1	**15**	Low	Approved		
12-53	721 12TH ST	1	0	1	**7**	Low	Approved		
12-64	730 ONEONTA AVE	1	0	1	**7**	Low	Approved		
12-76	557 FLORENCE ST	1	0	1	**4**	Low	Insufficient BMPs	NOV	Yes
12-192	1252 PALM AVE	1	0	1	**0**	Low	Approved		
12-204	375 DELAWARE ST	1	0	1	**0**	Low	Approved		
12-240	1319 FERN AVE	1	0	1	**0**	Low	Approved		
S10-101	RTIP FY 09-10 (Streets)	18	18	0	**0**	Low	Approved		

Project	Address	Total Insp.	Dry Weather Insp.	Wet Weather Insp.	Weeks Active During Wet Season	Priority	General Results	Enforcement Action Type	Resolved
W05-401	Wet Well & Manhole Repairs	20	20	0	**0**	Low	Approved		
W06-101	Wet well Replacement	30	30	0	**0**	Low	Approved		
W10-201	Sewer Main Line No.1 Rep	40	35	5	**2**	Med	Approved		
S11-102	Crosswalk Louden Lane	35	31	4	**2**	Med	Approved		
P03-50B	Tot lot Veterans Park	18	14	4	**2**	Low	Approved		
W10-101	Sewer Main N0.1 Replace	54	50	4	**2**	Med	Approved		
S09-102	Crosswalk Civic Center	75	48	27	**10**	Med	Approved		
P07-10A	Skate Park Fence	62	0	62	**19**	Med	Approved		
R05-20A	9th & Palm Demo	121	5	116	**28**	Med	Approved		
S04-108	Streets 3B	45	18	27	**8**	Med	Approved		
S11-105	Streets 4/5	48	18	30	**9**	Med	Approved		
S12-103	CDBG Ped Ramps	10	10	0	**0**	Low	Approved		
	Totals:	**746**	**339**	**406**					

4.0 MUNICIPAL COMPONENT

4.1 Introduction

The City endeavors to reduce or eliminate pollutants and runoff from municipal discharges to the MEP. This component is primarily applicable to the Department of Public Works and its efforts to prevent municipal discharges from causing or contributing to a violation of water quality standards. This section of the Annual Report discusses program management, implementation, and changes made during FY 2011-12 to the JURMP Municipal Component.

4.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the municipal component is described in the 2008 JURMP Section 6.0. During the reporting period the City continued implementation of its municipal training program which provides education opportunities for storm water to all staff throughout the year. The City also continued to implement and maintain BMPs for municipal facilities and activities during the reporting period.

4.3 Outcome Level 1b: Implementation of Management Program Activities

The City makes storm water pollution prevention and response a high priority for all Public Works employees. Each Public Works vehicle contains a binder of municipal storm water BMPs and contains a map of the entire MS4 system. The Environmental Division conducts annual training for all Public Works employees and daily interactions with staff ensures that storm water pollution prevention remains a high priory throughout the City. The Public Works Department provides the eyes and ears on the street and therefore the first line of defense for pollution prevention, response, and cleanup. The *2008 JURMP Section 6.0* provides a complete description of the management programs for the municipal component.

Routine maintenance, cleaning, and implementation of BMPs for municipal facilities and activities keep accumulated debris and other potential pollutants from entering the MS4. At a minimum the City conducts annual formal inspections of high priority municipal facilities and actives. The City also maintains a number of storm drain inlet filters that are cleaned and maintained quarterly by Downstream Services, Inc. Cleaning records are maintained on file and logged in a database on the Environmental Division server. The City continues to implement its street sweeping program, MS4 cleaning program, and participates in the Regional Copermittee's program planning activities with the Industrial, Commercial, and Municipal Workgroup.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Municipal program element:

- Table 4.1 Provides an overview of the Municipal inventory by facility type and priority classification
- Table 4.2 presents and describes targeted FY 2011-12 outcomes and results
- Figure 4.1 Street sweeping removal totals

- Table 4.3 Municipal storm drain filter inventory and maintenance records
- Table 4.4 Municipal facility and activity inventory and inspection records

4.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Staff

The City conducts annual training for all municipal employees. Training for the Municipal Component is specifically targeted at the Public Works Department because City Streets, Maintenance Workers, and Sewer crews are typically the first line of defense for storm water pollution. The training program focuses on the use of Best Management Practices in daily operations, and is designed to create an overall sensitivity to pollution prevention concerns.

4.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Staff

The *JURMP Appendix E* defines minimum BMP requirements applicable to streets, roads, highways, municipal areas, municipal activities, and parking facilities in the City. Major targeted outcomes for the JURMP municipal component included streets and parking lot sweeping, MS4 cleaning, sewer system preventative maintenance, municipal storm drain BMP maintenance, integrated pest management at parks, and implementation of BMPs at municipal facilities. All BMPs are inspected and enforced for compliance.

4.6 Outcome Level 4: Source Load Reductions

The City continues to make impressive source load reductions from municipal facilities and activities. The City maintained approximately 125 miles of curbed streets and uncurbed roads located throughout the City. Approximately 143.69 tons of debris was collected through street sweeping operations. The City also collected 170 loads of large bulky items illegally dumped in City alleys through its franchise waste hauler EDCO.

The Sewer Division maintains the City's storm drain lines and catch basins. During this reporting period the Sewer Division inspected 31% of the catch basins and open grates and cleaned any inlets with large obstructions or had exceeded 33% of design capacity. The MS4 includes five miles of underground piping, 92 catch basins, 143 open grates, and 7 open drainage facilities. Storm drain cleaning occurs between the months of May through September. This report contains the amount of storm drains inspected and cleaned between May 2012 and the writing of the report (September 1st). Starting with the FY 13 report, the entire cleaning period will be reported including this years reported numbers.

Lastly, over 30 acres of park facilities, athletic fields, beach accesses, landscapes at various facilities, and five community parks located throughout the City were maintained in a manner that best prevents storm water pollution. The City has a dedicated Tidelands crew that picks up trash and debris and conducts landscaping duties 7 days a week on the beach and one block inland of the beach. In addition, the City contrast with Donovan Prison for a weekly crew to pick up trash and conducts landscape duties at City parks and unmaintained areas. The City tracks source loads whenever possible.

Table 4.1 – Overview of Municipal Inventory by Facility Type and Priority Classification

Category	Miles	Number	Description
A. Type of Facility			
Paved Roads	127.9	---	
Municipal Parking Facilities	---	4	
Underground storm drain piping	5	---	
Catch basins	---	92	
Open Grates	---	143	
Open Drainage Facilities	---	7	
Storm Drain Diverters	---	2	
Vortex Storm Drain CDS	---	1	
Municipal Storm Drain Filters	---	13	
B. Priority Classification			
Streets, Roads, and Highways	(127.9	Miles)	The City also contains 13.3 miles of paves alleys and 2.5 miles of unimproved alleys that are not on the municipal inventory. The alleys are not owned by the City and are maintained by the property owners. The City conducts monthly street sweeping on the paved alleys and provides pick up of large bulky items illegally dumped in the alleys.
High (Commercial areas)	19.2	---	
Medium (Beachfront residential areas)	9.6	---	
Low (Other residential areas and paved alleys)	99.1	---	
Municipal Parking Facilities			
High (Commercial)	---	4	

Category	Miles	Number	Description
Medium (N/A)	---	---	
Low (N/A)	---	---	
Sanitary Sewer System			
Pump stations	---	12	
Underground piping	39.5	---	

JURMP Sections	Description of FY 2011-12 Changes
6.0 and Appendix E	BMP requirements of the JURMP applicable to streets, roads, highways, and municipal parking facilities were modified in accordance with the requirements of the updated Permit in March 2008. No significant updates made during the reporting period.

Table 4.2 - Municipal Component Targeted Outcomes and Results

Municipal FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)		
a) Modifications to JURMP		
Update applicable JURMP sections per Permit requirements	No updates necessary	The City continued to implement its Municipal Component of the JURMP and did not make any significant updates during the reporting period.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)		
Update program documentation for consistency with program updates	No significant updates	No significant updates during the reporting period.
c) Year-End Program Review		
Complete annual year-end program review	End of year program review on MS4 annual maintenance	The end of the year program review focused on looking to the future and the implementation of adaptive management strategies as proposed in the 2012 draft MS4. No programmatic changes to the Municipal Component are proposed to the current JURMP program until the new permit is released.
d) Updates to Training Program		
Update training materials for municipal staff	No significant updates	The City makes annual updates to the municipal training content and materials so that each education activity provides appropriate information for the target audience.
e) Updates to Municipal Inventor or Prioritization		
Update municipal inventory	No significant updates.	The City continues to maintain the municipal facilities and activities inventory that was developed in collaboration with the Commercial, Industrial, and Municipal Workgroup.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)		
a) Jurisdictional Requirements for Municipal Facilities and Activities		

Municipal FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Require municipal areas and activities to implement minimum BMPs	Implemented BMPs and verified through inspections and reinforced through annual training	Specific minimum BMP requirements for municipal facilities and activities, including pollution prevention methods, are described in the *2008 JURMP Appendix E*. Municipal BMPs are reviewed with staff regularly and updated as necessary. In addition, each City vehicle contains a binder of Best Management Practices for Municipal Facilities and Activities that get reviewed each year during annual training.
b) Confirmation of Designated Minimum BMPs		
Verify the implementation of minimum BMPs for municipal areas and activities	Implemented BMPs and verified through inspections and reinforced through annual training	Specific minimum BMP requirements for municipal facilities and activities, including pollution prevention methods, are described in the *2008 JURMP Appendix E*. Municipal BMPs are reviewed regularly and updated as necessary.
c) Confirmation of Municipal Inspections		
Verify that municipal inspections achieve BMP compliance	Municipal areas and act ivies get formally inspected each reporting cycle	Municipal inspections are used as means to verify the implementation of BMPs at municipal facilities and activities. Inspections also serve to educate staff, reinforce storm water concepts, and improve communication across City Divisions. Table 4.4 provides the annual Municipal Facility and Activity Inventory and Inspection Records results.
d) Municipal Staff Training		
Provide training opportunities for municipal staff	Conducted annual municipal training, weekly department meetings, outside training events, and provided education materials.	Community Development and Public Works Departments meet weekly to review critical issues including storm water project development requirements. Monthly meetings are also held to discuss code enforcement related issues. Municipal inspections also serve as one-on-one training for Division supervisors. Annual training is provided to Public Works staff and was conducted on 10/26/11. Regional workshops Construction General Permit. Daily interaction with City staff and abundant education material on storm water ensures that storm water pollution prevention remains a high priory throughout the City.
e) Confirmation of Pesticide, Herbicide, and Fertilizer Management		

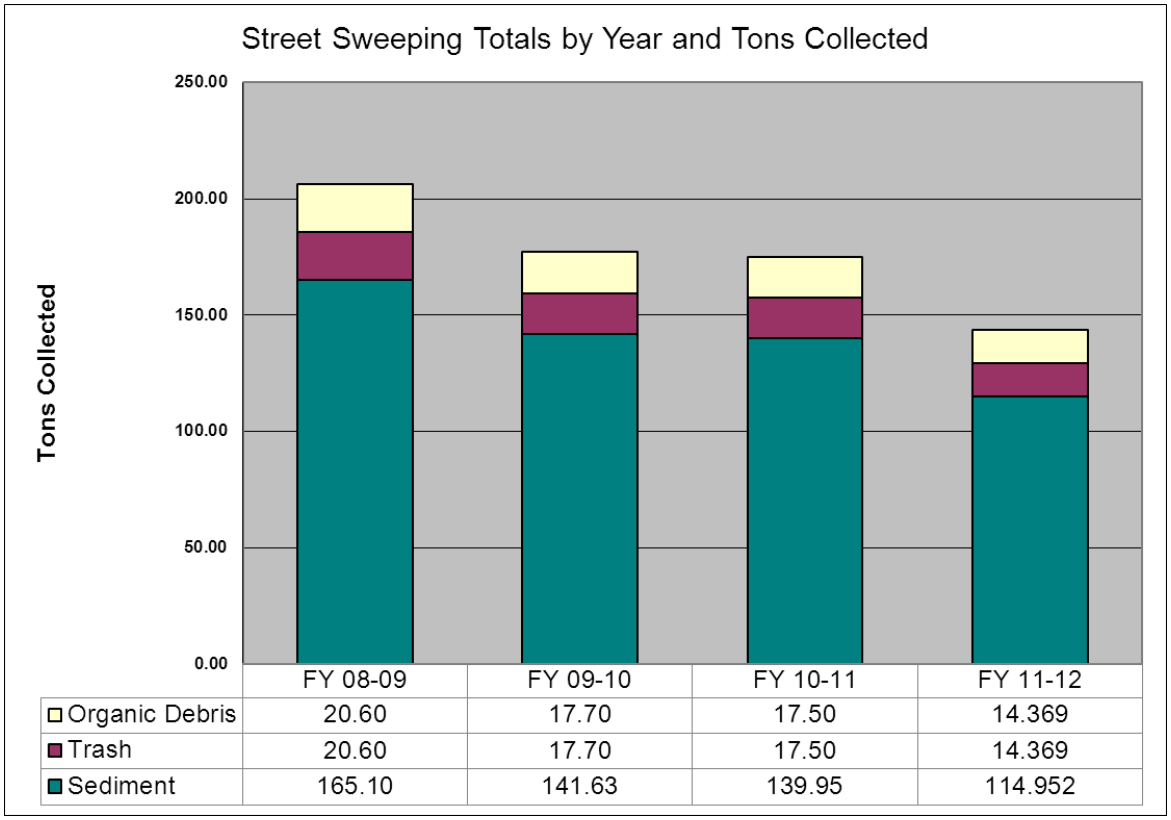
Municipal FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Verify designated BMPs for pesticides, herbicides, and fertilizer	IPM and BMPs implemented	The City limits the application of pesticides and herbicides applied to park and landscaping facilities in accordance with Integrated Pest Management Program policy.
f) Confirmation of Maintain for Municipal BMPs		
Verify maintenance of municipal storm water BMPs	Maintained operation and maintenance of existing storm water BMPs	The City maintains a number of storm water BMPs along the storm water conveyance system including two urban low flow and first flush storm drain diverters, 13 storm drain filters, 1 CDS unit, and multiple vegetated ditches, and infiltration areas.
g) Special Investigations		
Implementation of special investigations	No special jurisdictional investigations performed	Special investigations are not routinely conducted as part of the implementation strategy for the JURMP. Special investigations are generally performed under the context of the Regional Program in order to achieve maximum benefit.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY STAFF)		
Maintain high level of staff knowledge regarding storm water program	Conducted annual municipal training, weekly department meetings, outside training events, and provided education materials.	See Education Component Section 8.0.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY STAFF)		
a) BMP Implementation for Streets, Roads, Highway, and Parking Facilities		
Sweep all High trash areas at least twice per month	28.7 curb-miles swept at least twice per month and 4 municipal parking facilities swept weekly	Commercial areas (19.2 miles of curbed roads and 4 parking lots) are swept weekly. Beachfront residential areas (9.5 miles of curbed roads) are swept bi-weekly (high trash and debris). All other areas (99.1 curb miles) are considered moderate priority and are swept on a monthly basis.
Sweep all Moderate trash areas at least monthly	99.1 curb-miles swept at least monthly	

Municipal FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Sweep improved streets, roads, and highways	127.9 curb-miles swept (2,392 total miles) swept)	The City has a dedicated Tidelands Maintenance Division, funded by the Port of San Diego, that keep the beach and one block inland from the beach free of trash, sand, and other debris. The City also maintains a contract with Donavan Correctional Facility to provide supervised labor for various needs including landscaping and trash pickup. The Streets and Parks Divisions play a crucial role in keeping the City free of trash. EDCO also conducts alley sweeps for large bulky items upon request from the City (170 loads for FY 2011-12). Finally, the City provides a Home Front Cleanup event for residents to dispose of accumulated waste.
Collect trash and debris from non-sweeping activities	Collected trash and debris from parks, alleys, and tideland area	
b) BMP Implementation for Municipal Separate Storm Sewer System (MS4)		
Clean accumulations of trash and debris greater than 33% of design capacity	City is on track to inspect and clean 92 catch basins and 143 open grates inspected by the end of the dry season September 30th.	Storm drain cleaning generally occurs between the months of May and September and is still ongoing at the time of writing this report. It is important to note that the City inspects 100% of its catch basins and cleans them if necessary every year.
Inspect and clean MS4 line	31% of the MS4 inspected and 9124.85 feet of storm drain cleaned	The City cleans and inspects 100% of the catch basins and endeavors to clean 100% of the 5 miles of storm drain lines annually. The Sever Division uses the vactor truck to jet and clean accumulated debris out of the MS4. Cleaning for the 2012 season will be finished in September and still ongoing while writing this report.
Prioritization of MS4 system maintenance	Part of annual assessment of program	Following two years of inspections, any MS4 facility that requires inspection and cleaning less than annually may be inspected as needed, but not less than every other year The Environmental Division reviews past MS4 cleaning records to identify areas of high trash and debris accumulation. Sections of the MS4 that are identified as low trash and debris accumulation areas may be cleaned and inspected less than annually.
Prevent and eliminate infiltration from the sanitary sewer to the MS4	Implementation of the 2008 Sewer System Maintenance Plan	The City developed a Sewer System Management Plan (SSMP) in 2008 and has a proactive operation and maintenance program to prevent sewer system overflows. The Environmental Division helps in this endeavor by coordinating the response to any SSO, performing biennial SSMP audits, and implementing the FOG control program.
Conduct routine maintenance on sanitary sewer system	36 miles of sanitary sewer system maintained	Most sanitary sewer pipelines are cleaned at least annually, and known problem areas are cleaned more frequently. Twelve alarmed sewage pump stations are monitored daily.

Municipal FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Respond to all sewer spills and log in appropriate data bases	7 sewer spills reported with 6 being from private laterals	In the event of a sewer spill, City staff follows procedures laid out in its Sanitary Sewer Overflow Response Plan. The City experienced 7 sewer spills during FY 2011-12 and 6 of those were from private laterals.
c) BMP Implementation for Municipal Facilities and Activities		
Implement BMPs and maintain municipal treatment control BMPs	Maintained 13 storm drain or catch basin filters, 2 storm drain diverters, 1 CDS unit, vegetated swales, and infiltration areas	The City enforces compliance of minimum BMPs at all municipal facilities and maintenance activities. In addition, the City maintains 13 storm drain filters that are maintained quarterly by contract. The City also operates 2 storm drain diverters, one CDS unit, and a number of vegetated swales and infiltration areas.
d) Municipal Facilities and Activities Inspection Results		
Provide general inspection results for municipal areas and activities	Inspected 100% of municipal facilities and provided training on BMPs for municipal activities	General inspection results include the following: quarterly maintenance of municipal storm drain filters, proper implementation of minimum BMPs by staff, internal review and training on BMPs for municipal areas and activities.
e) Violations and Enforcement Actions		
Number of violations and enforcement actions to achieve compliance.	No enforcement actions necessary to achieve compliance	Minor violations were noted during municipal inspects and corrected without enforcement actions. For example old BMPs for material storage were replaced at the Public Works Yard. Municipal storm water violations are extremely rare as a result of continued education.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM MUNICIAPL FACILITIES AND ACTIVITIES)		
a) Street Sweeping		
Track debris collected from street sweeping activities	Trash: 14.369 tons Debris: 114.952 tons Organics: 14.369 tons	The City collected a total of 143.69 tons of material from street sweeping activities. The City sweeps 19.2 miles of commercial area and 4 municipal parking lots weekly (high priority), 9.6 miles of beach front biweekly (medium priority), and 99.1 miles of residential area monthly (low priority).
b) Cleanup Activities		

Municipal FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Track EDCO alley sweeps and Home Front Clean Up totals	EDCO Alley Sweeps: 170 large bulky items Home Front Clean Up: 148.95 tons	EDCO conducts alley sweeps for large bulky items upon request from the City. The City made 170 requests this year which was down from 293 from the previous year. In addition, the City provides a Home Front Cleanup event for residents to dispose of accumulated waste. The City also conducts a number of other cleanup activities to collect trash and debris from municipal areas using the Street, Tidelands, and Donavan Prison crews; however, this waste is not tracked at this time.
c) MS4 Cleaning		
Track debris collected through MS4 cleaning	Annual cleaning records are tracked on a form and entered into excel	There are approximately 93 catch basins, 143 open grates, and approximately 5 miles of storm drain pipe that is maintained and cleaned annually. The Sewer Division inspected and cleaned 31% of the catch basins, open grates, and open channels. MS4 cleaning starts in May and continues through September. Totals for the entire 2012 cleaning will be given in next year's report.
d) **Municipal Storm Drain Filters**		
Track debris collected from 13 municipal storm drain filters	Trash: 43 lbs. Sediment: 168.5 lbs. Organic: 125 lbs.	Downstream Services maintains 13 municipal storm drain filters quarterly. During the reporting period 346 pounds of debris was captured through municipal storm drain filters.
e) Storm Water Diverters		
Monitor storm water diversion from Palm Ave Diverter	Palm Ave Diverter: 1,042,416 gallons diverted into the sanitary sewer	The City operates two storm drain diverters (Palm Ave and Date Ave). Only the diverted flow from Palm Ave is monitored and tracked. The jockey pump for Palm Ave burned out this reporting period and was rebuilt in April.

Figure 4.1-Street Sweeping Totals



	FY 08-09	FY 09-10	FY 10-11	FY 11-12
Organic Debris	20.60	17.70	17.50	14.369
Trash	20.60	17.70	17.50	14.369
Sediment	165.10	141.63	139.95	114.952

Figure 4.1- The street sweeping totals above are presented by fiscal year. Street sweeping is contracted through Clean Streets and EDCO. The City maintains approximately 127.9 miles of curbed streets and uncurbed roads located throughout the City. Sweeping activities collected 143.69 tons of materials during the reporting period.

Table 4.3 Municipal Storm Drain Filter Inventory and Maintenance Records

ID	Filter Type	Address	Location	Watershed	Date of Installation	Date of Service	Service Conducted				Weight of Debris	Materials Collected (lbs.)				Volume Used
							Inspected	Cleaned	Filter Replaced	Repaired	Removed (lbs.)	Sediment	Trash	Organics	Other	% of Total
SDF1	Grate Inlet Skimmer Box 18" X 18" Bio-sorb oil absorbing polymers for hydrocarbon removal	495 Tenth St.	Public Works Yard (Rear of Yard)	910.20	10/13/2003	9/22/2011	x	x			2.000	1.000		1.000		2%
						12/21/2011	x	x			10.000	7.000	1.000	2.000		10%
						3/23/2012					0.000	0.000	0.000	0.000		0%
						6/14/2012	x	x			5.000	2.000	1.000	2.000		5%
SDF2	Grate Inlet Skimmer Box - Round 24" X 24" Bio-sorb oil absorbing polymers for hydrocarbon removal	495 Tenth St.	Public Works Yard (Front Parking Lot)	910.20	10/13/2003	9/22/2011	x	x			3.000	1.500		1.500		3%
						12/21/2011	x	x			6.000	3.000	1.000	2.000		6%
						3/23/2012	x	x			4.000	3.000		1.000		4%
						6/14/2012	x	x	x		4.000	2.000		2.000		4%
SDF3	Grate Inlet Skimmer Box 24" X 36" Bio-sorb oil absorbing polymers for hydrocarbon removal	Seacoast Dr. / Palm Ave.	City Parking Lot	910.10	1/13/2003	9/22/2011	x	x			8.000	5.000	0.000	3.000		8%
						12/21/2011	x	x			8.000	5.000	1.000	2.000		8%
						3/23/2012	x	x			9.000	5.000	1.000	3.000		9%
						6/14/2012	x	x	x		6.000	2.000	1.000	3.000		6%

ID	Filter Type	Address	Location	Watershed	Date of Installation	Date of Service	Service Conducted				Weight of Debris	Materials Collected (lbs.)				Volume Used
							Inspected	Cleaned	Filter Replaced	Repaired	Removed (lbs.)	Sediment	Trash	Organics	Other	% of Total
SDF4	Grate Inlet Skimmer Box 24" X 36" Bio-sorb oil absorbing polymers for hydrocarbon removal	825 Imperial Beach Blvd.	City Hall	911.11	10/13/2003	9/22/2011	x	x			5.000	2.000	0.000	3.000		5%
						12/21/2011	x	x	x		11.000	5.000	1.000	5.000		11%
						3/23/2012	x	x	x		9.000	5.000	1.000	3.000		9%
						6/14/2012	x	x	x		9.000	3.000	1.000	5.000		9%
SDF5	Grate Inlet Skimmer Box 12" X 12" Bio-sorb oil absorbing polymers for hydrocarbon removal	865 Imperial Beach Blvd.	Fire Station	911.11	10/13/2003	9/22/2011	x	x	x		3.000	1.000	0.000	1.000	1.000	3%
						12/21/2011	x	x	x		6.000	2.500	0.000	1.000	2.500	6%
						3/23/2012	x	x	x		4.000	1.500	0.000	1.000	1.500	4%
						6/14/2012	x	x	x		4.000	1.500	0.000	1.000	1.500	4%
SDF6	Grate Inlet Skimmer Box 24" X 30" Bio-sorb oil absorbing polymers for hydrocarbon removal	1075 8th St.	Marina Vista Center	911.11	1/13/2003	9/22/2011	x	x			8.000	3.000	0.000	5.000		8%
						12/21/2011	x	x	x		11.000	7.000	1.000	3.000		11%
						3/23/2012	x	x			11.000	5.000	2.000	4.000		11%
						6/14/2012	x	x	x		9.000	5.000	1.000	3.000		9%

ID	Filter Type	Address	Location	Watershed	Date of Installation	Date of Service	Service Conducted				Weight of Debris	Materials Collected (lbs.)				Volume Used
							Inspected	Cleaned	Filter Replaced	Repaired	Removed (lbs.)	Sediment	Trash	Organics	Other	% of Total
SDF7	Pipe Skimmer 24" X 24" Bio-sorb oil absorbing polymers for hydrocarbon removal	1459 Hemlock	Behind Apartment City Easement	911.11	1/12/2005	9/22/2011	x	x			1.000	0.500	0.000	0.500		1%
						12/21/2011	x	x			1.000	0.333	0.333	0.333		1%
						3/23/2012	x	x			1.000	0.333	0.333	0.333		0%
						6/14/2012	x				1.000	0.333	0.333	0.333		0%
SDF8	KriStar, Flo Guard Plus Catch Basin Insert 18" X 36" Hydrocarbon absorption boom	839 10 St. Alley east of 10th St. between Elm & Donax	City Alley	910.20	11/3/2005	9/22/2011	x	x			6.000	3.000	0.000	3.000		3%
						12/21/2011	x	x			6.000	3.000	1.000	2.000		6%
						3/23/2012	x	x			5.000	2.000	1.000	2.000		5%
						6/14/2012	x	x			4.000	2.000	1.000	1.000		4%
SDF9	2 Grate Inlet Skimmer Boxes 24" X 36" Hydrocarbon absorption boom	Alley abutting 8th St 100 yd. south of Palm	City Alley	910.20	2/22/2007	9/22/2011	x	x			10.000	5.000	0.000	5.000		10%
						12/21/2011	x	x			9.000	5.000	1.000	3.000		9%
						3/23/2012	x	x			12.000	5.000	2.000	5.000		12%
						6/14/2012	x	x			10.000	3.000	1.000	6.000		10%
SDF10	Grate Inlet Skimmer Box 32" X 40" Hydrocarbon absorption boom	Alley b/w 8th St. & Delaware St. just south of Palm Commercial Ctr.	City Alley	910.20	2/5/2007	9/22/2011	x	x			9.000	3.000	0.000	6.000		9%
						12/21/2011	x	x			7.000	5.000	1.000	1.000		7%
						3/12/2012	x	x			10.000	5.000	2.000	3.000		10%
						6/14/2012	x	x	x		8.000	3.000	1.000	4.000		8%

ID	Filter Type	Address	Location	Watershed	Date of Installation	Date of Service	Service Conducted				Weight of Debris	Materials Collected (lbs.)				Volume Used
							Inspected	Cleaned	Filter Replaced	Repaired	Removed (lbs.)	Sediment	Trash	Organics	Other	% of Total
SDF11	Grate-Inlet Box 24" X 36" Hydrocarbon absorption boom	Curb inlet at SW Corner 9th St. / Palm Ave.	Curb Inlet	910.20	2/22/2007	9/22/2011	x	x			13.000	5.000	5.000	3.000		13%
						12/21/2011	x	x			11.000	5.000	3.000	3.000		11%
						3/23/2012	x	x			7.000	3.000	2.000	2.000		7%
						6/14/2012	x	x			10.000	2.000	5.000	3.000		0%
SDF12	KriStar, Flo Guard Plus Catch Basin Insert	740-798 Florida Street alley behind apartment complex	City Alley	910.20	5/17/2007	9/22/2011					0.000					0%
						12/21/2011	x	x			4.000	4.000				4%
						3/23/2012					0.000					0%
						6/14/2012					0.000					0%
SDF13	Round Hydro Flow Guard Plus and hydrocarbon booms 24" Diameter Grate and 22" Diameter Inlet	4th Street at Sports Park	South end of parking lot at Sports Park	911.11	6/29/2009	9/22/2011	x	x			8.000	5.000	0.000	3.000		8%
						12/21/2011	x	x			12.000	8.000	1.000	3.000		12%
						3/23/2012	x	x			15.000	10.000	1.000	4.000		14%
						6/14/2012	x	x	x		11.000	3.000	1.000	4.000	3.000	11%
									Totals		**346**	**168.5**	**43**	**125**	**9.5**	

Table 4.4 Municipal Facility and Activity Inventory and Inspection Record

Facility Name	Address	Hydrologic Area	SIC	NAICS	Principal Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	Threat to water quality	APN	Latitude	Longitude	Inspection Date	CORRECTIVE ACTIONS REQUIRED	CORRECTIVE ACTIONS
Alleys	Citywide			926120	Road		x	x	x	x	x		x	x	N/A	High				4/5/2012	NO	
City Hall	825 Imperial Beach Bl	911.11		921190	Administration	x			x			x	x	x	YES	High	6321112700	32.576135	-117.115677	4/5/2012	NO	
Fire Station	865 Imperial Beach Bl	911.11		922160	Fire Station	x	x	x	x	x	x	x	x	x	YES	High	6321112700	32.576135	-117.115677	4/5/2012	NO	
Marina Vista Center	1075 8th Street	911.11	8322	624120	Administration	x			x			x	x	x	YES	High	6264007100	32.577109	-117.116187	4/5/2012	NO	
Public Works Yard	495 10th Street	910.20		921190	Public Works Yard			x		x	x			x	NO	High	6260600500	32.589236	-117.111108	4/5/2012	YES	Please remember to close all waste containers after depositing waste.
Dempsey Holder Safety Center	950 Ocean Ln	911.11		922120	Sheriff's Station	x	x	x	x	x	x	x	x	x	YES	High	6253401800	32.578694	-117.132217	3/29/2012	NO	
Sports Park & Recreation Center	425 Imperial Beach Bl	911.11	7999	713990	Park	x			x			x	x	x	YES	High	6324003500	32.576314	-117.123641	4/5/2012	NO	
Pocket Park	266 Palm Ave.	910.10	7999	713990	Park	x			x			x	x	x	NO	Low		32.58422	-117.127879	4/5/2012	NO	
Reama Park	210 Elkwood Ave.	911.11	7999	713990	Park	x			x			x	x	x	YES	High	6254012600	32.578683	-117.129327	4/5/2012	NO	
Teeple Park	1121 Calla Ave.	910.20	7999	713990	Park	x			x			x	x	x	NO	High	6261702400	32.585276	-117.109699	4/5/2012	NO	
Veteran's Park	1065 8th Street	911.11	7999	713990	Park	x			x			x	x	x	YES	High	6264007100	32.577109	-117.116187	4/5/2012	NO	
Pump Station #10 (Above ground)	814 Cypress Ave.	910.20	4952	221300	Sewer System	x	x		x	x	x	x	x		NO	High	6260905500	32.587228	-117.115014	3/22/2012	NO	
Pump Station #1A (Underground)	862 Seacoast Dr.	910.10	4952	221300	Sewer System	x	x		x	x	x	x	x		NO	High		32.580551	-117.131772	12/15/2011	NO	

Facility Name	Address	Hydrologic Area	SIC	NAICS	Principal Services	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	Threat to water quality	APN	Latitude	Longitude	Inspection Date	CORRECTIVE ACTIONS REQUIRED	CORRECTIVE ACTIONS
Pump Station #1B (Underground)	1098 Seacoast Dr.	911.11	4952	221300	Sewer System	x	x		x	x	x	x	x		YES	High		32.576639	-117.131879	3/29/2012	NO	
Pump Station #2 (Above ground)	1306 Seacoast Dr.	911.11	4952	221300	Sewer System	x	x		x	x	x	x	x		YES	High		32.57303	-117.131766	7/28/2011	NO	
Pump Station #6 (Underground)	498 Rainbow St.	910.10	4952	221300	Sewer System	x	x		x	x	x	x	x		NO	High		32.586156	-117.12068	11/17/2011	NO	
Pump Station #7 (Underground)	504 Oneonta Ave.	911.11	4952	221300	Sewer System	x	x		x	x	x	x	x		YES	High		32.570987	-117.122064	10/27/2011	NO	
Pump Station #8 (Underground)	895 Imperial Beach Bl	911.11	4952	221300	Sewer System	x	x		x	x	x	x	x		YES	High		32.576374	-117.114931	1/26/2012	NO	
Pump Station #9 (Underground)	1025 9th St.	911.11	4952	221300	Sewer System	x	x		x	x	x	x	x		YES	High		32.578243	-117.114069	9/22/2011	NO	
Streets	Citywide			926120	Road		x	x	x	x	x		x	x	N/A	High				12/1/2011	NO	
Dunes Park	750 Seacoast Dr.	910.10	7999	713990	Park	x			x			x	x	x	NO	High	6251821100	32.582283	-117.132179	3/29/2012	NO	
Elkwood Parking Lot	102 Elkwood Ave.	911.11	7521	812930	Parking Lot	x	x	x	x	x	x		x	x	YES	High	6253532200	32.578392	-117.131412	3/29/2012	NO	
Imperial Beach Pier	10 Evergreen Ave.	911.11	7999	713990	Park										YES	High		32.579578	-117.137124	3/29/2012	NO	
Pier Plaza	10 Evergreen Ave.	911.11	7999	713990	Park	x	x		x			x	x	x	YES	High	6253402000	32.579209	-117.13213	3/29/2012	NO	
Seacoast & Palm Parking Lot	105 Palm Ave.	910.10	7521	812930	Parking Lot	x	x	x	x	x	x		x	x	NO	High	6251910100	32.58378	-117.131418	3/29/2012	NO	

5.0 INDUSTRIAL AND COMMERCIAL COMPONENT

5.1 Introduction

The City endeavors to prevent or eliminate the discharge of pollutants and runoff from industrial and commercial sources. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and its efforts to oversee compliance with urban runoff regulations at businesses within the City and reduce the discharge of pollutants to the MS4 to the maximum extent practicable (MEP). The City is tasked with educating businesses about urban runoff management and overseeing their compliance with applicable Municipal Storm Water Permit requirements.

5.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Industrial and Commercial Component is described in the *2008 JURMP Section 7.0*. During the reporting period the City made routine updates to the Commercial and Industrial business inventory which conforms to the Copermittee's standard inventory template. The inventory is maintained on the Environmental Division server and identifies all industrial and commercial facilities that could contribute pollutant loads to the MS4. The City currently does not have any industrial facilities on that inventory. Records are also maintained on each specific business for inspections, corrective actions, and illegal discharges. During the reporting period the City continued to incorporate fats, oils, and grease (FOG) management into the commercial business inspection program for restaurants.

5.3 Outcome Level 1b: Implementation of Management Program Activities

The Environmental Division provides notification and verification of minimum BMPs for commercial businesses, in addition to performing inspections at all high priority commercial businesses in the City. The City also inspects non-high priority business and mobile businesses during the year as necessary. Inspections are conducted and documented as outlined in the *2008 JURMP Section 7.0*.

In addition to City staff reporting illegal discharges, the Environmental Division also responds to calls to the storm water hotline and from online complaints. However, the vast majority of storm water violation reports are made from well-trained City staff. The low number of commercial businesses and centralized commercial zoning allows City staff to be the predominant eyes on the street for identifying storm water violations.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Commercial Industrial program element:

- Table 5.1 Provides an overview of the Industrial and Commercial inventory by facility type and priority classification
- Table 5.2 presents and describes targeted FY 2011-12 outcomes and results
- Table 5.3 Commercial Business Inspections FY 2011-12
- Table 5.4 and Figure 5.1 Interactive Effectiveness Assessment of Commercial Businesses

- Appendix 1 Complete Commercial Business Inventory FY 2011-12

5.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Businesses

Commercial businesses receive education on storm water BMPs through a number of different methods including direct mail, face-to-face interaction with City staff during inspections, through dissemination of education material, and through follow up inspections to ensure compliance. The City also provides education to businesses during ICID investigations.

The Environmental Division also incorporates an interactive effectiveness assessment of commercial businesses during the annual storm water inspection at randomly selected businesses to gauge level of knowledge and awareness. The goal of the assessment is to get beyond BMP verification and assess the level of BMP effectiveness at commercial businesses in the City. General results showed a moderate level of knowledge among the businesses. The results are outlined in Table 5.4 and Figure 5.1.

5.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Businesses

The City facilitates changes in behavior and implementation of BMPs at commercial businesses by providing continuous education efforts through face-to-face interactions, routine inspections, dissemination of brochures, mailing of post inspection letters, and responding to illegal storm water discharges. City staff conducts all commercial inspections and have a good working relationship with business owners. The *2008 JURMP Appendix F* defines minimum BMP requirements applicable to industrial and commercial projects in the City. The *2008 JURMP Section 7.0* provides more information on the procedural and administrative mechanisms in the City that promote behavioral changes for commercial, industrial, and mobile businesses.

5.6 Outcome Level 4: Source Load Reductions

The two step approach of education on storm water pollution and enforcement of BMPs have unquestionably resulted in the source load reductions from commercial businesses. Although the City does not currently track source load reductions from commercial sites, the increased level of knowledge on storm water BMPs and cooperation among the local business community have successfully prevented the illegal discharge of pollutants from commercial businesses. Source load reductions can be implied from commercial businesses through the proper implementation of BMPs.

Table 5.1 – Overview of Industrial and Commercial Component by Facility Type and Priority Classification

Category	Number	Description
A. Type of Facility		
Industrial	0	Industrial zoning is limited to a small area in the City. Currently, no industrial businesses that require an industrial general permit reside in the community. The term "commercial" is therefore used for the activities within the City. As such, there is no need in this jurisdiction to identify non-filers under the General Industrial Permit.
Commercial	342	
B. Priority Classification Totals		
High	71	Imperial Beach Municipal Code 8.30.090 defines commercial businesses as either high or non-high (low) priority. High priority businesses include all food service and auto service related businesses.
Low	271	
Mobile	51	Mobile business database is tracked and maintained in house.
C. Inspection Totals		
Commercial Business Inspections	111	The Environmental Division conducts all commercial inspections. All high priority businesses receive inspections annually for storm water compliance. Commercial businesses that have a significant storm water violation receive a follow up investigation.
Follow Up Inspections	40	
Mobile	0	Mobile businesses do not currently receive annual inspections. The Environmental Division inspects mobile businesses while responding to illegal discharge or public service requests.
D. Enforcement Actions		
Notice of Violations (NOVs)	14	Businesses with multiple BMP violations generally receive a NOV and 2 follow up investigations.
Minor Violations (Follow Up)	1	Minor violations generally receive a follow up investigation and written warning.

JURMP Sections	Description of FY 2011-12 Changes
7.0 and Appendix F	BMP requirements of the JURMP applicable to industrial and commercial facilities were modified with the requirements of the updated Permit in March 2008. No significant changes were made during the reporting period.

Table 5.2 - Industrial and Commercial Component Targeted Outcomes and Results

Industrial and Commercial FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)		
a) Modifications to JURMP		
Update applicable JURMP sections per Permit requirements	No updates were made during reporting period	The City continued to implement its Commercial Component of the JURMP and did not make any significant updates during the reporting period.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)		
Update program documentation for consistency with program updates	No updates were made during reporting period	No significant updates made to this program component.
c) Year-End Program Review		
Complete annual year-end program review	Review program for effectiveness and efficiency	The use of the new field computer from last reporting period resulted in improved efficiencies and quicker response for inspections and enforcements. It also allowed for in the field printing of case specific BMP information.
d) Updates to Training Program		
Update training materials for businesses	No updates to education materials and staff	The City makes updates to commercial inspection training content as necessary. Education activities include brochures, handouts, informative letters, and inspections.
e) Updates to Commercial Inventor or Prioritization		
Update commercial inventory and prioritization	Annual updates made to the commercial inventory	Regular updates were made to the commercial and industrial business inventory, which follows the regional copermittee standard template. Currently all food or automotive related businesses get categorized as high priority and receive annual inspections. The regional online mobile business database was also maintained online.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)		
a) Jurisdictional Requirements for Commercial Businesses		

Industrial and Commercial FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Require commercial and industrial businesses to implement BMPs and verify through inspections	Notified businesses through mail, conducted inspections, responded to ICIDs, and provided education materials	The City requires all commercial and industrial sites/sources to implement designated minimum BMPs and other measures to prevent the discharge of pollutants to the MEP. The City's Urban Runoff Management and Discharge Control Ordinance (Chapters: 8.30.070, 8.30.090, and 8.30.100) mandate the implementation of designated BMPs and control measures. The commercial inspection program and ICID program are the mechanisms used to educate businesses on BMPs. All high priority businesses receive annual inspections for storm water.
b) Confirmation of Designated Minimum BMPs		
Verify the implementation of minimum BMPs for commercial businesses	Conducted commercial inspections and follow up inspections to verify BMPs	The City verifies the implementation of minimum BMPs at commercial businesses through the implementation of the commercial inspection program. The environmental division conducts annual inspections of all high priority businesses, which include all food and automotive facilities in the City.
c) Confirmation of Commercial Inspections		
Verify that commercial inspections achieve BMP compliance	Inspected all high priority commercial businesses	The Environmental Division conducts inspections at all high priority businesses, as needed inspections at lower priority businesses, and follow up inspections after ICIDs. The City achieved higher inspection frequency than the minimum established in the Permit.
d) Justification for Commercial Inspection Prioritization		
Provide rationale for the businesses that were inspected	IBMC 8.30.090 defines commercial businesses as either high or non-high (low) priority	High priority businesses include at a minimum all food service and auto service related businesses in the City. Businesses that have a treatment control BMPs also receive inspections as well as businesses that cause an ICID.
e) Efforts Made to Notify Businesses of BMPs		
Describe efforts made to notify businesses of BMPs	Notification made through education material, inspections, follow up inspection, and follow up letters	High priority businesses receive storm water inspections and follow up inspections in the case of a violation. A post inspection letter is also mailed to the business outlining the results of the visit. Education material is provided at the time of inspection and in some cases mailed with the post inspection letter. New businesses also receive BMP information through the business license application process.
f) Third Party Inspections		

Industrial and Commercial FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Describe third party inspection results	None	The City conducts all commercial inspections through the Environmental Division
g) General Industrial Permit Non-Filers		
Describe steps taken to identify industrial non-filers	None	The City did not have any industrial businesses during the reporting period.
h) Mobile Businesses		
Describe efforts made to address mobile businesses	Inspected mobile businesses as necessary	The City contacted each mobile business during the previous reporting period through mail with a letter and brochure that outlines the minimum BMP requirements. The Environmental Division informally inspects mobile businesses while responding to illegal discharge reports and public service requests.
i) Special Investigations		
Not targeted	Interactive assessment	The Environmental Division incorporates an interactive effectiveness assessment of commercial businesses and rates businesses on a scale of 1 out of 5. The results of the assessment are presented in Table 5.4 and Figure 5.1.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY COMMERCIAL BUSINESSES)		
Assess storm water program implementation knowledge from commercial businesses	Conducted interactive assessment of commercial businesses during annual inspections	The goal of the assessment is to get beyond BMP verification and assess the level of BMP knowledge among a random selection of commercial businesses in the City. Assessment results provided in Table 5.4 and figure 5.1
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY COMMERCIAL BUSINESSES)		
a) Commercial Business BMP Implementation		
Inspect businesses for compliance	71 sites inspected and 40 follow up inspections	The City inspections 100% of high priority commercial businesses, non-high priority businesses, and mobile businesses as needed. Inspections consist of observing business operations, reviewing minimum BMPs, and enforcing pollution prevention practices.

Industrial and Commercial FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Notify mobile and fixed commercial businesses of BMP requirements	71 fixed commercial and 0 Mobile Businesses contacted through mail	The City notifies business owners and operators, both fixed and mobile, of BMP requirements through a combination of methods including site inspections, follow-up inspection reports, direct mailings, inclusion of BMP information with business license and special event vendor packets, online resources such as the Project Clean Water website, and City's website. During the FY 09-10 reporting period all mobile businesses were notified of BMPs through the mail.
b) Violations and Enforcement Actions		
Number of violations and enforcement actions to achieve compliance.	Follow up inspections required at 31 businesses. City also issued 14 NOVs	The City enforces compliance at all businesses, including mobile sources, using an escalating series of enforcement actions. Verbal or written warnings are used when violation in question is minor. Notices of Violations (NOVs) may be issued for any observed violation. And escalating administrative penalties, fines, and civil penalties may be enforced for non-compliance
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM MUNICIAPL FACILITIES AND ACTIVITIES)		
a) BMP Implementation		
Load reductions from proper BMP implementation	Most businesses implemented correct BMPs	Source load reductions are not easily tracked from commercial businesses but can be implied through proper implementation of BMPs.

Table 5.3 Commercial Business Inspections FY 2011-12

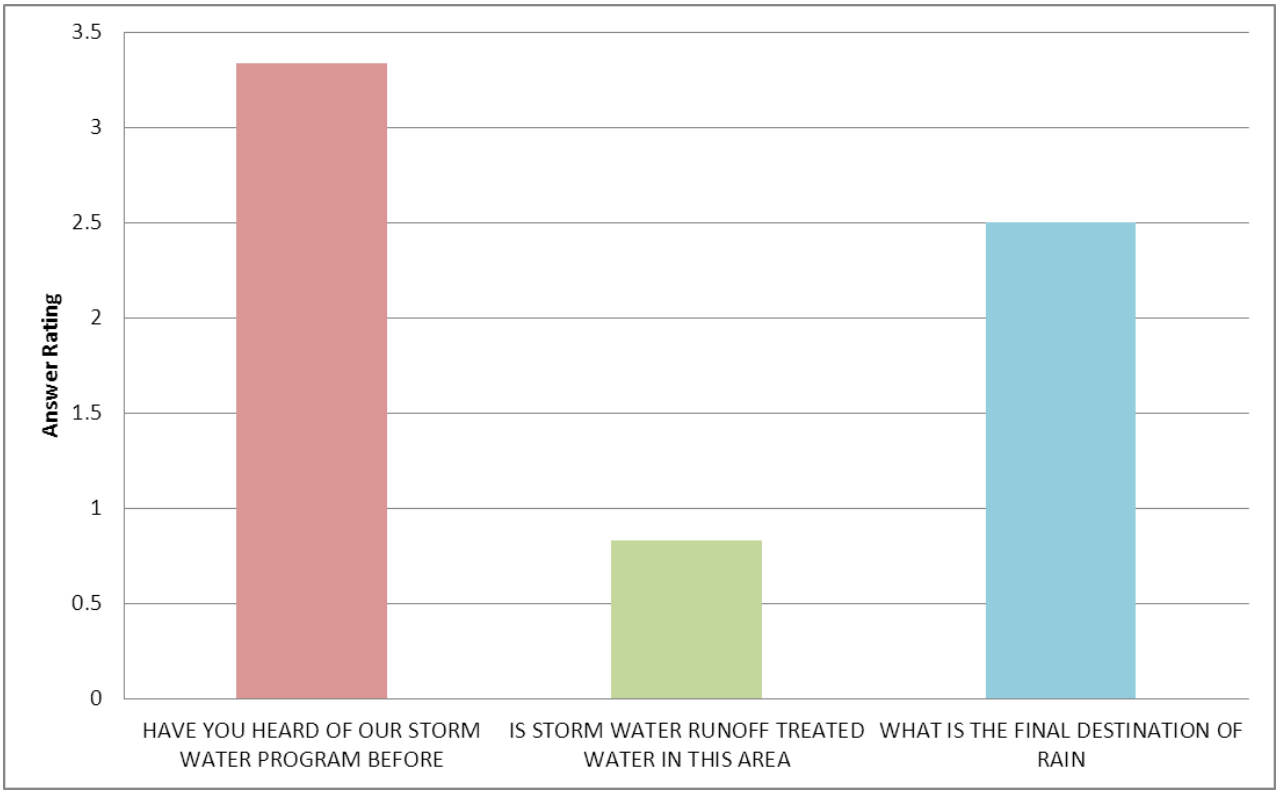
ID	FACILITY NAME	STREET NUMBER	SUITE NUMBER	STREET NAME	Establishment Class	Inspection Date	Follow Up Action
47	7-ELEVEN 24344	1311		PALM AVE	H	12/12/2011	Follow Up
69	7-ELEVEN 24344	1311		PALM AVE	H	1/3/2012	Cleared
79	7-ELEVEN STORE #23982A-2131	1303		IMPERIAL BEACH BLVD	H	1/6/2012	NOV
88	7-ELEVEN STORE #23982A-2131	1303		IMPERIAL BEACH BLVD	H	1/17/2012	Cleared
41	7-ELEVEN STORE #23982A-2131	1303		IMPERIAL BEACH BLVD	H	12/7/2011	Follow Up
86	ALBETO'S TACO SHOP	1183		13TH ST	HF	1/11/2012	Cleared
44	ALBETO'S TACO SHOP	1183		13TH ST	HF	12/7/2011	Follow Up
70	ALBETO'S TACO SHOP	1183		13TH ST	HF	1/3/2012	NOV
27	ALL AMERICAN CAR WASH IB	1158		PALM AVE	H	11/17/2011	Cleared
6	ALL AMERICAN CAR WASH IB	1158		PALM AVE	H	11/1/2011	Follow Up
4	AMERICAN LEGION POST NO 820	1268		PALM AVE	HF	11/1/2011	Cleared
73	AROMA THAI RESTAURANT	757		SEACOAST DR	HF	1/4/2012	Follow Up
91	AROMA THAI RESTAURANT	757		SEACOAST DR	HF	1/18/2012	Cleared
31	BEACH CLUB GRILLE	710	F	SEACOAST DR	HF	11/29/2011	Cleared
68	BEACH SIDE STATION	681		HIGHWAY 75	H	1/3/2012	Cleared
62	BEACH SIDE STATION	681		HIGHWAY 75	H	12/20/2011	Follow Up
45	BERNARDO SHORES	500		HIGHWAY 75	H	12/8/2011	Follow Up
98	BIG KAHUNA'S PIZZA N STUFFS	600	#117	PALM AVE	HF	1/24/2012	Cleared
81	BOWMAN'S MARKET	1008		PALM AVE		1/6/2012	NOV
95	BOWMAN'S MARKET	1008		PALM AVE		1/19/2012	Cleared
52	BOWMAN'S MARKET	1008		PALM AVE		12/14/2011	Follow Up
13	C.H. DONUTS	1070	A	13TH ST	HF	11/9/2011	Cleared
54	CAFE DI ROMA	633		9TH ST	HF	12/15/2011	Cleared
32	CARL'S JR. #585	700		13TH ST	HF	12/1/2011	NOV
16	CARL'S JR. #585	700		13TH ST	HF	11/10/2011	Follow Up
57	CARL'S JR. #585	700		13TH ST	HF	12/15/2011	Cleared
106	COW-A-BUNGA CA GLACIER FNAM	10	#E	EVERGREEN AVE	HF	1/26/2012	Cleared
8	CROSSROAD PETROLEUM INC.	1185		PALM AVE	H	11/2/2011	Follow Up
25	CROSSROAD PETROLEUM INC.	1185		PALM AVE	H	11/17/2011	Cleared
56	DEPENDABLE CARBURETOR EXCHANGE	660		EMORY ST	H	12/15/2011	Cleared
60	DON PANCHO'S MEXICAN FOOD	690		HIGHWAY 75	HF	12/19/2011	Cleared
18	ECONO LUBE N' TUBE	772		13TH ST	H	11/10/2011	Cleared
33	EL CILANTRO CAFE	764		13TH ST	HF	12/1/2011	Cleared
17	EL CILANTRO CAFE	764		13TH ST	HF	11/10/2011	Follow Up
78	EL TAPATIO CATERING	667		SILVER STRAND BLVD	HF	1/5/2012	Cleared
77	EL TAPATIO RESTAURANT INC	260		PALM AVE	HF	1/5/2012	Follow Up
51	ESTHER'S MEXICAN FOOD	1004		PALM AVE	HF	12/14/2011	Follow Up
84	ESTHER'S MEXICAN FOOD	1004		PALM AVE	HF	1/6/2012	NOV
97	ESTHER'S MEXICAN FOOD	1004		PALM AVE	HF	1/19/2012	Cleared
120	FLEET RESERVE CLUB 289	659		SILVER STRAND BLVD	HF	3/5/2012	Cleared
23	G & M OIL #177	907		PALM AVE	H	11/16/2011	Cleared
20	GENE'S AUTOMOTIVE	1085		PALM AVE	H	11/16/2011	Cleared

ID	FACILITY NAME	STREET NUMBER	SUITE NUMBER	STREET NAME	Establishment Class	Inspection Date	Follow Up Action
14	GIANT PIZZA KING #4	1070	B	13TH ST	HF	11/9/2011	Cleared
110	GIANT PIZZA KING #5	600	#100	PALM AVE	HF	2/8/2012	NOV
114	GIANT PIZZA KING #5	600	#100	PALM AVE	HF	2/17/2012	Cleared
99	GIANT PIZZA KING #5	600	#100	PALM AVE	HF	1/24/2012	Follow Up
12	GUISEPPE'S PIZZA	1293		IMPERIAL BEACH BLVD	HF	11/9/2011	Cleared
75	IB FORUM	1079		SEACOAST DR	HF	1/4/2012	Follow Up
93	IB FORUM	1079		SEACOAST DR	HF	1/18/2012	Cleared
43	IMPERIAL BEACH ULTRAMAR	1300		IMPERIAL BEACH BLVD	H	12/7/2011	Cleared
50	IMPERIAL DONUTS +	1002		PALM AVE	HF	12/14/2011	Follow Up
85	IMPERIAL DONUTS +	1002		PALM AVE	HF	1/6/2012	NOV
96	IMPERIAL DONUTS +	1002		PALM AVE	HF	1/19/2012	Cleared
94	JERSEY BOYS DINER	875		SEACOAST DR	HF	1/18/2012	Cleared
74	JERSEY BOYS DINER	875		SEACOAST DR	HF	1/4/2012	Follow Up
72	KATY'S CAFE	704	A	SEACOAST DR	HF	1/4/2012	Follow Up
92	KATY'S CAFE	704	A	SEACOAST DR	HF	1/18/2012	Cleared
11	K-C'S CHINESE FOOD	1299		IMPERIAL BEACH BLVD	HF	11/9/2011	Cleared
65	KFC IMPERIAL BEACH	1056		13TH ST	HF	12/21/2011	Cleared
49	K-PASTA	775		13TH ST	HF	12/14/2011	Cleared
55	L & M TIRE CO./ EXPRESS TIRE	950		PALM AVE	H	12/15/2011	Cleared
66	LA POSTA MARKET #2	1266		IMPERIAL BEACH BLVD	H	12/21/2011	Cleared
9	MARCO'S & RED HAWK	1205		PALM AVE	HF	11/2/2011	Follow Up
90	MARISA'S MEXICAN SEAFOOD GRILL	285		PALM AVE	HF	1/17/2012	Cleared
40	MARISA'S MEXICAN SEAFOOD GRILL	285		PALM AVE	HF	12/6/2011	Follow Up
76	MARISA'S MEXICAN SEAFOOD GRILL	285		PALM AVE	HF	1/5/2012	NOV
30	MASON'S ALIGNMENT-BRAKE-MUFFLE	975		PALM AVE	H	11/29/2011	Cleared
24	MCDONALDS/SCAROB INC.	1135		PALM AVE	HF	11/17/2011	NOV
7	MCDONALDS/SCAROB INC.	1135		PALM AVE	HF	11/2/2011	Follow Up
102	MEIJO SUSHI, INC.	600	#300	PALM AVE	HF	1/24/2012	Follow Up
108	MEIJO SUSHI, INC.	600	#300	PALM AVE	HF	2/8/2012	Cleared
39	MICKIES BAR AND GRILL	220		PALM AVE	HF	12/6/2011	Cleared
58	NFAROOQI ENT. LLC/JACK IN BOX	890		PALM AVE	HF	12/19/2011	Cleared
123	OLIVE OIL CAFE	600	#109	PALM AVE	HF	4/3/2012	Cleared
116	OLIVE OIL CAFE	600	#109	PALM AVE	HF	2/29/2012	NOV
113	OLIVE OIL CAFE	600	#109	PALM AVE	HF	2/17/2012	NOV
101	OLIVE OIL CAFE	600	#109	PALM AVE	HF	1/24/2012	Follow Up
42	PIZZA INDUSTRY/DOMINO'S PIZZA	1307		IMPERIAL BEACH BLVD	HF	12/7/2011	Follow Up
89	PIZZA INDUSTRY/DOMINO'S PIZZA	1307		IMPERIAL BEACH BLVD	HF	1/17/2012	Cleared
80	PIZZA INDUSTRY/DOMINO'S PIZZA	1307		IMPERIAL BEACH BLVD	HF	1/6/2012	NOV
26	PRECISION FOREIGN	1240		PALM AVE	H	11/17/2011	Cleared
5	PRECISION FOREIGN	1240		PALM AVE	H	11/1/2011	Follow Up
105	PRETZLES AND MUCH MORE	10	#D	EVERGREEN AVE	HF	1/26/2012	Cleared
115	RODRIGO'S MEXICAN FOOD	600	#106	PALM AVE	HF	2/17/2012	Cleared
109	RODRIGO'S MEXICAN FOOD	600	#106	PALM AVE	HF	2/8/2012	Follow Up
100	RODRIGO'S MEXICAN FOOD	600	#106	PALM AVE	HF	1/24/2012	Follow Up
35	ROLANDO'S TACO SHOP IB	805		SEACOAST DR	HF	12/1/2011	Cleared

ID	FACILITY NAME	STREET NUMBER	SUITE NUMBER	STREET NAME	Establishment Class	Inspection Date	Follow Up Action
46	SANTANA MEXICAN FOOD	1337		PALM AVE	HF	12/12/2011	Follow Up
37	SEACOAST PIZZA	807		SEACOAST DR	HF	12/1/2011	Cleared
121	SIESTA RV PARK, INC.	409		PALM AVE	H	3/5/2012	Cleared
122	SOMBRERO MEXICAN FOOD	189		PALM AVE	HF	3/20/2012	NOV
111	SOMBRERO MEXICAN FOOD	189		PALM AVE	HF	2/17/2012	Follow Up
124	SOMBRERO MEXICAN FOOD	189		PALM AVE	HF	3/22/2012	Cleared
29	SOPHISTICATED AUTO	987		PALM AVE	H	11/29/2011	Cleared
61	STARDUST DONUT SHOP	698		HIGHWAY 75	HF	12/19/2011	Follow Up
10	SUBSMART DELI-FRESH	1231		PALM AVE	HF	11/2/2011	Cleared
103	SUBWAY 20578	876		SEACOAST DR	HF	1/26/2012	Cleared
63	THAT'S A WRAP	1146	102	13TH ST	HF	12/21/2011	Cleared
104	THE BRIDGE	874		SEACOAST DR	HF	1/26/2012	Cleared
22	THE SCOREBOARD	951		PALM AVE	H	11/16/2011	Cleared
107	THE TIN FISH RESTAURANT	910		SEACOAST DR	HF	1/26/2012	Cleared
36	THE WAVE CAFE	809		SEACOAST DR	HF	12/1/2011	Cleared
64	THE WRIGHT WAY	1051	D	13TH ST	HF	12/21/2011	Cleared
48	TITO AUTO SERVICE	1335		PALM AVE	H	12/12/2011	Cleared
71	WALLY'S MARKETPLACE, INC	836		PALM AVE	H	1/4/2012	NOV
59	WALLY'S MARKETPLACE, INC	836		PALM AVE	H	12/19/2011	Follow Up
87	WALLY'S MARKETPLACE, INC	836		PALM AVE	H	1/11/2012	Cleared
38	WEST COAST KITCHEN	208		PALM AVE	HF	12/6/2011	Cleared
67	WIENERSCHNITZEL #358	1253		PALM AVE	HF	12/22/2011	Cleared
15	WIENERSCHNITZEL #358	1253		PALM AVE	HF	11/10/2011	Follow Up
112	WOODYS AUTO CARE	200		PALM AVE	H	2/17/2012	Cleared

Table 5.4 and Figure 5.1 Interactive Effectiveness Assessments of Commercial Businesses

FACILITY NAME	HAVE YOU HEARD OF OUR STORM WATER PROGRAM BEFORE	IS STORM WATER RUNOFF TREATED WATER IN THIS AREA	WHAT IS THE FINAL DESTINATION OF RAIN
AMERICAN LEGION POST NO 820	5	5	5
BERNARDO SHORES	5	0	5
CARL'S JR. #585	0	0	3
GENE'S AUTOMOTIVE	5	0	5
GUISEPPE'S PIZZA	0	0	0
KATY'S CAFE	5	0	3
K-PASTA	5	0	3
MCDONALDS/SCAROB INC.	0	5	0
NFAROOQI ENT. LLC/JACK IN BOX	0	0	0
SOPHISTICATED AUTO	5	0	0
SUBWAY 20578	5	0	3
WEST COAST KITCHEN	5	0	3
	3.333333333	0.833333333	2.5



6.0 RESIDENTIAL COMPONENT

6.1 Introduction

The City endeavors to prevent or eliminate the discharge of pollutants and runoff from residential sources. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and the City's Code Enforcement Division. Efforts are made to educate the public and oversee compliance with local urban runoff regulations to reduce the release of pollutants to the MEP.

6.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Residential Component is described in the *2008 JURMP Section 8.0*. During the reporting period no updates were made to the high priority residential area inventory. All other program planning and administration elements remain unchanged from the *2008 JURMP Section 8.0*.

6.3 Outcome Level 1b: Implementation of Management Program Activities

The City enforces its storm water ordinances for all residential areas and activities to maintain compliance with the Municipal Storm Water Permit. Public outreach and education as outlined in the *2008 JURMP Section 10.0* encourages residents to comply with the minimum set of BMPs listed in Imperial Beach Municipal Code 8.30.080. The City encourages the use of pollution prevention methods for all residents and provides convenient and cheap house hold hazardous waste disposal. The City also participated as Co-Chair in the Education and Residential Sources Workgroup and Chair of the Underserved Target Audience sub-workgroup.

The following tables and figures presented in this section provide additional information on the implementation and assessment of the Municipal program element:

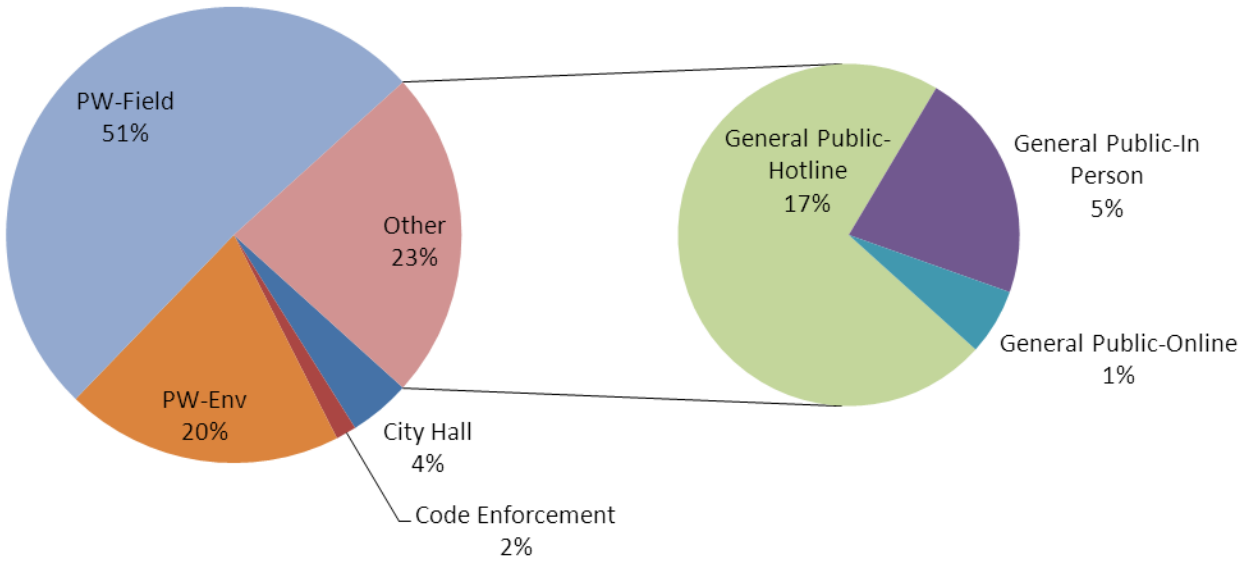
- Table 6.1 Provides an overview of the residential component as it was implemented
- Table 6.2 presents and describes targeted FY 2011-12 outcomes and results
- Figure 6.1 Show the referral source for ICIDs investigations

6.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Residents

Knowledge and awareness of the storm water program by residents is best assessed through the City's response to illegal connections and illicit discharge (ICID) investigations. Figure 6.1 below shows that twenty-three percent of the City's ICID cases come from the public. This is statistically the same as the previous year. This shows that the City is effective in making different stakeholders aware of the importance of reporting storm water violations and more importantly aware of how their own actions effect water quality. Continued commitment to preventing storm water pollution is also seen from City staff. Fifty-seven percent of all cases came from non-environmental City staff. City staff is encouraged to

report violations directly to the Environmental Division. This is an eleven percent increase from the previous year, showing storm water awareness by City staff is increasing.

Figure 6.1 Referral Source for ICID Investigations



6.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Residents

The City facilitates changes in behavior and implementation of BMPs for high threat to water quality activities and residential areas by providing education through face-to-face interactions, disseminating education materials through various media, and responding to illegal discharges. The *2008 JURMP Appendix G* defines minimum BMP requirements applicable to residential areas and activities in the City.

6.6 Outcome Level 4: Source Load Reductions

The City continues to quantify load reductions whenever feasible for disposal of household hazardous waste, used oil, and special clean up events. Pest waste collected by the Ocean Blue foundation is also estimated. The City does not normally track individual source load reductions to receiving waters from residential areas or activities but load reductions can be implied by proper implementation of BMPs.

Table 6.1 – Overview of Residential Component

Category	Pounds	Number	Description
A. Residential Threat to Water Quality Prioritization			
High	---	6	All residential areas in the City are considered high priority.
Medium	---	---	
Low	---	---	
B. House Hold Hazardous, Electronic, and Universal Waste Disposal			
Flammable and Poison	5728	---	Imperial Beach residents have a variety of options for the collection and disposal of house hold hazardous waste. Most residents utilize the South Bay HHW Collection center at the City of Chula Vista. Residents can also drop off used oil at the Auto Zone located at 1344 Palm Ave. and at Express Tire 950 Palm Avenue. The City coordinates used oil disposal that is part of CalRecycle Used Oil Block Grant with the City of Chula Vista. The amount of waste dropped off by Imperial Beach residents is provided in the table to the left. EDCO offers drop off of E-Waste. The City offers curbside pickup of HHW, used oil, and a number of regional collection events for electronic and universal waste. The disposal totals for these additional activities are not provided in this report.
Acid, Base, Oxidizer, and PCBs	321	---	
Reclaimable (Antifreeze, Car batteries, Latex Paint, Used Oil and filters)	6081	---	
Asbestos	3		
E-Waste, Aerosols, Other Universal Waste	10082		
Other HHW	1697		
Total Waste Disposed	23912		

JURMP Sections	Description of FY 2011-12 Changes
8.0 and Appendix G	BMP requirements of the JURMP applicable to residential areas and activities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 6.2 - Residential Component Targeted Outcomes and Results

Residential FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)		
a) Modifications to JURMP		
Update applicable JURMP sections per Permit requirements	No updates made during reporting period	Applicable updates were included in *JURMP Section 6.0*. No significant updates are expected to be necessary during this permit cycle.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)		
Update program documentation for consistency with program updates	No updates made	No updates made this reporting period.
c) Year-End Program Review		
Complete annual year-end program review	Review program for effectiveness and efficiency	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)		
a) Jurisdictional Requirements for Residential Areas		
Identify high threat to water quality areas	Update not needed	All residential areas in the City are considered high threat to water quality areas. The *2008 JURMP Section 8.0* provides a list of high threat to water quality activities.
b) Confirmation of Designated Minimum BMPs		
Require residents to implement BMPs	The City provides education and responds to ICIDs in residential areas	The City requires all residential areas to implement designated minimum BMPs and other measures to prevent the discharge of pollutants to the MEP. The City enforces its *Urban Runoff Management and Discharge Control Ordinance IBMC 8.30* and provides education and outreach to local residents.
c) Facilitate Proper Disposal of Household Hazardous Waste and Used Oil		

Residential FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Facilitate proper management and disposal of used oil and HHW	Provided a variety of disposal options for used oil, toxic materials, and other hazardous waste	The City provides a variety of options for the proper management and disposal of used oil and HHW. Residents are generally directed to drop off hazardous materials at the South Bay HHW center at 1800 Maxwell Rd. The City also provides home pickups of HHW for disabled residents. EDCO also provides pickup of used oil. The City also hosts regional collection events for HHW, used oil, electronic waste, and universal waste.
d) Enforcement of Residential Areas and Activities		
Enforce minimum BMPs in residential areas	Responded to storm water violations reported by staff and public	The Environmental Division responds to storm water violations that are reported by City staff or general public in residential areas and provides enforcement through the use of verbal warnings with distribution of BMP literature, Notices of Violation, Notices of Abatement, and additional penalties or fines and civil and/or criminal court actions
e) Evaluate Methods of Oversight for Residential Areas and Activities		
Evaluate methods of oversight and enforcement for residential areas and activities	Operate storm water hotline and utilizes monthly sewer and street inspections to identify violations	Operated a Storm Water Hotline (619-424-4095) during the reporting period. The City received 23 reports on the Storm Water Hotline (619-424-4095), 7 in-person reports, and 2 online reports for storm water violations in residential areas. The Environmental Division responded to another 105 residential violations reported by City staff.
f) Regional Residential Education Program		
Participate in Regional Residential Education Program	Participated in the Education and Residential Sources Workgroup and chair position of the Underserved Target Audience	During this reporting period the County took the lead on the Education and Residential Sources Workgroup. Significant progress continues to be made in the areas of media and public relations, materials development, outreach to underserved target audiences, partnership development, regional website development, regional brand, regional events, and program assessment through a county-wide telephone survey.
g) Special Investigations		
Implementation of special investigations	No special jurisdictional investigations performed	Special investigations for the Residential component are generally performed through the Regional Copermittee group to maximize the benefit.
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION BY RESIDENETS		

Residential FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Establish a baseline for knowledge of BMPs by residents	No additional assessments were targeted at residents outside of education activities	Knowledge and awareness of storm water issues by residents is assessed through the education program. The City uses brochures, special events, presentations, and ICID investigations as tools to educate local residents on storm water. Assessment results provided in Section 8.0 for residential and general public outreach.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION BY RESIDENTS)		
a) BMP Implementation		
Facilitate pet waste program with the Ocean Blue Foundation	10 pet waste bag dispensers are maintained by the Ocean Blue Foundation	The pet waste bag dispenser program has been maintained and operated by the Ocean Blue Foundation NGO for the last 10 years but starting next reporting period the Public Works Department will be taking over responsibility for the program.
Cleanup activities in residential areas	Implemented cleanup activities as part of the Municipal Component	Under the Municipal Component of the JURMP the City conducts street sweeping, alley sweeps, and cleanup activities in residential neighborhoods. Under the Education Component the City participates in community cleanup events.
b) Violations and Enforcement Actions		
Number of violations and enforcement actions to achieve compliance	Responded to a total of 137 ICID cases	The City operates a Storm Water Hotline (619-424-4095). The City received 23 reports on the Storm Water Hotline, 7 in-person reports, and 2 online report for storm water violations in residential areas. The Environmental Division responded to another 105 residential violations reported by City staff. In total the Environmental Division responded to 137 ICID cases.
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM RESIDENTIAL AREAS AND ACTIVITIES)		
a) BMP Implementation		
Household hazardous waste (HHW) collection	16.697 pounds of HHW collected **Year Pounds** 2008 6,000 2009 10,367 2010 10,377 2011 16,697 2012 23,912	The City's HHW disposal program is available to all residents, and the City partners with other jurisdictions in the South Bay to offer convenient, low-cost HHW disposal options.

Residential FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Used oil collection	6,081 pounds of Reclaimable (Antifreeze, Car batteries, Latex Paint, Used Oil and filters) collected **Year Pounds** 2008 2,110 2009 2,173 2010 3,763 2011 4,329 2012 6,081	The City is required to facilitate the proper management and disposal of used oil, toxic materials, and other HHW through educational and public information activities, and establishment of collection sites operated by the City or a private entity.
Universal and electronic waste collection	10,082 pounds of electronic and universal waste collected **Year Pounds** 2009 2,433 2010 3,025 2011 4,371 2012 10,082	The City facilitates the proper management and disposal of universal and electronic wastes trough both EDCO and the South Bay Regional HHW Program.
Pet waste collection	10 pet waste bag dispensers; 72,800 bags replaced, and an estimate of 18,200 lbs. of pet waste collected	The pet waste bag dispenser program is maintained and operated by the Ocean Blue Foundation, a local not for profit group. The City works with the Ocean Blue Foundation to ensure that the pet waste bag dispensers are maintained and the program has adequate funding. If the average pet waste weighs 4 ounces then an estimate of 18,200 lbs. of waste was collected. The City Council supports the foundation through an annual community grant.

Residential FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Special event recycling and waste management	Home Front Cleanup event had 714 participants and collected 148.95 tons of materials **Year No. Tons** 2009 732 154.3 2010 822 175.6 2011 753 178.8 2012 714 148.9	The City holds an annual Home Front Cleanup event. The Home Front Clean Up had 714 participants and disposed a total of 148.95 tons of materials. That includes93.58 tons of diverted materials (green waste, metal, concrete, and e-waste) that was recycled.

7.0 ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

7.1 Introduction

The City endeavors to prevent municipal discharges from the Municipal Separate Storm Sewer System (MS4) from causing or contributing to a violation of water quality standards. This component is primarily applicable to the Environmental Program Division of the Department of Public Works and its efforts to reduce municipal discharges of pollutants to the MS4 to the maximum extent practicable (MEP).

All components of the JURMP are represented in this report with the exception of this component. The San Diego Regional Water Quality Control Board adopted Addendum No. 2 to Order No. R9-2007-0001 (Municipal Permit), extending the annual reporting deadline associated with this component from September 30th to December 15th. This change was necessary because the program involves water quality monitoring during the dry season, defined as May 1st through September 30th, which does not allow for proper time in which to report and convey information on the dry season as a whole.

The City's implementation and assessment strategy for the illicit discharge detection and elimination component is described in the *JURMP Section 9.0*.

8.0 EDUCATION COMPONENT

8.1 Introduction

The City endeavors to implement a diverse education program in the community to reduce the impacts of urbanization on water quality. Education activities are targeted at the following groups: 1) municipal departments and personnel, 2) construction site owners and developers, 3) commercial and industrial business owners and operators, 4) residents, general public, and school children, and 5) underserved community. This component is applicable to all City departments, in particular the Environmental Program Division of the Department of Public Works, which spearheads the City's education efforts and is responsible for the annual training for municipal employees on the components and goals of the JURMP. Note that each section of this JURMP Annual Report already includes a description of education activities for each element. The City recognizes the long term importance education plays in facilitating the necessary behavioral changes to successfully reduce and eliminate pollutants from urban runoff.

8.2 Outcome Level 1a: Administration of Management Program Activities

The City's implementation and assessment strategy for the Education Component is described in the *2008 JURMP Section 10.0*. During the reporting period the City made no significant updates to the education program. The City continues to focus education efforts at the five targeted community groups. The City tailors each individual education activity to best suit the message and content for the target community; however, the overall message is consistent with the *2008 JURMP Section 10.0*. Minor changes to the program include changes to materials such as handouts, surveys, and educational guidance documents, which are continuously updated throughout the year. The City also continues to seek for ways to expand and improve the effectiveness of the education program.

8.3 Outcome Level 1b: Implementation of Management Program Activities

The Environmental Division oversees the implementation and assessment of the Education Component for the five targeted communities. The following tables and figures presented in this section provide additional information on the implementation and assessment of the Education program element:

- Table 8.1 Provides an overview of the Education program
- Table 8.2 presents and describes targeted FY 2011-12 outcomes and results
- Table 8.3 provides the education activity inventory by target community for FY 2011-12

8.4 Outcome Level 2: Knowledge and Awareness of Program Implementation by Target Community

The City implements an education program for each target community using all media as appropriate to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the

environment. During the reporting period the Environmental Division implemented a variety of techniques to capture changes in knowledge and awareness among the targeted communities. These techniques include the use of surveys, pre and post test, interactive assessments and evaluations during inspections, and regional assessment programs through the Education and Residential Sources (ERS) Workgroup.

8.5 Outcome Level 3: Behaviors and Best Management Practice (BMP) Implementation by Target Community

The City facilitates changes in behavior and implementation of BMPs by providing continuous education for each target audience using a variety of educational tools and media. The continual saturation of education for each target audience is gradually leading to a greater awareness about storm water pollution and the implementation of pollution prevention BMPs. Gauging the level of effectiveness of the education program from one year to the next is a challenging task because of the gradual nature of behavior change, but the City strives to measure this level of effectiveness and behavior change for each target audience whenever possible. Table 8.3 provides a description of how outcome level 3 is assessed for each targeted community.

8.6 Outcome Level 4: Source Load Reductions

Education is a key component of getting to source load reductions through the implementation of BMPs. Source load reductions are not easily tracked from education activities but can be implied through the proper implementation of BMPs.

Table 8.1 – Overview of Education

Category	Number	Description
A. Educational Efforts		
Municipal Departments and Personnel Events	7	Employees are trained annually on the use of BMPs in their daily operations. Face-to-face meetings are held on a regular basis with employees to discuss the JURMP and its application in their operations. Construction Site Owners, Contractors and Developers are trained through face-to-face meetings with the Community Development Department and the Publics Works Department during the permitting process, in inspections, and in investigations of illegal discharges. Commercial Site Owners and Operators are trained through scheduled inspections by the Public Works Department Environmental Division, and through investigations of illegal discharges. All residents receive educational information in the City's newsletter, a newsletter sent out by the City's waste franchisee, website updates, materials provided at City Hall and the Public Works Department, through community presentations, etc. The City also participated with other Co-Permittees in regional outreach events that target the underserved community.
Construction Site Owners, Contractors and Developer Training Events	4	
Public Participation	7	
Commercial Site Owners and Operators Training Events	3	
Residential Community and General Public Outreach Events	12	
Underserved Community	3	
School Children Outreach Events	2	

JURMP Sections	Description of FY 2011-12 Changes
10.0 and Appendix I	BMP requirements of the JURMP applicable to educational areas and activities were modified in accordance with the requirements of the updated Permit in March 2008.

Table 8.2 - Education Component Targeted Outcomes and Results

Education FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
LEVEL 1a OUTCOMES (ADMINISTRATION MANAGEMENT PROGRAM ACTIVITIES)		
a) Modifications to JURMP		
Update applicable JURMP sections per Permit requirements	No major updates during the reporting period	So significant programmatic changers were made to the Education Component during the reporting year. The City is no longer the co-chair of the Education and Residential Sources workgroup because the County is taking the lead to better facilitate consultant contracts for the workgroup.
b) Updates to Program Documentation (Policies, Plans, Procedures, and Forms)		
Update program documentation for consistency with program updates	No updates made during the reporting period	The City implements surveys when feasible at education events to establish a baseline level of knowledge. Minor program updates were made throughout the year to program content to more effectively present education materials.
c) Updates to Training Program		
Update training materials for consistency with *2008 JURMP Section 10.0*	New content added as necessary to training program	The City makes annual updates to training content and materials so that each education activity provides appropriate information for the target audience. For example a new topic for this year included the requirements in the new Construction General permit. The Environmental Division coordinates training program for all targeted audiences.
d) Year-End Program Review		
Complete annual year-end program review	Review program for effectiveness and efficiency	The City continues to improve the implementation of the JURMP by conducting an annual review of each component and incorporating any modifications into the next reporting period.
LEVEL 1b OUTCOMES (IMPLIMENTATION OF MANAGEMENT PROGRAM ACTIVITIES)		
a) Jurisdictional Requirements for Education Component		
Provide education to construction site owners, contractors, and developers	Educated and reinforced minimum BMP requirements for projects	Construction Site Owners, Contractors and Developers are trained through face-to-face meetings with the Community Development and the Publics Works Departments during the permitting process and pre construction meetings. Community Development holds counter hours for project applicant. Education is reinforced through inspections and in investigations of illegal discharges. The City also provides construction BMP info through brochures and on the City's website.

Education FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Provide education for municipal staff	Provided annual training and additional education opportunities to municipal staff	The Environmental Division provided 7 municipal training activities including the annual storm water training for Public Works on 10/26/11. Each division also received refresher training by the Env Specialist during the year. All new employees receive one-on-one training for storm water at the beginning of employment. City staffs are encouraged to attend training activities for storm water program outside the City for example HMP, SUSMP, and GCP. Face-to-face meetings are held on a regular basis with employees to discuss the JURMP and its application in their operations. Annual municipal inspections involve face time with each Division supervisor. Every City vehicle also contains a binder of Municipal Facility and Activity BMPs and MS4 map that get review during annual training.
Provide education to industrial and commercial owners and operators	Provided education to commercial businesses and owners	Commercial businesses receive education on storm water BMPs through a number of different methods inspections, face-to-face interaction with City staff during commercial inspections, through dissemination of education material, and through a follow up inspection letter that summarizes the results of the commercial inspection. The City also provides education to businesses during ICID investigations and educational materials to street vendors for special events. New businesses receive storm water BMP indoctrination when applying for a business permit.
Provide education to underserved community	Provided education to underserved community	Education materials are provided in both English and Spanish. The environmental division incorporates the underserved community in most education activities, which is particularly important to IB due to the large Spanish speaking community. The City also chairs the Underserved Target Audience Sub-Workgroup of the ERS workgroup.
Provide education to residential community, general public, and school children	Provided education to residential community, general public, and school children	The Environmental Division provided 14 education activities targeted to residential community, general public, and school children. Some of the activities included presentation to schools, after school activities at IB Sports Park, media education, Recycling All-Star award, and ILACSD school presentations. The Tijuana Estuary, State Park, FWS, YMCA Camp Surf, Surfrider, and Wildcoast also conduct environmental education and community outreach within Imperial Beach that is not currently tracked by the City but represents a significant effort to promote clean water in the region.

Education FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Provide opportunity for public participation	Provided opportunities for public education	Public participation is encouraged in the development and implementation of the JURMP. The annual JURMP Report is presented at City Council during an open public hearing process. The Environmental Division also facilitates and participates in public cleanup activities that serve as mechanism for public participation in watershed activities and provides proclamations from the Mayor to encourage such efforts.
b) Special Investigations		
Not targeted	Mayor Proclamation for April as Environmental Awareness Month and Oct as TJ River Action Month and Recycle All Star Award	Imperial Beach proclaimed the month of April as "Environmental Awareness Month". Environmental Division scheduled a number of education activities for the month with the afterschool youth at IB Sports Park and selected a weekly recipient for the Recycling All-Star award for the month. These activities were in addition to the normal Earth Day celebrations in the region. The month of October was also proclaimed as Tijuana River Action Month. The City and EDCO also encourage recycling through the Recycle All Star program that awards $100 to a select resident each month that demonstrates good recycling practices (which also includes clean curb and gutters in front of home).
LEVEL 2 OUTCOMES (KNOWLEDGE AND AWARENESS OF PROGRAM IMPLEMENTATION)		
a) Construction Site Owners and Developers		
Assess knowledge and awareness for construction site owners and operators	Assessed knowledge whenever possible	Most construction activity in the City is from small discretionary projects and CIPs. Knowledge and awareness is achieved through proper submittal of storm water documents and proper implementation of BMPs. All projects are required to submit the necessary storm water documents and implement BMPs. Deficient projects receive proper education from staff. General outcomes reveal a high level of knowledge from larger contractors and a lesser understanding of BMPs from smaller general contractors.
b) Municipal Departments and Personnel		
Assess knowledge and awareness for municipal staff	Assessed knowledge though surveys and regular meetings. Public Works survey average score of 9.58/10 correct answers.	Surveys are administered during annual storm water training events. The surveys are generally challenging in nature because personnel staff are expected to have a high level of understanding of storm water program. Surveys are administered at the begging of the training session and used as a tool to highlight specific topics during the training session.

Education FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
c) Industrial and Commercial Site Owners and Operators		
Assess knowledge and awareness for commercial businesses	Assessed through interactive assessment process. Assessment results provided in Table 5.4 and figure 5.1 in the Commercial Section.	The Environmental Division incorporates an interactive effectiveness assessment of commercial businesses and rates businesses on a scale of 1 out of 5. The results of the assessment are presented in Table 5.4 and Figure 5.1 in Section 5 for Industrial and Commercial Component.
d) Underserved Community		
Assess knowledge and awareness for underserved community	Assessed though Regional Copermittee group	The Education and Residential Sources Workgroup provides targeted assessment of the underserved community through event surveys and a countywide phone survey. The ERS workgroup have completed two countywide phone surveys that provide a pre and post assessment during the past 5 year permit cycle.
e) Residential Community, General Public, and School Children		
Assess knowledge and awareness for residential community, general public, and school children	Assessed through surveys during presentations and at events	The City worked with ILACSD to conduct targeted education and assessment for high school children. Results of pre and post test indicate a change in knowledge of high school students of 35% points between pre and post test. After the presentation students also indicated a higher likelihood of taking action to keep their watershed clean.
LEVEL 3 OUTCOMES (BEHAVIORS AND BMP IMPLEMENTATION FROM EDUCATION ACTIVITIES)		
a) Construction Site Owners and Developers		
Number of construction projects that were not in compliance with BMPs	7 of 71 construction projects were out of compliance with BMPs. 90% of active construction projects in compliance with site BMPs	Most construction projects (90%) implemented the necessary BMPs as prescribed in conditions to contain potential contaminates on site. Non-compliant projects received additional education and a follow up investigation to ensure the proper BMPs were implemented and maintained.
b) Municipal Departments and Personnel		

Education FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
Number of ICIDs identified and reported by municipal staff	Municipal Staff identified 105 out of 137 ICID during the reporting period. Total ICID: 137 Public Works: 97 City Hall Staff: 8	One component of the annual municipal training is the proper identification of ICIDs. During FY 2011-12 City Staff identified 77% of the reported ICIDs with non-storm water staff identifying 57% of the incidents, which again reinforces the high results from municipal staff training. General pubic reporting through online complaint form or hotline calls made up only 23% of the overall cases.
c) Industrial and Commercial Site Owners and Operators		
Number of commercial businesses not in compliance with minimum BMPs	31 out of 71 commercial businesses were out of minimum BMP compliance. 56% of high priority businesses in complete compliance with minimum BMPs (up from 48% last year)	The City inspects 100% of high priority commercial businesses annually for proper implementation of BMPs. During the reporting period the city inspected 71 commercial businesses with the result of 14 businesses receiving an NOV for non-compliance with minimum BMPs and 31 additional businesses having minor violations that required a follow up inspection. In total 31/71 businesses required some type of enforcement action and reinsertion for minimum BMPs. A total of 111 inspections were performed.
d) Underserved Community		
Not targeted	Regional ERS Workgroup conducted the second countywide phone survey reported in RURMP.	The underserved community is not specifically targeted but rather included in all existing education programs. The city does work with Wildcoast to target Spanish speaking and underserved residents as well as underserved youth through after school programs at the IB Sports Park. Behaviors and BMP implementation are more effectively addressed through the Regional Copermittee group where 2 Countywide phone surveys have been conducted.
e) Residential Community, General Public, and School Children		
Number of education activities that target behavior change	14 education activities during the reporting period	Assessing changes in behavior and BMP implementation across the whole community is best addressed through regional programs. Imperial Beach focuses on targeting education through a variety of media and interactive programs that target the most people possible. Anecdotal observations from City staff reveal a continuous improvement in BMP implementation across all targeted audiences as the persistent storm water education message gradually changes public behavior.

Education FY 2011-12 Results		
Targeted Outcome	Implementation Result	Explanation
LEVEL 4 OUTCOMES (SOURCE LOAD REDUCTIONS FROM EDUCATION ACTIVITIES)		
a) BMP Implementation		
Source load reduction	Provided education to targeted audiences. Total number of education activities:38	Source load reductions are not easily tracked from education activities but can be implied through proper implementation of BMPs. Source load reductions from cleanup activities are tracked and reported separately.

Table 8.3 Education Activity Inventory by Targeted Community

Education Activity	Date	Activity or Event Description	Topics	Participants	Effectiveness Assessment
Municipal Departments and Personnel					
Public Works Annual JURMP Training	10/26/2011	Annual Storm Water JURMP training for Public Works	Annual training on PW facility and activities BMPs, LIDs, and Tijuana River update	26	Survey and post assessment (Avg.: 9.58/10)
FYI to City Staff and Council	Weekly	Provided multiple updates on various storm water topics and current events through a weekly email newsletter sent to City staff and Council	Storm Water Program	City Staff and Council	
Code Enforcement Meeting	Monthly	Monthly meeting with Code Enforcement, Fire Inspector, Building Inspector, Community Development, and Environmental Division	Code enforcement issues many of which pertain to storm water	Env, Code, Fire, and Building Divisions	
Community Development Meeting	Weekly	Weekly staff meeting with managers from community development related to interdepartmental issues including storm water	new buildings, BMPs, storm water program	6	
Emergency Reponses Plan Training	8/10/2011	Review City's emergency response plan	Emergency shut off for fuel, equipment operations, spill response	23	
Complete Streets Workshop	6/22/2012	All day workshop on complete streets	Green streets, complete streets, and regional planning	2	
Construction General Permit	multiple	QSP and QSD General Construction Permit training (JS Storm water, URS, and RBF)	QSP/QSD certification	4	Passed test exam QSP
Construction Site Owners and Developers					
Copy of storm water/grading/erosion control requirements attached to Imperial Beach issued permits and construction BMP brochure.	On going	Community Development Department disseminates BMP and storm water information with permits	BMP, pollution prevention, City storm water requirements	---	
Community Development counter hours	On going	Counter hour for education relating to construction and development in the City	BMPs, pollution prevention, City storm water regulations	---	
Streets 3B Pre Construction Meeting	12/14/2011	Review project and BMP requirements with contractors and subs	BMPs and project schedule	14	
Streets 4/5 Pre Construction Meeting	1/5/2012	Review project and BMP requirements with contractors and subs	BMPs and project schedule	14	
Commercial Owners and Operators					
Commercial Inspection	On going	Commercial business inspections	Pollution prevention, BMPs, storm water regulations		

Education Activity	Date	Activity or Event Description	Topics	Participants	Effectiveness Assessment
Follow up inspection report and letter	On going	Each commercial inspection is followed up with summary report and BMP brochures by mail	Commercial BMPs, recycling and pollution prevention		
Sand Castle vender packed and inspections	7/21-24/2011	Education to Vendors and inspections during the event	Storm water pollution prevention, ICIDs	35	
Residents and General Public					
EDCO Shredding Event	7/9/2011	EDCO collected paper to shred at Mar Vista HS	Proper waste management	54	1.06 tons of paper recycled
Water Quality Workshop (When is it safe to swim?)	10/12/2011	Community workshop on beach water quality	County DEH, SCCOOS, Regional Board, Lifeguards, Coastkeeper presentations	40	
Day Without a Bag	12/15/2011	Surfrider handout reusable bags at Wally's IGA	Trash	250	
Day Without a Bag	12/15/2011	City staff handout bags at City Hall and Library	Trash	50	
City Council presentations on Tijuana River	7/6/2011 8/17/2011 2/15/2012 4/4/2012 4/18/2012 6/6/2012	Multiple updates at City Council Meetings on topics related to the environmental issues in the Tijuana River.	Over view of regulatory agencies in US and Mexico; wastewater treatment in Mexico; SCCOOS; TJ River Bacteria Study; IBWC	Public City Council Meeting	
FY 2010-11 JURMP AR Public Hearing	9/7/2011	Public hearing at City Council meeting	Overview of the FY 2010-11 JURMP AR components	Public City Council Meeting	
City Semi-Annual E-news letter	Summer / Winter	Included articles on storm water, Recycling, HHW, and street sweeping	Pollution prevention; storm water BMPs; Recycling HHW; Special Events; Street sweeping	Citywide	
EDCO Environmental Times Mailer	Quarterly	Published a variety of environmental articles in the Summer , Fall, Winter, and Spring EDCO news letters sent to all residents	Pollution prevention, special events, HHW, recycling, and storm water regulations	Citywide	
Citywide Garage Sale	4/28/2012	Annual citywide garage sale to promote reuse of items	Recycle and reuse	90	90 participants received training material from Env Division
Home Front Cleanup	5/5/2012	Citywide annual home front cleanup event	trash, recycling, HHW	714	Trash: 35.8 tons; Green waste: 20.7 tons; metal: 16.4 tons; con-demo: 72.2 tons; e-waste 7.4 tons
Christmas Tree Recycling	12/27/11 - 1/17/12	City provides 3 locations for xmas tree recycling with info	trash, recycling, and BMPS	Citywide	

Education Activity	Date	Activity or Event Description	Topics	Participants	Effectiveness Assessment
Eagle and Times and UT newspaper	Multiple	Articles from City PR on variety of topics advising the community on storm water related issues	Go green in IB for Environmental Awareness Month; Tijuana River Action Month	Citywide newspaper	
Underserved Community					
Underserved Target Audience Sub workgroup	On going	Co-chair of Education Residential Sources Workgroup, Chair of Underserved Target Audience sub-workgroup	Representation of the under community in all aspects of the regional education program	Region wide	
Spanish Calendars	2012	Developed 2011 storm water Spanish calendars and distributed 2000 through Wildcoast as part of regional Education program	Multiple storm water themes	2000	
Storm Drain Stenciling	4/21/2012 4/28/2012	Wildcoast storm drain stenciling in Imperial Beach for Env Awareness Month	Pollution prevention	20	
School Children					
ILACSD Mar Vista High School Presentations	3/23/2012	Mar Vista HS 9th, 10th, and 11th grade presentations	Storm water, watersheds, Tijuana River estuary, San Diego Bay	95	Pre and Post Tests (35% improvement)
IB Sports Park for April as environmental awareness month	4/25/2012 4/26/2012	After school activities with education staff from the Tijuana Estuary at IB Sports Park	watershed, storm water, environmental	30	
Public Participation					
Mayor Proclamation Tijuana River Action Month	10/5/2011	Public presentation at City council meeting and designation of Sep-October as TJ River Action Month	Volunteer appreciation and recognition of agency efforts in TJ River	Public City Council Meeting	
Mayor Proclamation Environmental Awareness Month	3/21/2012	Public presentation at City Council meeting and designation of April as Environmental Awareness Month in IB	Multiple environmental education activities for the month of April	Public City Council Meeting	
Coastal Cleanup Day	9/17/2011	Multiple location in TJ watershed on both sides of the border	Trash cleanup event with Wildcoast, Surfrider, and ILACSD	200+	
Fiesta del Rio	9/11/2011	All day event at Pier Plaza hosted by the TJ Estuary education staff.	Multiple topics that include storm water education	1000+	
Tijuana River Cleanup	10/15/2011	Cleanup at Dairy Mart Road	Cleanup coordinated by Wildcoast and Surfrider	45	
Creek to Bay Cleanup	4/28/2012	Annual Coastkeeper Creek to Bay cleanup	Cleanup of multiple location in the region including IB	Region wide	
Sand Castle Event	7/21-24/2011	Annual Sandcastle event with church group providing volunteers for trash and recycling service and enforcement of BMPs for street vendors	Trash, Recycling, and storm water BMPS	Large Event	

9.0 Public Participation

9.1 Introduction

The City is required to incorporate a mechanism for Public Participation in the updating, development, and implementation of the JURMP. Public involvement in the JURMP leads to a greater understanding of public perception and attitudes towards the problem of storm water pollution and helps the City implement a more effective storm water program. The Environmental Division regularly interacts with residents, commercial businesses, municipal staff, and developers while conducting inspections, education activities, BMP enforcement, and other JURMP implementation components. The City also makes additional efforts to include public participation in the implementation and development of the JURMP by providing opportunities throughout the year to provide comments and feedback.

9.2 Public Participation Efforts

The City holds a public hearing and solicits public comments prior to the adoption and submittal of the JURMP and its Annual Reports. The public was notified on this Annual Report in the Imperial Beach *Eagle & Times* newspaper and through public hearing notices that were posted at City Hall and the Imperial Beach Public Library. A draft of this JURMP Annual Report was made available for public viewing at the Imperial Beach City Hall, posted on the City's website, and presented at a public hearing to City Council on September 19, 2012.

Other public participation mechanisms the City uses include the operation of a storm water hotline and online reporting tool to report violations, coordination of cleanup activities such as the pet waste bag program and trash clean ups with local organizations, involvement with local environmental groups to spread awareness of urban runoff pollution, the City's storm water education program, participation with civic organizations, Mayor proclamations for Tijuana River Action Month and Environmental Awareness Month, and City special events.

10.0 Fiscal Analysis Component

10.1 Introduction

The Environmental Program Division of the Department of Public Works is responsible for the fiscal analysis of the storm water program. Implementation costs for the JURMP are approximately $773.075. Revenue source used by the City to fund the requirements of the Municipal Permit is the City general fund. The City also administered two grant projects in the approximate amount of $577,247 for the Tijuana River Bacteria Source Identification Study and the Los Laureles Trash Tracking Study

10.2 General Budget Information

The costs of implementing the JURMP are spread across the whole City. Each Department and associated Division has an established role in implementing the components of the JURMP. However, the primary responsibility of implementing the storm water program is split between the Department of Public Works and Community Development Department.

10.3 Fiscal Analysis Methods

The Standardized Fiscal Analysis Methods and Format (Fiscal Analysis Methods) were collaboratively developed and adopted by the Copermittees in January 2009 in accordance with sections G, J.1.a(3)(k), and J.1.c(1)(d) of NPDES Order No. R9-2007-0001. This section of the JURMP report follows the standardized Regional Fiscal Analysis Methods adopted by all Copermittees.

10.4 Fiscal Analysis Results

10.4.1 Expenditures

The expenditures for FY 2011-12 are provided in the tables below. The standardized fiscal analysis method does not exactly correspond to the line item budget maintained by the City. The values presented in Table 10.1 are therefore an extrapolation of the expenditures made that correspond best to the itemized categories. Table 10.2 also provides the expenditures related to City grant funded projects which included the Prop 50 Clean Beaches Initiative grant for the Tijuana River Bacteria Source Identification Study and the Cleanup and Abatement funding for the Los Laureles Trash Tacking Study.

The implementation of all JURMP Components involves every City Department and Division and the actual implementation costs for the program may exceed the amount posted below. The costs being reported only cover the expenditures tracked by the City of Imperial Beach Environmental Division budget.

Table 10.1 Expenditures on JURMP for FY 2011-12

Administration	$142,906
Development Planning	$80,295
Construction	$11,150
Municipal	$287,020
Industrial Commercial	$6,920
Residential	$16,695
IDDE	$34,440
Education	$16,447
Public Participation	$9,420
Special Investigations	$0
Non-Emergency Firefighting	$99,656
Regional Costs	$68,124
Total	**$773,075**

Table 10.2 Grant Funded City Projects FY 2011-12

Tijuana River Bacteria Study	$ 562,247
Los Laureles Trash Tacking	$15,000

10.4.2 Funding Source

Revenue source used by the City to fund the requirements of the Municipal Stormwater Permit is exclusively from the City's general fund.

11.0 Program Effectiveness Assessment

11.1 Introduction

The Environmental Program Division is responsible for the effectiveness assessment of JURMP activities and implementation of BMPs for each major component of the storm water program. Effectiveness assessments are incorporated into the storm water program whenever feasible to help inform the adaptive management process.

The structure of this Annual Report evaluates the level of effectiveness for each JURMP component in the context of program planning, management, and implementation. The City uses the structural hierarchy of levels that were established in the *2003 Framework for Assessing the Effectiveness of Jurisdictional Urban Runoff Management Programs*. Each section of this Annual Report incorporates program effectiveness on Outcome Level 1through Outcome Level 4. In general, Outcome Levels 1, 2, and 3 are best addressed on a Jurisdictional scale. Outcome Level 4 measurements of load reductions are provided whenever possible, but for the most part, assessment of changes to water quality (Levels 4, 5, and 6) are best addressed at the watershed or regional scale.

11.2 Outcome Level 1a: Administration of Management Program Activities

The administration of management program activities addresses modifications to the *2008 JURMP*, updates to program documentation or procedures, end of the year program review, and updates to inventories for next fiscal year.

The City's implementation and assessment strategy for the program effectiveness is described in the *JURMP Section 13.0*.

11.3 Outcome Level 1b: Implementation of Management Program Activities

The implementation of management program activities addresses BMP confirmation requirements, proper documentation, training, inspections, public awareness and response, and special investigations for each component of the *2008 JURMP*. The tables in each section of the Annual Report present and describe targeted outcomes and results based on program implementation for the reporting period.

11.4 Outcome Level 2: Knowledge and Awareness of Program Implementation

Knowledge and awareness are targeted and assessed as necessary within each element of this Annual Report independently.

11.5 Outcome Level 3: Behaviors and Best Management Practice (BMP)

Behaviors and BMP implementation are assessed within the tables located in each section of this Annual Report.

11.6 Outcome Level 4 – Source Load Reductions

Source load reductions are targeted and assessed as necessary within each element of this Annual Report independently.

12.0 Special Investigations

12.1 Introduction

This section describes special investigations that were conducted above and beyond Permit requirements, but with the ultimate goal of better understanding and controlling urban runoff and storm water pollution. Special investigations relevant to each JURMP component are assessed in the tables of each section of this Annual Report. The discussion presented in this section provides additional details on the special investigation for the Tijuana River Bacterial Source Identification Study and Los Laureles Trash Tracking Study.

12.2 Tijuana River Bacteria Source Identification Study

In April 2008, the City of Imperial Beach (City) was awarded a Clean Beach Initiative (CBI) grant by the State Water Resources Control Board (SWRCB) (Grant Program Agreement No. 07-584-550-0) to assess the potential sources of indicator bacteria on the United States (U.S.) side of the Tijuana River Watershed that may be impacting the Tijuana River Estuary and adjacent beaches. The resultant project was named the *Tijuana River Bacterial Source Identification Study*. The contract timeline for the work identified for the study was as follows:

- The SWRCB Contract for the City of Imperial Beach was awarded in February 28, 2008.
- The Contract was closed by the SWRCB due to the State-wide funding crisis on December 17, 2008.
- The Project was reopened on May 6, 2010.
- The Project end date is October 1, 2012.

The overall goal of the study was to identify sources of indicator bacteria in the Tijuana River Watershed within the U.S. side of the U.S./Mexico border that have the potential to impact the Tijuana River Estuary and adjacent beaches. Within this larger framework, the study had several specific objectives:

1. Identify anthropogenic sources of bacteria,
2. Identify non-anthropogenic sources of bacteria,
3. Assess annual bacteria loads into the Tijuana River,
4. Identify point and non-point sources (NPSs) of bacterial pollutants, and
5. Develop best management practices (BMPs) to reduce bacterial loads originating in from the U.S. side of the border.

To address these objectives, the project had several elements:

- Multiple Sanitary and Dry Weather Surveys,
- Wet Weather Assessments of multiple storm events,
- A Series of Special Studies (Groundwater, Goat Canyon Sediment, and Seacoast Dr. sewer line)
- BMP Concept Designs and Prioritization for urban areas in the US.

There were numerous findings from this multi-year, multi-faceted study. The final report will be submitted to the State Water Board in October and available on the City's website. The major conclusions drawn from the results of the monitoring and special studies are summarized below.

- The pollution sources and their impact on the Tijuana River Estuary vary dramatically by season. During dry weather, the estuary is relatively un-impacted from the watershed, and the estuary is a healthy, vibrant and vital ecosystem. During storm events, flows from Mexico transform the estuary into a severely impacted, polluted and hazardous water body with extremely elevated bacterial concentrations and elevated potential health risk to the environment and the public.
- Extensive dry weather and sanitary surveys revealed several locations in the watershed where indicator bacterial concentrations were high, or there was evidence of human fecal contamination, but the contamination was determined to be ephemeral and not related to a consistent source (such as leaking infrastructure).
- Dry weather surveys also revealed that there is very little hydrologic connection between watershed surface waters and the estuary (with the exception of some small drainages).
- Semi-natural BMPs such as soft-bottom sediments and ponds at the base of the major sub-drainages prevent the large majority of dry weather flows from entering the estuary.
- During wet weather, approximately 99% of the indicator bacterial loads entering the Tijuana River Estuary and Pacific Ocean originate from un-diverted flows from the Tijuana River main stream and tributary channels from Mexico.
- Proactive steps to reline the sewage system along Seacoast Drive by the City of Imperial Beach appear to have eliminated a suspected source of human fecal contamination from entering the northern arm of the estuary.
- Groundwater associated with the main stream of the Tijuana River at the U.S. Mexico Border may have elevated bacterial and nutrient levels compared to relatively clean sites closest to the estuary, suggesting the groundwater may not be a likely source of bacterial contamination to the estuary. However, the presence of enterovirus at sites closest to the estuary suggest that further studies may be needed to better understand surface groundwater interactions and the potential risk to estuary surface waters from groundwater resources.
- Sediments within the Goat Canyon Sediment Basins appear to act as a reservoir for indicator bacteria that has the potential to impact receiving waters for several days if the sediment were used for beach replenishment. Further studies are needed to clarify potential impacts indicated by this initial, small-scale study.
- Based on the findings of these studies, BMPs were designed and prioritized on their ability to reduce bacterial loads and will serve as a tool for managers to reduce potential impacts to the Tijuana River Estuary.

12.3 Los Laureles Trash Tracking Study

In June 2011 the City was awarded $15,000 in funds from the State Water Board Cleanup and Abatement Account for the Los Laurels Trash Tracking Study. The purpose of the study was to scientifically document the trans-border flow of trash into the Tijuana River Valley from illegal stockpiles originating in Mexico. The results of this study provide an important step towards developing bi-national policy to address cross border sources of trash that ends up in the Tijuana River Valley. The project was a joint effort by UCSD, City of Imperial Beach, and Tijuana River National Estuarine Research Reserve.

The goals and objectives of this project are as follows:

1. To Produce a Scientific Record of unmanaged Open Dump Sites in Los Laureles Canyon
   a. Objective – Geo-locate and map all significant open dump sites using GPS and ArcGIS software
   b. Objective – Record spatial attributes, land-use, and soil conditions of dump sites (in an effort to qualify conditions that stimulate waste flows)
   c. Objective – Create database of sites attributes and geography including descriptive attributes of waste found at dump sites

2. Track the Flow of Trash from Los Laureles Canyon to TRNERR during Coastal Storms
   a. Objective – Deploy 2,000 Trash-Tracker Probes housing RFID tags at significant dump sites in canyon (approx. 100 sites)
   b. Objective – Map the course of trash-flows using ArcGIS software
   c. Objective – Geo-locate Trash-Tracker Probes on the U.S. side of the border (post-storms) using RFID technology and map resting places

3. Share Scientific Record with Stakeholders: Community Members/Policy Makers/Government Officials
   a. Objective – Provide database of baseline data
   b. Objective – Provide map of canyon dump site locations
   c. Objective – Provide map of trash-flow (initial site, progress, resting place)
   d. Objective – Provide stakeholders with final analysis of case study

Work started on the project in the fall of 2011 prior to the first winter storms with the placement of trash probes in Mexico at identified illegal dumpsites. The trash probes that made it across the border were then collected in the spring of 2012 on the US side of the border from the Goat Canyon sediment basin. The results of the study demonstrated the hypothesized link between illegal trash dumpsites in Mexico and the trash that makes it across the border into the Tijuana Estuary every winter. The results of the study were presented to officials in Mexico and United States and lead to increased efforts in 2012 by Mexican authorities to clean up trash from illegal dumpsites and create constructive dialogue between both countries to better manage the trans-border flow of trash.

13.0 Non-Emergency Fire Fighting

13.1 Introduction

The City requires pollution prevention measures and BMPs to reduce or eliminate non-emergency firefighting flows. The Environmental Division assists the Fire Department in implementing control measures to prevent or control pollutants from both emergency and non-emergency firefighting activities. The 2008 JURMP Section 2.2 identifies the BMPs that are implemented as part of firefighting activities.

Non-emergency firefighting activities, such as training activities that simulate emergency responses, are performed in a manner that eliminates discharges to the storm water system whenever practicable, and minimizes discharges to the storm water conveyance system when elimination of discharges is practicably unavoidable. The following best management practices are implemented as part of these activities:

- Water flows are directed to landscaped areas whenever possible
- When flowing water to an area where landscaping does not prevent runoff, the area selected shall be surveyed by the Officer in charge prior to training activities to ensure that debris will not enter into the storm water system as a result of the drill
- Areas that have debris, which could potentially enter the storm water system as a result of the drill activities, will not be used for training until debris has been removed. Referrals to the Department responsible for the debris removal will be made as needed
- Live fire training activities will be pre-planned to allow integration of barriers to off-site runoff, which could contribute to storm water discharges
- Discharges from maintenance of equipment and restoration of hoses, vehicles, tools, ladders and other emergency response equipment are directed to the sewage, and dry methods are used whenever practical
- Staff is trained on good housekeeping practices to be used during standard facility maintenance procedures
- The firefighting personnel and inspectors receive annual pollution prevention training from Environmental Specialist
- Vehicle washing or equipment cleaning is conducted over a wash bay that drains to the sewer
- The fire inspector participates in monthly code enforcement meetings

14.0 JURMP Revisions

14.1 Introduction

The Environmental Program Division of the Department of Public Works is responsible to maximize program effectiveness by identifying and describing any JURMP modifications that are made during the reporting period, or that are proposed or planned for the next reporting period. Under the reporting format of this Annual Report, any modification or proposed changes made to the *2008 JURMP* are identified in the Program Planning and Administration subsection within each preceding Section of this report.

14.2 JURMP Updates

During the reporting period the City did not make any significant changes to the JURMP storm water program. No significant updates are anticipated until the Regional Board adopts a new region wide MS4 permit. The release of the next draft permit is anticipated for the fall of 2012. The City is currently working with Regional Board staff and the San Diego County Copermittees, Riverside, and Orange County on the next update to the MS4 permit. It is anticipated that the next permit will allow for a more adaptive and watershed approach based permit. Until the next permit is released, the City will continue to implement the current JURMP program.

15.0 Conclusions and Recommendations

15.1 Introduction

The City continues to made progress in further developing and refining its urban runoff and management program. The City believes that the management programs and activities implemented by municipal staff demonstrate a high level of compliance with the regulatory mandates of the Municipal Storm Water Permit, and underscore the City's commitment to reducing and eliminating pollutants related to urban runoff. The City's urban runoff management program outlined in this Annual Report successfully meets these regulatory requirements and in some cases exceeds the minimum Permit requirements.

The JURMP and all the Annual Reports are a living document that evolve over time and build upon the success and sometimes failure of management program activities. The City endeavors to implement the most effective storm water program possible, building upon the existing program, and given the resources that are available to the City. Looking forward to FY 2012-13 and beyond, the City is committed to continuing with many of the programs and management activities implemented in this report. The City is also looking ahead to the next reissued storm water permit for 2013 that will include adaptive management and a watershed approach to program implementation as guiding principles. The City is committed to working with the Copermittees, Regional Board, and local stakeholders on the next permit to implement a sustainable storm water management program that balances environmental, economic, and social needs.

APPENDIX 1

Commercial Business Inventory FY 2011 – 12

FACILITY NAME	ST. No.	ST. NAME	City	State	ZIP CODE	Hydrologic Area	SIC CODE	NAICS Code	PRINCIPLE PRODUCTS SERVICES	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	latitude	longitude
13TH ST MARKET	1126	13TH ST	I.B.	CA	91932	911.11	6162	522390	CKCASH									X	Yes	Yes	6330221900	32.575943	-117.105862
7 ELEVEN 18322/RNJ ENTERPRISES	657	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL	X				X	X			X	No	No	6252541100	32.58376	-117.118931
7-ELEVEN 13563	197	PALM AVE	I.B.	CA	91932	910.1	5999	453998	RETL	X				X	X			X	No	No	6251912500	32.583807	-117.129828
7-ELEVEN 24344	1311	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL	X	X	X		X	X			X	No	No	6270111800	32.58364	-117.105344
7-ELEVEN STORE #23982A-2131	1303	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	5999	453998	RETL	X	X	X		X	X			X	Yes	Yes	6330310100	32.576412	-117.105527
AB BRITE CLEANERS & LAUNDRY	674	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE									X	No	No	6251401700	32.58408	-117.118594
AFTER SCHOOL UNLIMITED	497	11TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6260600600	32.587617	-117.110422
ALBETO'S TACO SHOP	1183	13TH ST	I.B.	CA	91932	911.11	5812	722110	EATING	X	X		X	X	X			X	Yes	Yes	6330313000	32.575108	-117.105547
ALL AMERICAN CAR WASH IB	1158	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE		X	X			X			X	No	No	6262300500	32.58413	-117.109042
ALL PHASE DEVELOPMENT	1187	13TH ST	I.B.	CA	91932	911.11	1799	238990	GENCONT										Yes	No	6330311500	32.575049	-117.105547
ALL PRO HOME IMPROVEMENTS	1258	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6265420900		
ALLSTATE INSURANCE	1228	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6262411900	32.58412	-117.10735
AMANDA'S HAIRSTYLING	637	9TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262121400	32.584887	-117.114135
AMERICAN LEGION POST NO 820	1268	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6262420900	32.58412	-117.106402
AMERICAN OMBUDSMAN ENTERPRISES	150	PALM AVE	I.B.	CA	91932	910.1	7389	561499	PROF										No	No	6250140700	32.58408	-117.130638
AMOR FLOWERS & TUX	181	PALM AVE	I.B.	CA	91932	910.1	5999	453998	RETL										No	No	6251911700	32.583808	-117.130104
ANCHOR MOTORS	740	PALM AVE	I.B.	CA	91932	910.2	5012	421110	AUTO					X					No	No	6262021900	32.5841	-117.117599
ANN PHAM	750	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839

FACILITY NAME	ST. No.	ST. NAME	City	State	ZIP CODE	Hydrologic Area	SIC CODE	NAICS Code	PRINCIPLE PRODUCTS SERVICES	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	latitude	longitude
AROMA THAI RESTAURANT	757	SEACOAST DR	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6251920400	32.58251	-117.131642
ARTCO PICTURE FRAMES	716	BASSWOOD AVE	I.B.	CA	91932	910.2	5046	421440	WHOL										No	No	6260212300	32.590411	-117.117504
ARTWHEEL	133	ELDER AVE	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6253530400	32.578692	-117.13094
ASHLEY DE FRATES	704	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251811305	32.583555	-117.131854
ASHUR LIQUOR	750	13TH ST	I.B.	CA	91932	910.2	5999	453998	RETL									X	No	No	6263121400	32.583011	-117.105839
AT&T	1497	13TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6332234700	32.569207	-117.10548
AT&T MOBILITY	600	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
AT&T MOBILITY	825	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	7602421200	32.576429	-117.116015
AUNT ELLEN'S WATER	600	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6251401400	32.584072	-117.120629
BEACH CLUB GRILLE	710	SEACOAST DR	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6251821051	32.583076	-117.1318
BEACH SIDE STATION	681	HIGHWAY 75	I.B.	CA	91932	910.2	5541	447190	GAS	X	X	X		X	X			X	No	No	6262501200	32.584501	-117.118603
BEAN THERE BREWED THAT	600	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6251401400	32.584072	-117.120629
BERNARDO SHORES	500	HIGHWAY 75	I.B.	CA	91932	910.2	7033	721211	RVMOBIL		X			X				X	No	No	6251402000	32.586034	-117.120221
BIBBEY'S GIFT SHOP	903	SEACOAST DR	I.B.	CA	91932	910.1	5999	453998	RETL									X	No	No	6253510100	32.580109	-117.131601
BIBBEY'S SHELLS AND ROCKS	903	SEACOAST DR	I.B.	CA	91932	910.1	5999	453998	RETL									X	No	No	6253510100	32.580109	-117.131601
BIG KAHUNA'S PIZZA N STUFFS	600	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X				No	No	6251401900	32.584072	-117.120629
BILBRAY TAX SERVICE	970	SEACOAST DR	I.B.	CA	91932	911.11	7389	561499	PROF										Yes	No	6253400700	32.578645	-117.131891
BILLIE JEAN'S HAIRSTYLING	1144	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6261700500	32.58413	-117.109567
BOCA RIO PRINT	497	11TH ST	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6260600600	32.587617	-117.110422
BOWMAN'S MARKET	1008	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL									X	No	No	6262221100	32.584072	-117.111372
BOYS & GIRLS CLUB OF IB	847	ENCINA AVE	I.B.	CA	91932	910.2	7999	713990	BINGO										No	No	6264001200	32.580074	-117.115705

FACILITY NAME	ST. No.	ST. NAME	City	State	ZIP CODE	Hydrologic Area	SIC CODE	NAICS Code	PRINCIPLE PRODUCTS SERVICES	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	latitude	longitude
BOYS & GIRLS CLUB OF IB	847	ENCINA AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6264001200	32.580074	-117.115705
BRIDGET FAIRFIELD	704	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251811305	32.583555	-117.131854
BRYANTS AUTO REGISTRATION SVS	1235	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263111400	32.58364	-117.107297
BULLPEN TAVERN	706	HIGHWAY 75	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6262011100	32.584607	-117.117769
BY THE SEA RESIDENTIAL CARE	829	EMORY ST	I.B.	CA	91932	910.2	8361	623990	DAYCARE										No	No	6263220400	32.581758	-117.112893
C.H. DONUTS	1070	13TH ST	I.B.	CA	91932	911.11	5812	722110	EATING	X	X		X	X	X			X	Yes	Yes	6265421100	32.577073	-117.105853
CA ALUMINUM&VINYL WINDOWS INC	754	10TH ST	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262821500	32.58299	-117.111994
CA STATE PARKS/TJ RIVER ESTUAR	301	CASPIAN WAY	I.B.	CA	91932		7299	561990	SERVICE										No	No	6324003200		
CAFE DI ROMA	633	9TH ST	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6262121400	32.584935	-117.114134
CALIFORNIA-AMERICAN WATER COMP	1019	CHERRY AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6261021000	32.588539	-117.111495
CAMP, CATHY	704	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251811305	32.583555	-117.131854
CARL'S JR. #585	700	13TH ST	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6263121300	32.583631	-117.105846
CARMEN'S BEAUTY SALON	1177	13TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330313000		
CHARLENE HEGARTY	710	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251821050	32.583076	-117.1318
CHOCO'S HAIRCUTTING	1256	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6265420900	32.576671	-117.106592
CHURCH OF CHRIST OF IB	640	10TH ST	I.B.	CA	91932	910.2	8699	813410	NONPROF										No	No	6262212800	32.584827	-117.111994
CIRCLE H LIQUOR	600	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL									X	No	No	6251401400	32.584072	-117.120629
CITY NAILS	750	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
COLWELL REALTY	134	PALM AVE	I.B.	CA	91932	910.1	7389	561499	PROF										No	No	6250140500	32.584081	-117.130909
COMPREHENSIVE TRAINING SYSTEMS	497	11TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6260600600	32.587617	-117.110422
COMPUTERVILLE	740	10TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262822500	32.58316	-117.111993
CORONADO BAY URGENT CARE	600	PALM AVE	I.B.	CA	91932	910.2	8049	621399	HEALTH										No	No	6251401900	32.584072	-117.120629

FACILITY NAME	ST. No.	ST. NAME	City	State	ZIP CODE	Hydrologic Area	SIC CODE	NAICS Code	PRINCIPLE PRODUCTS SERVICES	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	latitude	longitude
COW-A-BUNGA CA GLACIER FNAM	10	EVERGREEN AVE	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	7602420903	32.579651	-117.132455
COX BAIT & TACKLE	996	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262211100	32.584093	-117.112008
CRAZY LADY'S	600	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6251401900	32.584072	-117.120629
CRISS CROSS SALON	1115	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263012300	32.58365	-117.110177
CROSSROAD PETROLEUM INC.	1185	PALM AVE	I.B.	CA	91932	910.2	5541	447190	GAS	X	X			X	X			X	No	No	6263021600	32.583675	-117.10857
CROW SANTIAGO JR	1155	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263022000	32.58365	-117.109153
CRYSTAL COVE COCKTAILS	995	PALM AVE	I.B.	CA	91932	910.2	7299	711120	DANCE										No	No	6262822200	32.583793	-117.111898
CVS/PHARMACY #9120	800	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262110600	32.584154	-117.115976
CYNTHIA SEPULVEDA	637	9TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262121400	32.584887	-117.114135
D & L LOCKSMITH	1148	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6261700500	32.584078	-117.109484
D'AMES FITNESS	704	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251811305	32.583555	-117.131854
DARMA DESIGNS	600	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
DEPENDABLE CARBURETOR EXCHANGE	660	EMORY ST	I.B.	CA	91932	910.2	7299	561990	SERVICE		X	X		X	X			X	No	No	6262122400	32.584593	-117.113213
DESPHY'S CLEANERS	600	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
DIEP LE	750	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
DIVINE RENEWAL	668	10TH ST	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262211000	32.584491	-117.111992
DOLLAR STORE	894	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262110700	32.584139	-117.114504
DON PANCHO'S MEXICAN FOOD	690	HIGHWAY 75	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6260705800	32.584833	-117.118321
DREW LINDEN MEIER	1155	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263022000	32.58365	-117.109153
E.N.S. COIN LAUNDRY	1167	13TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330313000	32.575346	-117.105546
ECONO LUBE N' TUBE	772	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE		X	X		X	X			X	No	No	6263121100	32.582738	-117.105835
ED'S SHOE REPAIR	635	9TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262121400	32.584911	-117.114135
EL CILANTRO CAFE	764	13TH ST	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6263121100	32.582838	-117.105836
EL TAPATIO CATERING	667	SILVER STRAND BLVD	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6250241200	32.584428	-117.12804
EL TAPATIO RESTAURANT INC	260	PALM AVE	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6250250100	32.584068	-117.128037
ELM ADULT DAY HEALTH CARE CTR	1220	ELM AVE	I.B.	CA	91932	910.2	8361	623990	DAYCARE										No	No	6263412000	32.580809	-117.1076
EPIFANIA A HENRY	600	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6251401400	32.584072	-117.120629

FACILITY NAME	ST. No.	ST. NAME	City	State	ZIP CODE	Hydrologic Area	SIC CODE	NAICS Code	PRINCIPLE PRODUCTS SERVICES	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	latitude	longitude
EPISCOPAL COMMUNITY SERVICES	1340	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	8049	621399	HEALTH										Yes	No	6272201400	32.576657	-117.104813
EPISCOPAL COMMUNITY SERVICES	485	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	8361	623990	DAYCARE										Yes	No	6320841100	32.576485	-117.122693
ESTHER'S MEXICAN FOOD	1004	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6262221100	32.584048	-117.111402
EVERGREEN II	1258	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	7389	561499	PROF										Yes	No	6265420900	32.57669	-117.106558
EVERYDAY FURNITURE	986	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262211200	32.584108	-117.112203
EVERYDAY FURNITURE	1003	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262910100	32.583741	-117.111743
EXPRESS APPLIANCE DELIVERY	497	11TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6260600600		
FAMILY BARBER SHOP	934	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262123200	32.584118	-117.113479
FAMILY HAIRCUTTERS	770	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263121100	32.582763	-117.105835
FARMERS INSURANCE	932	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6262123200	32.584118	-117.11352
FIRST ASSEMBLY OF GOD	588	9TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6261412200	32.585916	-117.114414
FIRST NATIONS SECURITY/ THE BR	874	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6253302200	32.58063	-117.131864
FITNESS WORLD	750	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
FLEET RESERVE CLUB 289	659	SILVER STRAND BLVD	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6250241000	32.584744	-117.128104
FLESH SKIN GRAPHICS	1155	PALM AVE	I.B.	CA	91932	910.2	7299	812199	TATOO										No	No	6263022000	32.58365	-117.109153
FRIENDS OF SD WILDLIFE REFUGES	301	CASPIAN WAY	I.B.	CA	91932		7299	561990	SERVICE										No	No	6324003200		
FRIENDS OF THE IB BRANCH LIBRA	810	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	8699	813410	NONPROF										Yes	No	6264005400	32.576701	-117.116254
G & M OIL #177	907	PALM AVE	I.B.	CA	91932	910.2	5541	447190	GAS	X	X	X		X	X			X	No	No	6262810100	32.583717	-117.114056
G.E. BROWN SERVICE	497	11TH ST	I.B.	CA	91932	910.2	1799	235990	SUBCONT										No	No	6260600600	32.587617	-117.110422
GENE'S AUTOMOTIVE	1085	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE		X	X		X	X			X	No	No	6262911400	32.583743	-117.111075
GENE'S TOWING SERVICE	753	10TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE		X	X		X	X			X	No	No	6262910500	32.583013	-117.111675
GENE'S U'HAUL	1085	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE		X	X		X	X			X	No	No	6262911400	32.583743	-117.111075

FACILITY NAME	ST. No.	ST. NAME	City	State	ZIP CODE	Hydrologic Area	SIC CODE	NAICS Code	PRINCIPLE PRODUCTS SERVICES	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	latitude	longitude
GERALDINE VEDRENE	704	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251811305	32.583555	-117.131854
GIANT PIZZA KING #4	1070	13TH ST	I.B.	CA	91932	911.11	5812	722110	EATING	X	X		X	X	X			X	Yes	Yes	6265421100	32.577073	-117.105853
GIANT PIZZA KING #5	600	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6251401400	32.584072	-117.120629
GJAG CORP DBA PACIFIC POINT	657	10TH ST	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6262221200	32.584637	-117.111674
GL ACCOUNTING SERVICES INC	662	10TH ST	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6262211000	32.584563	-117.111993
GLORIA BARRIOS	770	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263121100	32.582763	-117.105835
GOLDEN FINANCIAL	600	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6251401900	32.584072	-117.120629
GOODWILL INDUSTRIES OF SD	880	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL									X	No	No	6262110700	32.584153	-117.114678
GRAND PLAZA STUDIO DENTISTRY	1340	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	8049	621399	HEALTH										Yes	No	6272201400		
GREG MIXON	280	PALM AVE	I.B.	CA	91932	910.1	7389	561499	PROF										No	No	6250241300	32.584071	-117.127768
GUISEPPE'S PIZZA	1293	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	5812	722110	EATING	X	X		X	X	X			X	Yes	Yes	6330222300	32.576394	-117.105869
H & R BLOCK/ HRB TAX GROUP ING	1313	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6270111800	32.583665	-117.10531
HEALTHYKICKS INC	1025	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262911500	32.58365	-117.111602
HELFON HANONO, OPTOMETRIST	894	PALM AVE	I.B.	CA	91932	910.2	8049	621399	HEALTH										No	No	6262110700	32.584139	-117.114504
HOMESTART	1290	EBONY AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6265000900	32.577627	-117.105983
HS CARS COMPANY INC	1333	PALM AVE	I.B.	CA	91932	910.2	5012	421110	AUTO					X					No	No	6270111900	32.583656	-117.104908
HUTCHINS REALTY	1138	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6261700600	32.58413	-117.109691
I B GROOMIN	600	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6251401400	32.584072	-117.120629
I B LIQUOR	801	SEACOAST DR	I.B.	CA	91932	910.1	5999	453998	RETL									X	No	No	6252720100	32.581626	-117.131662
I.B. UNITED METHODIST CHURCH	455	PALM AVE	I.B.	CA	91932	910.2	8699	813410	NONPROF										No	No	6252302300	32.58377	-117.123135
IB BEAUTIFUL INC	600	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
IB BY THE SEA GIFTS	862	SEACOAST DR	I.B.	CA	91932	910.1	5999	453998	RETL									X	No	No	6253302100	32.580768	-117.131864
IB COIN LAUNDRY #5	760	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE									X	No	No	6263121100	32.582887	-117.105837

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IB DIVERS	641	9TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262121400	32.584839	-117.114136
IB FITNESS	600	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
IB FORUM	1079	SEACOAST DR	I.B.	CA	91932	911.11	5812	722110	EATING	X	X		X	X	X			X	Yes	Yes	6253922300	32.576938	-117.131594
IB GIFTS & BEACH GEAR/US INVES	710	SEACOAST DR	I.B.	CA	91932	910.1	5999	453998	RETL										No	No	6251821046	32.583076	-117.1318
IB MORTGAGE & REALTY	1258	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	7389	561499	PROF										Yes	No	6265420900	32.57669	-117.106558
IB NUTRITION STORE	888	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262110700	32.584145	-117.114578
IB PET	600	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6251401400	32.584072	-117.120629
IB PRINTING	706	SEACOAST DR	I.B.	CA	91932	910.1	5999	453998	RETL										No	No	6251811307	32.583429	-117.131854
IB SUPER WASH N DRY	1220	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262412700	32.58412	-117.107485
IDEAL CHOICE INSURANCE AGENCY	1233	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6263111400	32.58364	-117.107336
IMPERIAL BEACH CHAMBER OF COMM	702	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251811303	32.583681	-117.131854
IMPERIAL BEACH HEALTH CENTER	949	PALM AVE	I.B.	CA	91932	910.2	8049	621399	HEALTH										No	No	6262811700	32.583725	-117.113201
IMPERIAL BEACH MANAGEMENT CO	120	ELDER AVE	I.B.	CA	91932	911.11	7389	561499	PROF										Yes	No	6253522600	32.578962	-117.131147
IMPERIAL BEACH PET HOSPITAL	538	12TH ST	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6261810800	32.587145	-117.108206
IMPERIAL BEACH PRESCHOOL NORTH	608	10TH ST	I.B.	CA	91932	910.2	8361	623990	DAYCARE										No	No	6262212700	32.585211	-117.111997
IMPERIAL BEACH PRESCHOOL SOUTH	1179	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	8361	623990	DAYCARE										Yes	No	6330122400	32.57638	-117.108431
IMPERIAL BEACH SENIOR CITIZENS	1075	8TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6264005300	32.57721	-117.116392
IMPERIAL BEACH STUDIO DENTISTR	1340	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	8049	621399	HEALTH										Yes	No	6272201400	32.576657	-117.104813

FACILITY NAME	ST. No.	ST. NAME	City	State	ZIP CODE	Hydrologic Area	SIC CODE	NAICS Code	PRINCIPLE PRODUCTS SERVICES	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	latitude	longitude
IMPERIAL BEACH ULTRAMAR	1300	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	6162	522390	CKCASH									X	Yes	Yes	6272201100	32.57662	-117.105562
IMPERIAL BEACH WOMAN'S CLUB	1075	8TH ST	I.B.	CA	91932	911.11	8699	813410	NONPROF										Yes	No	6264005300	32.57721	-117.116392
IMPERIAL DONUTS +	1002	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6262221100	32.584049	-117.111598
IMPERIAL NAILS	600	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6251401900		
IMPERIAL TRAILER PARK	674	PALM AVE	I.B.	CA	91932	910.2	7033	721211	RVMOBIL										No	No	6251401700	32.58408	-117.118594
J & T NAILS	635	9TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262121400	32.584911	-117.114135
JACKMAN INDUSTRIES INC	708	BASSWOOD AVE	I.B.	CA	91932	910.2	1799	238990	GENCONT										No	No	6260211400	32.590412	-117.11766
JAMES ROWLES STUDIO	497	11TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6260600600	32.587617	-117.110422
JEFFREY D. POINDEXTER LAW OFFI	936	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6262123200	32.584118	-117.113439
JERSEY BOYS DINER	875	SEACOAST DR	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6252730100	32.58063	-117.131594
JESSOP & SON LANDSCAPE	425	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6324002100	32.57645	-117.124119
JP MORGAN CHASE BANK, N.A.	1100	PALM AVE	I.B.	CA	91932	910.2	7323	561450	CRED										No	No	6261621700	32.583991	-117.110573
KATY'S CAFE	704	SEACOAST DR	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6251811306	32.583555	-117.131854
K-C'S CHINESE FOOD	1299	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	5812	722110	EATING	X	X		X	X	X			X	Yes	Yes	6330222300	32.576476	-117.105767
KEYSTONE ESCROW INC	129	PALM AVE	I.B.	CA	91932	910.1	7389	561499	PROF										No	No	6251912601	32.583812	-117.131003
KFC IMPERIAL BEACH	1056	13TH ST	I.B.	CA	91932	911.11	5812	722110	EATING	X	X		X	X	X			X	Yes	Yes	6265421000	32.577288	-117.105851
K-PASTA	775	13TH ST	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6270112100	32.582716	-117.105515
L & M TIRE CO./ EXPRESS TIRE	950	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE		X			X	X			X	No	No	6262212000	32.584074	-117.112906
LA POSTA MARKET #2	1266	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	5999	453998	RETL	X	X			X	X			X	Yes	Yes	6265420900	32.57669	-117.10642
LA TAPATIA	1295	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	5999	453998	RETL										Yes	No	6330222300	32.576421	-117.105835

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LA'SHONDA MALDONADO	1155	13TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330311900	32.575525	-117.105545
LATTER RAIN MISSIONS & TRAININ	750	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
LAURA BECKER TATTOO	1155	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263022000	32.58365	-117.109153
LEADINGHAM REALTY	1062	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6262222500	32.58413	-117.110966
LENS WIRELESS	639	7TH ST	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262011200		
LEON DISCOUNT TOBACCO FOOD MAR	185	PALM AVE	I.B.	CA	91932	910.1	5999	453998	RETL										No	No	6251911700	32.583808	-117.130035
LINDA WHEELOCK WILLIS	204	PALM AVE	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6250230300	32.584064	-117.129371
LITTLE BONANZA	940	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6262123500	32.584117	-117.113357
LOIS FUSCO	204	PALM AVE	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6250230300	32.584064	-117.129371
LORRAINE WEIMER	704	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251811305	32.583555	-117.131854
LUIS A CONTRERAS, DDS	1340	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	8049	621399	HEALTH										Yes	No	6272201400	32.576657	-117.104813
LUNA'S BEAUTY DESIGNERS	204	PALM AVE	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6250230300	32.584064	-117.129371
LUPE MORENO SKIN CARE	235	PALM AVE	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6252010500	32.583798	-117.128753
LUXURIOUS NAILS & SPA	710	HIGHWAY 75	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262011100	32.584596	-117.117714
MAI BUTON SEWING	1175	13TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330313000	32.575227	-117.105546
MAR VISTA BAPTIST CHURCH	888	5TH ST	I.B.	CA	91932	910.2	8699	813410	NONPROF										No	No	6253111500	32.580544	-117.122547
MARCO'S & RED HAWK	1205	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6263110100	32.583672	-117.107867
MARIA E. SALAS RETCHLESS	235	PALM AVE	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6252010500	32.583798	-117.128753
MARIA ESTHER VALDEZ MEZA	702	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251811304	32.583681	-117.131854
MARISA'S MEXICAN SEAFOOD GRILL	285	PALM AVE	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6252011100	32.583802	-117.127733
MARJO'S HAIR DESIGN	742	10TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262822500	32.583136	-117.111993
MARRERO'S CAR WASH	1257	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330222700	32.576389	-117.106592
MARY ANN V. SANVICTORES, DDS	600	PALM AVE	I.B.	CA	91932	910.2	8049	621399	HEALTH										No	No	6251401900	32.584072	-117.120629

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MASON'S ALIGNMENT-BRAKE-MUFFLE	975	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE		X	X			X			X	No	No	6262820300	32.58368	-117.112424
MCDONALDS/SCAROB INC.	1135	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6263011800	32.58365	-117.109781
MEIJO SUSHI, INC.	600	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6251401900	32.584072	-117.120629
MERCADO SHORES	639	7TH ST	I.B.	CA	91932	910.2	5999	453998	RETL									X	No	No	6262011200	32.585107	-117.117833
MICHAEL ROGERS DDS	1340	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	8049	621399	HEALTH										Yes	No	6272201400	32.576657	-117.104813
MICHELLE RUBANO	1155	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263022000	32.58365	-117.109153
MICKIE'S BAR & GRILL	220	PALM AVE	I.B.	CA	91932	910.1	5812	722110	EATING										No	No	6250230500		
MICKIES BAR AND GRILL	220	PALM AVE	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6250230500	32.58407	-117.128987
MID ATLANTIC PROFESSIONALS, IN	600	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
MID ATLANTIC PROFESSIONALS, IN	600	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
MIKE'S CAR WASH	1117	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263012300	32.58365	-117.110138
MIKE'S UPHOLSTERY	1152	13TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330221600	32.575556	-117.105864
MISTY DAWN'S SALON	710	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251821050	32.583076	-117.1318
MOBILITIE, LLC	750	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
MONEYTREE INC.	1070	13TH ST	I.B.	CA	91932	911.11	6162	522390	CKCASH									X	Yes	Yes	6265421100	32.577073	-117.105853
MYA'S FLOWER DESIGN	245	PALM AVE	I.B.	CA	91932	910.1	5999	453998	RETL										No	No	6252010600	32.583841	-117.128554
NAIL TECH	938	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262123200	32.584117	-117.113398
NAKAWATASE & CO, CPA	923	SEACOAST DR	I.B.	CA	91932	911.11	7389	561499	PROF										Yes	No	6253522700	32.57943	-117.131641
NATURAL SELECTION SURFBOARDS	536	13TH ST	I.B.	CA	91932	910.2	3569	333999	MANUF										No	No	6261920400		
NESTOR WATCH REPAIR CENTER	635	9TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262121400	32.584911	-117.114135
NEW BEGINNINGS FAMILY CHIROPRA	1340	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	8049	621399	HEALTH										Yes	No	6272201400	32.576657	-117.104813
NFAROOQI ENT. LLC/JACK IN BOX	890	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6262110800	32.584143	-117.114553
NICK PHAM	750	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839

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NOHEMI'S STUDIO	1260	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6265420900	32.57669	-117.106523
NORTH ISLAND C.U.	1101	PALM AVE	I.B.	CA	91932	910.2	7323	561450	CRED										No	No	6263013300	32.583695	-117.110455
NOVAK SURFBOARD DESIGNS	536	13TH ST	I.B.	CA	91932	910.2	3569	333999	MANUF										No	No	6261920400		
OCHOA ELECTRIC	731	EMORY ST	I.B.	CA	91932	910.2	1799	235990	SUBCONT										No	No	6262820600	32.583288	-117.112914
OLIVE OIL CAFE	600	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6251401900	32.584072	-117.120629
OLLIE ANGEL SKATE SHOP	235	PALM AVE	I.B.	CA	91932	910.1	5999	453998	RETL										No	No	6252010500	32.583798	-117.128753
ORCA MARITIME INC	497	11TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6260600600	32.587617	-117.110422
OTAY MESA REALTY	970	SEACOAST DR	I.B.	CA	91932	911.11	7389	561499	PROF										Yes	No	6253400700	32.578645	-117.131891
PACIFIC BELL	1288	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262421000	32.58412	-117.106008
PACIFIC LEGACY PROPERTIES	702	SEACOAST DR	I.B.	CA	91932	910.1	7389	561499	PROF										No	No	6251811303	32.583681	-117.131854
PACIFIC REALTY	672	10TH ST	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6262211100	32.584443	-117.111992
PACIFIC REALTY SALES & MGT INC	280	PALM AVE	I.B.	CA	91932	910.1	7389	561499	PROF										No	No	6250241300	32.584071	-117.127768
PALM AVENUE BOOKS DBA ROMANTIX	1177	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6263020200	32.58365	-117.108721
PALM AVENUE LIQUOR & MARKET	1200	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262412700	32.584013	-117.108023
PALM COIN LAUNDRY	187	PALM AVE	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251912500	32.583807	-117.130001
PALM GLASS INC	754	10TH ST	I.B.	CA	91932	910.2	1799	235990	SUBCONT										No	No	6262821500	32.58299	-117.111994
PAN AM TAE KWON DO	730	HIGHWAY 75	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6262010600	32.584507	-117.117457
PARMELA SAWHNEY, M.D., INC.	705	PALM AVE	I.B.	CA	91932	910.2	8049	621399	HEALTH										No	No	6262500200	32.58377	-117.117773
PARTY MART	1070	13TH ST	I.B.	CA	91932	911.11	5999	453998	RETL									X	Yes	Yes	6265421100	32.577073	-117.105853
PAUL MCNALLY REALTY	280	PALM AVE	I.B.	CA	91932	910.1	7389	561499	PROF										No	No	6250241300	32.584071	-117.127768
PENTECOSTAL CHURCH OF GOD	1402	HEMLOCK AVE	I.B.	CA	91932	911.11	8699	813410	NONPROF										Yes	No	6332311500	32.570446	-117.103273
PHIL AM BARBERSHOP	1305	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330310100	32.576394	-117.10549
PHIL VILLALOBOS BARBER SHOP	1051	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6272200200	32.577378	-117.105584

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PHIL VILLALOBOS FAMILY BARBER	1070	13TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6265421100		
PIZZA INDUSTRY/DOMINO'S PIZZA	1307	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	5812	722110	EATING	X	X		X	X	X			X	Yes	Yes	6330310100	32.576393	-117.105453
POUR'S LIQUOR	1141	13TH ST	I.B.	CA	91932	911.11	5999	453998	RETL									X	Yes	Yes	6330312000	32.575733	-117.105544
PRECISION FOREIGN	1240	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE		X	X		X	X			X	No	No	6262412800	32.58417	-117.10717
PRETZLES AND MUCH MORE	10	EVERGREEN AVE	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	7602420902	32.579651	-117.132455
PRO HAIRCUT BY LISA	600	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6251401400	32.584072	-117.120629
R J CAR WASH	730	10TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262822600	32.583282	-117.111992
R&C SCHAUMBURG/COLDWELL BANKER	862	SEACOAST DR	I.B.	CA	91932	910.1	7389	561499	PROF										No	No	6253302100	32.580768	-117.131864
REGENERATIONVILLE	740	10TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262822500	32.58316	-117.111993
RODRIGO'S MEXICAN FOOD	600	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6251401400	32.584072	-117.120629
ROLANDO'S TACO SHOP IB	805	SEACOAST DR	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6252720100	32.58158	-117.131625
ROYAL CLEANER'S	1181	13TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330313000	32.575138	-117.105547
SAGE TRADITIONS ACUPUNCTURE	667	PALM AVE	I.B.	CA	91932	910.2	8049	621399	HEALTH										No	No	6262500900	32.58376	-117.118744
SALTWATER MAGIC	226	PALM AVE	I.B.	CA	91932	910.1	5999	453998	RETL										No	No	6250230600	32.584068	-117.128843
SAN DIEGO PET FOOD DELIVERY	600	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6251401400	32.584072	-117.120629
SAN YSIDRO HEALTH CENTER WIC P	886	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262110700	32.584147	-117.114603
SANDCASTLE REALTY	672	10TH ST	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6262211100	32.584443	-117.111992
SANTANA MEXICAN FOOD	1337	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X				No	No	6270120900	32.583657	-117.104829
SAVE A LOT #916	805	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6262500600	32.583782	-117.115348
SEA BREEZE COMMUNITY CHURCH	1220	ELM AVE	I.B.	CA	91932	910.2	8699	813410	NONPROF										No	No	6263412000	32.580809	-117.1076
SEACOAST PET CLINIC	600	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6251401900	32.584072	-117.120629
SEACOAST PIZZA	807	SEACOAST DR	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6252720100	32.581557	-117.131607
SEACOAST VITAMINS & HERBS	600	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6251401900	32.584072	-117.120629

FACILITY NAME	ST. No.	ST. NAME	City	State	ZIP CODE	Hydrologic Area	SIC CODE	NAICS Code	PRINCIPLE PRODUCTS SERVICES	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	latitude	longitude
SEASIDE BARBER & BEAUTY SHOP	702	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251811304	32.583681	-117.131854
SIESTA RV PARK, INC.	409	PALM AVE	I.B.	CA	91932	910.1	7033	721211	RVMOBIL					X				X	No	No	6252302400	32.583846	-117.124483
SILVER STRAND FAMILY MEDICINE	707	PALM AVE	I.B.	CA	91932	910.2	8049	621399	HEALTH										No	No	6262500200	32.583768	-117.117727
SILVER STRAND SPINE & SPORT	667	PALM AVE	I.B.	CA	91932	910.2	8049	621399	HEALTH										No	No	6262500900	32.58376	-117.118744
SJ TRANSPORT INC	535	FLORENCE ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6261920300	32.587203	-117.106757
SKINNART	1221	PALM AVE	I.B.	CA	91932	910.2	7299	812199	TATOO										No	No	6263111400	32.583666	-117.107576
SMILES OF IMPERIAL BEACH	743	EMORY ST	I.B.	CA	91932	910.2	8049	621399	HEALTH										No	No	6262820700	32.583141	-117.112914
SOFT WHISPERS	137	EVERGREEN AVE	I.B.	CA	91932	911.11	5999	453998	RETL										Yes	No	6253520500	32.579401	-117.130871
SOLARA MEDICAL SUPPLIES, INC	639	7TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262011200	32.585107	-117.117833
SOLARA MEDICAL/IB PHARMACY	720	HIGHWAY 75	I.B.	CA	91932	910.2	8049	621399	HEALTH										No	No	6262010600	32.584552	-117.117585
SOMBRERO MEXICAN FOOD	189	PALM AVE	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6251912500	32.583807	-117.129966
SOPHISTICATED AUTO	987	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE					X				X	No	No	6262822100	32.583678	-117.112177
SOUND OF BEACH	10	EVERGREEN AVE	I.B.	CA	91932	910.1	5999	453998	RETL										No	No	7602420901	32.579651	-117.132455
SOUTH COAST TILE CO.	1258	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	1799	235990	SUBCONT										Yes	No	6265420900	32.57669	-117.106558
SOUTHBAY TAX SERVICE	1064	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6262222500	32.58413	-117.110951
SOUTHWEST WETLANDS INTERPRETIV	708	SEACOAST DR	I.B.	CA	91932	910.1	8699	813410	NONPROF										No	No	6251811308	32.583302	-117.131833
SPIRIT REAL ESTATE	700	SEACOAST DR	I.B.	CA	91932	910.1	7389	561499	PROF										No	No	6251811301	32.583808	-117.131833
ST. JAMES LUTHERAN CHURCH	866	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	8699	813410	NONPROF										Yes	No	6264006900	32.576689	-117.115026
ST. JAMES LUTHERAN PRESCHOOL	866	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	8361	623990	DAYCARE										Yes	No	6264006900	32.576689	-117.115026
STAINEDGLASSWINDOWS.COM	600	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6251401400	32.584072	-117.120629

FACILITY NAME	ST. No.	ST. NAME	City	State	ZIP CODE	Hydrologic Area	SIC CODE	NAICS Code	PRINCIPLE PRODUCTS SERVICES	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	latitude	longitude
STAINEDGLASSWINDOWS.COM	600	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6251401400	32.584072	-117.120629
STARDUST DONUT SHOP	698	HIGHWAY 75	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6260705900	32.584795	-117.118228
STATE FARM INSURANCE	1144	13TH ST	I.B.	CA	91932	911.11	7389	561499	PROF										Yes	No	6330221800	32.575675	-117.105863
STATE FARM INSURANCE	1239	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6263111500	32.58364	-117.10722
STEVEN Y. LUO, DDS APC	629	9TH ST	I.B.	CA	91932	910.2	8049	621399	HEALTH										No	No	6262121400	32.584982	-117.114133
STL TECH DETALING, INC.	600	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6251401900	32.584072	-117.120629
STRONG TOWER COMMUNITY CHURCH	1439	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330412800	32.576427	-117.102576
STYLISH MOMENTS SALON AND SUPP	1155	13TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330311900	32.575525	-117.105545
SUBSMART DELI-FRESH	1231	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6263111400	32.58364	-117.107374
SUBWAY 20578	876	SEACOAST DR	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6253302200	32.580607	-117.131864
SUN & SEA MANOR	740	7TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262501000	32.583219	-117.118156
SUSAN KIDDER	1155	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263022000	32.58365	-117.109153
SUZANNE ADAMS HAIR DESIGN	710	SEACOAST DR	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6251821050	32.583076	-117.1318
TAKING CARE OF BUSINESS	1146	13TH ST	I.B.	CA	91932	911.11	6162	522390	CKCASH										Yes	No	6330221700	32.575645	-117.105863
TERRA NOVA REALTY	600	PALM AVE	I.B.	CA	91932	910.2	7389	561499	PROF										No	No	6251401900	32.584072	-117.120629
THAT'S A WRAP	1146	13TH ST	I.B.	CA	91932	911.11	5812	722110	EATING	X	X		X	X	X			X	Yes	Yes	6330221700	32.575645	-117.105863
THE B.D. BARR COMPANY	1144	13TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6330221800	32.575675	-117.105863
THE BOSN'S LOCKER	238	PALM AVE	I.B.	CA	91932	910.1	5999	453998	RETL									X	No	No	6250230700	32.584024	-117.128556
THE BRIDGE	874	SEACOAST DR	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6253302200	32.58063	-117.131864
THE CHECK CASHING PLACE, INC.	894	PALM AVE	I.B.	CA	91932	910.2	6162	522390	CKCASH									X	No	No	6262110700	32.584139	-117.114504
THE CONCEPTS & DESIGN	600	PALM AVE	I.B.	CA	91932	910.2	1799	238990	GENCONT										No	No	6251401900	32.584072	-117.120629
THE FINE AUTO STORE	942	PALM AVE	I.B.	CA	91932	910.2	5012	421110	AUTO					X					No	No	6262123500	32.584117	-117.113317
THE MAIL ROOM	757	EMORY ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6262820800	32.582969	-117.112914
THE SCOREBOARD	951	PALM AVE	I.B.	CA	91932	910.2	7299	711120	DANCE									X	No	No	6262820100	32.583729	-117.112917
THE SURF HUT	710	SEACOAST DR	I.B.	CA	91932	910.1	5999	453998	RETL										No	No	6251821049	32.583076	-117.1318

FACILITY NAME	ST. No.	ST. NAME	City	State	ZIP CODE	Hydrologic Area	SIC CODE	NAICS Code	PRINCIPLE PRODUCTS SERVICES	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	latitude	longitude
THE TIN FISH RESTAURANT	910	SEACOAST DR	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	7600820500	32.580008	-117.131864
THE VIP CLEANERS	1070	13TH ST	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6265421100	32.577073	-117.105853
THE WAVE CAFE	809	SEACOAST DR	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6252720100	32.581534	-117.131594
THE WRIGHT WAY	1051	13TH ST	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6272200200	32.577378	-117.105584
THOMAS GIBSON/DC EXC CORP	425	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6324002100	32.57645	-117.124119
THOMAS LINDLEY PARKING LOT	915	OCEAN LN	I.B.	CA	91932	910.1	7299	561990	SERVICE										No	No	6253301100	32.58006	-117.132435
TIM TOWNSLEY SURFBOARDS	206	PALM AVE	I.B.	CA	91932	910.1	5999	453998	RETL										No	No	6250230300	32.584073	-117.129323
TITO AUTO SERVICE	1335	PALM AVE	I.B.	CA	91932	910.2	5012	421110	AUTO					X				X	No	No	6270111900	32.583657	-117.104868
TJ INFINITY	1220	PALM AVE	I.B.	CA	91932	910.2	7215	812310	COIN										No	No	6262412700	32.58412	-117.107485
T-MOBILE	750	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
T-MOBILE	1473	GROVE AVE	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6331713201	32.572689	-117.102051
TNT SURFBOARDS	536	13TH ST	I.B.	CA	91932	910.2	3569	333999	MANUF		X	X						X	No	No	6261920400		
TO MARKET TO MARKET	921	SEACOAST DR	I.B.	CA	91932	911.11	5999	453998	RETL										Yes	No	6253522700	32.579456	-117.131662
TOMMY'S TOBACCO	1297	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	5999	453998	RETL										Yes	No	6330222300	32.576448	-117.105801
TONY'S HOTEL & APT LIQUIDATORS	536	13TH ST	I.B.	CA	91932	910.2	5999	453998	RETL									X	No	No	6261920400	32.586426	-117.105794
TOOLING AROUND INC	1461	5TH ST	I.B.	CA	91932	911.11	1799	238990	GENCONT										Yes	No	6322520700	32.570009	-117.122444
TRACY MICHELLE GUTIERREZ	1223	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263111400	32.58364	-117.107528
TUYET THI HA	750	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263121400	32.583011	-117.105839
U.S. SANDCASTLE COMMITTEE, INC	970	SEACOAST DR	I.B.	CA	91932	911.11	7299	561990	SERVICE										Yes	No	6253400700	32.578645	-117.131891
UNION BANK OF CALIFORNIA	900	PALM AVE	I.B.	CA	91932	910.2	7323	561450	CRED										No	No	6262123600	32.584088	-117.114171
UNITED PENTECOASTAL CHURCH	631	12TH ST	I.B.	CA	91932	910.2	8699	813410	NONPROF										No	No	6262414100	32.58494	-117.107942
VFW SILVER STRAND #5477	123	PALM AVE	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X				No	No	6251912400		
VICKY HAIR & ACCESORIES	1223	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263111400	32.58364	-117.107528

FACILITY NAME	ST. No.	ST. NAME	City	State	ZIP CODE	Hydrologic Area	SIC CODE	NAICS Code	PRINCIPLE PRODUCTS SERVICES	Bacteria	Gross Pollutants	Metals	Nutrients	Oil & Grease	Organics	Pesticides	Sediment	Trash	Tributary to 303(d) Listed	303(d) Pollutants Generated	APN	latitude	longitude
VICTOR HERNANDEZ	1223	PALM AVE	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6263111400	32.58364	-117.107528
VIDEO 4 YOU	1051	13TH ST	I.B.	CA	91932	910.2	7299	561990	SERVICE										No	No	6272200200	32.577378	-117.105584
WALLY'S MARKETPLACE, INC	836	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL	X		X		X	X			X	No	No	6262110700	32.58419	-117.11523
WATERMILL EXPRESS	1261	IMPERIAL BEACH BLVD	I.B.	CA	91932	911.11	5812	722110	EATING	X	X		X	X	X				Yes	Yes	6330222700	32.57637	-117.106523
WEST COAST KITCHEN	208	PALM AVE	I.B.	CA	91932	910.1	5812	722110	EATING	X	X		X	X	X			X	No	No	6250230300	32.584072	-117.129275
WIENERSCHNITZEL #358	1253	PALM AVE	I.B.	CA	91932	910.2	5812	722110	EATING	X	X		X	X	X			X	No	No	6263120100	32.583658	-117.106711
WILDCOAST	925	SEACOAST DR	I.B.	CA	91932	911.11	8699	813410	NONPROF										Yes	No	6253522700	32.579404	-117.131621
WOODYS AUTO CARE	200	PALM AVE	I.B.	CA	91932	910.1	7299	561990	SERVICE		X	X		X	X			X	No	No	6250230200	32.584076	-117.129791
YAROSLAV KUSHNIR, M.D., INC.	184	PALM AVE	I.B.	CA	91932	910.1	8049	621399	HEALTH										No	No	6250141000	32.584077	-117.130062
YE OLDE PLANK INN	24	PALM AVE	I.B.	CA	91932	910.1	7299	711120	DANCE									X	No	No	6250111800	32.583973	-117.132151
YOUR T-SHIRT STORE	1181	PALM AVE	I.B.	CA	91932	910.2	5999	453998	RETL										No	No	6263020200	32.58365	-117.108642

DECLARATION OF SERVICE BY EMAIL

I, the undersigned, declare as follows:

I am a resident of the County of Sacramento and I am over the age of 18 years, and not a party to the within action. My place of employment is 980 Ninth Street, Suite 300, Sacramento, California 95814.

On March 29, 2024, I served the:

- **Current Mailing List dated March 28, 2024**
- **Notice of Waiver of Procedural Requirements, Extension Request Approval, and Postponement of Hearing issued March 29, 2024**
- **Claimants' Comments on the Draft Proposed Decision and Parameters and Guidelines (Volumes 1-14) filed February 20, 2024**

  San Diego Regional Water Quality Control Board Order No. R9-2007-0001, Permit CAS0108758, Parts D.3.a.(3)(b)(iii), D.5.a.(1), D.5.a.(2), D.5.b.(1)(a), D.5.b.(1)(b)(iii-vi), D.5.b.(1)(c), D.5.b.(1)(d), D.5.b.(2), D.5.b.(3), E.2.f., E.2.g., F.1., F.2., F.3., I.1., I.2., I.5., J.3.a.(3)(c)(iv)-(viii), (x)-(xv), the first sentence of L.1. as it applies to the newly mandated activities, and L.1.a.(3)-(6), 07-TC-09-R County of San Diego, Cites of Carlsbad, Del Mar, Imperial Beach, Lemon Grove, Poway, San Marcos, Santee, Solana Beach, Chula Vista, Coronado, Del Mar, El Cajon, Encinitas, Escondido, Imperial Beach, La Mesa, Lemon Grove, National City, Oceanside, San Diego, and Vista, Claimants

by making it available on the Commission's website and providing notice of how to locate it to the email addresses provided on the attached mailing list.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that this declaration was executed on March 29, 2024 at Sacramento, California.

Jill Magee

_____

Jill Magee
Commission on State Mandates
980 Ninth Street, Suite 300
Sacramento, CA 95814
(916) 323-3562

COMMISSION ON STATE MANDATES

Mailing List

Last Updated: 3/28/24

Claim Number: 07-TC-09-R

Matter: San Diego Regional Water Quality Control Board Order No. R9-2007-0001 Permit CAS0108758 Parts D.1.d.(7)-(8), D.1.g., D.3.a.(3), D.3.a.(5), D.5, E.2.f, E.2.g, F.1, F.2, F.3, I.1, I.2, I.5, J.3.a.(3)(c)iv-viii & x-xv, and L.

Claimants: City of Carlsbad
City of Chula Vista
City of Del Mar
City of Encinitas
City of Escondido
City of Imperial Beach
City of La Mesa
City of Lemon Grove
City of National City
City of Oceanside
City of Poway
City of San Diego
City of San Marcos
City of Santee
City of Solana Beach
City of Vista

TO ALL PARTIES, INTERESTED PARTIES, AND INTERESTED PERSONS:

Each commission mailing list is continuously updated as requests are received to include or remove any party or person on the mailing list. A current mailing list is provided with commission correspondence, and a copy of the current mailing list is available upon request at any time. Except as provided otherwise by commission rule, when a party or interested party files any written material with the commission concerning a claim, it shall simultaneously serve a copy of the written material on the parties and interested parties to the claim identified on the mailing list provided by the commission. (Cal. Code Regs., tit. 2, § 1181.3.)

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